# Finding Certainty in “ Uncertainty ”

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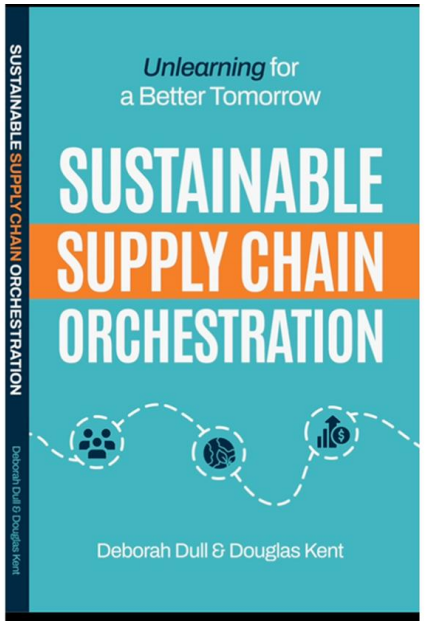
***Chicagoland Webinar 2/18/26***




LinkedIn Profile

# A BETTER WORLD THROUGH SUPPLY CHAIN

ASCM is the largest non-profit supply chain professional association globally with a global network of partners, instructors and thought leaders

ASCM is a signatory on the United Nations Global Compact

ASCM world-class standards (SCOR DS, Digital Capabilities & Enterprise Supply Chain Sustainability) – all available FREE of charge to anyone in the world

Wide range of certifications (APICS), certificates, training, education and benchmarks which have been leveraged by over 5000 organizations worldwide, helping navigate their respective journeys to supply chain excellence




