About the Speaker – Douglas Kent

- **Douglas Kent** is the Executive Vice President of Strategy and Alliances at ASCM.
- Kent's relentless focus on Supply Chain innovation is driven from his 35+ years of transformational advisory and practitioner experience working with many of the most complex, multi-national organizations.
- Kent holds a master's degree in international business from Pepperdine University and a bachelor's degree in marketing from Indiana University.
- Now, with over 20 years instructing as adjunct faculty, he teaches in the Masters of Digital Transformation and Consulting program at SKEMA University in France and in the MBA program within the College of Business @ Hawaii Pacific University

Supply Chain Sustainability – Aspiration or Reality?

Paris - France April 2022

3 **Sustainable Supply Chain** Topics for Today

Sensing Top 10

What are the Top 10 trends likely to impact supply chain?

Supply Chain Resiliency

What common vulnerabilities exist?

Sustainability Mandate

Are you balancing Economic, Ecological and Ethical considerations in your supply chain?

About ASCM: **Quick Facts**

1957
APICS founded

2019
ASCM launched,
ASCM Foundation launched,
$37.4 MM annual revenue

45,000+
professional members in 100+ countries with 1,600+ active volunteers

100,000+
certified supply chain professionals

100+
Global Training Partners across 45 countries and 6 continents

100+
staff headquartered in Chicago

Signatory on the United Nations Global Compact

Developer of the Enterprise Certification for Sustainability Standards

ASCM Solutions are Designed for Impact

Holistic approach on the organization's supply chain excellence journey

- **Talent development** for **every** level of your staff and leadership
- Supply chain **transformation**, leadership and **strategy**
- **Sustainability**, corporate responsibility, **ESG** and circular business models
- **Community-driven** technical support to **ASCM Foundation**
  - Global Health Supply Chain Initiative
  - Workforce development

OUR PURPOSE

Make the world better through supply chain

OUR GOAL

"Make an Impact" to Individuals, Corporations and Communities

WE WILL ACHIEVE THIS BY (THROUGH)...

Creating a home for life	Developing supply chain talent	Maintaining customer centricity in everything we do	Innovating through leveraged alliances

OUR FOUR STRATEGIC PRIORITIES (BLUE CHIP BETS)

Compelling Products & Solutions	Ecosystem Orchestrator	Business Intelligence	Unique IP & Voice-of-Record (VOR)

In the new world we need to build supply chains that are **robust**, **socially-aware**, **environmentally-responsible** and *still* contribute to business **profitability**.

Requires:

1. A clear understanding of the trends impacting supply chain
2. An honest assessment of our SC Resiliency
3. Equal dedication to social responsibility and ecological stewardship

