

Industry Brief

# Beyond Silos: Evolving to an Enterprise Supply Chain

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# At a Glance



# Chapter 1: Agile and Flexible Supply Chains

Modern supply chains are shifting from just-in-time to agile, regional structures to better respond to market demands and disruptions.

This evolution addresses systemic issues like inflexibility and fragmented communication, paving the way for more cohesive operations. Creating a pivot-ready, interconnected supply chain ensures rapid adaptation to market and technology shifts.



# **Chapter 2: Strategic Integration and Technology**

As supply chains integrate advanced processes and technologies such as artificial intelligence (AI) and unified data clouds, they become smarter and more adaptable.

Overcoming traditional inefficiencies through strategic integration enhances real-time operations and decision-making. This shift is crucial for achieving seamless coordination across networks.



# Chapter 3: Future-Proofing and Innovation

Enhancing agility and driving innovation are key to modernizing supply chains and maintaining resilience against rapid changes.

By fostering transparency and collaboration, interoperable supply chains reduce waste and inefficiencies. This integration supports sustainability and long-term success, positioning businesses to thrive in a dynamic market.



# Agile Supply Chains Will Form the Backbone of Modern Enterprises

Modern supply chains are transforming, moving from traditional just-in-time (JIT) and global sourcing methods to regional best-cost strategies. This shift addresses cost, speed, and flexibility and enhances risk mitigation in response to recent disruptions, meeting today's business and consumer demands.

The increasing complexity of supply networks requires sophisticated management to ensure visibility and real-time coordination among suppliers, manufacturers, carriers, distributors, and retailers. This is essential for maintaining cost efficiency, meeting customer demands, and achieving sustainability goals, underscoring the crucial role of skilled supply chain management in today's competitive market.

Companies are now **20%** more likely to prioritize supply chain resilience over traditional focuses like customer centricity or new product innovation, shifting from past trends.

IDC

# **Enabling Market Expansion and Innovation:**

Supply chains are central to market expansion and business model innovation, facilitate entry into new markets and support models like subscriptions and marketplaces. Integral to both sourcing/manufacturing and distribution/retail, they strengthen business-customer ties with options such as last-mile delivery and curbside pick-up, boosting consumer choice throughout the product lifecycle.



# **Driving Profitability Amidst Challenges:**

Supply chains are vital in maintaining profitability amid disruptions and rising operational complexities. Adapting to these evolving commerce challenges requires enhanced human resources, equipment, and systems. Effective supply chain management is crucial in converting challenges into opportunities for cost optimization and operational excellence.





# Leading the Way to Sustainable Business Practices:

Supply chains are pivotal in promoting sustainability and ethical practices. By fostering transparency and collaboration, they reduce waste and inefficiencies, contributing to operational excellence and environmental responsibility. This approach achieves sustainability goals and ensures long-term resilience, marrying sustainability with business efficiency.

# Tackling Systemic Issues Such as Inflexibility is Key For Modern Supply Chains

Today's supply chains are facing a range of systemic challenges, each demanding strategic attention.

As globalization increases and markets evolve, these networks must continuously innovate and adapt to overcome obstacles effectively. This necessity underscores the importance of resilient and agile supply chain practices that anticipate and react to the changing business environment.

68%

of enterprises fail to achieve the desired ROI on digital transformation, and most (58%) cite change resistance as a critical obstacle.

**Everest Group** 

# **Inherent Inflexibility:**

Supply chains grapple with inflexibility that hinders their ability to adapt swiftly to modern markets' dynamic and complex demands. This lack of agility creates a significant gap, preventing quick adjustments to new challenges and opportunities.

# Fragmented Communication Systems:

The fragmentation of communication, data, and workflows within supply chains creates systemic inefficiencies. Different segments struggle to share information effectively, causing delays in responding to market shifts and internal coordination.

# Lack of End-to-End Visibility & Decisions:

The absence of comprehensive visibility is a major obstacle, complicating disruption anticipation, inventory management, and informed decision–making. This issue obstructs the development of a responsive and streamlined supply chain.



# Crafting Agile and Responsive Supply Chains for Tomorrow

The ultimate goal is a dynamic, pivot-ready supply chain marked by operational excellence and characterized by a seamlessly connected, resilient, and data-driven ecosystem.

This ideal framework facilitates rapid adaptation to changing market conditions and technological advancements. It empowers supply chains to meet and exceed the evolving expectations of customers and stakeholders.

