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E-Commerce, D2C and Quick-Commerce Supply Chains in 2027

What businesses should expect in the coming year



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EXECUTIVE SUMMARY

E-commerce, D2C and quick commerce are moving beyond separate growth stories to become one operating challenge. The challenge is to serve demand that moves faster, fragments more deeply, and exposes supply chain decisions almost instantly.

In the earlier phase of digital commerce, the priority was reach. Brands wanted to be present on marketplaces, launch their own websites, expand seller networks, and test faster fulfillment models. The next phase is different. Growth is still important, but the more urgent question is whether the operating model can support that growth without creating margin leakage, inventory imbalance, service failures, and planning noise.

This was especially visible in 2026. E-commerce continues to expand as a share of retail. Quick commerce is moving from a convenience experiment into a serious consumption channel across groceries, beauty and personal care, packaged goods, and impulse categories. D2C is evolving beyond owning a website into a way for brands to learn faster, test faster, and build stronger customer relationships outside the limits of marketplace algorithms.

But scale is only half the story since the bigger shift is operational. Demand is becoming more event-led, more hyperlocal, more influenced by algorithms, and more difficult to read from historical sales alone. 3SC's e-commerce demand planning research highlights the core break: e-commerce demand resets hourly, not monthly, across anonymized buyers, long-tail SKU portfolios, thin sales histories, marketplace mechanics, and promotion-led volatility.

For businesses, this means digital commerce growth cannot be evaluated only by GMV, order count, or customer acquisition. What matters is the ability to sustain profitable growth without letting fulfillment cost, returns, excess inventory, lost sales, and working capital pressure erode the upside.

This shift demands a more responsive approach to supply chain planning. Monthly forecasts, static inventory norms, and broad channel-level assumptions cannot absorb the pace of modern digital commerce. Sustaining growth will require faster demand sensing, more precise inventory positioning, better event planning, and disciplined execution.

Digital commerce is still expanding. The operating question is changing.

India's e-commerce ecosystem is projected by Google and Deloitte to reach **$250 billion by 2030**, with quick commerce maturing into a **$50 billion** segment and its shopper base projected to double to **70 million**.

THE SHIFT IN DIGITAL COMMERCE

Digital Commerce Then	Digital Commerce Now
Channel expansion	Operating maturity
Monthly planning	Daily / hourly sensing
National inventory view	Hyperlocal inventory placement
Sales history as the main planning input	Signals, context, and distortion analysis
Fast delivery as a differentiator	Profitable speed as the differentiator

DIGITAL COMMERCE IS MOVING FROM CHANNEL EXPANSION TO OPERATING MATURITY

The first digital commerce question was simple: where should we sell?

The next question is harder: how should the business operate when every channel creates a different demand signal?

A brand may sell the same product through Amazon, Flipkart, its own D2C website, a social commerce campaign, a retail partner, and a quick-commerce platform. On paper, it is the same SKU. Operationally, it is not the same demand.

Marketplace demand is influenced by search rankings, pricing and promotional visibility, while delivery promises and platform events can further shape buying decisions. D2C demand, on the other hand, depends more on brand engagement and customer retention, with personalised experiences and new product launches influencing purchasing behaviour. Quick-commerce demand is shaped by hyperlocal availability, assortment relevance, delivery radius, dark-store capacity, rider availability, weather, and time of day.

That difference matters because supply chains are still often planned as if digital demand is one clean number.

The coming year will push companies away from generic “digital growth” strategies and toward channel-specific operating models. Sustained success will depend on more than simply expanding into additional online sales channels. They will know which channel serves which role.

Marketplaces will remain critical for scale, discovery, and customer trust. D2C will become more important for first-party learning, loyalty, product testing, and margin control. Quick commerce will expand where speed changes buying behavior, especially in high-frequency and impulse categories.

The challenge is that these channels will not replace one another. They will coexist. That coexistence creates the real supply chain problem.

The same product may need different service promises, inventory strategies, and planning rhythms depending on where it is sold. A monthly forecast may still support baseline planning, but it cannot explain a sudden marketplace spike, a viral D2C launch, or a quick commerce stockout in one neighborhood.

Digital commerce is becoming less about channel access and more about operating precision:

SAME SKU. DIFFERENT DEMAND SIGNAL.

