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SUPPLY CHAIN Talk
Your Success Partner
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เอกรัตน์ รุจิรเศรษฐกุล, CTSC, CPIM, ESLog

ที่ปรึกษากลยุทธ์ และผู้เชี่ยวชาญโลจิสติกส์และซัพพลายเชน

กรรมการผู้จัดการ บริษัท อินโน อินไซท์ จำกัด

ประสบการณ์การทำงาน

- 20 ปี การบริหารองค์กร ผู้บริหารซัพพลายเชนอาเซียน
- ที่ปรึกษาโลจิสติกส์และซัพพลายเชน ภาครัฐและเอกชน
- คณะทำงานรางวัลบริษัทจดทะเบียนด้านการบริหารจัดการห่วงโซ่อุปทาน, ตลาดหลักทรัพย์แห่งประเทศไทย, 2568
- คณะทำงานรางวับอุตสาหกรรมดีเด่น สาขาการจัดการโลจิสติกส์และซัพพลายเชน, กรมส่งเสริมอุตสาหกรรม, 2568

ความเชี่ยวชาญ

- การวิเคราะห์หาจุดอ่อนและจุดเสี่ยงในกระบวนการโลจิสติกส์และซัพพลายเชน
- ออกแบบ วางระบบ การจัดการกลยุทธ์ซัพพลายเชน
- การปรับปรุงกระบวนการทางธุรกิจแบบบูรณาการ (IBP)
- กระบวนการวางแผนการขายและการปฏิบัติงาน (S&OP)
- การพยากรณ์ความต้องการ การกระจายสินค้า การบริหารสินค้าคงคลัง

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Integrated Solutions

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Process

- ตรวจเช็ค กระบวนการธุรกิจ
- ลดต้นทุนที่ไม่จำเป็นด้วยการจัดการซัพพลาย เชน
- วางระบบ และเพิ่มประสิทธิภาพ กระบวนการ ธุรกิจ

People

- Mindset คิดเหมือนเจ้าของ
- Critical Thinking วิธีการ แก้ปัญหา และ เพิ่ม ประสิทธิภาพอย่างเป็นระบบ
- ตัดสินใจด้วยข้อมูล (Data-Driven Decision Making)

Technology

- พยากรณ์และบริหารสต็อค
- วางแผนการผลิตด้วย AI
- ระบบข้อมูลช่วยตัดสินใจ Performance and Data-Driven Decision using Business Intelligence

PlantOne

Our accumulated Experience

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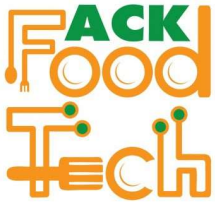

การบริหารจัดการ ซัพพลายเชนเชิงรุก

ปรับองค์กร นำหน้า การเปลี่ยนแปลง

SUPPLY CHAIN Talk

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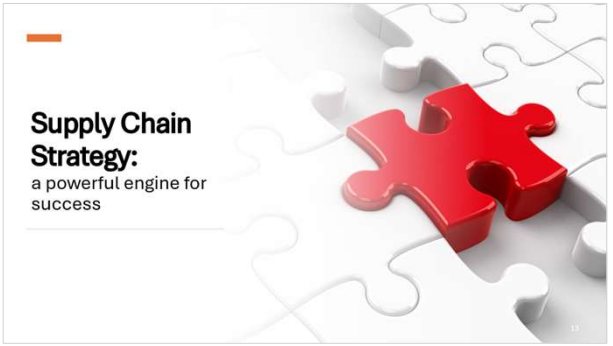
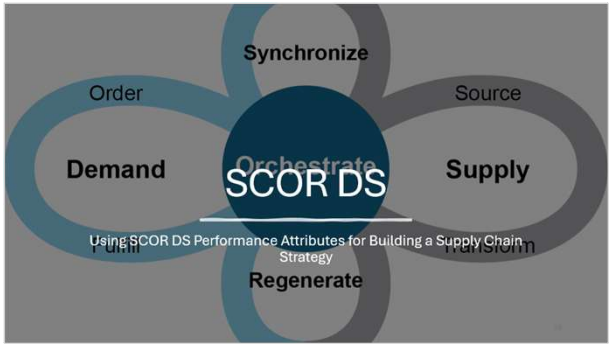
TikTok