## ABOUT ASCM

**1957**
APICS founded

**50,000+**
Professional members in 100+ countries with 1,600+ active volunteers

**100+**
Global Training Partners across 50+ countries and 6 continents

**2019**
ASCM launched,
ASCM Foundation launched,
~$45M annual revenue

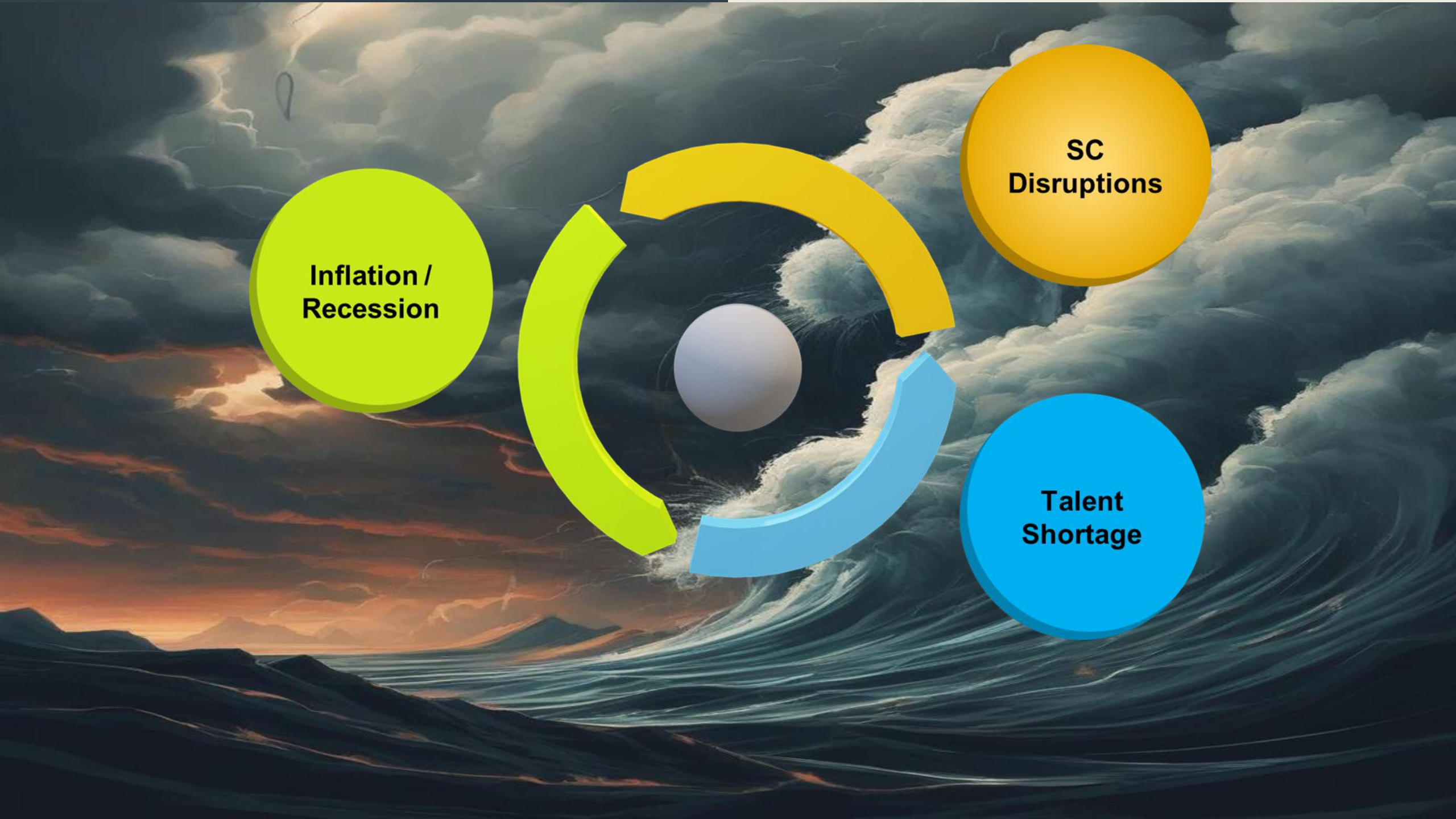
**120,000+**
Certified professionals

**110+**
Staff headquartered in Chicago

ASCM ASSOCIATION FOR SUPPLY CHAIN MANAGEMENT



# Facing an (Im-)Perfect Storm


Inflation / Recession
SC Disruptions
Talent Shortage

# The (Im-)perfect storm

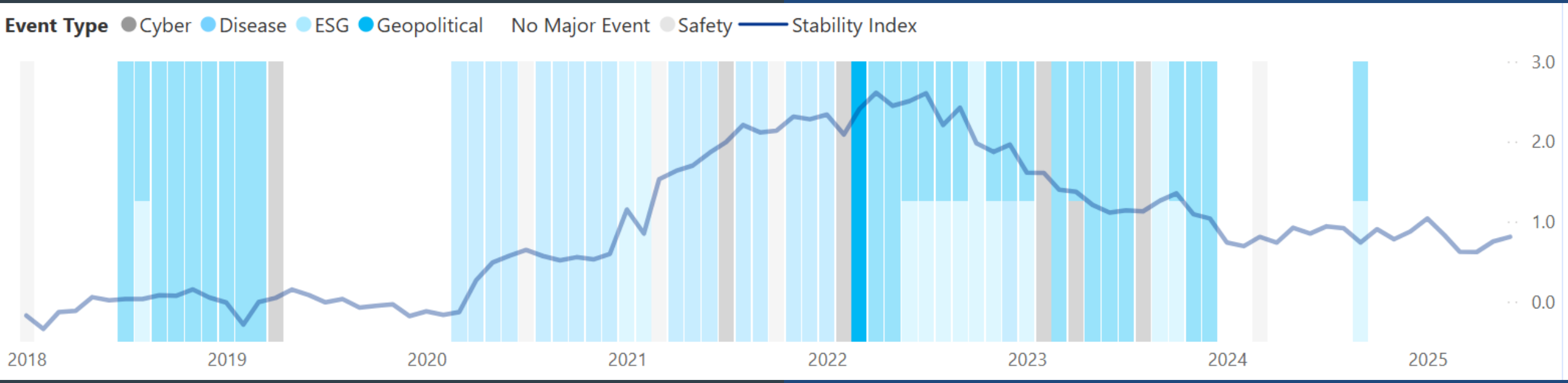



Over the last 2+ years, supply chains faced recurring disruption waves: major maritime rerouting (Red Sea), chokepoint capacity constraints (Panama Canal drought restrictions), repeated signals of slower supplier deliveries in purchasing surveys, and a choppy U.S. freight environment — reinforcing that **disruption has shifted from episodic to structural.**

While inflation has **fallen sharply from the 2021–2022 peak (7–9%)**, prices **never reversed**—they **reset at a permanently higher level**. Cumulatively, prices are **~6% higher over the last two years alone**, on top of the earlier post-pandemic surge.

**Workforce and talent shortages** continue to rank alongside inflation and disruption as one of the most significant barriers to supply chain performance. The challenge is no longer just "headcount" – it is a **skills and capability gap.**

# VOLUME + VARIETY + SEVERITY




KPMG Supply Chain Stability Index in association with ASCM

# ASCM 2026 Top 10 Trends

**1. Artificial Intelligence**

*Smarter, faster, AI-driven decision-making*

**2. Trade Policies and Global Dynamics**

*Navigating disruption with visibility and tech*

**3. Automation**

*Rapid manufacturing with robotics and AI*

**4. Agility and Resilience**

*Adapting fast to constant change*

**5. Workforce Evolution**

*Upskilling for a digital future*

**6. Visibility and Traceability**

*Real-time insights across the supply chain*

**7. Cybersecurity**

*Protecting networks from growing threats*

**8. Cost Optimization**

*Balancing performance with profitability*

