



Enabling supply chain performance through an intelligent fulfillment approach



Supply chain resilience, visibility, and efficiency has risen to the top of the C-suite agenda. On recent earnings calls, three out of four S&P 500 companies cited “supply chain” as a critical aspect of performance. ² A range of external factors put significant pressure on distribution networks, however new technologies present logistics operators with new opportunities. Moving to an “intelligent fulfillment” approach enables leading companies to stay a step ahead and create more value across their supply chains.

Value chains should adapt to both immediate and long-term disruptions

A series of historic disruptions causing a range of significant impacts to businesses have roiled value chains, with 78 percent of organizations reporting at least one supply chain disruption in the past 12 months.¹

Key factors include:

Geopolitical challenges

Since the onset of the pandemic, organizations have been reconsidering how to build more resilience into their supply chains and operations. As new geopolitical issues continue to emerge – including military conflicts, sanctions, supply shortages, and other health crises – pressures on supply chains remain constant.



Economic pressures

The highest inflation in decades has eroded margins. Uncertain growth forecasts and currency volatility are adding complexity to global networks that rely on efficiency and predictability.



Same-day delivery demands

Consumers and businesses increasingly expect same-day delivery for a wide range of products, and omni-channel options for buying, distribution, and returns. This model requires a shift in technology, planning, and operational models. Currently, 67 percent of organizations identify “meeting customer expectations for speed” as an important issue.³



Technology advancements

The combination of pervasive cloud computing, sophisticated data networks, digital technologies, automation and robotics, and more are creating opportunities for more visibility. However, most companies remain behind the curve on adoption. Nearly 60 percent of organizations are reluctant to adopt new technologies due to budget constraints, legacy IT infrastructure, and/or a lack of talent.¹



¹Source: BCI Resilience Report (2021): 62 countries and 173 respondents

²Source: Earnings Insights, Factset, (April 8, 2022)

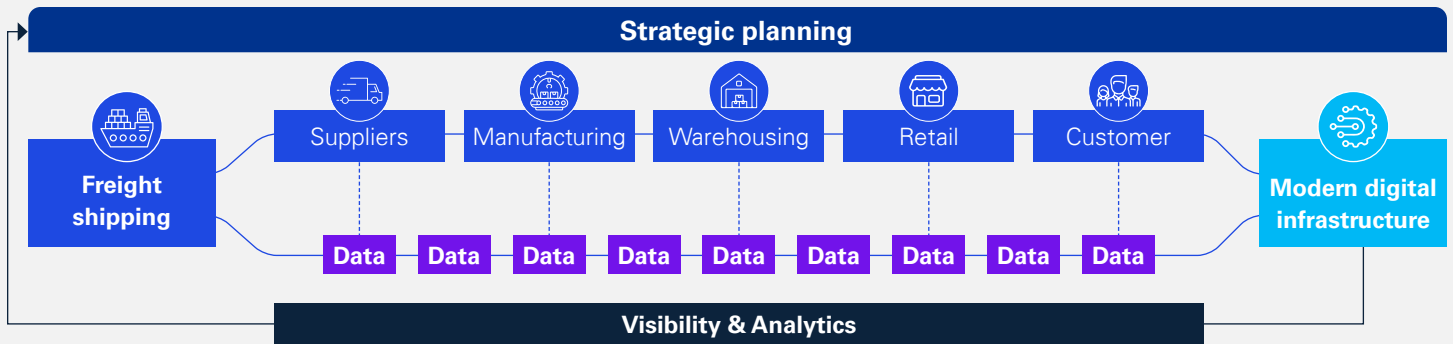
³Source: KPMG Global Supply Chain Survey, (November 2022)

Intelligent fulfillment enables more visible, resilient, and efficient value chains

These challenges and opportunities are catalysts for forward-looking companies to rethink their value chain. For many, an intelligent fulfillment approach provides the agility, efficiency, and insights to enhance their supply chain performance.



What is intelligent fulfillment? Intelligent fulfillment is a method of integrating strategy, data, and advanced technologies to enhance the efficiency of an entire value chain by better predicting and meeting evolving distribution needs.