# Only 55%

of global supply chain professionals describe their supply chain as stable and well-positioned for the future, while 47% believe they are vulnerable to disruption.

### **KPMG**

# **Dynamic Adaptability:**

The ability to reconfigure supply chain components rapidly in response to internal and external shifts.

# **Integrated Transparency:**

Full end-to-end visibility that informs strategic decisions and enhances customer trust.

# **Synchronized Operations:**

A harmonized network that leverages collective intelligence for peak performance.

Focusing on agility allows businesses to adapt to market shifts and consumer needs, enhancing supply chain responsiveness, innovation, and customer service while supporting enterpriselevel decisions.



# Reevaluating the Path to Agile Supply Chains With a Shift to New Strategies

Modern enterprises aim for supply chain agility, exploring various paths to achieve it. Leveraging next-generation technology focusing on interoperable systems offers an efficient, streamlined, and lower-risk alternative to traditional point solution methods.

Supply chain visibility resulting from effective communication can lead to a **20%** reduction in inventory holding costs. However, only **21%** of chief supply chain officers report having a highly resilient network, characterized by clear visibility and quick adaptability in sourcing, manufacturing, and distribution.

Deloitte | Gartner

# Point Solutions (The Traditional Approach):

Connects systems for data sharing from isolated setups, enhancing connectivity but often leading to siloed information and limited visibility, resulting in delays and complexities. It is also expensive to create and maintain. Custom integrations without thorough testing for business adaptability can cause significant operational disruptions.

# Interoperable Supply Chain (The Next-Gen Approach):

Interoperability facilitates real-time, seamless system interactions with a unified data set and workflow, surpassing basic integration by fostering effective communication and dynamic adaptation to change. This method enhances decision-making and optimizes data use, building a unified data infrastructure for quick, informed decisions.

The Traditional Approach

# Point Solutions: An Obsolete Approach in a Dynamic New World

Traditional approaches are now being outpaced by the agility demands of modern supply chains. This transition reflects a significant shift in operational needs and strategic priorities.

Even with interconnected business functions, the point solution approach struggles in rapidly evolving markets due to its linear nature.

For instance, a retailer adapting to quick shifts in consumer preferences might face slow communication and action across departments like marketing and sales, resulting in disjointed strategies and lost opportunities.

Moreover, the high costs of adapting these systems to new demands can restrict innovation and expansion, leading to slower market responses and a reduced competitive edge.

# Inflexibility in Market Adaptation:

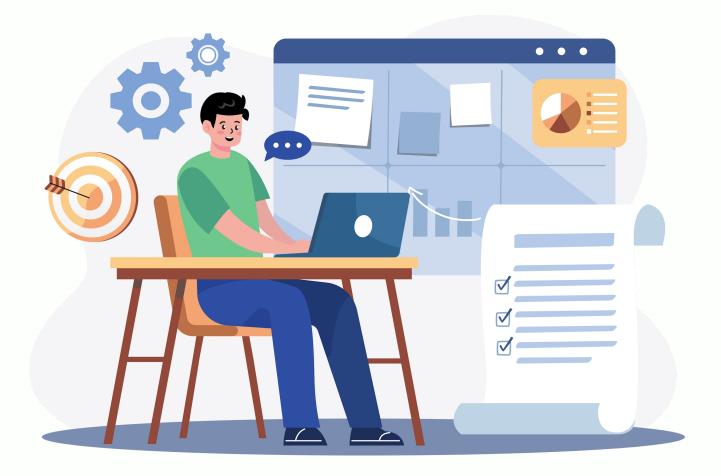
The point solution approach, characterized by its rigid structures from custom-built integrations, often lags in responding to market shifts. This sluggishness can lead to missed opportunities and a failure to capitalize on emerging trends, leaving businesses a step behind their more agile competitors.



# **Elevated Operating Costs:**

A point solution approach is rigid and costly, requiring substantial custom coding and maintenance investment. This custom coding is typically done at a specific time, making it almost immediately outdated in today's rapidly evolving business environment. This adds complexity and overhead, often diverting precious resources from innovation and growth and hindering a company's ability to scale and adapt.





