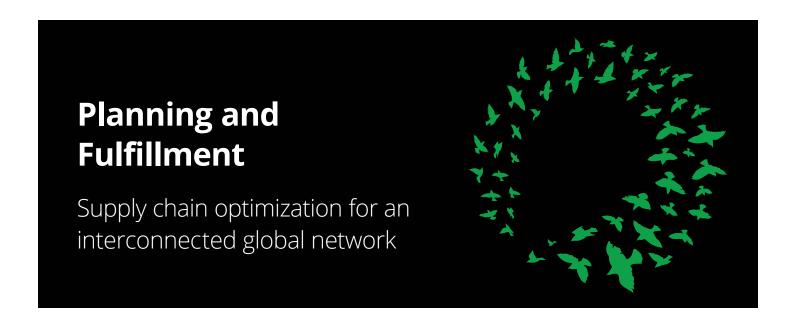
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Many companies are transforming their linear, sequential supply chain into digital supply networks (DSNs)—interconnected, open systems of supply operations that can more readily incorporate ecosystem partners and dynamically respond to changing customer behaviors. Within DSNs, synchronized planning and fulfillment is a series of capabilities that leverages the constant flow of data from throughout the supply network to continuously and accurately plan production to match actual demand and rapidly deliver exceptional service at an optimal cost to serve. This constant collaboration between supply and demand creates a more dynamic, flexible, and efficient supply network that becomes an increasingly integral part of strategic planning and decision making and a primary value driver of an elevated customer experience.

Drivers of change

As customer expectations become more sophisticated, the demand for the swift delivery of individualized products and services increases. Organizations are looking to more agile and connected supply chains to meet the needs of all value chain partners while simultaneously delivering on heightened customer expectations. Advances in technology—including cloud computing, artificial intelligence (AI), the Internet of Things (IoT), and robotics—enable highly responsive DSNs that orchestrate continuous collaboration between supply and demand, planning and fulfillment, and expectations and customer satisfaction.

A synchronized planning and fulfillment strategy can help facilitate the end-to-end planning, production, and distribution of products and services. Armed with this strategic roadmap, organizations can more readily evolve their supply chain capabilities to make fulfillment personal, commerce seamless, technology invisible, and trust automatic.

Sx steps to synchronzed planning and ulfillment

A synchronized planning and fulfillment strategy can help your business reconfigure its supply chain planning and fulfillment ecosystem, allowing your organization to continually optimize. In this way, synchronized planning and fulfillment orchestrates supply chain efficiency, helping to streamline and accelerate core processes while delivering insights that drive smarter decisions.



Shift from sequential to concurrent planning

- Leverage a common data model to achieve rapid information exchange
- Shorten response time to demand fluctuations and fulfillment variations by improving collaboration across the supply chain
- Perform near-term forecasting using structured and unstructured information
- Optimize margin by knowing and shaping causal factors and demand drivers



Improve operational flow through use of robotics and streamlined processes

- Accelerate routine operations with physical and digital robotics
- Focus on value-add activities with exception-based processes



Pivot to optimizing supply of resources and labor

- Shift from a static model to a dynamic network
- Achieve the same or enhanced service with customers based on segment
- Maximize asset investments such as machining and transportation fleet



Automate processes with artificial intelligence

- Leverage cognitive learning, artificial intelligence, and computerto-computer connectivity
- Drive resource efficiencies through automation and improved process effectiveness



Create synchronized planning and fulfillment ecosystems

- Gain end-to-end visibility, visualization, and predictive insights through a common data platform
- Streamline connectivity among nodes and value chain partners to reduce manual intervention via APS, WMS, and TMS
- Enable customer-facing operations for predictive, value-added activities through a "command center" of centralized information



Model processes with a "digital twin"

- Replicate the physical world and derive real-time cost insights
- Gain predictive insights on the financial impact of decisions (e.g., cost to serve)
- Track and optimize material movements
- Design optimal network footprint to balance cost of delivery with service expectations

Orchestrating the benefits of efficiency

Synchronized planning and fulfillment can help your organization achieve ongoing efficiencies and cost savings in a variety of ways.

Renewing a focus on value as

stakeholders are often more supportive as the value of improvements becomes welldefined and impactful

Reducing human interventions, and being always on through Al-driven workflows

Enabling continuous and real-time

feedback between financial and customersatisfaction targets, synchronized demand and supply-planning models, automated fulfillment capabilities, network and transport models, and Al-driven decision engines, helping to accelerate insights

Enhancing supply chain processes

through machine learning, digital-physical interactions, and automation

Driving new forms of business value by unlocking capabilities and offerings for new customer segments

How Deloitte can help

Deloitte's Planning & Fulfillment practice offers leading-class experience and technological-innovation capabilities that help senior executives—including COOs, CFOs, and supply chain leaders—identify and realize new value from their supply networks. Our operational know-how, digital technologies, advanced analytics capabilities, and industry-specific hybrid solutions help businesses create more efficient, flexible, and responsive value chains. Additionally, we help improve operations, product, and material flow across the breadth of the value chain to create greater supply network synergy and value. Here's how we do it:

Assess the maturity of your current operations to inform the strategy and implementation plan and to create a roadmap to breakthrough planning and fulfillment capabilities.

Capability assessments

- Network assessments
- Product-flow assessments
- Inventory assessments
- Warehouse operations assessments
- Transportation assessments

Strategy and roadmap definition

- · Logistics and distribution
- Transportation strategy
- Network and product-flow strategy
- Inventory optimization
- · Integrated business planning
- Omnichannel fulfillment
- Customer-fulfillment strategies



Develop and implement processes and technology to optimize end-to-end operations and total enterprise value.

- Warehouse operational improvement
- Control tower
- Sales and operations planning optimization
- · Integrated business planning
- Transportation management
- Warehouse management
- Omnichannel fulfillment
- Supply chain planning optimization
- Supply network optimization

Manage data analysis, automate processes, and deliver insights that support day-to-day operations, freeing your business to focus on strategic imperatives that advance the business.

- Continuous improvement of warehouse operations
- Control tower operation and optimization
- Omnichannel fulfillment optimization
- Integrated business planning
- Continuous improvement of distribution network
- Continuous transportation optimization

Synchronized planning and fulfillment is enabled by disruptive technologies that provide the computing power, insights, and capabilities required for continuous collaboration.



Cloud computing

Cloud computing provides the computational power necessary to efficiently drive the digital-fulfillment process.



Artificial intelligence

Using pattern recognition and algorithms to interpret data and translate it into real-time insights, AI simplifies tactical planning and automates much of the decision making.



Internet of Things

Smart sensors can be embedded in various devices to transform data into insights that can, in turn, drive improvements in digital fulfillment.



Robotics

Both virtual and physical robotics, including RPA, drive the automatic completion of tasks based on specific directions.

Let's talk

Learn more about how your business can benefit from the new world of interconnected, concurrent, and always-on planning and fulfillment processes. We're here to help.

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