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The Winning Edge:

How Edge Logistics is Shaping the Future of Retail

In the age of instant gratification, the cutting edge of logistics resides at the Edge. This white paper explores how Edge Logistics, logistics practices powered by data science and AI, are fundamentally transforming the game. Discover how this innovative approach optimizes your product location and delivery times, unlocking unparalleled speed, flexibility, and customer satisfaction for forward-thinking brands.

Today's hyper-digital retail landscape is unforgiving. Customer expectations for speed, traceability, and security are skyrocketing, with one negative experience enough to lose them forever. A whopping 73% would jump ship after just one misstep, according to a TCN Inc. survey.

In this environment, supply chain leaders with omni-channel fulfillment need to find ways to deliver faster than ever without compromising quality or raising costs. It's an optimization game, and market leaders are turning to a new approach to logistics, called Edge Logistics, to unlock new value, especially in the last mile.

> The closer your inventory is to your customers, the faster and more cost-effectively you can deliver it

What is Edge Logistics?

The fundamental insight behind Edge Logistics is elegantly simple: the closer your inventory is to your customers, the faster and more cost-effectively you can deliver it. However, proximity is not the only vector—intelligence is truly the key that unlocks the value of this approach. Advanced data science applications provide critical insight on how to dynamically monitor inventory levels and ensure that the right product is in the right place at the right time when the customer calls. This revolutionary model breaks free from traditional, centralized fulfillment hubs and pushes operations closer to the edge, shortening the shipping distance to customer's doors.

This approach draws inspiration from the explosively successful edge computing model. Just as edge computing processes data closer to its source for faster response times and improved efficiency, Edge Logistics strategically positions inventory closer to customers and optimizes fulfillment and delivery networks, shrinking the final mile and unlocking a cascade of benefits.

Technologists architected edge computing after facing a staggering rise in volumes, and demand for quicker responses. By using technology to intelligently push responses closer to end users, response times were naturally cut short. Additionally, network capacity freed up, creating more bandwidth for processing critical data. But the benefits didn't stop

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there, leveraging the edge didn't just deliver better performance, it increased efficiency, lowered costs, achieved higher speeds, allowed real-time insights, improved customization and personalization, and ultimately—created more satisfied customers.

Now the entire computing industry is moving that way, with 75% of enterprise data predicted to be processed at the edge by 2050, according to research and analyst firm Gartner.

Edge Logistics promises to deliver a similar, if not more potent, suite of benefits to supply chains. By bringing inventory closer to customers and pairing this with data intelligence, to unlock faster deliveries, reduced costs, improved visibility and greater control over operations, and importantly, the ability to consistently exceed customer expectations.

In essence, Edge Logistics is a direct translation of a proven success story from one domain to another. By harnessing the power of proximity, brands and retailers can empower their supply chain to thrive in the age of instant gratification, delivering a winning edge.

How Edge Logistics is redefining the retail landscape

Traditionally, supply chains have relied on manual processes and outdated centralized systems, leading to inefficiencies, errors, and increased costs. Edge Logistics has the power to help brands and retailers of all sizes that are struggling to adjust their logistics infrastructure and operations. As the transition to digital accelerates, many are stuck with legacy assets built for slower delivery cycles or without the internal capabilities to build multi-nodal distribution networks.

Conventional race-to-the-bottom tactics such as swapping vendors, renegotiating contracts, and incremental process improvements have proven to be stopgaps that have distracted executives and their teams from creating and executing the longer-term strategies and capabilities they need. But the truth is that many brands and retailers right now still lack the right networks, analytics, and operations to be agile in today's omni-channel environment. Edge Logistics can change that.

Cloud Computing

Computation takes place here

Edge Computing

Computation takes place here

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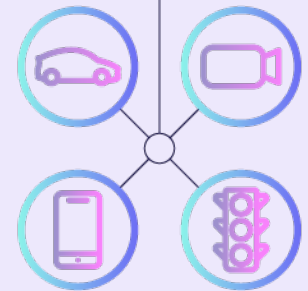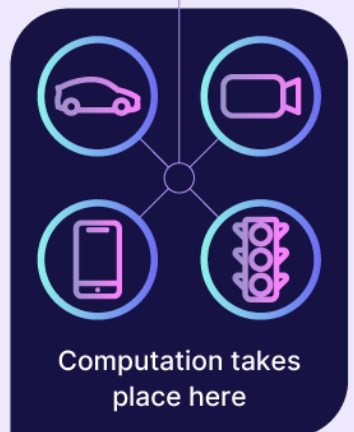
By combining optimum locations with advanced data intelligence and state-of-the-art AI and data processing capabilities, the Edge ecosystem is reshaping the omni-channel retail landscape by cutting costs and improving efficiencies—which result in faster deliveries and happier customers.