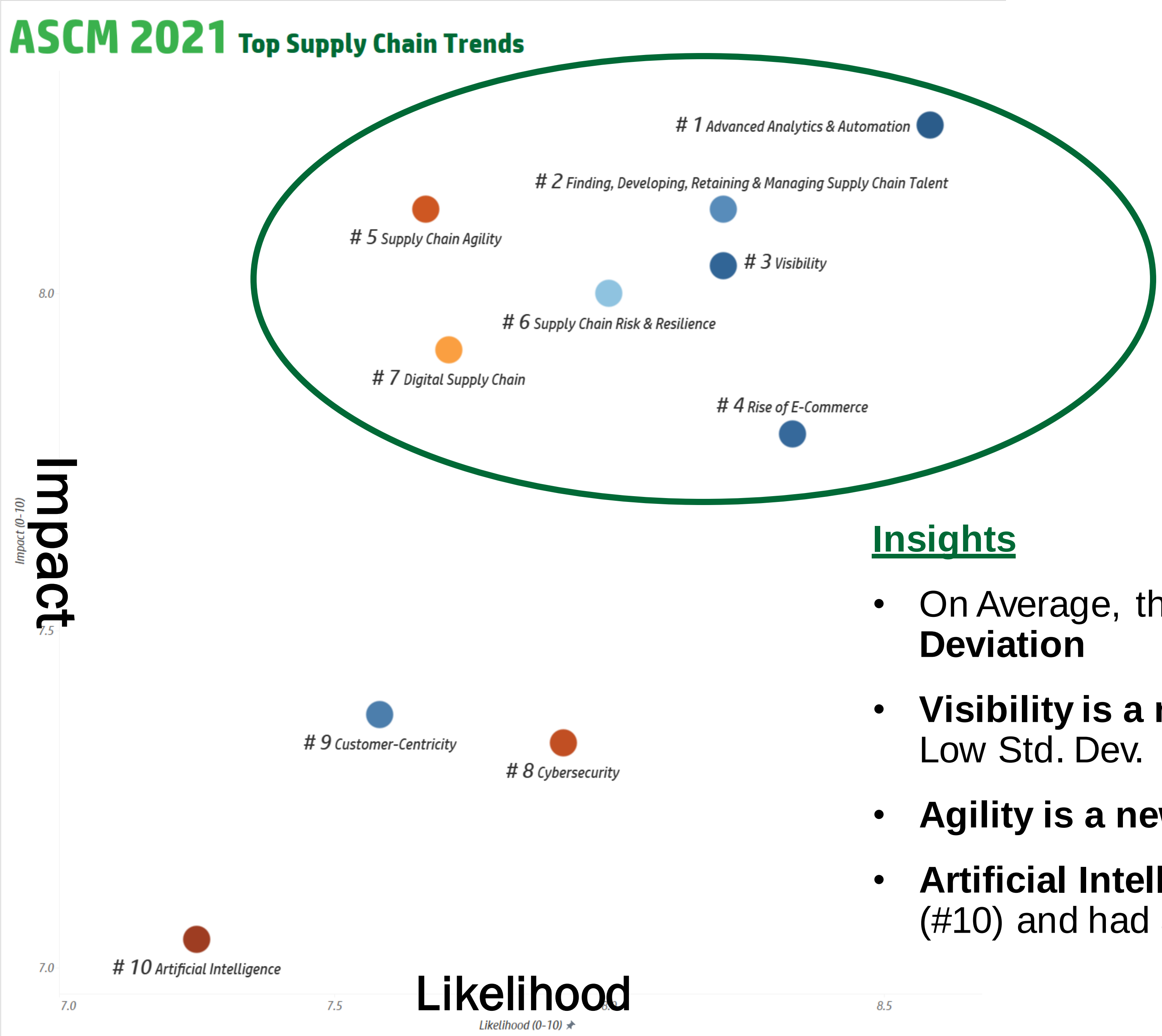
Top Ten Trends

ASCM's Sensing Subcommittee

2021 Top 10 Trends as revealed in 2022

2021 Trend	Change	2020 Rank
1. Advanced Analytics & Automation	--	1
2. Finding, Developing, Retaining & Managing Supply Chain Talent	▲ 2	4
3. Visibility	New	--
4. Rise of E-Commerce	▲ 2	6
5. Supply Chain Risk & Resilience	▼ 3	2
6. Supply Chain Agility	New	--
7. Digital Supply Chain	▼ 4	3
8. Cybersecurity	▼ 3	5
9. Customer-Centricity	New	--
10. Artificial Intelligence	New	--

Source: ASCM RISC



Insights

- On Average, the **highest trends have the lowest Std. Deviation**
- **Visibility is a new trend**, but moved all the way to #3 with a Low Std. Dev.
- **Agility is a new trend**, but extracted from risk & resiliency
- **Artificial Intelligence is a new trend**, but scored relatively low (#10) and had a high std. deviation

The Top 14 Trends & SCOR

Mapping To SCOR Model

Highest Impact				Lowest Impact
1	2	3	4	5

Top 10

2021 Top 14 Trends	Plan	Source	Make	Deliver	Return
Advanced Analytics & Automation					
Supply Chain Talent					
Visibiliy					
Rise of E-Commerce					
Supply Chain Agility					
Supply Chain Risk & Resilience					
Digital Supply Chain					
Cybersecurity					
Customer-Centricity					
Artificial Intelligence					
Demand Sensing					
Corporate Citizenship (ESG)					
Demographic Changes					
3D Printing					

ASCM Focus Areas and Top 14

Supply Chain Talent

- #2 Supply Chain Talent
- #9 Customer Centricity
- #11 Demand Sensing
- #13 Demographic Changes

Transformation

- #1 Advance Analytics & Automation
- #3 Visibility
- #4 Rise of eCommerce
- #5 Supply Chain Agility
- #6 Supply Chain Risk & Resilience
- #7 Digital Supply Chain
- #10 Artificial Intelligence

Sustainability

- #8 Cybersecurity
- #12 Corporate Citizenship (ESG)
- #14 3D Printing

Overall Theme for 2021 – Enterprise Optimization

Covid-19 has highlighted the need for companies to focus on optimizing their enterprise to execute effectively, mitigate risk, improve agility and responsiveness, and increase competitive advantage.