Marketplace	D2C	Quick Commerce
Search rank	Product drops	Dark-store availability
Sponsored placement	First-party data	Hyperlocal assortment
Platform events	Community and retention	Time-of-day demand
Competitive pricing	Bundles and subscriptions	Rider / node capacity
Reviews and ratings	Brand experience	Instant replenishment

The same SKU can create three different operating realities depending on where it is sold.

THE DEMAND SIGNAL IS GETTING FASTER, THINNER, AND MORE DISTORTED

Traditional demand planning assumes that historical sales are a useful guide to future demand. In e-commerce, that assumption is only partly true.

Sales history can be distorted by stockouts, pricing and promotional activity. Changes in search rankings, competitor availability and marketplace algorithms can further influence demand patterns, making historical sales an unreliable indicator of future demand. An SKU may appear weak because it was underexposed. Another may appear strong because it received temporary sponsored visibility. A promotion may create incremental demand, or it may simply pull forward demand that would have happened later.

This is why digital commerce planning cannot rely only on what sold. It must also ask why it sold, what demand was missed, and which signals are likely to repeat.

3SC's research identifies four structural differences in e-commerce demand planning, including incomplete buyer and channel visibility, faster demand movement, long-tail catalogs with limited history, and marketplace mechanics that distort the signal.

For businesses, the implication is direct. Forecast accuracy at an aggregate level can hide failure at the level where customers experience the brand.

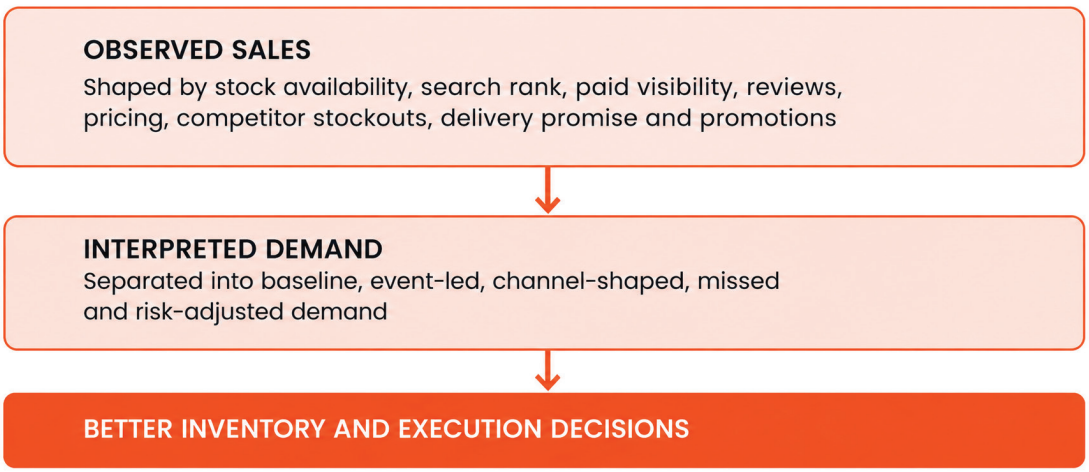
National-level forecasts may appear accurate even when inventory shortages affect key cities. Similarly, stable channel forecasts can mask the impact of marketplace events, leaving some locations with excess stock and others facing lost sales. Even successful promotions can come at the expense of margins and service levels, creating further challenges for the next planning cycle.

The coming year will push companies to separate demand into more useful layers. Baseline demand must be distinguished from event-led demand. Missed demand must be understood separately from recorded sales. Channel-shaped demand caused by ranking, pricing, or paid visibility must not be confused with lasting consumer pull. The demand number that drives inventory should be risk-adjusted, not simply copied from the last sales trend.

This is not a technical distinction. It is an operating discipline.

Without it, companies will keep confusing demand growth with demand distortion.

DEMAND SIGNAL DISTORTION STACK



What is sold is only the visible layer. The planning value is in understanding what shaped the sale.

D2C IS BECOMING A LEARNING ENGINE, NOT JUST A SALES CHANNEL

D2C is often discussed as a way to bypass intermediaries. That is too narrow.

In 2027, D2C is going to be a learning engine. It helps brands understand which products resonate, which cohorts repeat, which claims convert, which bundles work, and which communities can sustain demand without permanent discounting.

That learning matters because marketplaces can give scale, but they do not always give control. D2C gives brands more ownership over the customer relationship, the product story, the data, and the post-purchase experience. But it also adds operational responsibility.