Components of an intelligent approach



Strategic planning

Building a more **flexible organizational model for continuous adaption** to internal and external pressures (e.g., geopolitical events, supply-demand imbalances) while staying on track toward long-term strategic growth and operational priorities



Data integration

Integrating systems and streamlining data for end-to-end supply chain visibility, transparency and control to inform better decisions; deploying predictive analytics to spot emerging risks, enhance elasticity, and improve overall performance



Future Ready Technologies

Implementing emerging technologies throughout the value chain—such as IoT, AI, robotics, and RPA—to drive growth, reduce redundancies, and increase efficiencies

Benefits

Visibility and transparency

With the data for end-to-end visibility, decision makers have insights to enhance execution throughout the value chain, including better collaboration among business units and enhanced tracking progress against strategic goals.



Network optimization

Faster, better decisions - enabling companies to balance distribution network and route optimization through enhanced delivery metrics, shorter and less expensive last mile, and stronger brand recognition



Resilience

Organizations can surface and remedy under-the-radar issues before they become crises and develop more accurate scenario plan modeling through risk detection and mitigation and more effective contingency planning.



Cost-effectiveness

Logistics operators can identify and pull the right cost and value levers to prevent margin erosion through automated material handling, enhanced warehouse and distribution management, and improved productivity.



Key steps that businesses can take to adopt an intelligent fulfillment approach

The three components of intelligent fulfillment—strategic planning, data integration, and future ready technology—are interrelated and work in tandem for the greatest benefit.

Strategic Planning



- Contingency plans
- Capacity plans
- Scenario modeling

Data Integration



- Data standardization
- System integration
- Tracking KPIs

Future Ready Tech



- Automation tipping point
- Resource automation
- Low latency data networks

Strategic planning: Adopt a more flexible model

Whether responding to crises or shifting with evolving market trends, organizations must be able to adapt to the unexpected. This requires deploying the right mix of fulfillment solutions and re-prioritizing quickly. For instance, organizations must calibrate their balance of in-house versus third-party distributors, workforce growth relative to robotics, and permanent routes compared to variable routes.

This flexibility begins with more frequent and rigorous strategic planning to assess market conditions, capacity needs, contingencies, and how the organization benchmarks against industry norms. These insights guide the right fulfillment solutions for each situation and inform technology investments and new procedures.

Data integration: Invest in a control tower

Actionable, timely data is needed to spot potential risks, react to changing market conditions, and track performance. Supply chain control towers are one solution. These integrated platforms provide dashboards of key metrics and events in a supply chain. Control towers help consolidate often disparate data systems and give decision makers real-time visibility into the flow of goods along with analytics to understand long-term trends.

The adoption and deployment of a supply chain control tower architecture is a journey. Effective control towers have the same four layers in the architecture: integration, visibility, execution, and analytics. However, each control tower will vary in terms of core capabilities, scope, and technologies involved. It takes a plan to begin, and recognition that it will take time to build and see the vision come to life.

