Agenda

1. Introduction of the Association for Supply Chain Management
2. Lifecycle of SCOR and Vision Relative to two Digital Inflection Points
3. Voice of the ASCM Corporate Member Relative to Digital Transformation
4. What we Know About Return on Investment for Digital Investments
5. Scope of SCOR Digital Edition
INTRODUCING THE ASSOCIATION FOR SUPPLY CHAIN MANAGEMENT

WWW.ASCM.ORG
The Association for Supply Chain Management


Something special is happening in supply chain

Introducing the Association for Supply Chain Management (ASCM)

Learn more →
LIFECYCLE OF SCOR
1996 TO 2023
2023 AND BEYOND
The Supply Chain Operations Reference (SCOR) Model Has Served Professionals Well

SCOR brought structure and standards to the supply chain profession

Plan → Source → Make → Deliver
Many Organizations Have Already Extended the Concept Within their Enterprise

Organizations have extended SCOR concepts to adjacent functions
Technologies are Enabling Incremental Improvements Within a SCOR-based Approach

Creative supply chain professionals constantly find ways to incrementally improve
We Must Rethink Traditional Paradigms in Light of Exciting, Emerging Technologies

- Internet of Things
- Cellular, Satellite, & WiFi Comms
- Business Systems
- Cloud Computing
- Blockchain & Cryptography

Decision Support
Machine Learning
Artificial Intelligence
Visualization

Physical

Digital

- Additive Manufacturing
- Robotics
- Autonomous Transportation
- Augmented Reality
- Intelligent Workflow Automation
- Intelligent Workforce Automation
- Business Systems
DSNs Allow Us to Move from Sequential Chains to Concurrent Networks

- Sensor-driven Replenishment
- Quality Sensing
- Cognitive Planning
- 3D Printing

- Develop
- Plan
- Source
- Make
- Deliver
- Support

- Synchronized Planning
- Dynamic Fulfillment
- Connected Customer
- Smart Factory
- Intelligent Supply
- Digital Development
Digital Disciplines
Bringing Supply Networks into the Digital Era

Practicing Four Digital Disciplines Compels Us to Think and Work Differently

- Sensing
- Predicting
- Optimizing
- Collaborating
Model Development Timeline and Approach

The next generation APICS Model seeks to transform the supply chain profession

**Timeline**

August 1st 2018 Kickoff

- **Launch Model**

- **Mid-year Updates**

- **Release 1**

- **Mid-year Updates**

- **Release 2**

- **Mid-year Updates**

- **Transition Model to APICS**

**Approach:**

- Deloitte and APICS will collaborate to partner to define the next generation of a Supply Chain Process Model adapted to the digital era.

- Deloitte will drive the content for a 5-year period then hand over the management and maintenance to APICS. This allows for rapid evolution of the model to keep up with rapid technology developments.

- APICS will foster collaboration of members into the Digital Supply Network Model development at regular intervals.
VOICE OF THE ASCM CORPORATE MEMBER

WHO ARE THEY?
HOW DO THEY LOOK AT DIGITAL INVESTMENTS?
Perspectives from ASCM Supply Chain Leaders

>300 Corporations

>200 In the Global 2000, Fortune 1000, Global 250

19 Industries

27 Countries with HQ locations

60% In the Gartner Top 25

>7,500 Employees engaged with APICS talent programs annually

~1,000 Supply chain leaders involved in ongoing polling activity
Profile of APICS Supply Chain Leaders

20%  Executive overseeing end-to-end supply chain, i.e. VP of Supply Chain

40%  Functional leader overseeing one or more processes, i.e. Director of Logistics

25%  Process leader overseeing, managing a global process, i.e. S&OP Manager, Materials Manager

15%  Process expert, i.e. Forecasting, Supply Planning
Major Trends Affecting Supply Chain Digital Strategy

Key Questions to be Addressed in this Session

- What are the 2018 digital investment trends? How does your investment portfolio compare?
- What are the strategic focus areas that will best leverage these investments to gain a competitive advantage? How does your focus compare?
- What are the critical factors that accelerate rate of return on digital investments? Which is your company’s biggest gap?
VOICE OF THE ASCM CORPORATE MEMBER

