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Mobility

The Future of Carmakers' Procurement:

How Sourcing Strategies Are Changing in 2026

Whitepaper
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As we move through 2026, automotive procurement is operating under sustained pressure. A fragmented global economy, tighter regulation, and more complex supply chains continue to disrupt the stability automakers once relied on.

More recently, the Iran war and new geopolitical conflict have added volatility to global energy markets, with higher gasoline prices historically reshaping vehicle demand and, in turn, upending the market mix OEMs planned their procurement strategies around.

These disruptions are being influenced by various factors, including trade dynamics and tariff exposure, the evolution of Just-in-Time (JIT), software centric procurement, sustainable and ethical sourcing, and rapid digital transformation — all of which are pushing procurement away from least cost optimisation and toward broader “best cost” trade offs.

Over the last 100 years, procurement has evolved from vertical integration to global sourcing in pursuit of the lowest cost. Today, that model no longer holds. Instead, OEMs are recalibrating toward more localized and regional strategies not simply to reduce cost, but to balance risk, compliance, resilience, and long term supply security.

For procurement leaders, the challenge isn't just understanding what's changing in global sourcing, it's knowing what to do next. That's why we're building a new, AI-driven supply chain intelligence platform to give you the insight you can't get anywhere else: from mapping multi-tier supplier networks to uncovering hidden risks and identifying new sourcing opportunities. So you can move faster, reduce uncertainty, and make more confident procurement decisions.

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The changing dynamics in OEM procurement

Global sourcing has long been a cornerstone of procurement strategies, enabling automakers to tap into diverse markets and optimize costs. However, the dynamics of global sourcing are shifting, driven by several key factors:

Automotive Supply Chain Stability

Destabilizing Forces

-  **GEOPOLITICAL CONFLICTS & TARIFFS**
-  **CRITICAL MINERAL SHORTAGES**
-  **ENERGY & FUEL PRICE SHOCKS**
-  **SHIPPING & LOGISTICS DISRUPTIONS**
-  **REGULATORY FRAGMENTATION**

Risk Mitigation Actions

-  **DIVERSIFY SOURCING & SUPPLIERS**
-  **REGIONALIZE & NEARSHORE PRODUCTION**
-  **BUILD SUPPLY CHAIN VISIBILITY & INTELLIGENCE**
-  **SCENARIO PLANNING & RISK MONITORING**
-  **STRONGER COLLABORATION & PARTNERSHIPS**





Trade-insulated cost optimization

OEMs are moving away from traditional global sourcing towards trade-insulated cost strategies. Intensifying protectionist policies and trade barriers are forcing companies to rethink their approach. Operating within supposedly safe trading blocs no longer guarantees protection from tariff volatility.



Evolution of Just-in-Time (JIT)

Increasing frequency of Black Swan events has prompted a reassessment of JIT inventory management. The combination of escalating tariffs, fragmented trade zones, and unpredictable customs clearance times is forcing companies to adopt hybrid models – dubbed ‘just-in-case’ – that incorporate strategic stockpiling of critical components.



Software-centric procurement

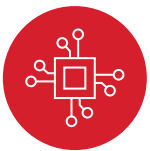
With software and user experience increasingly front and center of customers’ vehicle and brand experience, procurement practices are changing accordingly. They’re already evolving today and will shift even further with the continued rise of software-defined vehicles (SDVs). Traditional component sourcing is being complemented by the need for sophisticated software solutions and digital capabilities. Procurement leaders must now focus on finding technology partners that align with future product needs, including software platforms, cybersecurity solutions, and connectivity components.



Sustainable and ethical sourcing

While increased electrification of the vehicle fleet as a strategy for carbon-reduction is well documented, other parts of the automotive ecosystem are increasingly in focus. Emissions reduction is gaining importance for upstream emissions too – meaning OEMs are prioritizing less emission-intensive components from their suppliers. Stricter regulations are being imposed on upstream emissions, particularly for batteries – given their sophisticated value chain and complex constituents.

In addition, minimum usage of low carbon metals such as steel and aluminum is also regulated. Regulators are promoting closed-loop recycling by mandating minimum recycled content thresholds. OEMs that proactively decarbonize their upstream supply chains will secure cost advantages, avoid penalties, and differentiate their brands. Those that delay risk losing access to key markets, facing carbon tariffs, and forfeiting contracts to more sustainable competitors



Digital transformation in procurement

Digital collaboration platforms are revolutionizing supplier relationships, with initiatives like Catena-X leading the standardization of supply chain data sharing. These platforms facilitate semiconductor availability tracking, raw material traceability, and multi-tier supplier risk monitoring.