facebook

YouTube

Discussion topics





Supply Chain Management

Strategy and Sustainability

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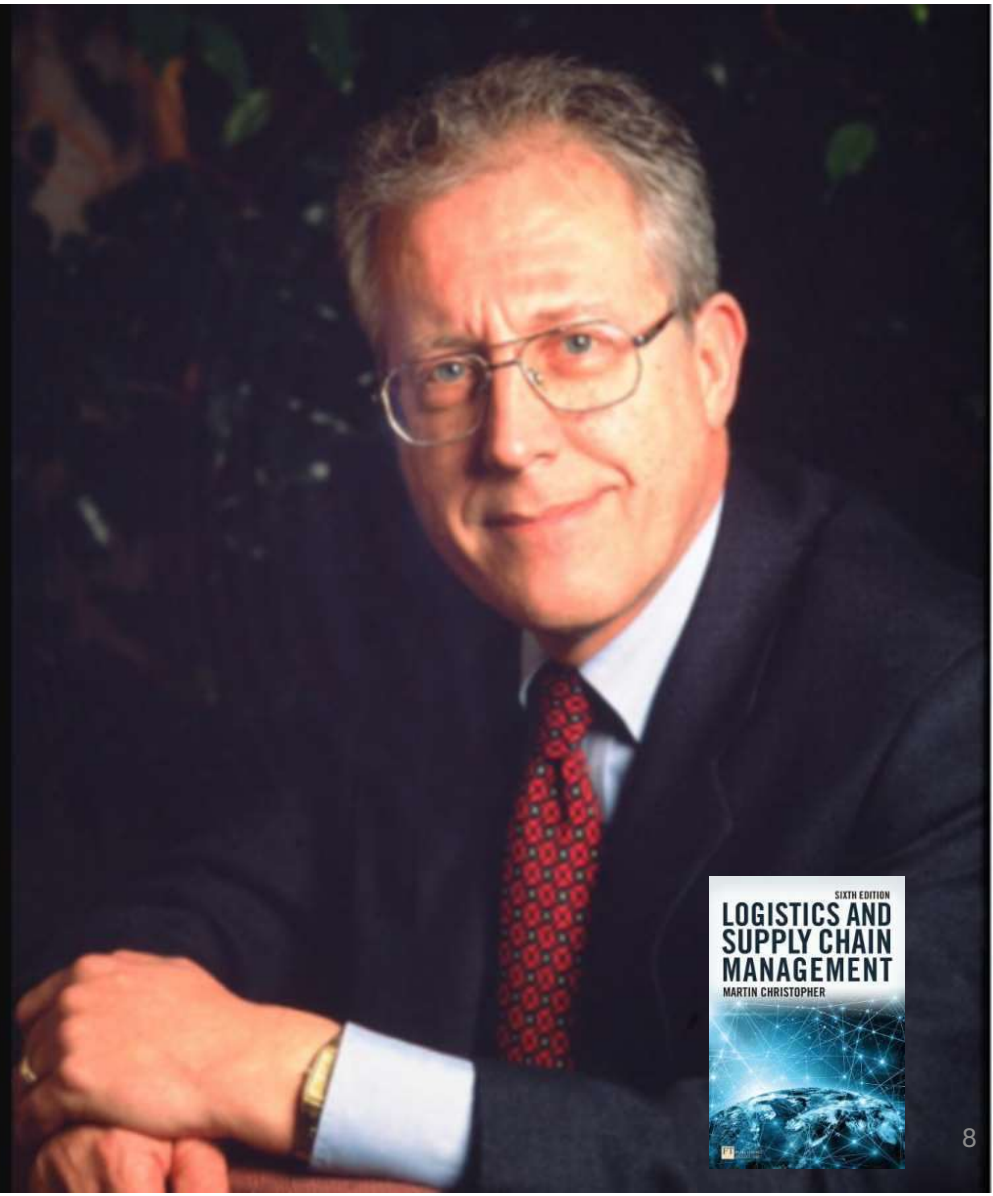
MARTIN CHRISTOPHER