As Andrew Stevens, senior director analyst with the Gartner Supply Chain Practice puts it: "Edges are physical locations where things, people, and data connect. Increasingly, supply chains are becoming more dynamic and cover larger networks where data and decisions originate at the edge–from operators, machines, sensors or devices."

The huge advantage of the Edge is that not only can inventory be closer to your intended delivery door, but fulfillment and delivery decisions can also be more agile. It is no surprise then that leading brands and retailers are moving fast to push their supply chain toward Edge solutions. The trend is gaining so much speed, Gartner predicts that up to one-quarter of supply chain decisions will be made across Edge intelligent ecosystems by 2025.

How edge-enabled fulfillment and delivery compares with traditional supply chain models.

Traditional fulfillment and delivery:

- ✓ Centralized warehousing, decision-making
- ✓ Vulnerable to supply chain shocks
- ✓ Manual, fragmented data processes
- ✓ Multi-day delivery processes
- ✓ Cost spikes

Edge fulfillment and delivery:

- ✓ Closer to customers/ Edge of the urban area / multi-nodal
- ✓ More resilient and shock-proof
- ✓ Automated, real-time data collection and decision-making
- ✓ Faster delivery (24 hours)
- ✓ Lower and more predictable costs

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The benefits of Edge Logistics

From allowing brands to respond faster and act smarter by optimizing inventory management and streamlining logistics processes to keeping a lid on costs and helping brands build customer loyalty, Edge Logistics is transforming retail in important ways. We highlight four key benefits here:

Benefit 1: Edge nodes move you closer to customers so you can be more agile

Edge Logistics moves brands closer to your customers enabling you to respond faster, and act smarter by optimizing inventory management, reduce order fulfillment times, and streamline logistics processes far more effectively than traditional supply chain practices.

Push-based, centralized distribution facilities have always been ill-suited for fast, cost-effective omni-fulfillment. That's why when American Eagle Outfitters, Inc. (AEO) started running out of space in its two centrally located distribution centers and needing help with direct-to-consumer (DTC) responsibilities, it chose to take a step to the Edge. Instead of investing in another mega distribution center, AEO set up five in-market Edge nodes in Los Angeles, Florida, Boston, Chicago, and Dallas to handle fulfillment for DTC customers and store replenishments in those areas.

This omni-channel Edge Logistics network paid off in less than one year and has continued to deliver value since. In 2022, AEO expanded to include two more in-market nodes in Atlanta and St. Louis, bringing their total count to seven. AEO has strategically improved inventory regionalization from 23% to 63% while simultaneously shrinking shipments-per-order by over 10%, even as volumes climb. This, combined with reducing average shipping zones, has decreased transportation costs by over 1% while delivery times improved by nearly one day.

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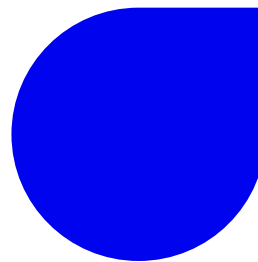
On top of these important supply chain improvements, regionalized inventory has improved turns and productivity, significantly reducing out-of-stock and markdowns.

Benefit 2: Edge Logistics can help shockproof fulfillment and delivery processes

Centralized supply chains are fragile, with disruptions causing a domino effect of delays and sad customers. Edge Logistics replaces fragility with resiliency, turning disruption into competitive advantage.

Imagine a viral trend sending your product's demand skyrocketing. With Edge, you're not scrambling for stock—you're seamlessly rerouting inventory from nearby hubs, keeping customers raving and sales soaring. Picture a port closure halting your usual shipping routes. With Edge, you don't panic—you leverage your decentralized network to find alternative paths, ensuring deliveries continue uninterrupted.

Edge isn't just about weathering the storm, it's about dancing in the rain. Real-time data and analytics anticipate demand spikes, even those driven by social media, allowing you to adapt before the shock hits. Quiet Platforms research proves it, our Edge-enabled brands achieved a staggering 4x Black Friday volume without compromising on cost, quality, or speed.