Trend 1: From best-landed cost to “constraint-optimized” cost

In 2026, cost optimization in automotive procurement no longer means chasing the lowest landed cost. It means working within constraints and maximizing outcomes.

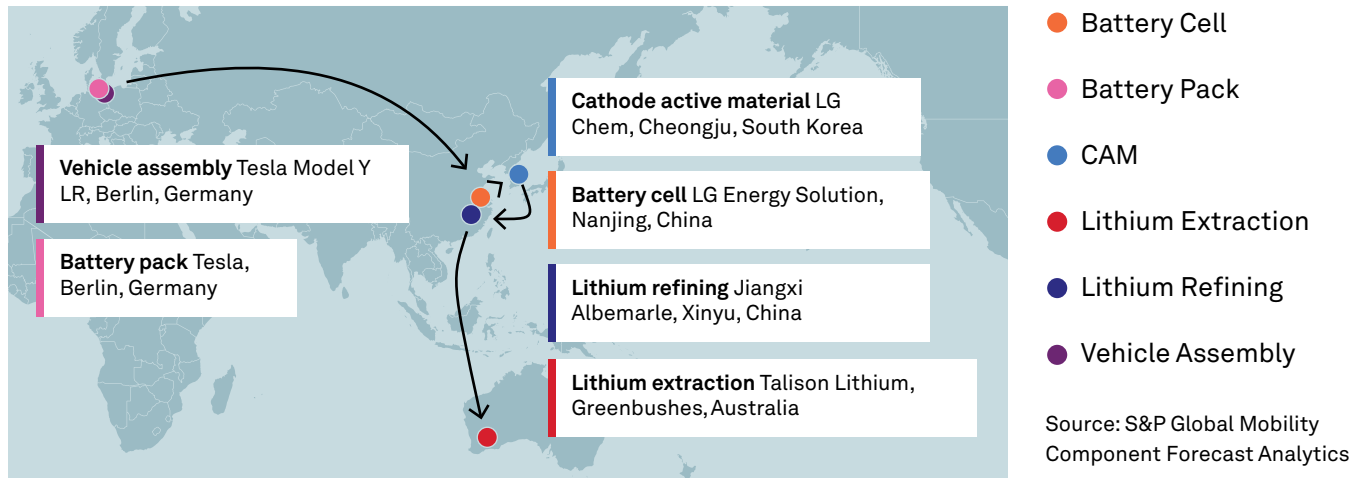
In March 2026, the European Commission proposed the Industrial Accelerator Act (IAA), a framework designed to speed up industrial investment, accelerate decarbonization, and strengthen EU manufacturing capacity. While most provisions are not yet in force, the direction is clear: faster permit approvals, stronger “Made in EU” preferences in public procurement, and tighter scrutiny of foreign investment in strategic sectors such as batteries and electric vehicles. OEMs are already factoring these constraints into sourcing decisions.

The Berlin built Tesla Model Y shows what this constraint optimized reality looks like in practice. Vehicle and battery pack assembly are localized in Germany, supporting regulatory alignment and market access. But upstream dependencies remain global with battery cells sourced from China, cathode material from South Korea, and lithium extracted in Australia and refined in China. This is not a transitional gap. It is a steady state outcome shaped by policy direction, supplier capability, and capacity limits.

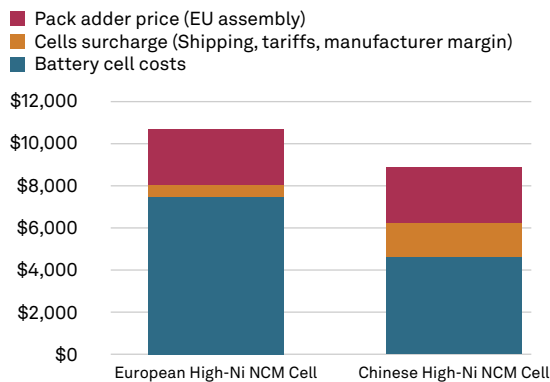
What matters now is not whether a supply chain is fully local — very few are. What matters is whether it is viable under the rules taking shape. For procurement teams, that means balancing cost, compliance, risk, and time, often accepting higher structural costs to secure eligibility, stability, and long term supply.

