

Industry Brief

# Navigating the Future: The Essential Role of Multi-Faceted Automation in Modern Supply Chains

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### Is This Report for Me?

Dive into "Navigating the Future: The Essential Role of Multi-Faceted Automation in Modern Supply Chains" to understand the pivotal role of automation in modern logistics. This report is tailored for enterprises and teams responsible for moving goods to market, including Logistics Service Providers (LSPs), Retail, and Manufacturing focused on:

- Leveraging automation for adaptability and responsiveness in evolving market conditions.
- Utilizing automation as a strategic tool for enhancing customer experiences and competitive positioning.
- Revolutionizing their supply chain and improving competitiveness through advanced automation.





Use the insights and vision laid out in this report to refine or redefine your supply chain and logistics automation strategies. This eBook will be indispensable if you are:

- Aiming to elevate operational outcomes across efficiency, adaptability, and market competitiveness.
- Seeking insights on how automation can drive business growth, enhance service quality, and achieve operational excellence.
- Ready to transition from traditional logistics models to innovative, automation-led solutions, focusing on customer-centric and efficient logistics practices.

Let's dive in.

Navigating the Future: The Essential Role of Multi-Faceted Automation in Modern Supply Chains Incisiv, in partnership with Blue Yonder

## Shaping Agile and Intelligent Supply Chains for Tomorrow

Modern supply chains must evolve into agile and intelligent entities to effectively respond to rapid market changes and operational complexities, ensuring sustainable competitiveness.

- **Strategic Adaptability:** Modern supply chains must be designed to swiftly adjust to disruptions, from global market shifts to unforeseen challenges, positioning businesses to thrive amidst change.
- Competitive Operational Efficiency: In facing issues like labor shortages and rising material costs, efficient and adaptable supply chain operations are vital for maintaining a competitive edge and managing escalating pressures effectively.
- **Enhancing Customer Centricity:** The modern supply chain is key to delivering exceptional customer experiences, emphasizing speed, flexibility, and transparency from sourcing to delivery, creating distinct market advantages.



Companies are **20%** more likely to prioritize supply chain resiliency over things like customer centricity or new product innovation—things that have dominated top—priority lists from the past few years.

IDC



## Automation Becomes the Linchpin for the Way Forward

Automation is vital for modern supply chains to adapt to today's rapidly changing business world. It equips them with agility and intelligence, essential for staying competitively viable in a dynamic market.

- **Driving Adaptability and Resilience:** Automation equips supply chains with the ability to quickly respond to and recover from disruptions. It ensures seamless operations and adaptability in the face of changing market conditions and unforeseen challenges.
- Streamlining for Operational Efficiency: Through automation, supply chains achieve heightened efficiency. It streamlines processes, optimizes resource utilization, and manages operational costs, contributing to a robust and competitive business model.
- Elevating the Customer Experience: Automation is instrumental in enhancing the customer journey within the supply chain. It brings about faster delivery times, greater transparency in operations, and consistent reliability, all of which are key to meeting the evolving expectations of customers.



By 2025, **70%** of organizations will implement structured automation to deliver flexibility and efficiency, an increase from **20%** of organizations in 2021.

Gartner



## Enterprises Must Avoid Short-Sighted Automation Myopia

The industry needs to understand supply chain automation clearly. A well-defined view of automation aids in crafting holistic strategies for its adoption and practical application.

- Automation Goes Beyond Robotics: Automation is more than just robotics; it involves multiple technologies working together for intelligent, autonomous decision-making and streamlined processes.
- **Intelligence at the Core of Automation:** True automation is built on intelligence derived from extensive enterprise data, highlighting the significance of innovations such as Edge technologies.
- **Optimizing Business Outcomes:** Automation improves business results through software, hardware, or hybrid systems capable of making intelligent, independent decisions.



89% of business leaders believe process automation in the supply chain is either "important" or "very important" to attain their digital transformation objectives.

Precisely



## Laying the Groundwork for Effective Supply Chain Automation

To harness the full potential of automation in supply chains, enterprises must establish a robust digital foundation and embrace intelligent decision systems. This approach ensures not only efficiency but also responsiveness across their extended networks.

