Digital Supply Networks (DSNs), which can serve as a powerful competitive weapon. Innovative and disruptive technologies can enable supply chains to transform into agile interconnected networks that unlock new value across the digitized nodes.

**THE COLLAPSE OF THE LINEAR SUPPLY CHAIN**

New technologies and tools have allowed the traditionally linear supply chain to collapse into an agile interconnected network that unlocks new value across the digitized nodes. New technologies and tools have allowed the traditionally linear supply chain to transform into digital supply networks, the dynamic, interconnected systems that transcend physical-digital boundaries and include people, processes and technologies needed to break through traditional organizational silos and be competitive in the digital age.

**DIGITAL CAPABILITIES MODEL FOR SUPPLY NETWORKS**

Innovative and disruptive technologies can enable supply chains to transform into Digital Supply Networks (DSNs), which can serve as a powerful competitive weapon. New value is being created by digitizing and connecting the traditional nodes.

**ABOUT THE MODEL**

Deloitte and ASCM will incrementally develop and release components of the model through 2022. Compatible with the Supply Chain Operations Reference (SCOR) Digital Standard, the new model helps companies advance their capabilities from traditional linear supply chains to digital supply networks, the dynamic, interconnected systems that simultaneously plan, execute, and enable digital supply "chains".

- Include capabilities and their interdependencies that transcend physical-digital boundaries and include people, processes and technologies needed to break through traditional organizational silos and be competitive in the digital age.
- How to explicitly leverage established and emerging digital enablement, from IoT and sensors, to the application of data science, machine learning and artificial intelligence, and lights out supply network planning and execution functions.
- Span functions to achieve enterprise level optimization, aligning planning and execution in collaboration with customers, suppliers and internal facilities.

**MARKETPLACE Demands**

**Traditional Challenges**
- Bullwhip effect magnifying variability from customer to supplier by up to 50x
- Poor end-to-end visibility leading to buffers and safety stocks at every stage in the supply chain, creating the quarter-end hockey stick effect
- Functional silos and misaligned incentives in organizations combined with decoupled planning and execution, causing unwarranted delays

**New Technologies**
- Internet of Things (IoT)
- Augmented & Virtual Reality
- Artificial Intelligence
- Cloud Computing
- Mobility (5G & in-memory processing)

**Expanding Demand**
- Projected global growth by 2021: 2.8%
- Of consumers consult their phones while they’re in a store deciding what product to buy (one in 10 ended up buying a different product than they had planned)
- Of consumers are interested in buying personalized products and services (and 46% would wait longer to receive a personalized product)
- Of customers consider their phones while they’re in a store deciding what product to buy
- Of consumers consult their phones while they’re in a store deciding what product to buy (one in 10 ended up buying a different product than they had planned)
Digital Capabilities Model for Supply Networks

DIGITAL SUPPLY NETWORKS CHARACTERISTICS

DSNs share common characteristics that drive differentiated performance and value

DIGITAL DISCIPLINES

Sense: Identify and act on environmental changes
DSNs sense the environment around them, their customers, suppliers, and other operations to detect risks and opportunities
- Customer sentiment
- Supplier risk and performance
- Internal operational performance
- Employee performance and satisfaction

Collaborate: Inside and outside the organization
DSNs collaborate with their business partners, upstream and downstream, to understand and address the impact of the sensed signals
- Improved data visibility as “one source of the truth”
- Improved collaboration technologies, from phone to email to chat to corporate social media
- Concurrent and transparent engagement across multiple nodes in the network

Respond: Place decisions into action
DSNs systematically and effectively convert decisions into actions
- Within the enterprise and with partners, suppliers, and customers
- Highly automated capabilities to convert decisions to tasks with owners

Optimize: Maximize performance
DSNs persistently seek to identify the best, implementable courses of actions to optimize the end-to-end network
- Cross-functional and cross-enterprise analytics
- Computing, communication and storage technologies augmented by artificial intelligence capabilities

Explore the importance of integration between operating technology and information technology (including sensor technology). You'll learn how data and analytics services

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Immerse and inform
Immerse yourself in the details of digital transformation and disruptive technologies that impact the value chain. Inform yourself with a new business and digital transformation strategy, and in-flight initiatives.

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Design the path forward
Design a high-level implementation roadmap by prioritizing ideas and business needs. You'll review case studies of Deloitte's digital transformation experiences to help inform your strategy. Then, we'll help conduct an interactive session where potential opportunities are identified and documented. Finally, take part in a discussion on the role people and culture play in the success of transformative change.

Build a scalable delivery model that rapidly ideates, prototyped, and implements digital tactics, on an ongoing basis using established processes and governance.

THE DIGITAL FOUNDRY

Idea Sources
Engineering & Technology Groups
Business Units
Employees
Deloitte’s CoEs
Market Scans
Ecosystem Partners
University Alliances

CLIENT OUTCOMES

Improve business understanding of cross-functional dependencies

Broken down silos in the SC organization

Deloitte is the recognized market leader

Deloitte named the undisputed global leader in Data and Analytics Services, based on ability to execute and completeness of vision by Gartner (2019)¹³

Deloitte named the undisputed worldwide leader in industry Cloud Professional Services based on capability and strategy by IDC (2019)¹⁰

Deloitte named a global leader in Cybersecurity Consulting based on strategy and current offering by Forrester (2019)¹⁰

Deloitte named a worldwide leader in Artificial Intelligence Services based on capability and strategy by IDC (2019)¹¹

Gartner names Deloitte a Leader in its Magic Quadrant for Oracle Application Services, Worldwide (2018)¹²

Gartner names Deloitte a Leader in its Magic Quadrant for SAP Application Services, Worldwide (2018)¹³

Deloitte Greenhouse® Corporate Innovation Lab

Experience that DSN “aha!” moment with a business breakthrough

Immerse and inform
Immerse yourself in the details of digital transformation and disruptive technologies that impact the value chain. Inform yourself with a new business and digital transformation strategy, and in-flight initiatives.

Explore the art of the possible
Explore the importance of integration between operating technology and information technology (including sensor technology). You’ll learn how data and tech architecture are related to the evolution of new use cases. Plus, you’ll discover a selection of value creating use cases that are relevant to your digital transformation goals.

Design the path forward
Design a high-level implementation roadmap by prioritizing ideas and business needs. You’ll review case studies of Deloitte’s digital transformation experiences to help inform your strategy. Then, we’ll help conduct an interactive session where potential opportunities are identified and documented. Finally, take part in a discussion on the role people and culture play in the success of transformative change.

Contact

Get in touch with our team to begin your supply chain transformation.

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