Constraint optimized cost has shifted from being a response to disruption to a necessary operating model.

Tesla Model Y battery components supply chain



Tesla Model Y (79 kWh) - Pack price (CTP configuration)



Using our battery price model, we quantified the cost trade-offs embedded in this constraint-optimized approach. For the Berlin-built Tesla Model Y, sourcing high-nickel NCM cells from Europe results in a battery pack cost roughly €1,800 higher per vehicle than sourcing the same cells from China, even after accounting for tariffs and logistics. This difference is driven primarily by higher European battery cell costs, while pack assembly costs remain largely unchanged.

This illustrates that cost is only one of several constraints that procurement teams must manage. OEMs are increasingly forced to choose between higher structural costs and reduced regulatory risk, localized capacity, and long-term supply security rather than optimizing for the lowest landed cost in isolation.

Trend 2: Reevaluating Just-in-Time (JIT) strategies

The increasing frequency of Black Swan events—rare and unpredictable occurrences that have significant consequences—has raised questions about the effectiveness of Just-in-Time (JIT) inventory management, a cornerstone of automotive efficiency for decades. While JIT has been effective in reducing costs and improving efficiency, it also exposes organizations to risks.

Supply chain disruptions caused by natural disasters, geopolitical tensions, or pandemics can severely impact production schedules. As a result, companies are reconsidering their reliance on JIT and exploring alternative inventory management strategies.

The combination of fragmented trade zones, and increasingly unpredictable customs clearance times is forcing a fundamental reassessment of this approach. The traditional JIT model, which assumed seamless cross-border movements and predictable transit times, has become increasingly risky and cost-inefficient. OEMs are now forced to maintain larger buffer stocks than they have historically for selected critical parts, not just to protect against supply chain disruptions, but also to navigate the complex web of tariff-driven cost variations and potential trade policy changes.

This shift is particularly evident in cases where components cross multiple trade boundaries before final assembly, with each border crossing representing a potential point of delay or cost escalation. The result is a hybrid model – sometimes dubbed ‘just-in-case’ – where selective stockpiling of critical components is becoming a strategic necessity, rather than the inventory inefficiency it was once considered to be.



Trend 3: A shift towards software-centric sourcing

As vehicles become increasingly reliant on software and digital solutions, procurement is no longer focused exclusively on physical parts or traditional commodities. The role of software has become a key driver of this shift, especially in the rise of software-defined vehicles (SDVs).

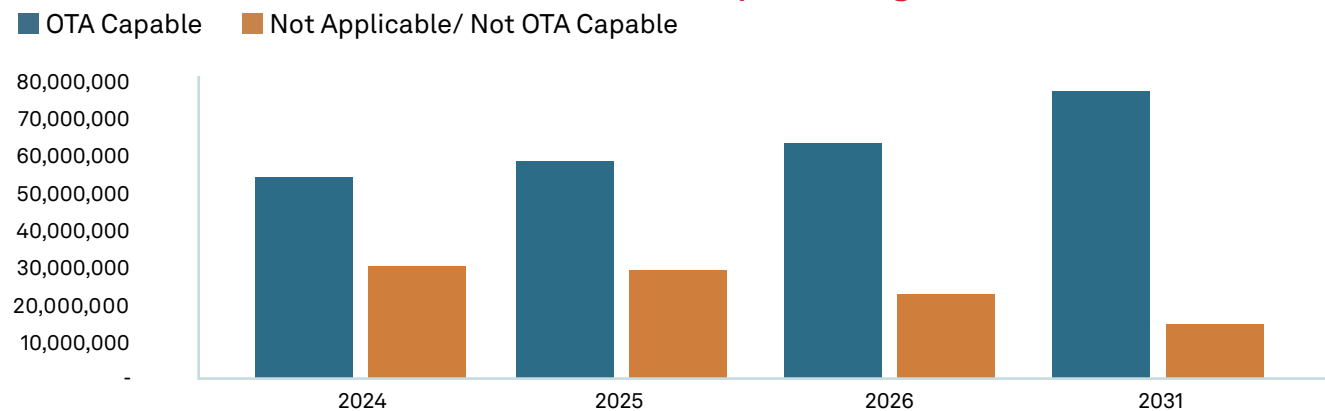
Instead of merely seeking the lowest price for traditional components, procurement leaders must now focus on finding technology partners that align with their future product needs. This would include providers that specialize in software platforms, cybersecurity solutions, and connectivity components.