A brand-owned channel must consistently deliver on its customer promises. This requires reliable product availability and timely deliveries, along with efficient returns management and personalised customer experiences. When a marketplace order fails, the platform absorbs part of the experience. When a D2C order fails, the brand owns the disappointment directly.

For businesses, this changes how growth should be planned. Campaigns cannot be evaluated only by reach, traffic, and conversion. They must be connected to supply readiness. A product drop that creates demand faster than the supply chain can respond is not just an operations issue. It becomes a customer trust issue.

D2C adds planning complexity as demand becomes increasingly influenced by marketing campaigns and product launches. Creator collaborations and paid media can trigger sudden spikes in orders, while limited-edition products and bundles create demand patterns that differ from traditional retail sales.

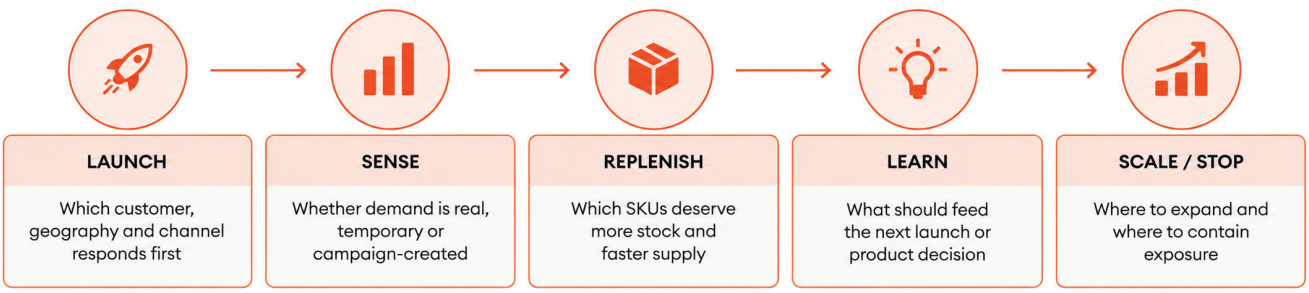
The next year will likely see D2C brands operate with smaller, faster launch cycles. Large inventory commitments will give way to controlled drops, early-signal reading, and faster replenishment decisions. D2C data will also become more useful to enterprise planning, especially when search behavior, add-to-cart movement, repeat purchase, subscription signals, and campaign response can show demand before sell-through fully appears.

Fulfillment will carry more of the brand promise. Customers will expect accurate delivery commitments, clean returns, proactive communication, and fast recovery when something goes wrong. That makes D2C a supply chain test as much as a commercial one.

D2C supply chains need to be designed for learning speed. They must be able to read early signals, adjust inventory, protect high-potential SKUs, and stop weak experiments before they become dead stock.

The companies that treat D2C as only a storefront will miss the real value. The companies that treat it as a demand intelligence system will learn faster than competitors.

D2C LEARNING LOOP



The strongest D2C supply chains do not just fulfill demand. They learn from it.

QUICK COMMERCE IS ENTERING ITS DISCIPLINE PHASE

Quick commerce has already proved that customers value speed. The challenge now lies in delivering that speed while maintaining operational efficiency and profitability.

In high-density markets, quick commerce has changed customer expectations. Purchases that once required planning are increasingly shifting towards near-instant replenishment. This trend extends beyond groceries and snacks to personal care, beauty and home essentials, with categories such as electronics accessories and festive products also gaining traction.

But the model is operationally demanding. It requires local assortment design, frequent replenishment, high inventory accuracy, store-level demand sensing, dense fulfillment networks, and tight control over labor, rider capacity, real estate, and shrinkage.

The coming year will mark a shift from expansion to productivity. Fast growth will invite tougher scrutiny. Investors, operators, and enterprise brands will increasingly ask whether the model improves profitable access or simply moves cost from the consumer to the supply chain.

Hyperlocal assortment will become one of the defining capabilities. A dark store is not a miniature warehouse but a local demand node. Getting the assortment right requires understanding neighbourhood-level preferences and purchasing power. Factors such as weather, local events and the concentration of offices or residential communities also influence what customers buy and when.

Inventory productivity will matter just as much. Quick commerce cannot carry lazy stock. Space is limited, replenishment is frequent, and service failure is immediate. Every SKU must justify its position in the node.

Demand volatility will remain the hardest variable. Sudden changes in weather or local events can shift demand quickly. Social media trends and competitor promotions can further influence buying patterns, making traditional planning at national or even city level insufficient.