**9. Agile Sourcing**

*Flexible, fast, customer-focused procurement*

**10. Climate and Circularity**

*Designing for sustainability and impact*

# 1. Artificial Intelligence

Industry Insights

- Industrial manufacturing can use AI-powered forecasting tools to anticipate risks like tariffs, geopolitical disruptions, and equipment maintenance needs.

- Procurement professionals may work along side virtual agents for supplier negotiations.  Co-agents!



By 2027, **AI will be central to supply chain strategy**



By 2032, AI will be **essential** to supply chain for cost savings and resilience



**Digital twins**, and **ESG-focused AI** are reshaping operations



Powers **forecasting, logistics, and sourcing**



Data quality, ethical concerns, cybersecurity, and **regulatory pressures must be managed**

# 2. Trade Policies and Global Dynamics

Industry Insights

- Automotive, aerospace and medical-device makers race to lock Mexican capacity.

- Electronics brands establish “Vietnam-plus” satellite clusters, rewiring capital-expenditure flows away from coastal China.



Creates **uncertainty and cost pressures** from tariffs



Requires enhanced **visibility and traceability**



Supports **nearshoring and localization** strategies



Leverages blockchain and **digital twins**



Enables better **compliance** and decision-making

# 3. Automation

Industry Insights

- Robotic picking systems are streamlining warehouse operations by handling inventory movement and order fulfillment

- E-commerce will leverage self-driving trucks and drones to cut delivery costs by 20–40%, especially in remote areas.



Uses **robotics, AI, and autonomous tech**



Improves **manufacturing and logistics precision**



Reduces labor and delivery **costs**



Supports **scalability and sustainability**



**Builds resilience** against disruption

# 4. Agility and Resilience

Industry Insights

- Manufacturing will benefit from digital twins, allowing for predictive maintenance and scenario testing

- Highly regulated sectors, such as pharmaceuticals and food, and automotive can adopt digital twins to meet compliance requirements and traceability reporting.