Suppliers who can provide ongoing innovation and robust digital platforms capable of supporting a vehicle's software needs—both now and in the future—will be critical.

The increasing prominence of software-defined vehicles (SDVs) has created unprecedented challenges in automotive procurement costing models. Traditional component pricing methodologies, which were built around physical parts with clear bill of materials and established amortization patterns, prove inadequate when applied to software.

The complexity stems from multiple factors: software's inherent scalability means its development costs don't follow traditional per-unit economics, its continuous update requirements create ongoing operational expenses rather than one-time costs, and its value proposition often lies in features that may be activated post-sale through subscriptions.

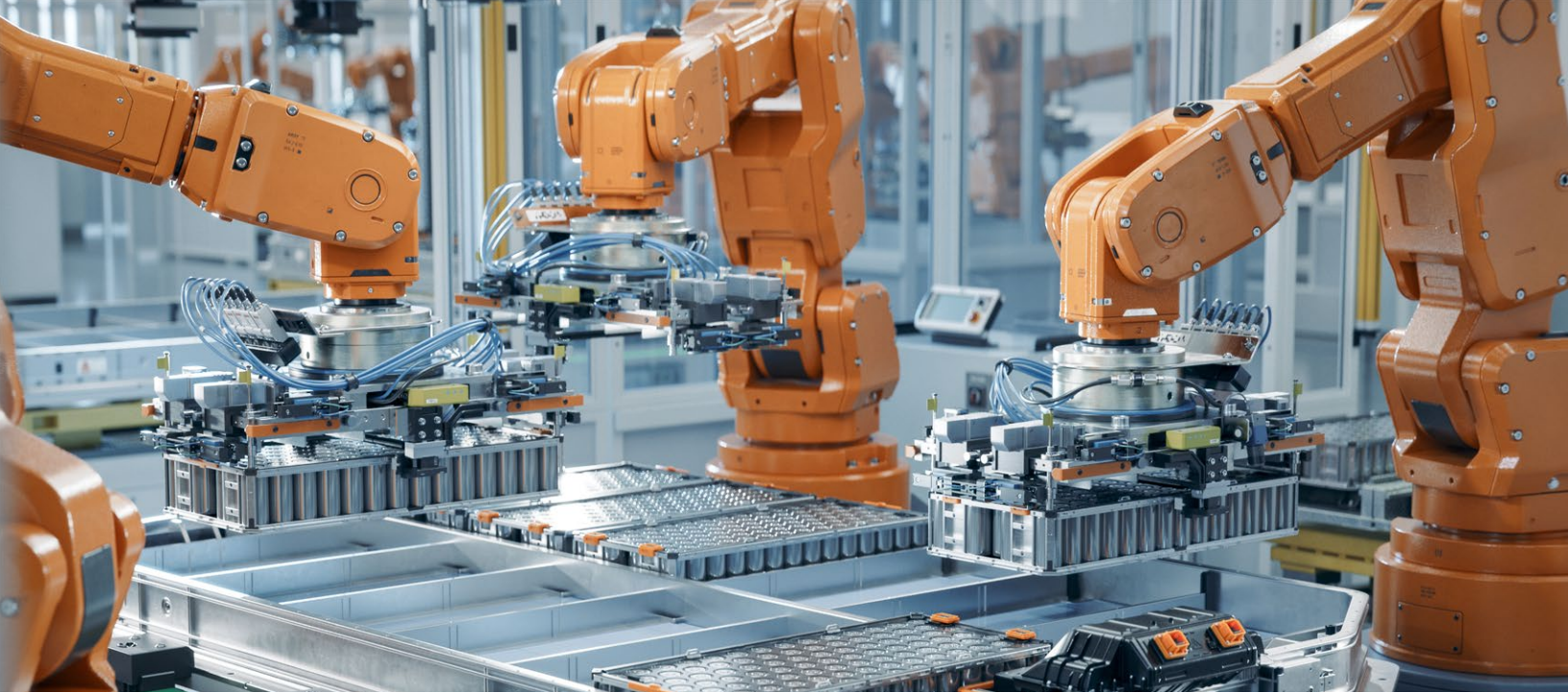
Number of vehicles with over-the-air software capabilities, global



Source: S&P Global Mobility
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Furthermore, as vehicles become more software-dependent, procurement leaders must grapple with pricing models that account for cybersecurity requirements, over-the-air update capabilities, and the long-term commitment needed from software partners to maintain and enhance these systems throughout the vehicle's lifecycle. Procurement professionals will need to address risk management and compliance, ensuring that sourced components adhere to stringent cybersecurity standards to protect against vulnerabilities.