# Strategic Decision-Making Hurdles:

Traditional integration leads to a fragmented operational view, with each system operating on separate data sets, hindering timely and collaborative decision–making. This approach can cause strategic misalignments and execution delays, with diff erent functions potentially working against broader enterprise goals. Optimizing individual KPIs may not align with overall value creation, leading to conflicts in strategy and hindering cohesive responses to market demands and internal changes.

The Next-Gen Approach

# Interoperable Supply Chains: A Strategic Lever for Modern Business Requirements

Interoperability signals a major shift in supply chain management, offering a strategic edge through cohesive, real-time coordination. It extends beyond individual company functions, influencing the entire enterprise network.

In a global manufacturing company with interoperable systems, for instance, supply chain disruptions are efficiently managed, demonstrating the 'network effect' of such integration. When there's a supplier delay, departments like procurement, logistics, sales, production, and warehousing respond in unison.

This coordinated response – from sourcing alternatives to updating customers and reallocating resources – optimizes operations across the organization. This network effect enhances customer service and protects revenue, highlighting the role of interoperable supply chains in enabling effective, unified responses to challenges.

# **Instantaneous Information Flow:**

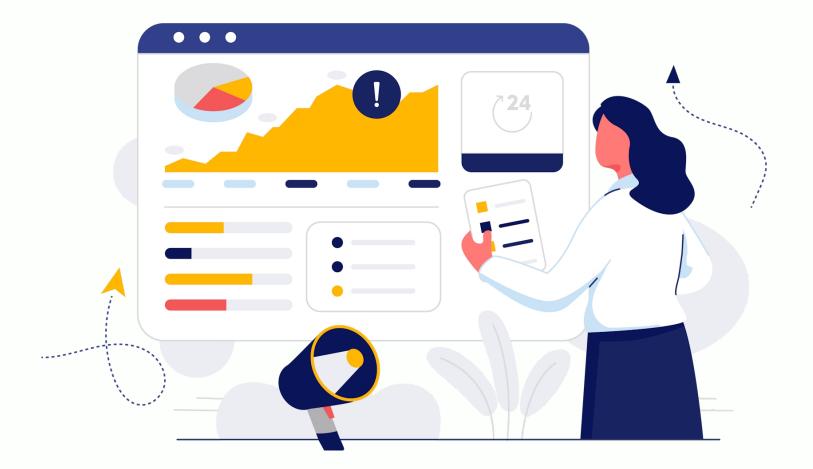
With an interoperable supply chain, a decision in one department rapidly disseminates across the business, aligning various units in a synchronized manner. This ensures a cohesive and timely response throughout the organization.



# **Enhanced Decision-Making and Agility:**

Interoperable systems enhance supply chain decision–making by quickly evaluating various scenarios, aligning operations with strategic objectives, and adapting to market changes. This agility extends across the organization, synchronizing decisions for strategic cohesion, enabling rapid adaptation to new information, and fostering a proactive, agile business capable of navigating complex markets and seizing opportunities.





# Seamless Integration of Business Processes:

Interoperable supply chains unite different systems and processes through a unified data model and cloud infrastructure, creating a single source of truth for real-time data utilization across the organization. This integration streamlines workflows and enhances responsiveness, as decisions are based on a comprehensive, up-to-date view of the business landscape. It also enables AI/ML applications to form a digital twin of the business, offering insights and predictive capabilities for strategic decision–making.

# Comparing the traditional "Point Solutions" approach with the next-generation "Interoperable supply chain" approach



### **DATA SHARING**

Involves passing information to shared locations or between applications with custom coding.

Goes beyond basic data sharing, focusing on a unified data model and cloud-based infrastructure for real-time application interaction. This significant shift, exemplified by advanced platforms like Snowflake.



### **IMPACT ON PROFITABILITY AND EFFICIENCY**

Potentially reduced due to delays and fragmented decisionmaking.

Enhanced through agile responses, optimized processes, and strategic decisions.



### IT IMPLEMENTATION

Relies on programming, scripting, or configurations, leading to potential blind spots and limitations post-implementation.

Systems, workflows, and data are designed from the outset to work together, evolving rapidly and reducing the likelihood of blind spots or shortcuts.



### **DECISION-MAKING**

Decisions are often made in isolation, leading to delays and inefficiencies.

Decisions made in one part of the business instantaneously impact and inform other areas.



### **RESPONSE TO MARKET CHANGES**

Generally reactive due to slower information flow and decision-making processes.

Proactive and dynamic, allowing for immediate adaptation to market shifts.