Increase in **geopolitical unrest and climate events**



**Digital twins** will become a necessity



Increased **regulatory compliance**



Strengthens **sustainability and adaptability**

# 5. Workforce Evolution

Industry Insights

- Manufacturing and CPG will benefit from structured, cross-functional network design teams, as they often manage global networks with complex distribution and production footprints.

- Machine learning and use of AI chat bots are either in partial implementation or planned to be implemented



Prepare for **digital skill gaps** and labor shortages



Focuses on **upskilling and talent attraction**



Promotes **data-driven**, learning cultures



Supports **innovation and operational efficiency**

# 6. Visibility and Traceability

Industry Insights

- Food and beverage, pharmaceutical, and luxury goods can leverage this technology for fraud prevention

- Logistics firms are leveraging blockchain for greater visibility, data sharing and dispute resolution.



Tracks goods across all supply chain tiers



Provides near-real-time data and insights



Blockchain serves as a tool



Improves disruption response and planning



Adds location intelligence for better context

# 7. Cybersecurity

Industry Insights

- Industries reliant on 3PL or contract manufacturing will face increasing pressure to improve internal digital security or through trusted vendors
- Financial supply chain and “supply chain as a service” organizations are the biggest targets from nefarious actors and must play defense against ransomware and blackmail



Protects against **rising digital threats**



Requires team-wide **security awareness**



Builds strong **compliance frameworks**



**Secures third-party data** and systems



Ensures **continuity and data integrity**

# 8. Cost Optimization

Industry Insights

- Retailers are shifting to actual purchased costs to provide better visibility to true inventory costs and inventory shrinkage. Similarly, many retailers are moving to pull based inventory systems to reduce inventory on hand.

- In response to tariffs, CPG may shift from cost-cutting to creating customer value through responsiveness, transparency and purpose-driven design.



Minimizes **total supply chain costs**



**Tackles tariffs** and regulatory expenses



Avoiding (or delaying) **“passed on costs”**



**Refines sourcing and distribution** strategies



Aligns **profitability with performance**

# 9. Agile Sourcing

Industry Insights

- Semiconductors will need to prepare for tougher scrutiny when sourcing raw materials due to national security concerns

- The pharmaceutical industry may face higher operational costs but can benefit from a shift to localized sourcing



Emphasizes **speed and adaptability**



Uses **iterative, customer-centric** approaches



Enables **flexible procurement** strategies



Responds quickly to **market shifts**



**Balances quality, speed, and risk**

# 10. Climate and Circularity

Industry Insights

- Manufacturing and agriculture will need adaptive infrastructure to mitigate flooding and heat impacts.
- Technology and automotive must “green” their supply chains and prove carbon reduction for EU compliance



Designs products for **circularity**



Focuses on **decarbonization and green logistics**



Optimizes **reverse logistics and returns**



Meets **ESG and regulatory** standards



**Builds brand value** and investor appeal

# Why Now: Beyond the AI Hype

- What are the applications of AI in supply chain?
- What benefits can companies expect from AI implementation?
- What are the considerations for companies looking to implement AI?



# AI in Supply Chain – Applications

"In supply chains, AI delivers value through four core capabilities: **predicting** what will happen, **optimizing** what should be done, **automating** how work gets executed, and **orchestrating** decisions across the end-to-end network."

**PREDICTION** – Machine Learning and Predictive Analytics

Using AI-powered analytics to gain deeper insights from supply chain data, enabling better decision-making.

**OPTIMIZATION** – Prescriptive & Mathematical AI

Applying AI algorithms to optimize supply chain processes, such as inventory management, transportation routing, and production scheduling.

**AUTOMATION & AUGMENTATION** – AI Driven Execution + GenAI

Deploying AI-powered cognitive assistants to automate routine tasks, provide recommendations, and augment human decision-making through co-pilots, agents and documents intelligence.