This fundamental shift from hardware-centric to software-centric procurement requires automotive companies to develop entirely new frameworks for cost assessment and supplier relationships. By fostering strong relationships, procurement teams can leverage supplier expertise to drive innovation and enhance supply chain performance.



Trend 4: Sustainability reshapes procurement economics

Sustainability and ethical sourcing have moved from corporate commitments to enforceable requirements. In 2026, regulatory compliance is a primary input into automotive procurement, shaping sourcing decisions just as directly as cost and capacity. Across major markets, stricter enforcement, rising penalties, and conditional market access have narrowed the margin for error. For OEMs, sustainability is no longer a reporting exercise. It is a determinant of whether a supply chain remains viable.

This shift is most visible upstream. As electrification accelerates, regulators are increasingly focused on emissions embedded in materials and components, not just vehicle tailpipe performance. Batteries sit at the center of this change, but scrutiny now extends to steel, aluminum, plastics, and critical minerals. Procurement teams are being drawn deeper into questions of extraction, refining, recycled content, and end of life recovery. What was once outside their remit is now shaping supplier eligibility, cost exposure, and even platform decisions.

In response, OEMs are moving from compliance planning to execution. During 2025 and into 2026, most major automakers have been implementing IT systems and governance processes to meet emerging sustainability requirements. That work has now shifted toward scale deployment. AI driven supply chain mapping, digital material passports, and blockchain enabled traceability systems are becoming core procurement infrastructure. Regulators increasingly expect Tier N visibility—the ability to trace materials from extraction through processing and manufacturing—to validate provenance and carbon intensity across multiple supply chain tiers.

The European Union remains the most influential force shaping sustainable sourcing requirements. Its regulatory framework covers the full vehicle lifecycle and translates sustainability performance directly into cost, eligibility, and market access.

Battery regulation is the most immediate example. The Digital Battery Passport moves from design phase to operational reality in 2026, requiring OEMs to integrate verified data on carbon footprint, recycled content, and supply chain provenance ahead of mandatory enforcement in 2027. At the same time, the Carbon Border Adjustment Mechanism (CBAM) attaches a carbon price to imported materials such as steel and aluminum, turning supplier emissions intensity into measurable tariff exposure.

Material sourcing rules reinforce this pressure. Under the Industrial Accelerator Act (IAA), steel and aluminum used in civilian vehicles must be at least 25% low carbon to qualify for public procurement and state support schemes. This effectively creates a government backed market for green metals and forces procurement teams to reassess supplier portfolios, pricing assumptions, and long term contracts.

Circularity requirements are equally prescriptive. The updated End of Life Vehicles (ELV) regulation mandates that at least 25% of plastics in new vehicles must come from recycled sources, with a defined share sourced from closed loop, automotive “car to car” recycling. Similar closed loop recycled content targets for steel and aluminum are now being formalized, with enforcement commencing in 2026. Digital tracking of ELV material flows is mandatory, closing the loop between end of life recovery and new vehicle production.

Taken together, these measures leave little room for partial compliance. For vehicles sold in Europe, sustainability performance is no longer modular. A shortfall in recycled plastics, a high carbon metal supplier, or a traceability gap upstream can now undermine the viability of the entire vehicle program.

Outside the EU, regulatory approaches differ in pace and structure, but not in direction.

China continues to enforce its domestic dual carbon objectives, while shifting its focus toward preserving export access. Battery manufacturers and material processors are increasingly adopting Western carbon accounting standards and localizing production to remain competitive in EU and North American markets.

Japan and South Korea are positioning themselves as compliant sourcing hubs by aligning more closely with EU environmental requirements and U.S. geopolitical constraints. As a result, suppliers from both countries are strengthening their role as lower risk alternatives for Western OEMs navigating tightening sustainability rules.

India is taking a more prescriptive approach. New battery regulations mandate minimum recycled content, extended producer responsibility, and detailed traceability and reporting. Additional requirements on recycled plastics in automotive manufacturing are designed to accelerate a domestic closed loop ecosystem and reduce reliance on virgin materials.

