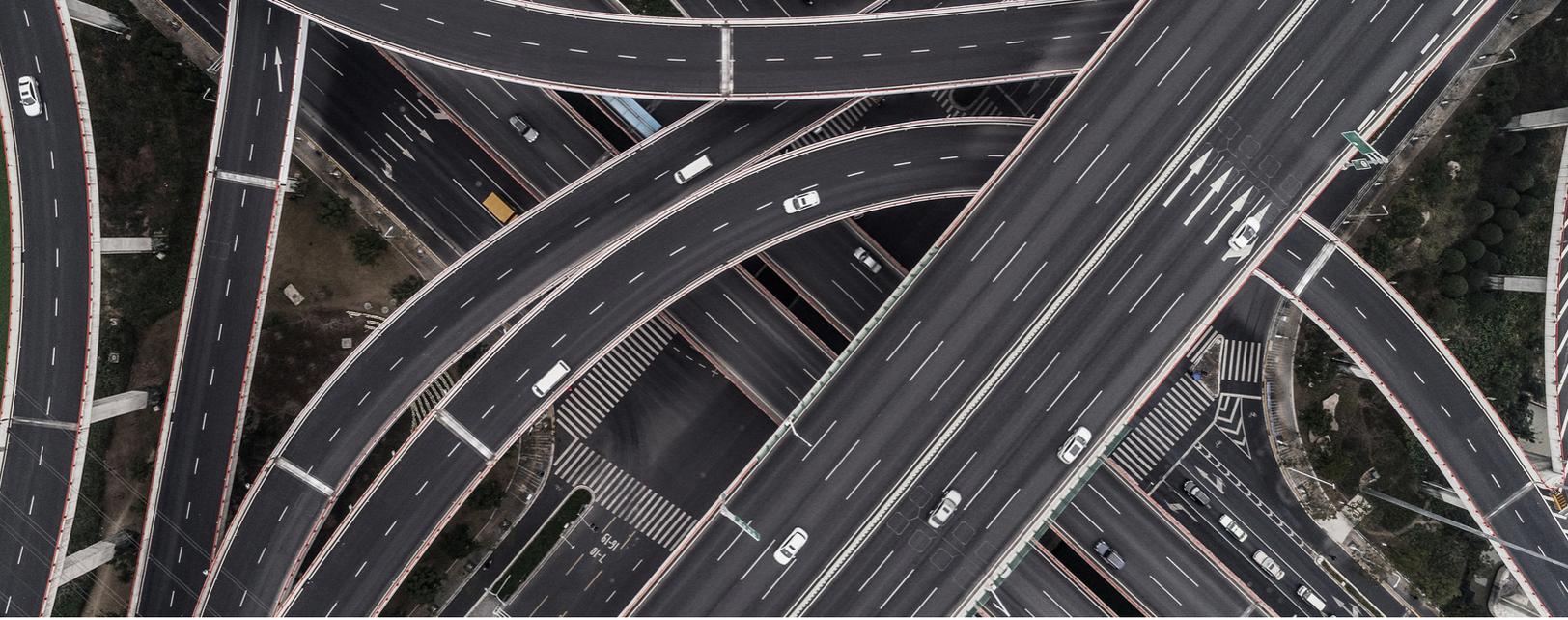


# From Static to Intelligent— 5 Imperatives for the Future of CPG Supply Chains



EMPOWER YOUR SUPPLY CHAIN WITH  
REAL-TIME DATA AND FULL VISIBILITY TO  
PREDICT, COMPETE AND OUTPERFORM.



# The foundation for intelligent, self-optimizing networks

Supply chains are undergoing a fundamental transformation. For years, CPG and Grocery businesses operated with static execution models—long planning cycles, step-by-step processes and siloed decision-making. But as demand becomes more volatile, supplier disruptions intensify and fulfillment grows more complex, these rigid structures are breaking down. To keep pace, businesses must move beyond reactive planning and manual interventions to intelligent, AI-driven networks that sense, predict and execute in real time.

## **From silos to coordinated networks:**

Traditional supply chains operate in isolated processes, but coordinated networks optimize inbound execution by interconnecting warehouse operations, transportation, orders, carriers and suppliers. This multi-party synchronization enables real-time, data-driven decision-making across the supply chain, aligning planning, execution and collaboration.

## **The power of AI-driven orchestration:**

AI is no longer just a forecasting tool—it orchestrates real-time inventory movement, prevents stockouts and enhances fulfillment agility. By dynamically adjusting sourcing, replenishment and distribution, CPG and Grocery businesses can respond instantly to demand shifts.