### **OPERATIONAL AGILITY**

Limited; changes in one area take time to be communicated and acted upon.

High; changes are instantly communicated, enabling swift organization-wide response.



### **ORGANIZATIONAL SILOS**

Larger silos persist due to limited visibility and interaction between systems.

Silos are minimized or eliminated, fostering a unified and cohesive operational model.

Point Solutions: The Traditional Approach

Interoperable Supply Chain: The Next-Gen Approach



# Future-Proofing Your Business Through an Interoperable Supply Chain

Interoperability is crucial in transforming agile supply chains from vision to reality, central to a company's ability to adapt and lead in dynamic markets.

It enables seamless integration of diverse technologies and systems, ensuring that different components work together efficiently. This connectivity is vital for maintaining fluid operations and driving strategic innovations that respond to rapidly changing market conditions.

94%

of consumers are more likely to be loyal to a brand that offers complete supply-chain transparency, and **39%** say they are willing to switch to a more transparent brand.

Nielsen

# **Enhancing Agility for Customer Service:**

Data synchronization across the organization minimizes coordination time, enabling quick strategic shifts. This improves responsiveness to customer needs, securing a competitive edge with superior agility.

# **Accelerating Automation Adoption:**

Interoperable supply chain creates a unified operational framework essential for implementing advanced automation. It ensures consistency and comprehensiveness in automated processes, boosting operational reliability and innovation.

# **Enhanced Transparency:**

By harmonizing internal data, interoperable supply chains are essential to transparent customer and partner interactions and ensuring the integrity of data-driven insights. It synchronizes and validates data throughout the organization, providing accurate, current business insights.



# Essential Trio for an Interoperable Supply Chain: Data, AI/ML, and Composability

Advanced technologies are pivotal in the quest for agile and responsive supply chains.

Unified data clouds provide real-time visibility, AI/ML integration offers predictive insights, and composability enables flexible, modular designs. Together, these technologies are transforming the supply chain landscape.

**12%** 

of supply chain professionals say their organizations are currently using artificial intelligence (AI) in their operations and **60%** expect to be doing so within the next five years.

### MHI

### **Unified Data Cloud Revolution:**

Beyond centralizing data, the unified data cloud forms a singular model accessible in real-time across the supply chain, utilizing a consistent dataset for every process to enable seamless collaboration and proactive decision-making.

# AI/ML for Predictive Capabilities:

Integrating AI and ML into the unified data cloud goes beyond providing insights; it equips businesses with the tools to preemptively adapt to market trends and systematically optimize operations for enhanced outcomes.

# Composability for Flexibility:

Composability offers a scalable, modular design that enables supply chains to swiftly adopt new technologies. This flexibility ensures that infrastructure evolves with changing business needs, maintaining competitive relevance.



# Embracing Interoperable Supply Chains: Ensuring Resilience and Adaptability

Embracing interoperable supply chains is critical in today's rapidly changing supply chain landscape. Transitioning from traditional systems to interoperable frameworks is vital for competitive advantage and market responsiveness.

Interoperability is foundational for modern, efficient supply chains, enabling swift adaptation to market shifts and improved customer experiences. Assess your current infrastructure and strategically implement interoperable solutions to future-proof your business.

In the evolving world of supply chains, stagnation is not an option. The future is interconnected, and the time to adapt is now.



Incisiv is a peer-to-peer executive network and industry insights firm for consumer industry executives navigating digital disruption. Incisiv offers curated executive learning, digital maturity benchmarks, and prescriptive transformation insights to clients across the consumer and technology industry spectrum.

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Blue Yonder is the world leader in digital supply chain transformation. Global retailers, manufacturers and logistics providers leverage Blue Yonder to optimize their supply chains from planning through fulfillment, delivery and returns. Blue Yonder's AI-embedded, interoperable supply chain solutions are connected end-to-end via a unified platform and data cloud, enabling businesses to collaborate in real time across functions, which supports more agile decision-making, improved customer satisfaction, profitable growth, and more resilient, sustainable supply chains.

At the time of writing, Blue Yonder is one of only two companies recognized as a Leader in

three Gartner Magic Quadrant reports covering Supply Chain Planning, Transportation Management Systems and Warehouse Management Systems. Please read our TMS, WMS and SCP blog posts for details.

If you would like to learn more, visit blueyonder.com.