For global OEMs, this creates a complex compliance matrix. Procurement strategies must now accommodate different regulatory thresholds by destination market, while maintaining cost discipline and operational feasibility across shared platforms.

The practical consequences for procurement are immediate. Sustainability now affects supplier choice, sourcing geography, cost structure, and long term contract strategy.

OEMs that invest early in upstream decarbonization, traceability, and circular material flows are better positioned to manage carbon related cost exposure, secure access to constrained materials, and avoid regulatory disruption. Those that delay face rising tariff risk, tighter supplier availability, and increased vulnerability as compliant capacity becomes scarce.

Sustainable sourcing is no longer a parallel workstream. It has become a structural design parameter. Procurement strategies that fail to integrate carbon intensity, provenance, and circularity are not just less competitive, they are increasingly incompatible with the regulatory environment shaping the future automotive value chain.

Trend 5: Growing digital procurement efforts

Digital procurement is now evolving from tool deployment to ecosystem orchestration. OEMs are moving beyond visibility-focused platforms toward shared data environments that enable predictive decision-making across multi-tier supply networks. For example, BMW is advancing multi-tier traceability and digital thread integration through Catena-X, linking sourcing, engineering, and sustainability data to improve transparency and CO₂ tracking across the value chain.

Ford Motor is strengthening supply chain resilience through digitally integrated planning systems and control-tower capabilities that enhance real-time visibility, disruption management, and scenario planning, supported by participation in cross-industry data initiatives such as Catena-X. Meanwhile, Toyota is evolving its supplier ecosystem by enabling more structured digital collaboration and two-way information flows, improving coordination of demand, capacity, and logistics across its network.

More recently (2025–2026), this shift is accelerating toward regulated, decision-grade data ecosystems. Catena-X is increasingly becoming foundational procurement infrastructure, with standardized data exchange moving from voluntary adoption to a de facto requirement for participation in automotive value chains.

At the same time, emerging supply chain digital twins are enabling cross-enterprise decision-making by integrating real-time supplier, logistics, and risk signals into shared models that support AI-driven scenario planning. Together, these developments signal a shift from visibility and collaboration toward coordinated, semi-autonomous decision orchestration across organizational boundaries, with procurement becoming a continuously synchronized, data-driven ecosystem.



Conclusion: Preparing for the future of procurement

Trade insulated cost optimization, the recalibration of Just-in-Time models, software centric sourcing, sustainability regulation, and digital integration, together are defining the constraints under which procurement decisions are now made.

OEMs are moving away from least cost optimization toward strategies that balance cost with regulatory exposure, supply risk, and long term viability. Sustainability and ethical sourcing, in particular, have shifted from parallel initiatives to structural requirements, directly shaping supplier eligibility, sourcing geographies, and platform decisions. At the same time, software dependence and digital collaboration are redefining procurement relationships, cost models, and accountability across multiple supply chain tiers.

In today's environment, procurement competitiveness hinges on end-to-end visibility, foresight, and the ability to evaluate trade-offs before they become constraints. Our industry-first, AI-driven supply chain intelligence is transforming how teams operate, delivering high-resolution, multi-tier visibility that maps supplier networks beyond Tier 1, uncovers single-source exposure and hidden bottlenecks, and monitors disruption risk in near real time. By turning noisy, fragmented data into expert-validated, actionable insights, procurement teams can precisely assess exposure, test scenarios, and align sourcing strategies with how regulation, capacity, and markets are actually evolving.

Looking ahead, the opportunity is not simply to optimize more efficiently, but to operate more deliberately. Procurement organizations that leverage AI-driven intelligence to reduce blind spots, proactively mitigate emerging risks, and translate data into confident sourcing decisions will be best positioned to lower costs, strengthen resilience, and improve supplier performance. Those that stay agile, invest in decision-grade insights, and embed sustainability, digitalization, and risk into core strategies will lead in an increasingly constrained and complex landscape through 2026 and beyond.

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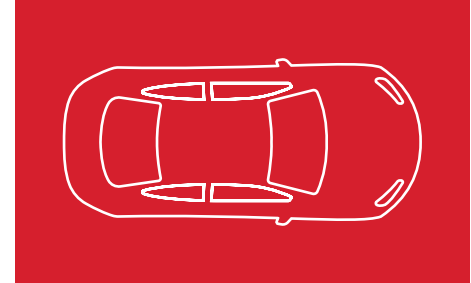
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