- Optimizing technologies by reducing the number of ERP's and other operating systems within the enterprise.
- Workforce optimization is occurring as companies focus on the needs of the future given digital transformation.
- Warehouse and distribution footprints also need to be optimized as inventory strategies are improved and streamlined.
- Companies are being forced to reassess their strategies in the areas of inventory, sourcing, and warehousing.
- Customer Centricity heavily influences the performance strategies of the organization.
- Understanding these market dynamics and speed to change leads to an organizational design to meet these needs

SC Resiliency

Collaborative Research with Economist Intelligence Unit

The Impact of the Global Supply Chain

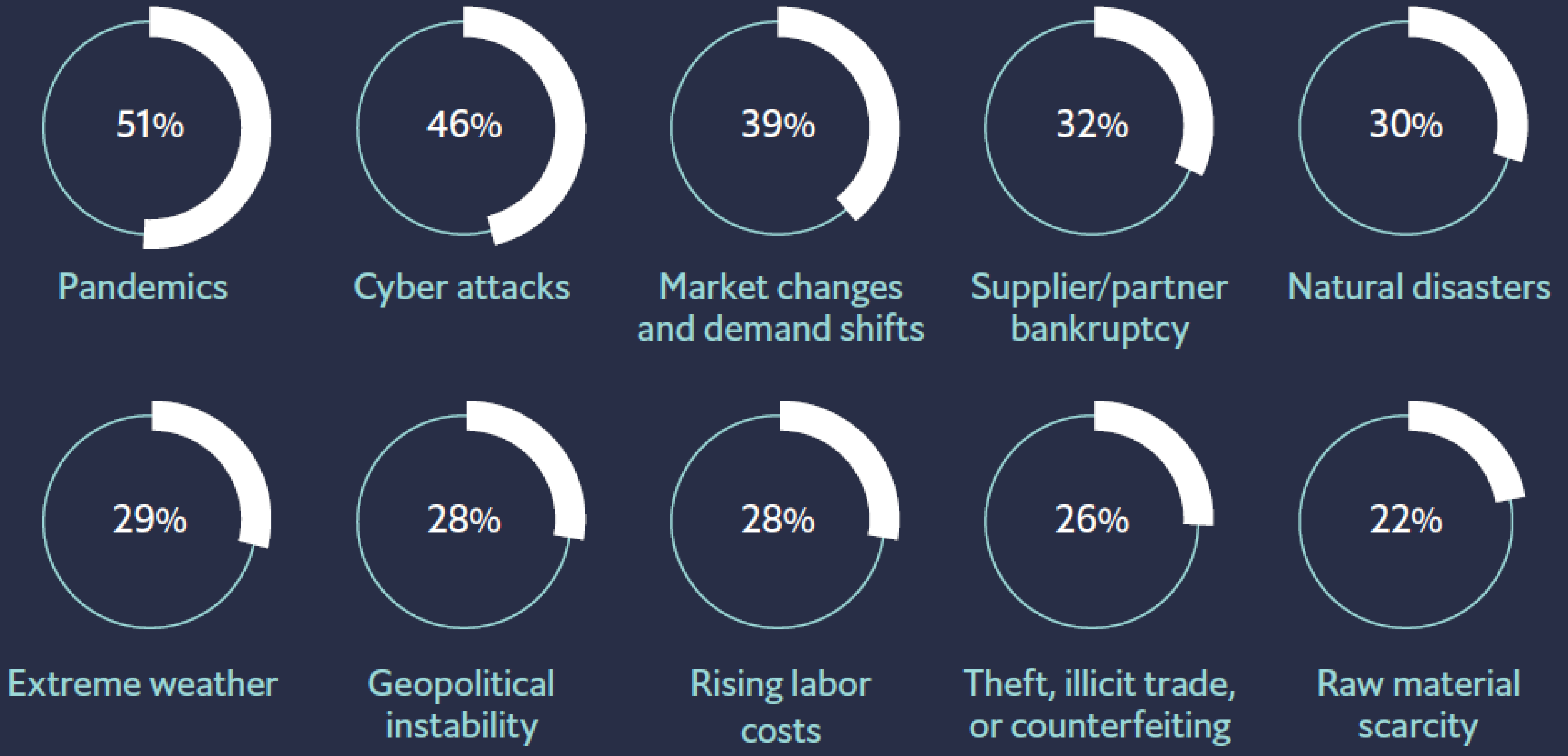
Dynamic Macro-level Forces

Challenge our Work as Supply Chain Professionals Every Day

- Coronavirus, diseases
- Climate Change
- Tariffs and geopolitical
- Cyber security
- Earthquakes, hurricanes and natural disasters
- Environmental and climate concerns
- Cost of Labor

Today's complex threat matrix: Risks most likely to cause severe supply chain disruptions over the next 12 months (%)

Respondents were asked to select up to three.



Covid-19 has brought the reality of doing business in a high-risk world into sharper focus, with businesses, the public and investors all gaining unprecedented awareness of supply chain disruptions. When asked to name **three main objectives of their supply chain strategy** over the coming year, benchmarked companies ranked increasing supply chain resilience as one of their top objectives, behind only increasing sales growth and increasing customer satisfaction and experience.