- **Building a Digital Foundation:** Enterprises need to digitize all elements of their supply chain, including assets, transactions, stakeholders, and interactions, to create a solid base for automation.
- Leveraging Smart Decision Systems: Integrating artificial intelligence, machine learning and advanced algorithms are crucial for making informed, strategic decisions within automated processes.
- Orchestrating Actions Across the Network: A central 'operating brain' is essential for coordinating activities across the supply chain, ensuring seamless, synchronized operations.



**8 out of 10** supply chain leaders say the digital supply chain will be the predominant business model within the next five years.

MHI



## **Automation Maturity Framework**

This Automation Maturity Framework provides enterprises a roadmap of various stages of automation, underscoring the importance of rethinking automation as a multi-faceted pursuit.





#### Optimization

Employing software to identify and implement the most efficient operational options and outcomes, leveraging intelligent systems for enhanced logistics management.



#### Predictive

Using historical and near real-time data to forecast future needs and scenarios, enabling proactive decision-making and strategic planning.



#### Autonomous

Implementing self-operating technologies such as decision-making software for selecting transportation carriers and scheduling tasks for labor and robots.

### Foundations of Forward-Thinking Automation

Embracing the full spectrum of automation requires more than technology; it requires a philosophy. This philosophy guides not just the implementation of tools but also aligns with strategic business objectives and core values. The following principles are essential for any company looking to navigate the complexities of automation. They ensure that technological advancements enhance rather than displace human talent and that every innovation delivers tangible benefits to customers.

#### **Technological Evolution**

Transform processes by examining how to improve or remove them, ensuring they are optimized for effective and streamlined operations.

**Insightful Analytics Utilization** 

Integrate and analyze data to inform smarter

operational decisions, fostering a culture of

continuous improvement and innovation.

#### **Human Potential Enhancement**

Utilize automation to enhance human capabilities, allowing the workforce to concentrate on strategic and innovative activities.

#### Consumer-Focused Innovation

Ensure automation initiatives enhance the customer experience, driving service improvements and deeper engagement.

#### **Adaptive System Integration**

Adopt automation solutions that can dynamically scale and adapt, future-proofing operations against evolving market demands.



## Companies Using This Approach to Automation Gain a Clear Advantage

Modern businesses, including manufacturers, retailers, and LSPs, recognize advanced automation's transformative power. By adopting this approach, they achieve significant improvements across various facets of their operations:

- Modernized Operations and Enhanced Efficiency: Automation combines modernizing operations with efficiency and precision. It sets new industry standards, reducing labor costs and errors, thus impacting the bottom line and operational quality.
- **Smarter Supply Chain Operations:** Facilitates strategic decision—making through data analysis, keeping pace with rapidly changing market dynamics.
- **Future-Readiness and Resilience:** Ensures seamless operations and resilience against disruptions, fostering sustainable growth, and paving the way for future industry leadership.



By 2025, retailers plan to automate 70% of their routine tasks and prioritize tech investments that will enhance operational efficiency, reduce costs, and help gain higher profits.