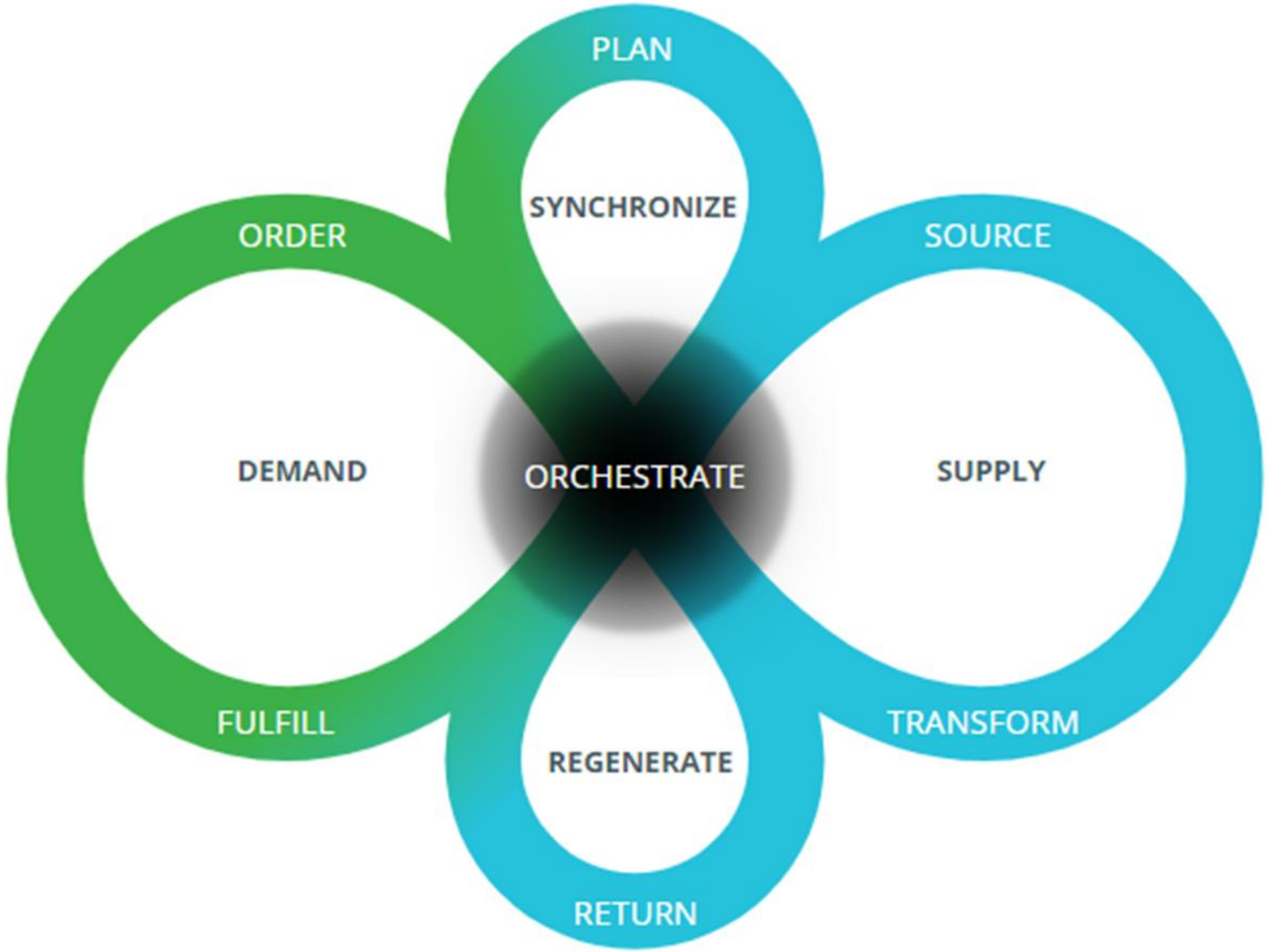
**ORCHESTRATION** – (Agentic AI & Decision Coordination)

Coordinates decisions across functions, partners and time horizons in near real-time. Control-tower like visibility enabling cross-functional tradeoffs.

