

The role of technology in cost-effective and resilient supply chains



Over the past few years, we have witnessed some significant strategy shifts in the arena of supply chain execution. Whereas once our customers looked at their supply chains as an area that needs to become more cost-efficient, the COVID-19 pandemic irrevocably altered their operating assumptions, forcing everyone to prioritize resilience-focused strategies, often by increasing cost in the short term. Our customers now tell us that their biggest challenge is to balance these competing goals, ensuring that supply chains are highly resilient while also remaining incredibly cost-effective.

Over the past 12 months, 40% of the reported disruptions was due to transportations costs and 33% due to transportation/delivery delays

IDC's Multi-Industry Supply Chain Survey 2024*.

Balancing these objectives requires a new approach that expands beyond investment in technology to drive isolated priorities within functional areas like transportation, warehousing or commerce enablement. In today's fast-paced and increasingly complex landscape, businesses need a new approach that seamlessly integrates every aspect of supply chain execution –from order management to warehouse operations and transportation logistics. Specifically, since the pandemic, it has become clear to us that strategic integration between **Order Management Systems (OMS)**, **Warehouse Management Systems (WMS)** and **Transportation Management Systems (TMS)** is the key to achieving this balance, since seamless flow and cooperation between each of these systems creates a variety of opportunities to improve resilience and efficiency at the same time.

According to IDC's Multi-Industry Supply Chain Survey 2024*, 22% of respondents plan to reduce costs/eliminate waste/drive efficiency and 17% plan to improve end to end supply chain orchestration capabilities over the next 12 months.

Creating meaningful connections between software solutions is essential for creating cost-optimized resilience in modern supply chains and meet the goals of a forward-thinking business, an approach that many industry analysts are also recommending. Although supply chains have moved increasingly to planning platforms, execution and fulfillment remain fragmented. Vendors that can offer a set of integrated, end-to-end fulfillment tools will find favor with operators.

Building resilience through seamless integration

By seamlessly integrating OMS, WMS and TMS, businesses can create a unified system that enhances resilience. The confluence between software ensures that each component of the supply chain communicates effectively under one ecosystem, allowing for more rapid responses to disruptions and changes. Whether it's adapting to sudden shifts in demand or managing supply shortages, a well-integrated system provides the flexibility needed to maintain continuity while managing cost efficiency.

Maximizing efficiency with real-time insights and visibility

One of the most significant advantages of connecting OMS, WMS, and TMS is the enhanced visibility and real-time insights from a shared analysis of data. We continue to hear that many companies struggle with the lack of transparency and delayed information, leading to inefficiencies and increased costs. When data from across the supply chain can be leveraged in concert, businesses gain real-time access to critical data, enabling them to make informed decisions quickly. This visibility helps identify potential issues before they escalate, ensuring that operations run smoothly and cost-effectively. As a result, businesses can proactively address potential disruptions, minimize delays and improve overall customer satisfaction.

Cost-effective optimization across functional areas

The integration of **Order Management Systems (OMS)**, **Warehouse Management Systems (WMS)**, and **Transportation Management Systems (TMS)** has the potential to expand optimization capabilities across existing silos, optimizing both transportation modes and warehouse efficiency. This flexibility is crucial in today's global market, where demand fluctuates, and supply chain disruptions can range from a lack of raw materials to blocked shipping canals.

Enhancing order and shipment management

Efficient order and shipment management is at the heart of a resilient and cost-effective supply chain. Integrated supply chain execution software can streamline these processes, reducing errors and enhancing accuracy. This confluence between technologies ensures that orders are processed swiftly, inventory is managed effectively and shipments are tracked meticulously through 1st and 3rd party fulfillment and between inventory at rest and in transit. The result is a leaner, more efficient operation that minimizes waste and maximizes resource utilization, driving down costs while maintaining high service levels.

Final mile delivery optimization

Final mile delivery is often the most complex and cost-intensive part of the supply chain. The integration of OMS, WMS, and TMS ensures that this critical phase is optimized for both resilience and cost-effectiveness. With detailed tracking and optimization tools, companies can manage final mile deliveries with precision, ensuring timely and reliable delivery while controlling expenses and added efficiency to react when something goes wrong. This capability is especially important in the post-pandemic era, where customer expectations for fast, affordable delivery are higher than ever.

Expanding our capabilities with MercuryGate

It is in response to the challenges facing our customers that Körber Supply Chain Software recently announced the intent to acquire MercuryGate, a leading provider of transportation management systems software. This strategic acquisition will bring MercuryGate's advanced TMS capabilities into our portfolio, with the intent to provide the type of benefits I just explained. It is a critical pillar in our ambition to create a unified supply chain execution suite that can offer real-time optimization, orchestration and collaboration across the supply chain.

We intend to bring solutions that will accelerate innovation, using machine learning and artificial intelligence for data analytics to provide better predictions, supply chain visibility and coordination between execution systems.

In the post-pandemic world, achieving cost-optimized resilience is not just a strategic advantage; it's a necessity. The integration of OMS, WMS, and TMS provides the foundation for supply chain execution that is both resilient and cost-effective.

We look forward to unlocking the transformative power of this integration and are committed to helping our customers to navigate the complexities of modern supply chains with confidence.

*IDC's Multi-Industry Supply Chain Survey Findings and Implications, 2024: Overall Respondent Base, doc #US52121824, May 2024