Incisiv

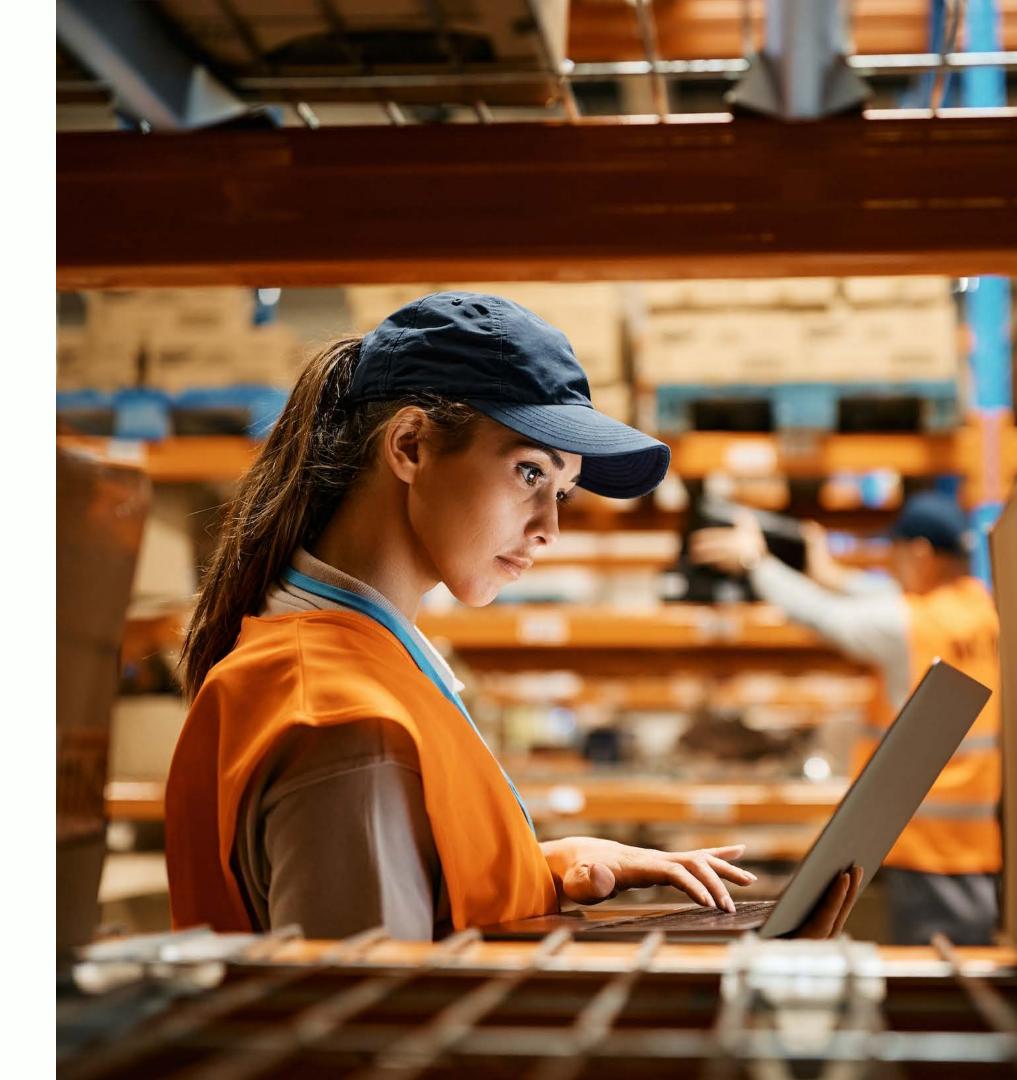


### Catalyzing Change in Supply Chain Management: Towards Comprehensive Automation

In the evolving world of supply chain management, embracing comprehensive automation is crucial. Beyond individual technologies, it is crucial to have a holistic view of automation – from digitalization to autonomous systems. This shift towards a comprehensively automated supply chain is key to enhancing efficiency, improving customer experiences, and driving sustainable growth.

The steps you take today towards integrating comprehensive automation solutions will define your competitive edge tomorrow. This is a call to action – assess your current automation landscape, identify potential areas for growth, and strategically implement technologies that will drive your business forward.

Remember, in the ever-evolving landscape of logistics, standing still is not an option. The future is automated, and the time to act 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 highlighted its standing as the only company recognized as a Leader in three Gartner Magic Quadrant reports covering Supply Chain Planning, Transportation Management Systems and Warehouse Management Systems — consistently for the past three years. Please read our TMS, WMS and SCP blog posts for details.

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

Gartner, "Magic Quadrant for Supply Chain Planning Solutions," Pia Orup Lund, Amber Salley, Tim Payne, Janet Suleski, Joe Graham, Caleb Thomson, 2 May 2023; "Magic Quadrant for Transportation Management Systems," Brock Johns, Oscar Sanchez Duran, Carly West, 28 March 2023; Gartner, "Magic Quadrant for Warehouse Management Systems," Simon Tunstall, Dwight Klappich, Rishabh Narang, Federica Stufano, 8 May 2023.

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