"Supply chains compete, not companies“

- The Era of Network Competition



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SUPPLY CHAIN Talk

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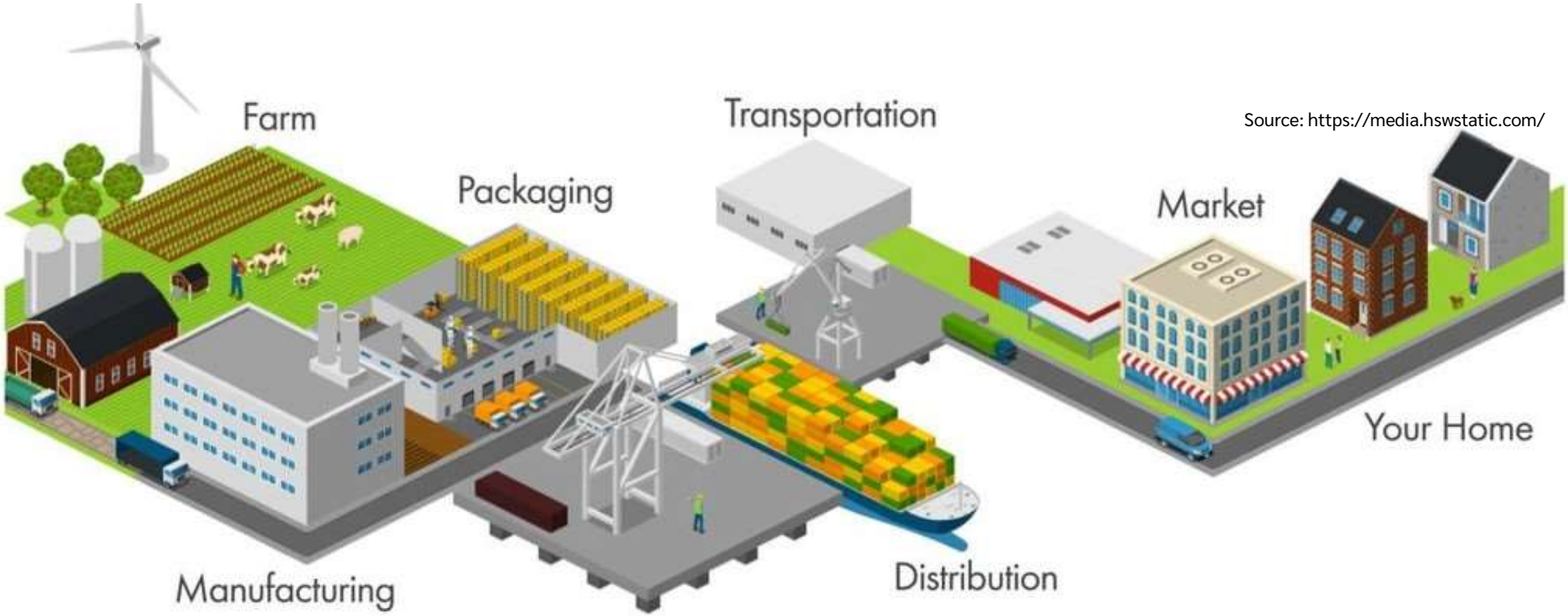
What is Supply Chain

- **The network of suppliers** that deliver products from raw materials to end customers through either an engineered or transactional flow of information, goods, and money