1. Increasing sales growth
2. Increasing customer satisfaction and experience
3. **Increasing supply chain resilience**

The supply chain's ability to ***bounce back and recover to a normal state*** *of affairs*

The supply chain's ability to ***bounce forward and adapt to a new normal***

Operational capabilities

- Position and prepare
- Sense and Plan
- Mitigate and respond

Strategic capabilities

- Lead
- Build
- Transform

Four Key Highlights Emerged from the Benchmark

1. Companies **lack total visibility into their supply chains**, leaving them vulnerable to dynamic or unexpected risks.
2. Companies are promoting strategic **supply chain resilience by building strong long-term relationships with key suppliers.**
3. **Business continuity plans and playbooks should include triggers** outlining actions to be taken across a range of disruptions.
4. **Climate change is the biggest risk factor of the 21st century** but supply chain resilience planners are not factoring for it enough

Highlight #1 – **Supply Chain Visibility**

Companies lack total visibility into their supply chains, leaving them vulnerable to dynamic or unexpected risks.

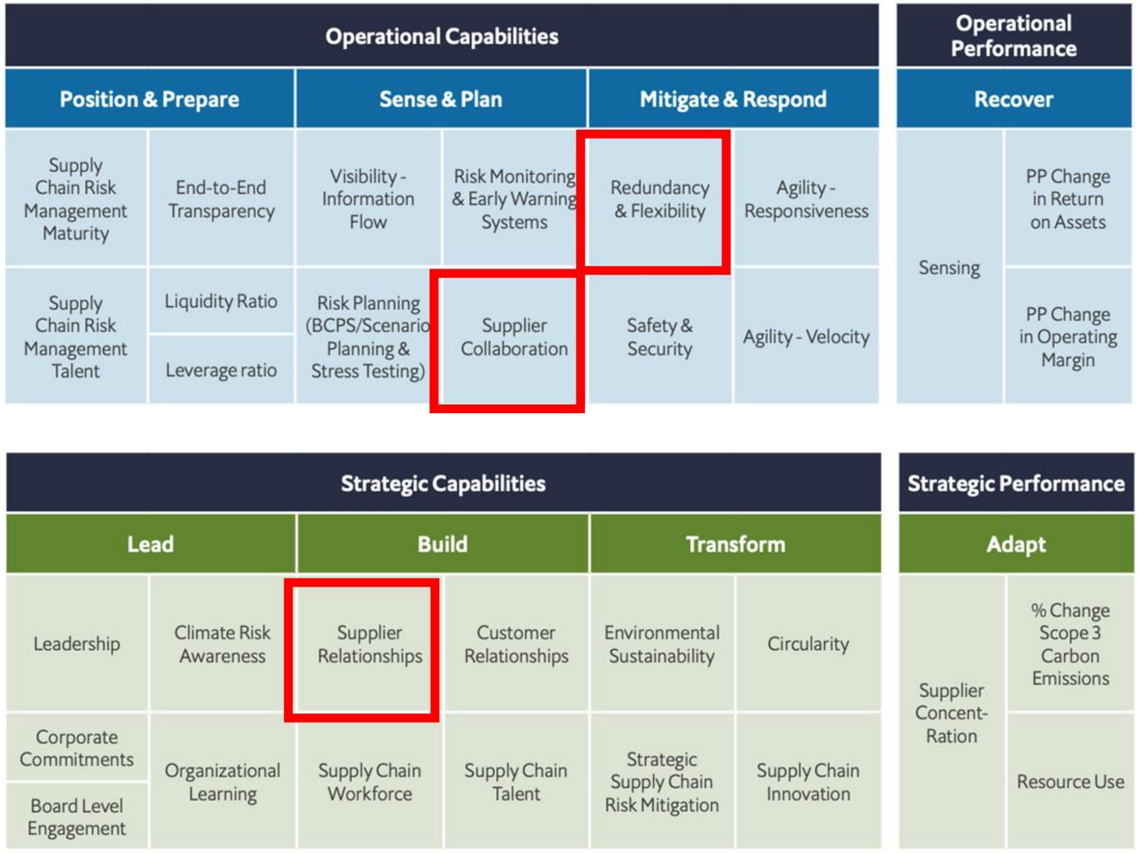
Operational Capabilities						Operational Performance	
Position & Prepare		Sense & Plan		Mitigate & Respond		Recover	
Supply Chain Risk Management Maturity	End-to-End Transparency	Visibility - Information Flow	Risk Monitoring & Early Warning Systems	Redundancy & Flexibility	Agility - Responsiveness	Sensing	PP Change in Return on Assets
Supply Chain Risk Management Talent	Liquidity Ratio Leverage ratio	Risk Planning (BCPS/Scenario Planning & Stress Testing)	Supplier Collaboration	Safety & Security	Agility - Velocity		PP Change in Operating Margin