For businesses, the implication is clear. Quick commerce must be managed as a precision channel, not just a faster delivery channel.

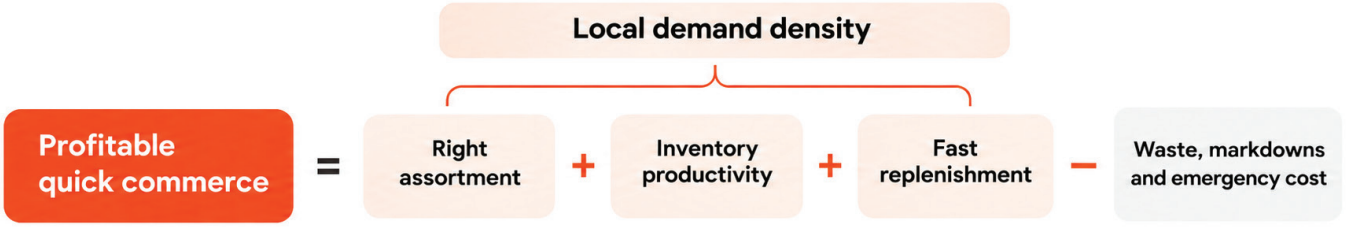
The key decisions will be which categories deserve instant availability, which SKUs should be placed in which local nodes, how much inventory can be held without damaging margin, and when speed creates real customer value versus avoidable cost.

Quick commerce will continue to grow, but its expansion will become more selective. Speed will remain important, while unit economics will determine where and how sustainably it scales.

Quick commerce is scaling beyond a niche format.

Market Research projects the global quick-commerce market at **US$291.4 billion in 2026**, reaching **US$2,013.3 billion by 2033**, at a **31.8% CAGR**.

QUICK COMMERCE OPERATING EQUATION



Speed creates value only when the local operating model can support it profitably.

TWO OPERATING SCENARIOS SUPPLY CHAIN LEADERS SHOULD PREPARE FOR

TWO FAILURE PATTERNS TO WATCH

Scenario	What looks good	What breaks underneath
D2C launch spike	Campaign outperforms	Inventory is not where demand lands
Quick-commerce festival spike	Revenue jumps	Store-level assortment and replenishment fail

Scenario 1: The D2C launch that succeeds too quickly

A personal care brand launches a new premium product through its own website, creator partnerships, and marketplace storefronts. The campaign performs better than expected. Search rises, social engagement increases, first-week sales exceed plan, and the product begins trending in a few metro markets.

At first, this looks like success.

Then the supply chain pressure appears. Inventory is available nationally but not in the cities where demand is strongest. Marketplace stock sells out before the next replenishment run. The D2C channel keeps accepting orders, but delivery promises stretch. The brand team increases media because conversion is strong, while operations asks for a pause. A hero SKU starts losing momentum because customers cannot get it when interest is highest.

The issue is not that demand was unpredictable. The issue is that the operating model could not learn and respond fast enough.

Brands are increasingly seeing product launches shaped by social discovery and creator-led demand. Short-form videos and limited product drops can quickly gain traction through platform algorithms, turning early signals into significant demand before traditional planning cycles can respond.

The right response is not to overstock every launch. That would create its own problem. The better approach is to treat launches as controlled learning systems.

Before launch, teams should use comparable products to establish expected demand ranges and identify potential risks. Clear channel allocation rules and replenishment triggers, supported by defined decision-making responsibilities, can help teams respond effectively as demand evolves.

During launch, they should track early indicators such as conversion, search, repeat purchase, geographic concentration, returns, cancellation, and marketplace availability. After launch, they should separate true baseline demand from campaign lift.

This is where commercial and supply chain alignment becomes critical. Demand generation needs room to create momentum. Supply chain needs visibility into when demand is exceeding the business's ability to serve it profitably. Leadership needs both teams optimizing for sustainable growth, not isolated wins.

The lesson: a successful launch is not only one that sells out. It is one that teaches the business where to scale next.

Scenario 2: The quick-commerce festival spike

A packaged foods brand prepares for a festive season. Historically, the business planned demand at a regional level and pushed inventory into major distribution points. This year, a larger share of festive demand comes through quick-commerce platforms.

The demand pattern changes.