# What Area(s) to Implement?






PLAN
SYNCHRONIZE
ORDER
SOURCE
DEMAND
ORCHESTRATE
SUPPLY
FULFILL
TRANSFORM
REGENERATE
RETURN

# Use Cases for AI, E2E Opportunities Abound

**Order** - ***AI turns Order into a fast intelligent commitment engine that improves promise accuracy***

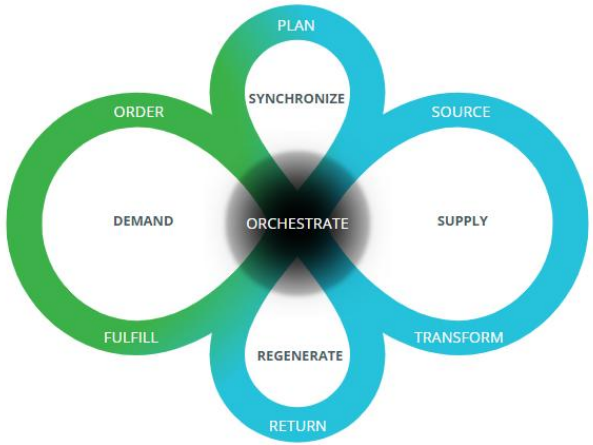
- Intelligent order capture and validation
- Load consolidation & decision support
- AI-enhanced order promising (ATP/CTP)
- Order exception prediction & resolution
- Order integrity credit risk checks
- Order customer service co-pilots

**Fulfill** - ***AI in Transform converts factories from reactive operations into self-optimizing systems***

- Route & logistics optimization & modeling – e.g. last mile
- Warehouse slotting and labor optimization
- ETA prediction and exception management
- Customer support – automated chatbots

**Plan** - ***AI in Plan converts planning from forecast-driven to probability-driven***

- Demand Forecasting & Sensing
- Inventory Optimization & Planning
- Modeling & Simulation – rapid "what-if" scenario analysis
- Transportation & logistics planning
- Customer segmentation & clustering
- S&OP/IBP decision support




**Source** – ***AI in Source turns procurement from transactional buying into risk-aware portfolio management***

- Supplier evaluation, selection & performance prediction
- Supplier risk sensing
- Supplier analytics, opportunity identification & alerts
- Procurement automation (invoice processing, contract review, etc.)
- Should-cost modeling
- Supplier discovery and diversification

**Transform** - ***AI in Transform converts factories from reactive operations into self-optimizing systems***

- Production scheduling optimization & capacity planning
- Predictive maintenance for tooling & equipment
- Real-time quality control – prediction and defect detection
- Digital twins of plants
- Energy & resource optimization – waste elimination

**Return** - ***AI in Return turns a cost center into a value-recovery engine***

- Automated sorting & reverse logistics
- Return analytics – return reason application & customer experience
- Fraud and abuse detection
- Disposition optimization (repair, resell, recycle)
- Refurbishment forecasting

**Orchestrate** - ***Orchestration is where AI moves from tools to a system of intelligence***

- Predictive analysis for risk mitigation
- Automated RCCA for disruptions
- Real-time dashboards & performance analytics
- Circular supply chain & sustainability
- E2E control towers
- Autonomous decisioning / Knowledge co-pilots

# Select a Focus Area

*Illustrative so you can apply the framework and imagine building your own agentic workforce!*

- Have you asked for headcount in the last year? For what?
- What is the least favorite task that you have to do?
- What is super repetitive?
- Have you asked “wow it seems like tech should be able to do this?”

| | | |
|---|---|---|
| The Process is Complex. | The Information is Scattered. | The Scenarios Repeat. |
| The Work is Tedious. | The Rules are Clear. | The Impact is Measurable. |