Future ready technology: Utilize automation

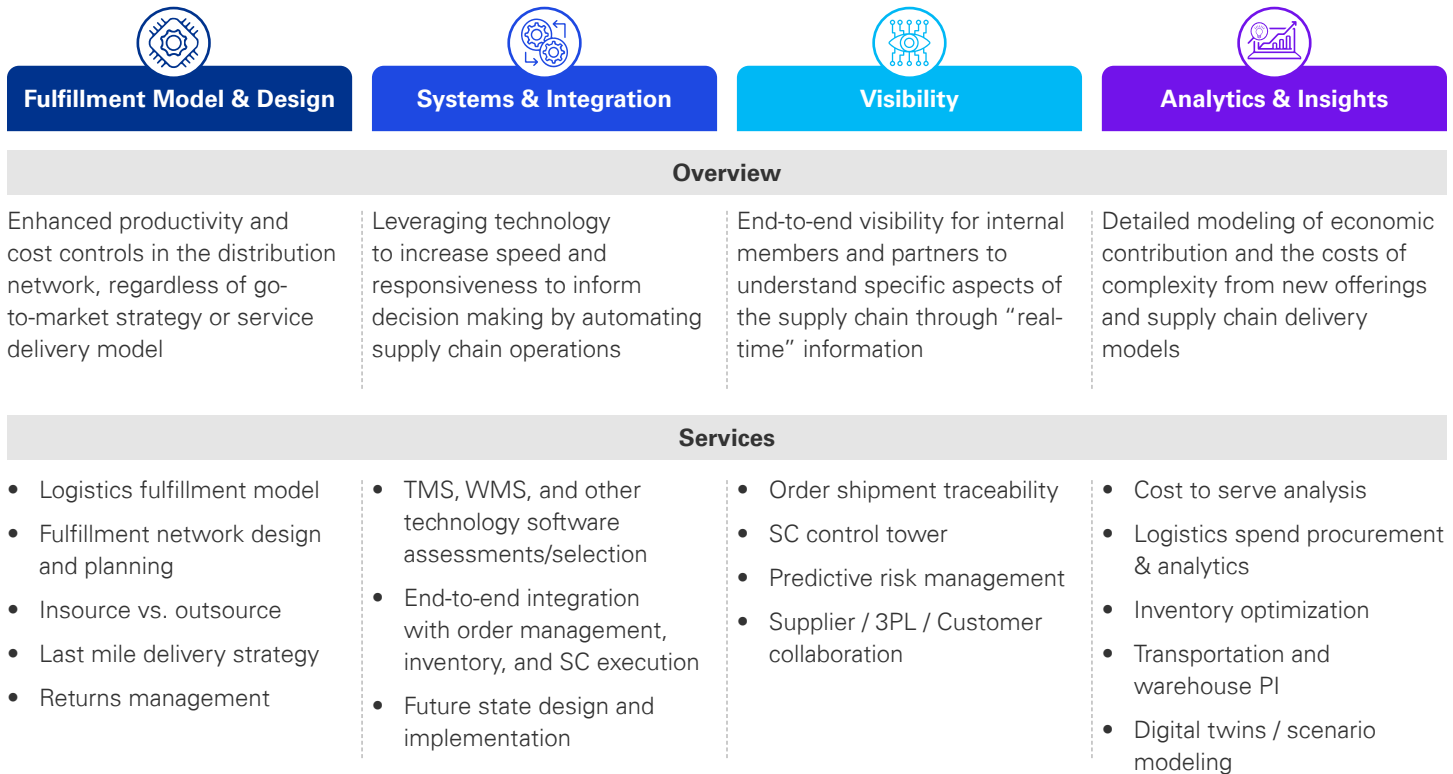
Automated technologies can improve efficiency throughout a supply chain. For instance, machine learning can help predict peaks and valleys in demand. Robotics can reduce handling time in warehouses and boost capacity. Distributed smart sensor networks can track inventory, fuel use, and last mile speed. With the right strategy and data systems, organizations can determine where to invest in automated tech for greatest effect.



KPMG helps clients to implement an intelligent fulfillment approach

To deliver on changing customer expectations, organizations need to focus on the areas that provide the most opportunity to impact revenues and enable growth.

Our framework for intelligent fulfillment



Creating value for our clients: Intelligent fulfillment for a leading technology organization



Client challenge

- Our client had an outsourced supply chain which prevented proper transportation planning, execution, and visibility beginning at their Contract Manufacturers and continuing through to their end customers
- Lack of planning capability pushed the client towards costly air shipments and increased costs with premiums and inability to consolidate
- Low visibility during logistics execution prevented the client from addressing inventory issues to and from their DC and resulted in breaking SLAs with key customers



KPMG activities

- Architected and led a 28-week agile project plan to focus on attaining the MVP of the E2open solution while providing proper time to design and refine advanced tracking and control tower capabilities
- Drove ‘future-proof’ solution design with scalability and sustainability in mind
- Assisted client with testing, training, and onboarding
- Began working on future opportunities to automate process with support from E2open product team



Results

- Identified key contractual opportunities with LSPs and FFs to reduce rates moving forward
- Onboarded 10+ external partners to new solution
- Strategic perspective on logistics areas for client to insource and take more control of transportation company-wide

Contact us



Yatish Desai

Supply Chain Distribution &
Logistics Practice Leader
KPMG LLP
440.725.8547
ydesai@kpmg.com



Craig Russell

Director, Advisory
KPMG LLP
248.938.8441
craigrussell1@kpmg.com

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