Forget the trade-offs between resilience, cost, and speed. Edge unlocks them all. You gain the agility to outrun disruptions, the efficiency to keep costs down, and the speed to exceed customer expectations, every time.

## Benefit 3: An Edge ecosystem delivers predictably lower costs

The Edge ecosystem can deliver measurable cost savings by, among other things, reducing transportation spend, minimizing inventory shrinkage, and optimizing resource allocation. Such margins can make all the difference to a fast-growing brand with ambitious scaling plans.

Take JVN Hair, for example. This powerhouse brand, backed by influencer Jonathan Van Ness, exploded onto the scene in 2021. Their rapid growth quickly outpaced internal fulfillment capabilities, leaving them scrambling to meet customer demand across the country.

Enter Quiet Platforms and our Edge expertise. We deployed a multi-nodal platform with three strategically placed Edge nodes in Chicago, Los Angeles, and Boston. This instantly brought inventory closer to JVN's customers, dramatically reducing shipping distances and costs.

The results speak for themselves. Package miles plummeted by 33%, from 1,029 to 685. Meanwhile costs became predictable, thanks to our unique Click2Door service, which integrates fulfillment and delivery into a single SLA with a single per order price. By joining our larger network and capitalizing on our Edge Logistics, JVN pays one, lower price for success, not a bunch of charges for activities. We simplified logistics, made it reliable and faster, and let them return to focus on the customer experience.

"Edge enabled us to shift from paying for activity to paying for outcomes. This delivers predictable costs, happier customers, and a booming brand fueling our future growth."
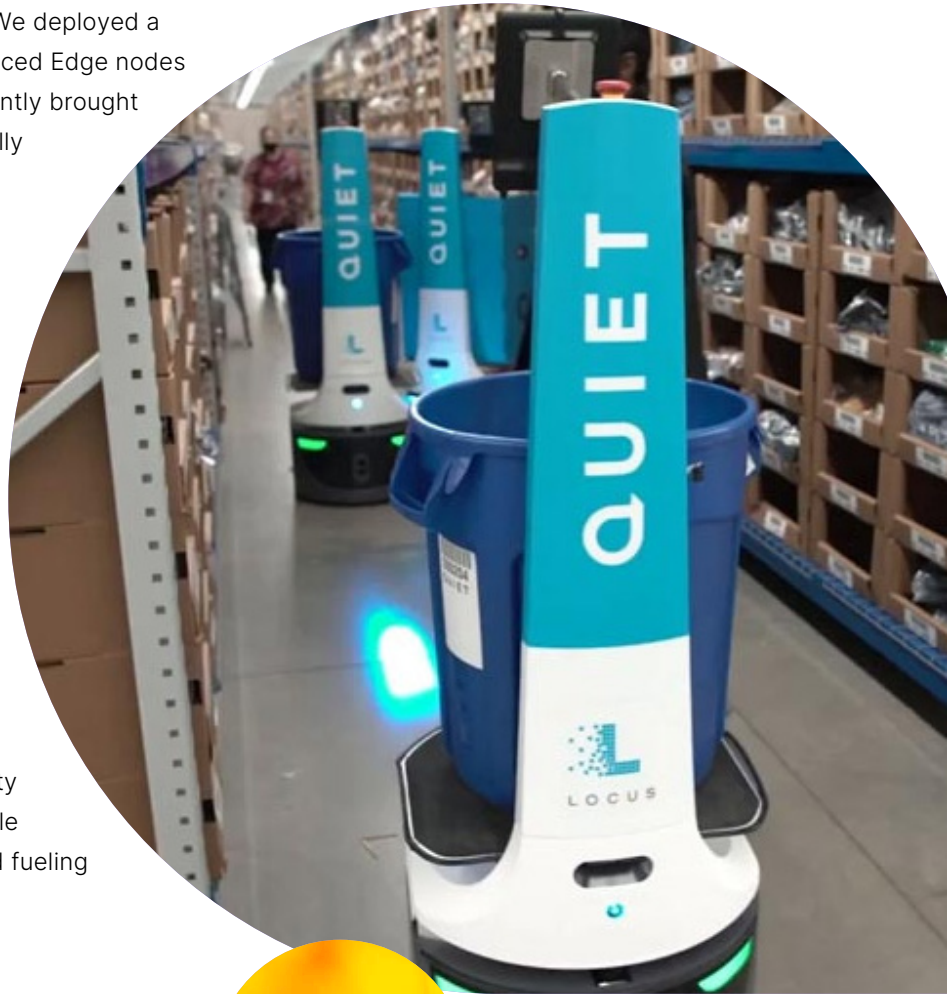
Benefit 4: Building a loyal customer base

For retailers, the holy grail isn't just delivering products—it's building a loyal customer base that keeps coming back for more. Loyal customers are your future currency. Companies with a devoted fanbase hold the power to attract premium pricing and outperform their rivals. This is how premium brands are built.