Strategic Capabilities						Strategic Performance	
Lead		Build		Transform		Adapt	
Leadership	Climate Risk Awareness	Supplier Relationships	Customer Relationships	Environmental Sustainability	Circularity	Supplier Concent-Ration	% Change Scope 3 Carbon Emissions
Corporate Commitments Board Level Engagement	Organizational Learning	Supply Chain Workforce	Supply Chain Talent	Strategic Supply Chain Risk Mitigation	Supply Chain Innovation		Resource Use

Best Practices/Capabilities
• Established, objective criteria in place to **assess supplier criticality** • Critical suppliers have been identified, **Tier 1 through Tier 3**
• **Real time visibility** of demand and supply via data exchange with key partners through integrated systems
• Products **designed with risk avoidance** in mind i.e., dependence on single source of supply or rare raw materials • Utilization of **prescriptive analytics** to enable rapid decision making and enhanced control of end-to-end supply chain • Utilization of **control towers** to gain end-to-end supply chain visibility • Supply chain innovations proactively managed and deployed i.e., strong change management for **digital transformation**

Highlight #2 – Strategic Supplier Relationship Management

Companies are promoting strategic supply chain resilience by ***building strong long-term relationships*** *with key suppliers.*



Best Practices/Capabilities

- **Information sharing** with critical suppliers regarding downstream dependencies
- **Joint decision-making process** with suppliers regarding order quantity and inventory requirements
- **Revenue sharing/risk agreements** in place with suppliers, including ability to make accelerated payments as needed

- **Strategic levels of inventory** (safety stock) maintained
- **Multiple sources of supply** established for critical items
- **Flexible contracting** in place with suppliers to change order quantities, delivery schedules, and/or delivery modes in support of changes
- Products and services **designed for flexibility** i.e., delayed differentiation or modularization

- Direct engagement with suppliers as a part collaborative efforts including **joint planning, joint innovation, or joint marketing** campaigns
- Common **performance management system** in place with strategic supply chain partners to enable joint monitoring of metric performance

Highlight #3 – Business Response Playbooks

Business ***continuity plans and playbooks*** *should include triggers outlining actions to be taken across a range of disruptions.*

Operational Capabilities						Operational Performance	
Position & Prepare		Sense & Plan		Mitigate & Respond		Recover	
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Best Practices/Capabilities

- SC risk management activities are funded, coordinated, and integrated into sales and operations planning (S&OP) process
- SC personnel have necessary skillset to mitigate and respond to disruptions
- SC risk management activities have full support from executive management, with risks clearly communicated to Board

- Business playbooks with associated triggers in place to outline steps taken in the event of a disruption
- Robust scenario planning process to stress test different operational or tactical responses to disruptions before disruption occurs
- Suppliers and/or customers are included in risk management planning activities

- Risk monitoring procedures for events highlight by media, government, and/or credit monitoring of key suppliers with trigger levels and thresholds clearly identified
- AI-powered analytics utilized to detect threats and provide early warnings in real-time

- Supply chain risks, including near misses, are documented and analyzed via RCCA efforts to improve future response strategy
- Scenario testing processes in place to stress test supply chain responses to various risk events

Highlight #4 – Climate Change

***Climate change** is the biggest risk factor of the 21st century but supply chain resilience planners are not factoring for it enough*

Operational Capabilities						Operational Performance	
Position & Prepare		Sense & Plan		Mitigate & Respond		Recover	
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Best Practices/Capabilities

- Robust analysis of climate change, including impact to your company, your suppliers, and your customers
- Clear targets established for carbon emissions, water usage along with associated investment to improve
- Physical assets designed to withstand natural disasters
- Programs established to recover and repurpose materials with performance targets both internally and across supplier ecosystem
- Partnerships with other organizations to advance circular supply chain initiatives i.e., waste repurposing
- Circularity considered as part of upfront design process

Sustainability Mandate

Are you balancing Economic, Ecological and Ethical considerations in your supply chain?

Why was the ASCM Enterprise Certification Developed?