WHAT ARE THE 2018 DIGITAL INVESTMENT TRENDS? HOW DOES YOUR INVESTMENT PORTFOLIO COMPARE?
A Month of Headlines from Supply Chain 24/7 and This Week in Supply Chain

- Slavery in Supply Chain Remains Key Risk in 2018
- 8 Fundamentals for Achieving AI Success in the Supply Chain
- The emerging role for drones
- 3-D and the Global Supply Chain
- TMS expands in NextGen supply chains
- Five views on how materials handling and other activities within the four walls are changing right in front of us
- Measuring Supplier Innovation Performance
- Untangling the Complexities of eFullfillment
- The Viability of Modern Pick-to-Light Systems
- Sophisticated Supply Chains Improve Inventory Turns by 200%
- The Future of Production Intralogistics
- Supply Chain Visibility: From Passive to Active
- Measuring Supplier Innovation
- Is S&OP in Your Resilience Toolbox?
- What is Less-than-Truckload Shipping and Why is it Important to Corporate America?
- Bridge to Blockchain: The Enterprise Journey
- The Industrial Internet of Things Driving the Big Data Boom
- Kuehne + Nagel Group Report Shows Strengthening Supply Chains in Asia and Latin America
- Jabil Explains Digitized Supply Chain Journey...‘ designed to minimize risk, optimize production and address spend management...’
- Q&A with FedEx Supply Chain on LTL’s Growing Role in Reverse Logistics and Ecommerce Returns
- Inventory Management and Omnichannel Fulfillment Challenges
- Making Sales & Operations Planning a Calendar Highlight
- Intergenerational Differences - Opportunity? Or, Not?
- Prologis Addresses Supply Chain Risk in its “Sustainability” Report
- Managing Freight Rates with Multi-Modal Solutions
APICS Leadership Poll: What are the major trends affecting supply chain strategy?

1. Effective use of big data and advanced analytics
2. Overall network capability, i.e., transportation management, last mile, autonomous vehicles, IoT, Industry 4.0, 3D printing, etc.
3. Digital transformation readiness and approach
4. Effective use of artificial intelligence, machine learning, and cognitive computing applications
5. Increasing market complexity through acquisitions and mergers by eCommerce players
6. Need to accelerate organizational learning, adaptation, and closing the supply chain talent gap
7. Consumer driven supply chain requirements in the omni-channel
8. End-to-end visibility, collaboration, and leverage of the Blockchain solutions
9. Impact of supply chain risk to organizational performance including global trade, natural disaster, and security (both physical and cyber)

Source: 2018 poll of APICS supply chain leaders
Rank from top to bottom, your digital investment priority as reflected in your current supply chain strategy.

1st: Consumer driven supply chain requirements in the Omni-channel

2nd: End-to-end visibility, collaboration, and leverage of the Blockchain solutions

3rd: Overall network capability, i.e., transportation management, last mile, autonomous vehicles, IoT, Industry 4.0, 3D printing, etc.

4th: Effective use of big data and advanced analytics

4th: Digital transformation readiness and approach

4th: Impact of supply chain risk to organizational performance including global trade, natural disaster, and security (both physical and cyber)

7th: Effective use of artificial intelligence, machine learning, and cognitive computing applications

7th: Increasing market complexity through acquisitions and mergers by eCommerce players

9th: Need to accelerate organizational learning, adaptation, and closing the supply chain talent gap
WHAT WE KNOW ABOUT SUPPLY CHAIN ROI

5,000 COMPANIES HAVE USED SCOR
WE KNOW THE MOST COMMON FOCUS AREAS TO ACHIEVE ROI
HOW CAN WE LEVERAGE THAT KNOWLEDGE DIGITALLY?
Leaders have better delivery performance

**OTD to Customer Request Date**
Leaders have 9.7% better on-time delivery to customer request than Laggards

- Leaders: 86.7%
- Median: 85.2%
- Laggards: 77.0%

**OTD to Customer Commit Date**
Leaders have 7.4% better on-time delivery to customer commit than Laggards

- Leaders: 94.5%
- Median: 92.3%
- Laggards: 87.1%
Leaders have less inventory and shorter cash-to-cash cycle time