Some neighborhoods over-index on gifting packs. Others move smaller impulse packs. One platform promotes a bundle heavily in selected cities. Weather changes increase demand for certain categories. A competitor stockout temporarily lifts sales. A local festival creates a sharp spike in a few micro-markets but has little impact elsewhere.

At an aggregate level, the forecast may still look reasonable. At the dark-store level, it fails.

Some stores run out of high-velocity packs. Others carry slow-moving festive inventory after the demand window closes. The brand sees strong sales in one channel but weak margin after emergency replenishment, returns, and markdowns. The post-season review concludes that demand was volatile, but the deeper problem was that the planning grain was too broad.

This scenario will become more common as quick commerce expands beyond routine grocery missions into occasion-led categories.

The operating response is different from traditional seasonal planning. Businesses will need local assortment rules, channel-specific event calendars, pack architecture by fulfillment model, daily sensing during the event window, and clear rules for replenishment, substitution, and cut-off decisions.

The planning question shifts from “how much inventory do we need for the season?” to “which inventory should sit in which node, for which customer mission, during which demand window?”

The lesson: in quick commerce, the event is local even when the campaign is national.

AI WILL MATTER, BUT GOVERNANCE WILL MATTER MORE

AI is becoming an integral part of the digital commerce operating model. Its applications are expanding across demand sensing and dynamic replenishment, helping businesses identify disruptions and improve planning decisions. AI is also gaining traction in warehouse automation and delivery optimisation, while supporting more accurate returns prediction and personalised customer experiences.

But 2027 is also bringing more realism.

AI will not fix a fragmented operating model by itself. If product data is inconsistent, inventory visibility is weak, promotion calendars are not integrated, and teams do not trust the recommendations, AI will only make the confusion faster.

For digital commerce, this matters because the environment is already noisy. AI can help separate signal from noise, but only if the business defines which decisions it wants to improve.

The most useful applications will be specific: identifying demand shifts, recommending replenishment, detecting stockout risk, adjusting allocation, flagging promotion distortion, predicting returns, or showing when no action is better than overreaction.

Each decision carries a different level of risk. Flagging demand fluctuations requires a certain level of trust in the system, but changing inventory allocations carries greater responsibility. Recommendations around markdowns, product substitutions or replenishment decisions require clearly defined business rules and accountability.

The coming phase will reward companies that apply AI to bounded, decision-specific problems. The goal should not be "autonomous commerce" as a slogan. The goal should be better decisions where speed, data volume, and complexity exceed human capacity.

The practical rule is straightforward: automate detection before automating decisions, and govern decisions before scaling autonomy.

AI adoption is rising, but readiness is still the constraint.

Gartner's 2026 supply chain AI survey found that **56% of CSCOs** see integration with legacy systems and processes as a major challenge, while **50%** cite limited internal expertise or talent to implement and manage AI.

Autonomy will be gradual, not instant.

Gartner predicts that by 2030, only **5%** of organizations implementing supply chain planning automation will make at least **10%** of planning decisions autonomously, because human oversight, data readiness, technology readiness and organizational readiness remain critical.

BEYOND REVENUE: MAKING DIGITAL COMMERCE GROWTH PROFITABLE

Digital commerce has reached the point where leadership alignment matters as much as channel capability.

The business cannot evaluate online growth only through revenue. Commercial teams cannot create demand without understanding supply constraints. Supply chain teams cannot plan supply based only on historical sales. Finance cannot assess channel performance without seeing the true cost of fulfillment, returns, markdowns, and inventory imbalance.

As digital commerce continues to evolve, businesses will need to address a more critical set of questions.

Where is digital growth actually profitable? Which channels create repeatable demand, and which depend on discounts or platform visibility? Which categories deserve faster fulfillment, and which do not? Which SKUs should be protected for availability, and which should be governed tightly for working capital? Where are stockouts caused by forecast error, and where are they caused by poor allocation or slow replenishment? Which promotions create incremental demand, and which only pull demand forward? How much inventory should sit close to the customer, and where does that proximity become too expensive?

These questions matter because digital commerce is making operational weakness visible faster. A poor forecast becomes a stockout. A stockout becomes a lost customer. Excess inventory becomes markdown pressure. Slow replenishment becomes missed momentum. Weak returns management becomes margin leakage.

Managing these trade-offs effectively requires more than responding to every change in demand. Businesses need the visibility to identify what matters, the discipline to prioritise decisions, and the ability to act before emerging risks affect performance.