THE INDUSTRY'S FIRST AND ONLY CORPORATE-LEVEL SUPPLY CHAIN DESIGNATION

- **Measures:**
  - Social responsibility
  - Economic sustainability
  - Ecological stewardship

- **Empowers organizations to**:
  - Reach goals
  - Drive efficiency
  - Improve results
  - Remain Competitive

THE THREE PILLARS OF THE ASCM ENTERPRISE CERTIFICATION

ETHICAL

Evaluations of the ethical practices of an organization's supply chain include the review of the supply chain for: anti-corruption and anti-trust, codes of conduct, confidentiality of information, human rights and labor practices, intellectual property and patents, and responsible marketing and sales engagement.

ECONOMIC

Evaluations of the economic practices of an organization's supply chain include the review of the supply chain for: business integrity and company reputation, board and corporate leadership, enterprise risk and crisis management, materiality index, responsible tax, supply chain strategy and differentiated operating models.

ECOLOGICAL

Evaluations of the ecological practices of an organization's supply chain include the review of the supply chain for: circular economy, climate strategy, energy, water and waste, material usage, and product life-cycle stewardship.

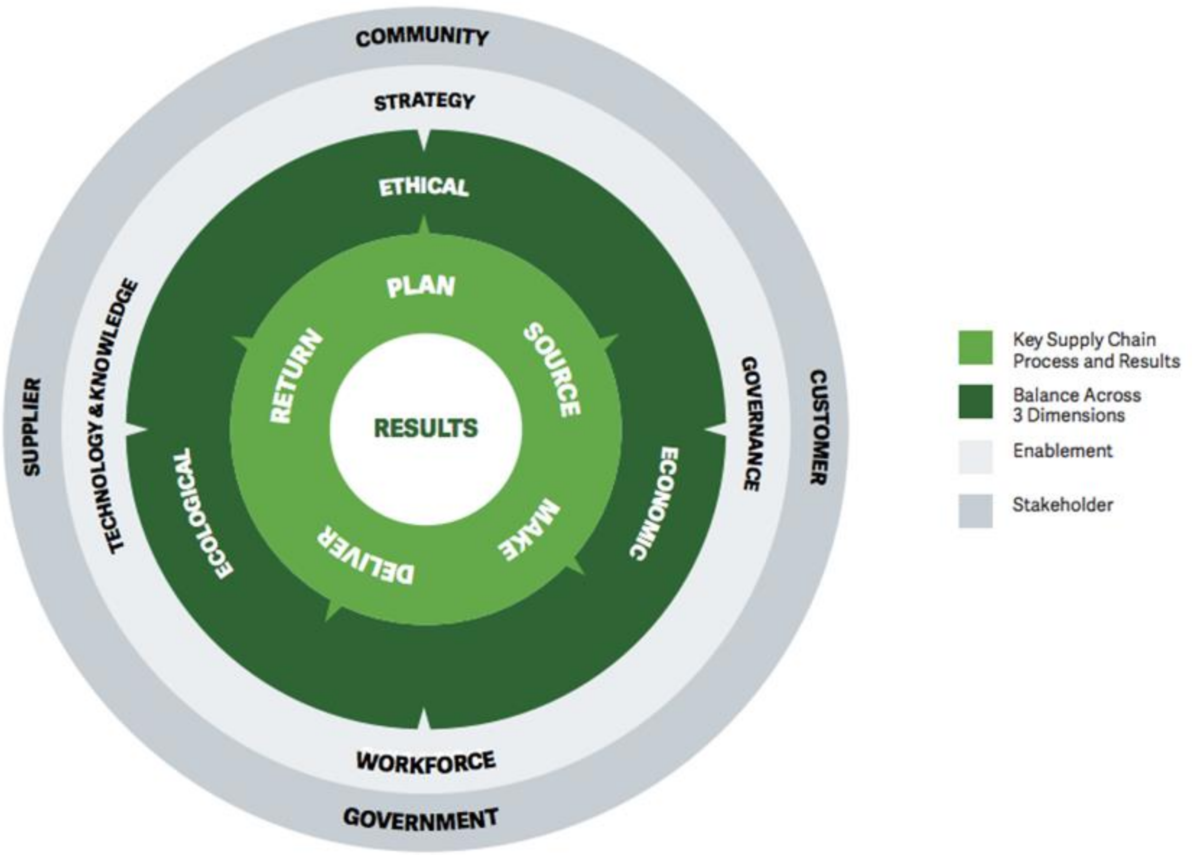
The Enterprise Standard for Sustainability

A handbook of over 60 criteria that provides a comprehensive evaluation of a supply chain results achieved across three dimensions.

Ethical Criteria: anti-corruption and anti-trust, codes of conduct, confidentiality of information, human rights and labor practices, intellectual property and patents, and responsible marketing and sales engagement.

Economic Criteria: business integrity and company reputation, board and corporate leadership, enterprise risk and crisis management, materiality index, responsible tax, supply chain strategy and differentiated operating models.