ASCM Supply Chain Dictionary Seventeenth Edition

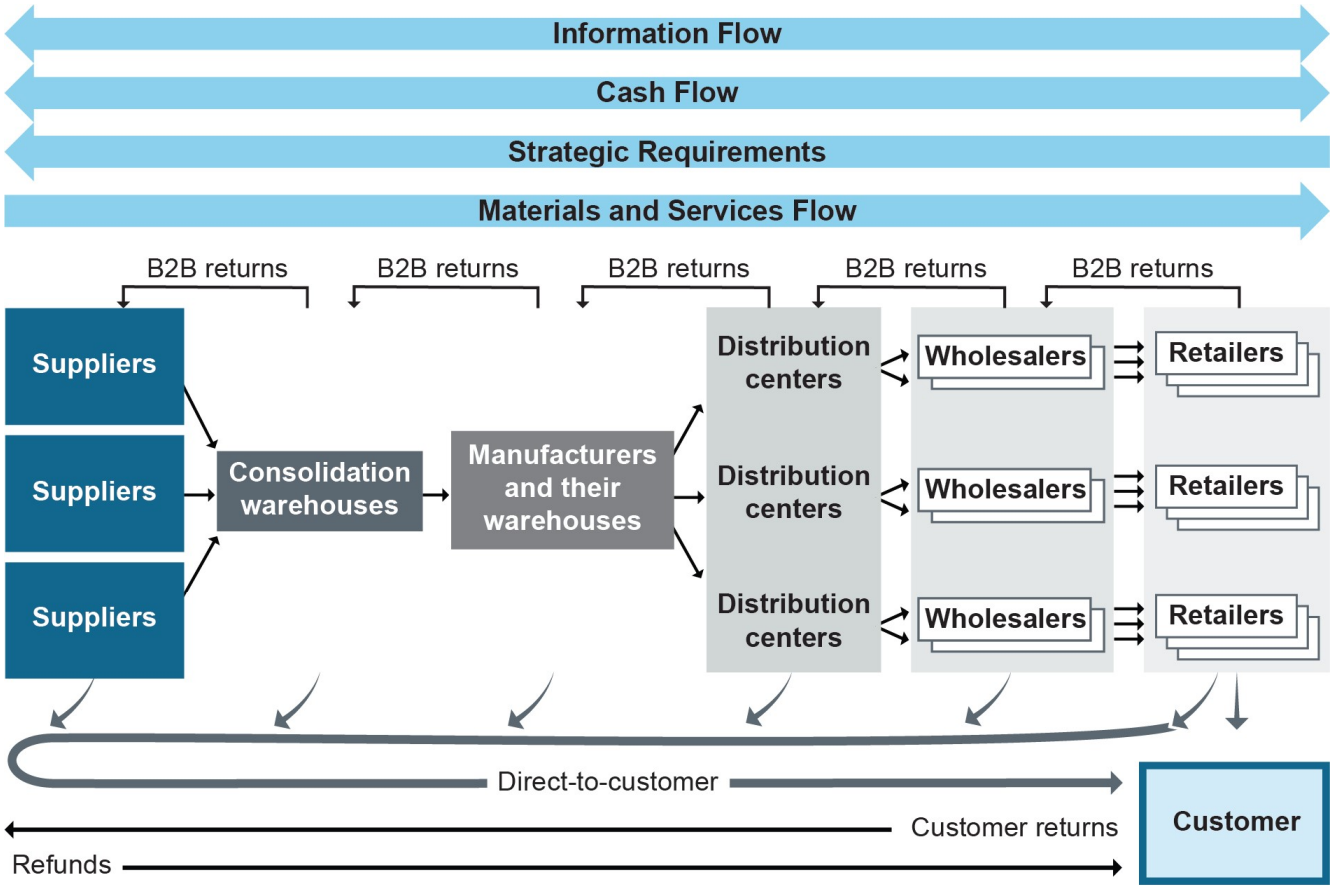


Source: https://media.hswstatic.com/