## **Beyond visibility to multi-enterprise execution:**

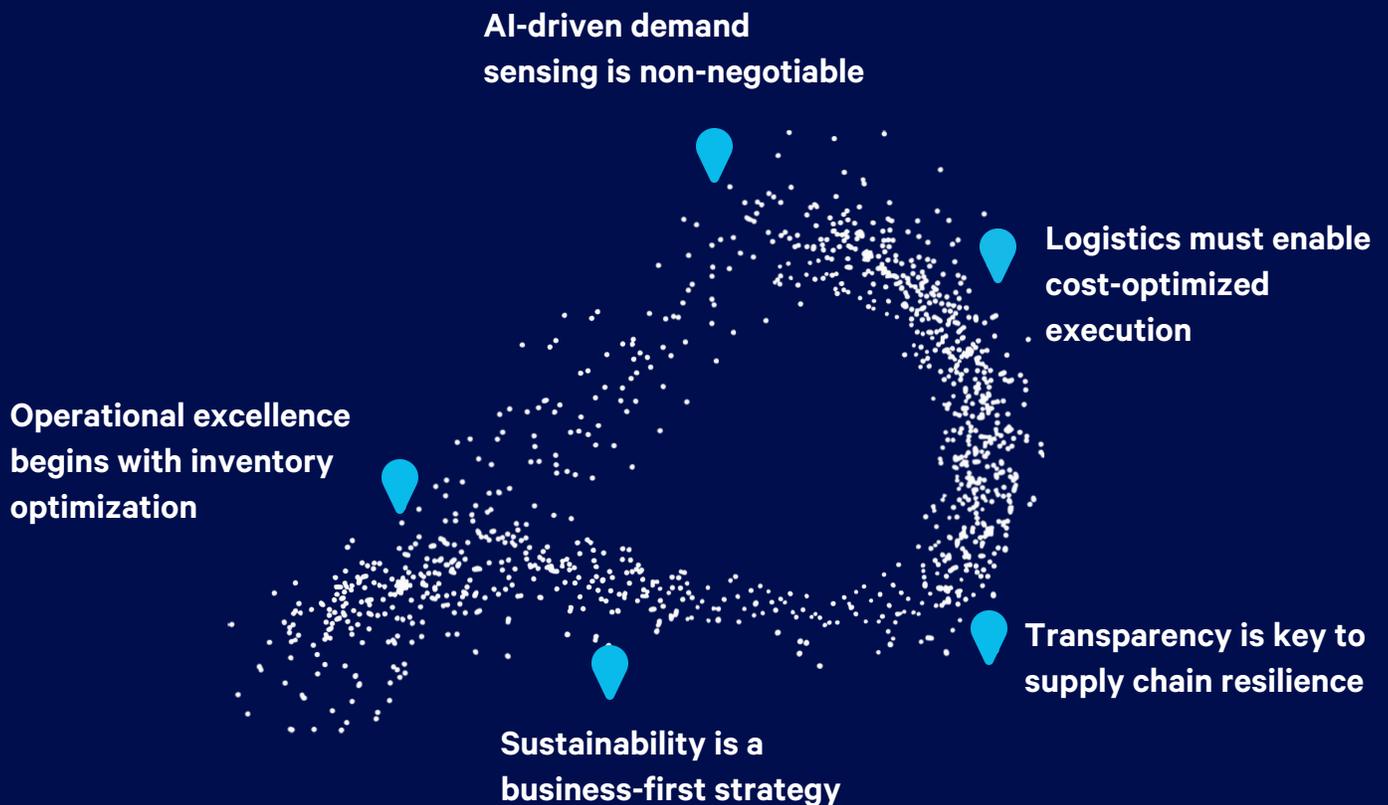
Tracking inventory, orders and shipments is no longer enough. Connected supply chains enable multi-party, multi-enterprise collaboration to proactively address disruptions—from supplier capacity constraints to sudden demand surges—ensuring product availability and optimizing costs across the CPG and Grocery networks.

# CPG supply chains are evolving— Here's what leaders must do

For decades, CPG supply chains followed a predictable model—long production cycles, rigid planning and bulk replenishment. But today's market demands speed, precision and adaptability. Retailers expect tailored assortments; consumers demand faster fulfillment and supply disruptions expose the cracks in traditional execution. Sticking to outdated, siloed operations leads to inventory imbalances, inefficiencies and lost revenue opportunities.

To stay competitive, CPG leaders must shift to intelligent, AI-powered supply networks that turn complexity into agility, inefficiencies into optimization and disruptions into strategic advantages. Leading brands are rethinking how they sense demand, plan inventory, orchestrate logistics and collaborate across the supply chain.

The 5 imperatives defining the future of CPG supply chains are outlined in the rest of this e-book. Together, they enable businesses to move beyond rigid planning cycles and execute decisions in real time—anticipating shifts, mitigating risk and maximizing efficiency.