Ecological Criteria: circular economy, climate strategy, energy, water and waste, material usage, and product life-cycle stewardship

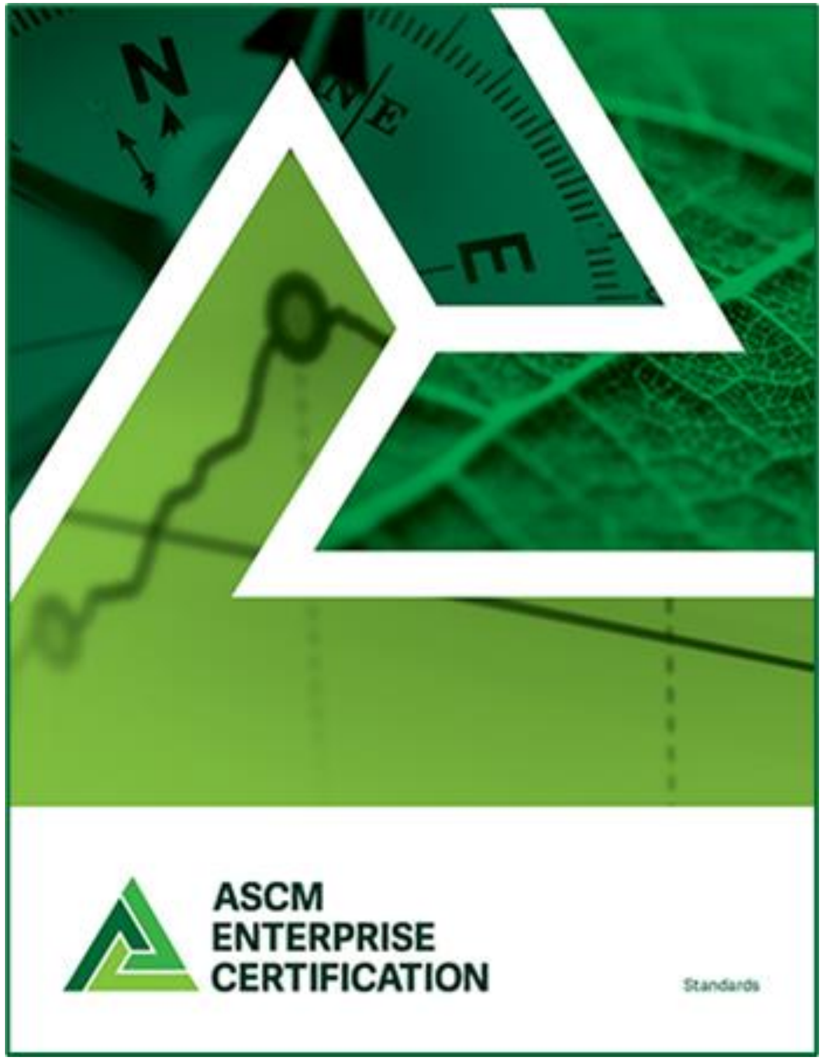


Enterprise Standards for Sustainability Application for Organizations

The Enterprise Certification standards can be used to assess an organization's alignment to the three pillars that make up the program, regardless of your organizations interest in becoming certified.

Four immediate applications of the standards:

- As an unbiased tool to validate supplier quality, development, and/or selection
- To help identify gaps for supply chain continuous improvement
- To validate or update supply chain strategy
- Operationalize Sustainability plan