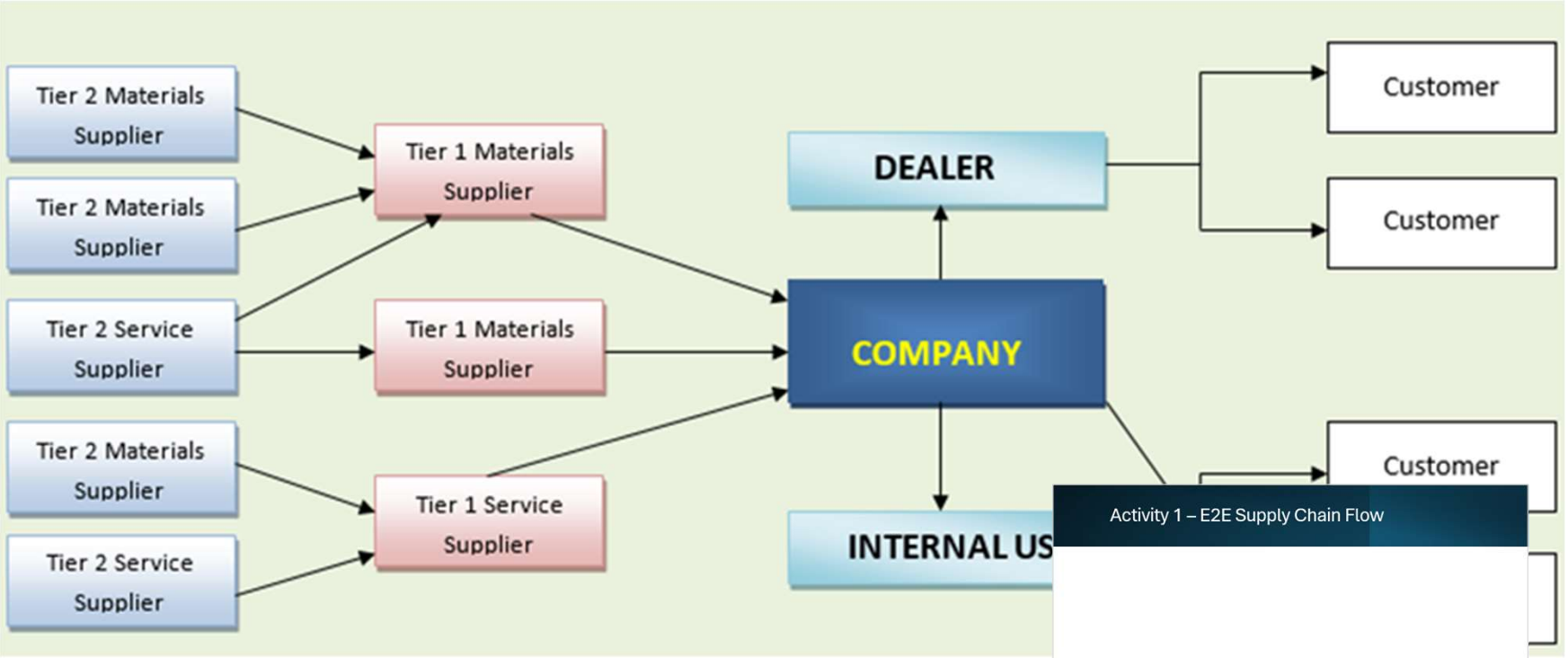
upply chain management

The design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand, and measuring performance globally.