**Inventory Days of Supply**
Leaders have 48% less inventory compared to Laggards

- Leaders: 55.4 days
- Median: 69.7 days
- Laggards: 106.8 days

**Cash-to-Cash Cycle Time**
Leaders have 75.5% shorter cash-to-cash cycle time compared to Laggards

- Leaders: 23.9 days
- Median: 80.3 days
- Laggards: 97.4 days
Leaders are more profitable and have greater sales growth

**EBIT (Profitability) as a % of Revenue**
Leaders are 75.5% more profitable compared to Laggards

- Leaders: 12.2%
- Median: 7.6%
- Laggards: 6.9%

**Sales Growth**
Leaders have more than 3.6x the sales growth compared to Laggards

- Leaders: 14.0%
- Median: 6.0%
- Laggards: 3.9%
SCORmark Benchmarks Define Competitive Performance Gaps

Implementation of the project portfolio closes competitive gaps in both internal and customer-facing metrics

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Metrics</th>
<th>Parity</th>
<th>Advantage</th>
<th>Superior</th>
<th>Target Level Performance</th>
<th>Your Organization</th>
<th>Gap to Target</th>
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<tbody>
<tr>
<td>Customer Facing Metrics</td>
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<tr>
<td>Reliability</td>
<td>Perfect Order Fulfillment (%)</td>
<td>77.5%</td>
<td>85.6%</td>
<td>93.7%</td>
<td>Advantage</td>
<td>69.2%</td>
<td>16.4%</td>
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<tr>
<td>Responsiveness</td>
<td>Order Fulfillment Cycle Time (days)</td>
<td>9.1</td>
<td>6.5</td>
<td>3.9</td>
<td>Parity</td>
<td>7.1</td>
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<tr>
<td>Agility</td>
<td>Supply Chain Flexibility (days)</td>
<td>45.0</td>
<td>33.0</td>
<td>21.0</td>
<td>Advantage</td>
<td>15.0</td>
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<td></td>
<td>Supply Chain Adaptability (%)</td>
<td>35.5%</td>
<td>51.3%</td>
<td>72.0%</td>
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<td>10.0%</td>
<td>41.3%</td>
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<td>Internal Facing Metrics</td>
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<tr>
<td>Cost</td>
<td>Total Supply Chain Management Cost % Revenue</td>
<td>8.7%</td>
<td>5.6%</td>
<td>2.4%</td>
<td>Superior</td>
<td>8.1%</td>
<td>-5.7%</td>
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<tr>
<td>Asset Management Efficiency</td>
<td>Cash to Cash Cycle Time (days)</td>
<td>55.4</td>
<td>30.5</td>
<td>5.5</td>
<td>Parity</td>
<td>160.5</td>
<td>-105.1</td>
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</table>
SCOR Connects Performance to Process, Practices, and People

SCOR defines supply chain as the integrated processes of plan, source, make, deliver, return, and enable from supplier’s supplier to customer’s customer.
### Strategic Focus Areas by Process

The 12 strategic focus areas listed below are based on the project portfolios of 90 SCOR based transformation programs from 30 companies across 6 industries over a 12 year span.

<table>
<thead>
<tr>
<th>Strategic Focus Area</th>
<th>Plan</th>
<th>Source</th>
<th>Make</th>
<th>Deliver</th>
<th>Return</th>
<th>Enable</th>
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<tbody>
<tr>
<td>1 Demand Management and Forecasting</td>
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<td>3 ERP and Advanced Planning System Utilization</td>
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<td>6 Integrated Product Life Cycle Management</td>
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<td>7 Integrated Sales and Operations and Tactical Planning</td>
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<td>8 Efficiency and Effectiveness of the Physical Supply Chain Network</td>
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<td>9 Order Management Discipline</td>
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<td>10 Return Management</td>
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<td>11 Inventory Control Practices</td>
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</table>
## Strategic Focus Area Impact by SCOR Metric

Based on project portfolio results of 90 SCOR based transformation programs from 30 companies across 6 industries over a 12 year span. XX denotes highest impact.