WHAT TO EXPECT IN THE COMING YEAR

E-commerce will keep growing, but scrutiny will shift to quality of growth. More leaders will ask whether e-commerce growth is improving profitability, customer lifetime value, and market reach, or whether it is creating hidden cost in fulfillment, returns, and working capital.

D2C will become more selective and more strategic. Brands will use D2C to test, learn, personalize, and build communities. But they will also become more disciplined about where D2C should scale and where marketplaces remain the better route.

Quick commerce will expand beyond grocery, but not every category will work. High-frequency, impulse, convenience, and occasion-led categories will continue to benefit. Bulky, low-margin, slow-moving, or highly complex categories will face tougher economics.

Tier-2 and Tier-3 markets will matter more. Growth outside metros will increase, but companies will need local playbooks. Demand density, assortment, price sensitivity, fulfillment cost, and service expectations will vary sharply by market.

Inventory will move closer to demand. More inventory will be distributed across regional warehouses and marketplace fulfillment networks, with dark stores and micro-fulfillment centers bringing stock closer to customers. Retail-adjacent locations will also play a growing role in supporting faster deliveries. The question will be whether companies can manage this distribution without losing control.

Returns will become a bigger planning variable, extending beyond reverse logistics to influence forecast quality and inventory accuracy. Their impact on margins and sustainability will also make returns management increasingly important to the overall customer experience.

AI adoption will accelerate, but trust will decide scale. Companies will use AI more widely, but the winners will be those that connect AI to trusted data, workflow governance, and clear decision rights.

Gartner identifies agentic AI and physical AI among the top supply chain technology trends for 2026, shaped by three broader themes: autonomy and agency, specialization and intelligence, and trust and governance.

THE SUPPLY CHAIN LEADERSHIP AGENDA

As digital commerce continues to evolve, businesses will need a more disciplined approach to planning and execution.

Build channel-specific demand visibility. Do not blend marketplace, D2C, quick commerce, and retail demand into one generic number. Each channel has different triggers, service expectations, and cost structures.

Separate baseline demand from event demand. Promotions, campaigns, creator drops, marketplace events, and festivals should not permanently distort the baseline forecast. Teams need to know what demand is repeatable and what was event-created.

Plan at the level where failure occurs. Customers do not experience national availability. They experience whether the product is available in their pin code, delivery radius, preferred platform, or promised time window.

Treat launches as learning cycles. New products should be planned with demand ranges, analogue logic, early-signal tracking, and controlled replenishment rules. The first forecast will be imperfect. The speed of correction matters more.

Measure true channel economics. Track not just revenue, but contribution after fulfillment cost, returns, markdowns, working capital, service penalties, and operational complexity.

Govern AI before scaling it. Use AI where it improves specific decisions. Make assumptions explainable. Keep override discipline. Build trust through measurable decision quality, not broad claims.

Align commercial and supply chain calendars. Campaigns, promotions, launches, and seasonal events should be tied to supply readiness. Demand creation should not outrun the organization's ability to serve demand profitably.

2026 DIGITAL COMMERCE READINESS CHECK

Readiness question	Why it matters
Can we see demand by channel, SKU, location and time window?	Because aggregate demand hides local failure.
Can we separate baseline demand from campaign or event demand?	Because not every spike should reset the forecast.
Can we detect whether stockouts are caused by forecast error, allocation or slow replenishment?	Because each failure needs a different fix.
Can we measure true channel profitability after fulfillment and returns?	Because revenue growth can hide margin leakage.
Can we connect campaign calendars to inventory readiness?	Because demand creation without supply readiness breaks trust.
Can we govern AI recommendations before automating decisions?	Because speed without accountability increases risk.

CLOSING: THE NEXT SUPPLY CHAIN ADVANTAGE IS RESPONSE TIME

E-commerce, D2C, and quick commerce are increasingly becoming part of the same operating conversation. Each reflects a common challenge as demand moves faster than traditional planning cycles can absorb.

The coming year will test how quickly supply chains can learn. Not just how accurately they can forecast, or how fast they can deliver, but how well they can detect a change in demand, understand what caused it, decide where it matters, and act before the customer experience breaks.

That is the real shift for 2027 and beyond. Sustainable growth will depend on how accurately businesses interpret demand, position inventory where it is needed, and respond to market changes without adding unnecessary cost or operational complexity.

As digital commerce accelerates, speed matters. But the more sustainable advantage lies in moving quickly without compromising margins, governance, or customer trust.