But how do you achieve this loyalty? The answer lies in consistently exceeding customer expectations. This means not just meeting deadlines, but surpassing them with personalized service and value-added experiences.

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These value-adds can include features like real-time updates and notifications, flexible and customized delivery options, access to dedicated virtual assistants, reinforced levels of privacy and security, and better overall customer service. Here's where Edge-enabled supply chains step in, empowered to deliver the following:

- **Real-time updates and notifications:** Keep customers informed every step of the way, from order placement to delivery, fostering trust and transparency.

- **Flexible and customized delivery options:** Offer convenient time slots, alternative delivery locations, and even same-day options to cater to diverse needs and preferences.

- **Dedicated virtual assistants:** Provide personalized support throughout the shopping journey, building a sense of connection and enhancing the customer experience.

- **Reinforced privacy and security:** Prioritize data protection and implement secure shopping practices to earn customer trust and loyalty.

- **Improved customer service:** Equip teams with real-time data and insights to resolve issues quickly and efficiently, exceeding customer expectations.

These value-adds are the building blocks of resilient, loyalty-based relationships. Research by IBM's Institute for Business Value highlights the rising importance of these factors:

- 73% of consumers value traceability, and 71% of those who do would pay a premium for it.
- 48% are likely to switch retailers if they lack order visibility before purchase.

Without Edge optimization and real-time inventory insights, retailers face a tough choice: either compromise profitability to guarantee delivery or risk losing customers by failing to meet expectations.

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of consumers value traceability

71%
of those who value traceability would pay a premium for it

48%
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4 ways Edge Logistics can boost fulfillment and delivery

1. **Agility & speed** by optimizing inventory management, reducing order fulfillment times, and streamlining logistics processes
2. **More resilient in the last-mile**
3. **Cheaper and more predictable costs:** Through route optimization for faster delivery
4. **Customer loyalty:** Through personalized service and real-time updates

Embrace the Edge, or get left behind

The retail landscape has witnessed more seismic shifts in the past five years than the previous quarter-century combined. McKinsey paints a sobering picture: consumers, suppliers, employees, and investors—every primary stakeholder—has dramatically rewritten their expectations, all at once.

In this whirlwind, fulfillment and delivery become the new battleground. Flexibility, efficiency, and real-time responsiveness are the golden keys, and Edge-enabled logistics empowers you to unlock them. Leading players are strategically investing in digital supply chain technologies and analytics, forging a network of Edge nodes that bring inventory and fulfillment closer to their customers.

But this revolution isn't confined to retail giants. Smaller brands and budding players can leverage partnerships with 3PLs offering Edge-powered solutions. This strategy grants everyone the same level of nimbleness and transparency, leveling the playing field and allowing you to focus on what truly matters: crafting unparalleled customer experiences.

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Both JVN Hair and American Eagle are textbook examples of brands of varied sizes conquering the competitive retail arena by embracing Edge, even though they are dramatically different businesses.

They prove that the rewards of the Edge are manifold: substantial cost savings, optimized resource allocation, and faster deliveries. This, in turn, fuels customer delight through real-time tracking, personalized deliveries, and exceptional service. Ultimately, it fosters unwavering loyalty, the lifeblood of any retailer.

And in an industry under immense pressure, even marginal wins make all the difference.

Let's talk!

Quiet Platforms is a leader in the rapidly emerging Edge ecosystem. We specialize in bringing ambitious retail brands—large and small—closer to their customers by enabling them to deliver exceptional brand experiences from multiple locations.

Benefits at a glance

- 30+ national, regional and local carrier partners
- 15-20% lower costs per order
- Faster delivery speeds by 1-2 days
- Reduced split shipments
- A redundant network that scales easily
- Intelligent inventory placement and routing
- Expert service and experience.

Let's talk

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www.quietplatforms.com