<table>
<thead>
<tr>
<th>Strategic Focus Area</th>
<th>Revenue ($)</th>
<th>Perfect Order Fulfillment (%)</th>
<th>Order Fulfillment Cycle Time (days)</th>
<th>Upside Supply Chain Flexibility (days)</th>
<th>Total Supply Chain Management Cost ($)</th>
<th>COGS ($)</th>
<th>Inventory ($)</th>
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Typical Results from Implementing Portfolios

The most advanced affiliates:

- Rank in the upper quartile of their industry group in shareholder value
- Programs achieve average operating income improvement of 3% of sales (high 4.5% - low 1.5%)
  - 50% Revenue Impact
  - 50% Cost Impact
- Out perform competitors on all major supply chain indices
- Possess 10+ years of SCOR experience
- Apply a proven Supply Chain Assessment approach

Typical results:

- 30% faster system implementations with 30% more functionality
- Continuous improvement portfolios refreshed at a value of 0.5%
- 20% improvement on inventory turns
- 25% improvement in delivery reliability
- 20% improvement in flexibility
- Maximize share growth through effective risk management

Source: APICS Supply Chain Council 2002 to 2014
## Digital Investment Priorities by SCOR Process – Scenario

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</table>
Prioritize the following strategic focus areas based on your company's project list:

1. Integrated Sales and Operations and Tactical Planning
2. Order Management Discipline
3. Efficiency and Effectiveness of the Physical Network
5. Integrated Product Life Cycle Management
6. Supplier Flexibility
7. Manufacturing Flow
8. Other
VOICE OF THE ASCM CORPORATE MEMBER

WHAT ARE THE CRITICAL FACTORS THAT ACCELERATE RATE OF RETURN ON DIGITAL INVESTMENTS?
Critical Factors that Accelerate Rate of Return on Digital Investments

1. There is a tight link between competitive advantage, strategic focus area, and digital investment

2. The portfolio is prioritized from an end-to-end supply chain perspective (versus functional priority)

3. Implementation integrates performance, process, practices, people, data, and technology
Which factor is my company's biggest challenge?

- Tight link between competitive advantage, strategic focus area, and digital investment: 10%
- Prioritization from an end-to-end supply chain perspective (versus functional priority): 10%
- Integration of performance, process, practices, people, data, and technology: 80%
SCOPE OF SCOR DIGITAL EDITION

AREAS OF FOCUS
RELATED WORKSTREAMS
PROCESS FOR EDIT
SCHEDULE
NEXT STEPS
SCOR Digital Edition Updates 2019

1. Digital technology best practices
2. Application in the eCommerce, Omni-channel space
3. Metrics for use with advanced analytics
4. Level 4 processes by platform
5. Addition of soft skills and leadership skills
6. Use cases for nine digital investment scenarios
7. Workflow updates for the ARIS platform version
8. Integrating Network Design
Related Workstreams

1. **Updated SCOR-P endorsement** that includes a virtual framework introduction (day 1), a web-based instructional option for project management (days 2 and 3), and a self-proctored exam from a personal computer.

2. **Introduction of an Digital Transformation Readiness Assessment** leveraging a research grant from the Research, Innovation, and Strategy Committee.

3. **Request for Information for a Digital Standard for ‘Computers’** exploring the feasibility of introducing a machine readable standard dictionary both in an open and license ecosystems.
Face-to-Face Workshop Days; Virtual Options will be Available

- November 13 - 14, 2018
- December 11 - 12, 2018
- April 2 - 3, 2019
- July 9 - 10, 2019
Next Steps

- Talk it over with an executive sponsor and other key stakeholders.
- Register for the virtual kick-off session taking place on October 23, 2018.
- Say “yes” by November 13, 2018 by attending at our first face to face meeting (last opt-in date is December 11, 2018).
- Provide us an indication of commitment via e-mail as soon as possible.
- Return a signed APICS volunteer policy agreement.
- If not already, set up your corporate membership.
THANK YOU