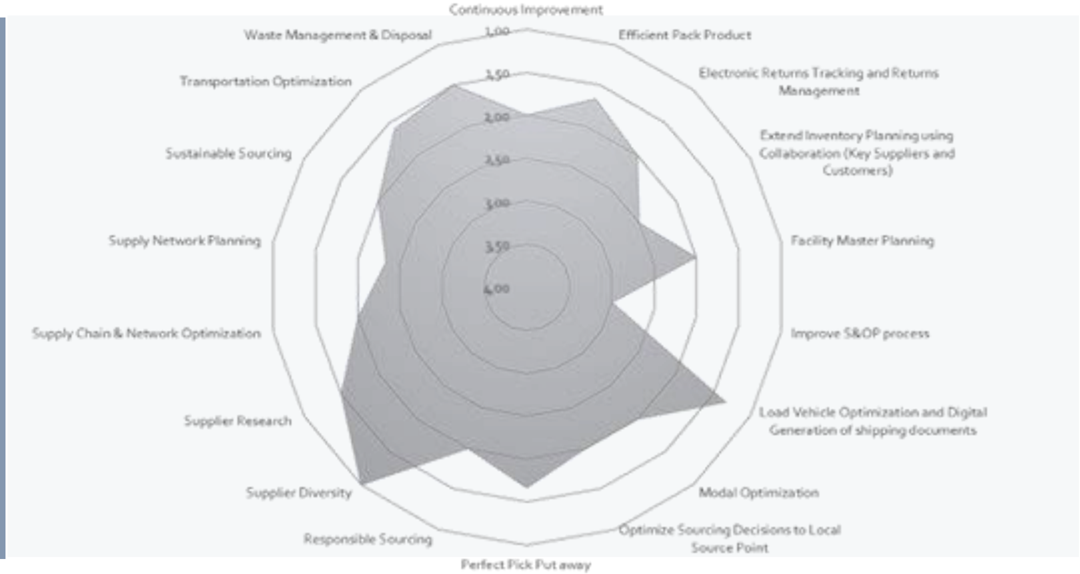


Download the Enterprise Standards for free by visiting: ASCM Enterprise Standards

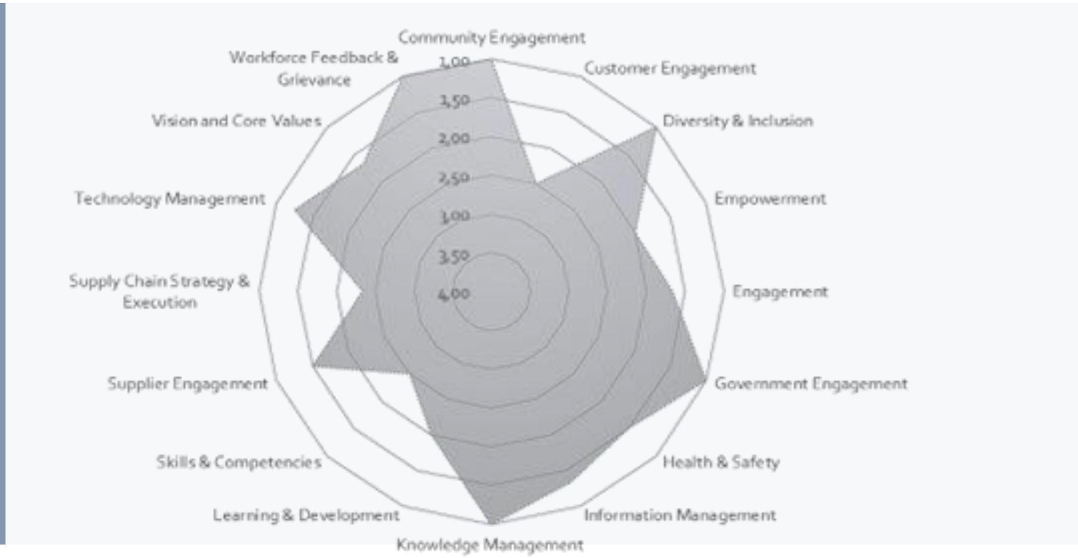
Free to Everyone!

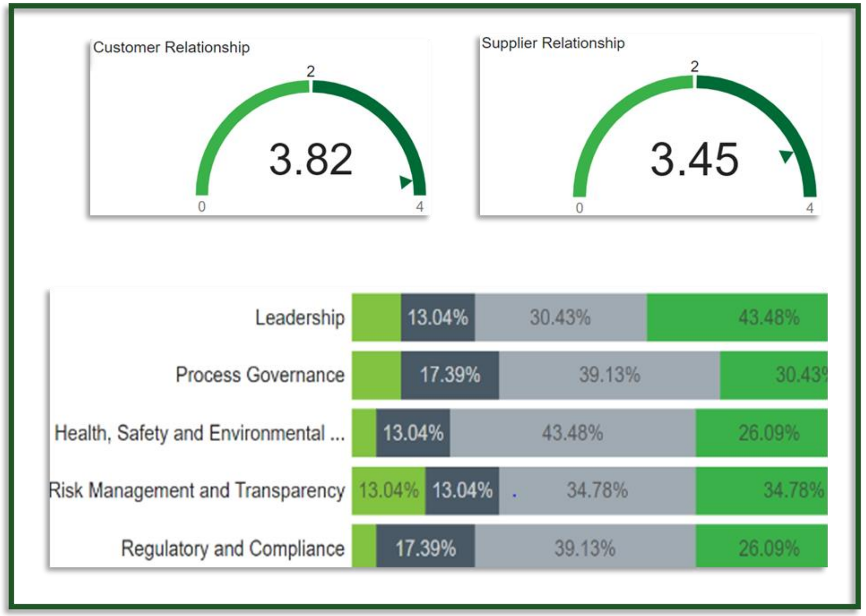
Call-to-Action - Perform a self-assessment

Internal Process and Results



Enablement Results





Thank You!