# Operational excellence begins with inventory optimization

Inventory performance is under more pressure than ever. Static planning and fragmented visibility result in overstocks, stockouts and costly last-minute fixes. As consumer preferences evolve and retailers demand reliability, CPG brands must shift from reactive inventory management to real-time, network-based execution. With enhanced visibility, dynamic allocation and synchronized planning, businesses can ensure product availability and improve OTIF.

## **Enhance last-mile product allocation:**

Use real-time consumption signals, perpetual node-level inventory visibility and actual lead times to automate allocation decisions across the network, enabling partners to coordinate replenishment efficiently and ensure smoother product flow while reducing stockouts, excess inventory and costly expediting.

## **Align production planning with demand:**

Leverage real-time demand forecasting to synchronize production and distribution strategies with shifting consumer preferences, seasonal trends and regional demand fluctuations.

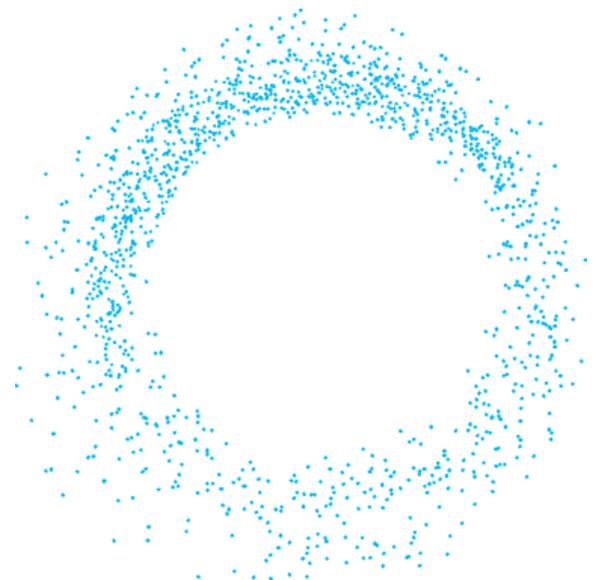
## **Drive on-shelf availability with real-time visibility:**

Enable multi-enterprise transparency into inventory levels, lead times and order statuses across suppliers, manufacturers and retailers. Improve OTIF and OSA by dynamically balancing inventory and coordinating fulfillment based on actual constraints and shared demand signals.



- ▶ A customer-centric supply chain can drive a **60%** improvement in forecast accuracy and power profitable exponential growth.

[Consumer Brands Association](#)



# AI-driven demand sensing is non-negotiable

Market volatility, shifting consumer preferences and supply chain disruptions make traditional demand forecasting unreliable. Static models fail to capture real-time changes, leading to inaccurate inventory planning, costly overstock and stockouts that frustrate retailers and consumers alike. Without AI-driven intelligence, CPGs risk losing sales, inefficient replenishment and supply chain bottlenecks.



## **Predict demand with AI-powered insights:**

Use machine learning to analyze historical sales, market trends and real-time retail signals, identifying demand shifts before they happen. Adjust inventory, production and distribution strategies proactively to stay ahead of fluctuations.

## **Automate inventory adjustments in real time:**

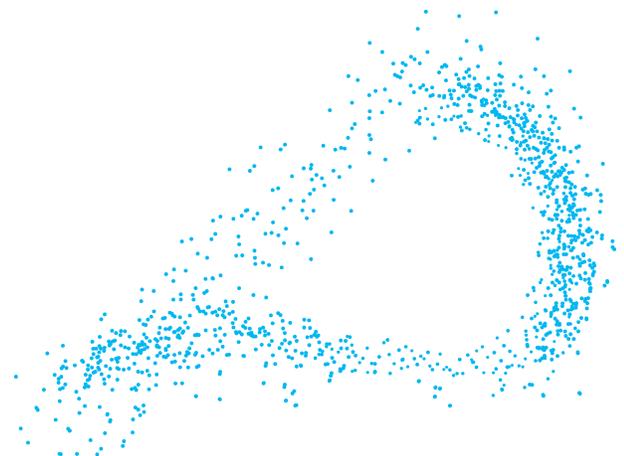
Optimize stock allocation with AI-driven replenishment that dynamically redistributes inventory across locations, preventing excess stock and shortages. Ensure every distribution center has precisely what it needs—no more, no less.

## **Fine-tune demand forecasting by retailer and channel:**

Leverage AI for hyper-granular forecasting across retailers, regions and channels. Align inventory strategies with localized demand to improve fulfillment accuracy, minimize excess stock and ensure seamless product availability.

- ▶ Autonomous supply chain planning can increase revenue by up to **4%**, reduce inventory by up to **20%** and lower supply chain costs by up to **10%**.

McKinsey & Company



# Logistics must enable cost-optimized execution

Volatile demand, rising transportation costs and fragmented execution make efficient logistics a growing challenge for CPGs. Siloed fulfillment systems create costly bottlenecks—delays increase, freight costs soar and inventory moves out of sync with demand. To stay competitive, brands need synchronized logistics that optimize routing, adapt to disruptions and meet retailer expectations in real time.