# Metrics Impacted by AI Implementation

| PLAN | SOURCE | ORDER | TRANSFORM | DELIVER | RETURN | ORCHESTRATE |
|---|---|---|---|---|---|---|
| Improved Forecast Accuracy | Reduction of lead times | Increased customer perfect order fulfillment | Reduced downtime of capital equipment | Decreased freight cost | Decreased freight cost | Decreased cost of supply chain |
| Reduced stockouts | Increased perfect order condition from supplier (quality) | Decreased order fulfillment cycle time | Increased production schedule adherence | Decreased emissions | Decreased processing times | Higher utilization of human capital |
| Decreased excess inventory | Increased supplier perfect order fulfillment | | Improved perfect order condition (quality) | | | Increased Value at Risk (VAR) accuracy |
| Increased supply chain agility | | | Decreased Transform cycle time | | | |
| | | | | | | |

# My personal take on AI

**"Artificial Intelligence is a powerful amplifier of human ingenuity—yet it can never substitute for true talent.“**

# Maturity Assessment Overview

## Purpose

### SCOR-BASED MATURITY ASSESSMENT

*Assess the maturity of your supply chain across the 7 SCOR process areas. Understand key capability deficiencies and how the SCOR model can help your organization address those deficiencies.*

## Methodology

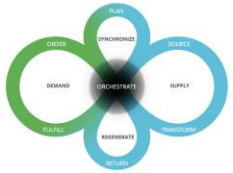
### Maturity Assessment

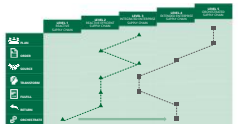
*Assess the maturity of 27 focus areas derived from SCOR L2 processes*
Targeted at SC VPs / BU leads
Time to Complete: ~2 hours



### Results & Analytics

*Deep-dive into current state* – maturity breakdown for each focus area with identification of relevant processes, metrics, skills and best practices in SCOR DS
Detailed, facilitated results review focused on utilizing SCOR to improve deficiencies
Time to Complete: 1 hour, typically 2 weeks after completion of assessment





## Maturity Levels Synopsis

**Level 1: Reactive Supply Chain** → **Level 2: Reactive Efficient Supply Chain** → **Level 3: Integrated Enterprise Supply Chain** → **Level 4: Extended Enterprise Supply Chain** → **Level 5: Orchestrated Supply Chain**

*Maturity levels are defined both at an aggregate supply chain level and at an individual focus area level (for the 27 focus areas) in order to accurately assess maturity*

# ASCM Organizational Skills Assessment

## Purpose

**SCOR-BASED ORGANIZATIONAL TALENT ASSESSMENT**

*Identify organizational competency gaps and opportunities and guide discussions on skill elevation*

## Methodology

### Assessment

*Conducted at an individual OR a management team level across all SCOR Level 1 Process Areas: Plan, Order, Transform, Source, Fulfill, Return, Orchestrate*

Time to Complete: 15-30 minutes (individuals); 2-4 hours (management team)



### Results & Analytics

*Aggregated responses which show organizational competency gaps by process and guide upskilling investments*

Detailed, facilitated results review

Time to Complete: 1 hour, typically 2 weeks after receipt of individual responses




## Talent Assessment Scoring Synopsis

**Level 1:** Little to No Knowledge of Skill Area

**Level 2:** Basic understanding of skill concepts, but unable to apply the skill to work environment

**Level 3:** General Understanding of skill concepts, and starting to apply skill in the work environment

**Level 4:** High level of Understanding of Skill concepts, and ability to apply, teach, and / or coach this skill regularly in the work environment

**Level 5:** Expert in this skill area and ability to apply teach, coach, and / or design this skill regularly in the work environment

# Turn Supply Chain into Your Competitive Advantage

Kickstart your journey with ASCM's **FREE** assessments. These tools help you reveal strengths, uncover gaps, and guide your next steps.

Supply Chain Maturity

Organizational Skills

Sustainability

Digital Readiness

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