Digital Capabilities Model for Supply Networks

**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.

**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.

**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
- Augmented & Virtual Reality
- Artificial Intelligence
- Cloud Computing
- Mobility (& in-memory processing)

**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.

**HOW TO ENGAGE**

**dcmc.ascm.org/survey**
Assess your readiness: Take a Readiness Assessment to learn how your organization’s digital readiness capabilities measure up.

**dcmc.ascm.org**
Explore the website: Bookmark and explore the first release of the Digital Capabilities Model for Supply Networks. (Level 1 capabilities are available to the general public while ASCM members have access to the full model.)

**Deloitte.com/us/dcm**
Move ahead on your DSN journey: Learn more about the Deloitte and ASCM collaboration, the DSN Deloitte Greenhouse Lab, and ASCM’s Transformation Learning Programs, and on-demand learning.

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DIGITAL SUPPLY NETWORKS CHARACTERISTICS

DSNs share common characteristics that drive differentiated performance and value

End-to-end Transparency
The ability to see across the network

"Always-on" Agility
The ability to proactively operate across the network

Connected Environment
The ability to extend into your suppliers and customers

Resource Optimization
The ability to identify and utilize the right worker, human or machine, for work

Holistic Decision Making
The ability to continuously learn and make optimal network decisions

DIGITAL DISCIPLINES

Sensing
Identify and act on environmental changes

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

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

Responsive: 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 solutions

Computing, communication and storage technologies augmented by artificial intelligence capabilities

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

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

Deloitte named a global leader in Cybersecurity Consulting based on current offering and strategy, and in-flight initiatives by Forrester (2018)

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


Gartner names Deloitte a Leader in its Magic Quadrant for Data Analytics Services, based on ability to execute and completeness of vision by Gartner (2019)