## **Synchronize routing and replenishment with AI:**

Optimize inventory movement across fulfillment nodes in real time, dynamically rerouting shipments and reallocating stock to prevent delays and inefficiencies.

## **Coordinate supply chain execution end-to-end:**

Use AI-driven distribution planning to align inventory flows with real-time retail demand, minimizing last-minute freight costs and ensuring optimal stock levels across warehouses and stores.

## **Strengthen retail fulfillment with smarter logistics:**

Collaborate with key retail partners to secure priority fulfillment, streamline deliveries and enhance shelf availability. AI-powered logistics orchestration eliminates inefficiencies, creating a resilient and cost-optimized supply network.



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- ▶ CPGs are prioritizing supply chain collaboration and agility, with **84%** planning to invest in real-time dashboard technology and **81%** in advanced analytics in 2025.

CGT

# Transparency is key to supply chain resilience

Blind spots in sourcing, production and distribution create costly disruptions for CPGs. Missed signals lead to supply shortages, regulatory non-compliance and inefficient inventory movement—impacting both profitability and brand trust. As supply chains grow more complex, businesses need complete visibility to mitigate risks, improve operational agility and meet evolving regulatory demands.

## **Gain real-time visibility into suppliers and sourcing:**

Monitor supplier performance, production status and raw material availability to prevent bottlenecks. Use AI-driven insights to detect risks early and adjust sourcing strategies proactively.

## **Enhance coordination with retailers and distributors:**

Align on-shelf inventory, shipment tracking and demand fluctuations in real time. AI-driven visibility enables faster responses to sales trends, promotional surges and shifting consumer demand.

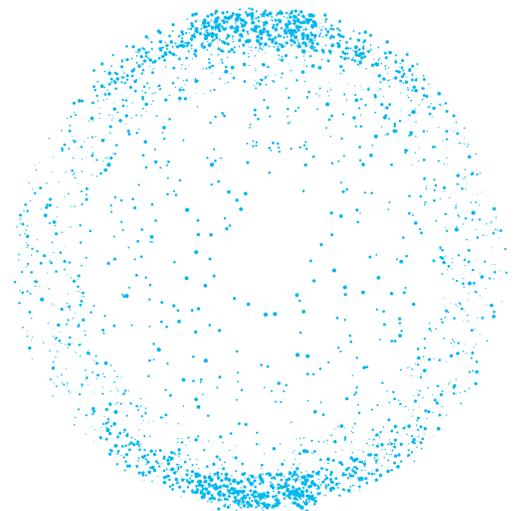
## **Ensure compliance and sustainability with AI:**

Track ESG goals, labor law compliance and regulatory mandates in real time. AI-powered transparency strengthens risk management, improves sustainability tracking and enhances ethical decision-making.



Only **13%** of supply chain and risk management executives have complete visibility of their end-to-end supply chain.

KPMG



# Sustainability is a business-first strategy

Sustainability is a key lever for efficiency, cost control and brand loyalty. CPGs that integrate sustainability into sourcing, inventory management and logistics reduce waste, optimize operations and strengthen retailer and consumer trust. AI-powered visibility and automation ensure that sustainability goals align with business performance, creating a supply chain that is both responsible and profitable.

## **Drive sustainability with smart, accountable sourcing:**

AI-powered supplier monitoring tracks sustainability benchmarks, ethical sourcing practices and compliance standards, allowing CPGs to work with responsible partners without adding operational complexity.

## **Reduce waste with AI-optimized inventory management:**

AI-driven replenishment minimizes excess stock and spoilage, lowering costs and environmental impact while ensuring products are available when and where they're needed.

## **Cut emissions via sustainable packaging and distribution:**

Optimized freight loads and eco-friendly packaging reduce carbon footprint and material waste, helping brands meet retailer and consumer expectations while improving cost efficiency.



- ▶ Products marketed as sustainable accounted for **18.5%** of the CPG market in 2023, up from **17.3%** in 2022—the largest single-year increase in the last five years.

[NYU Stern Center for Sustainable Business](#)



# The future of CPG supply chains—smarter, faster and more profitable

The CPG industry stands at a critical inflection point. Traditional supply chains can't keep up with today's volatility, retailer demands and operational complexity. Market leaders are embracing AI-powered networks that turn obstacles into opportunities and drive new levels of efficiency and resilience.

The five imperatives in this e-book form the foundation for CPG's next evolution. Implementing these strategies enables supply chains to detect shifts before they happen, adapt instantly to disruptions and continuously self-optimize.

The impact is clear: tailored assortments, precise demand sensing, optimized logistics, real-time transparency and sustainability that delivers business value. The most successful CPG brands will anticipate change and respond with intelligence, turning supply chain complexity into a competitive advantage. The future belongs to those who begin this transformation today.