Supply Chain as End-to-End Process



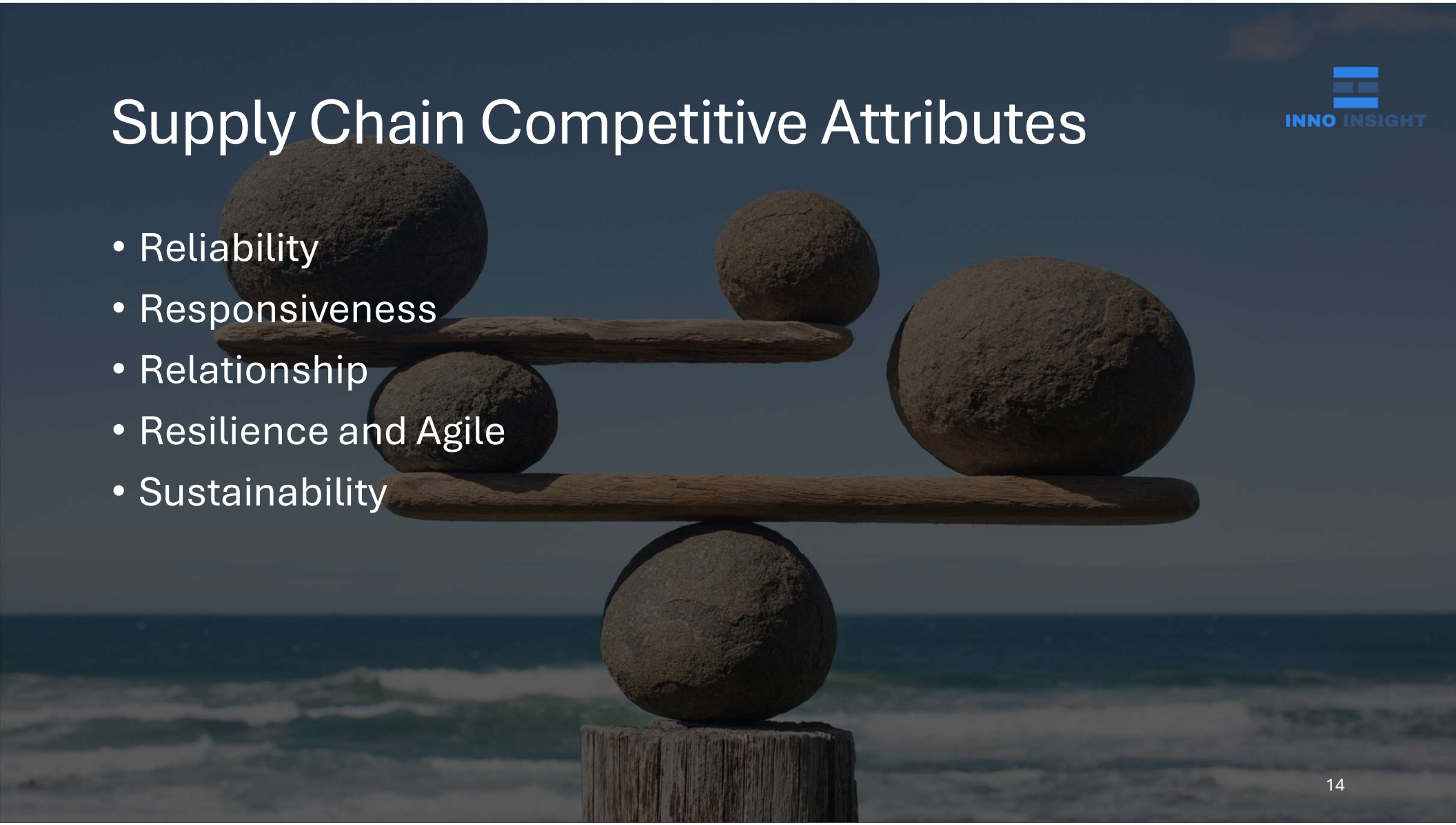
Activity 1 – E2E Supply Chain Flow



Supply Chain Strategy:

a powerful engine for success

Supply Chain Competitive Attributes



- Reliability
- Responsiveness
- Relationship
- Resilience and Agile
- Sustainability

Reliability

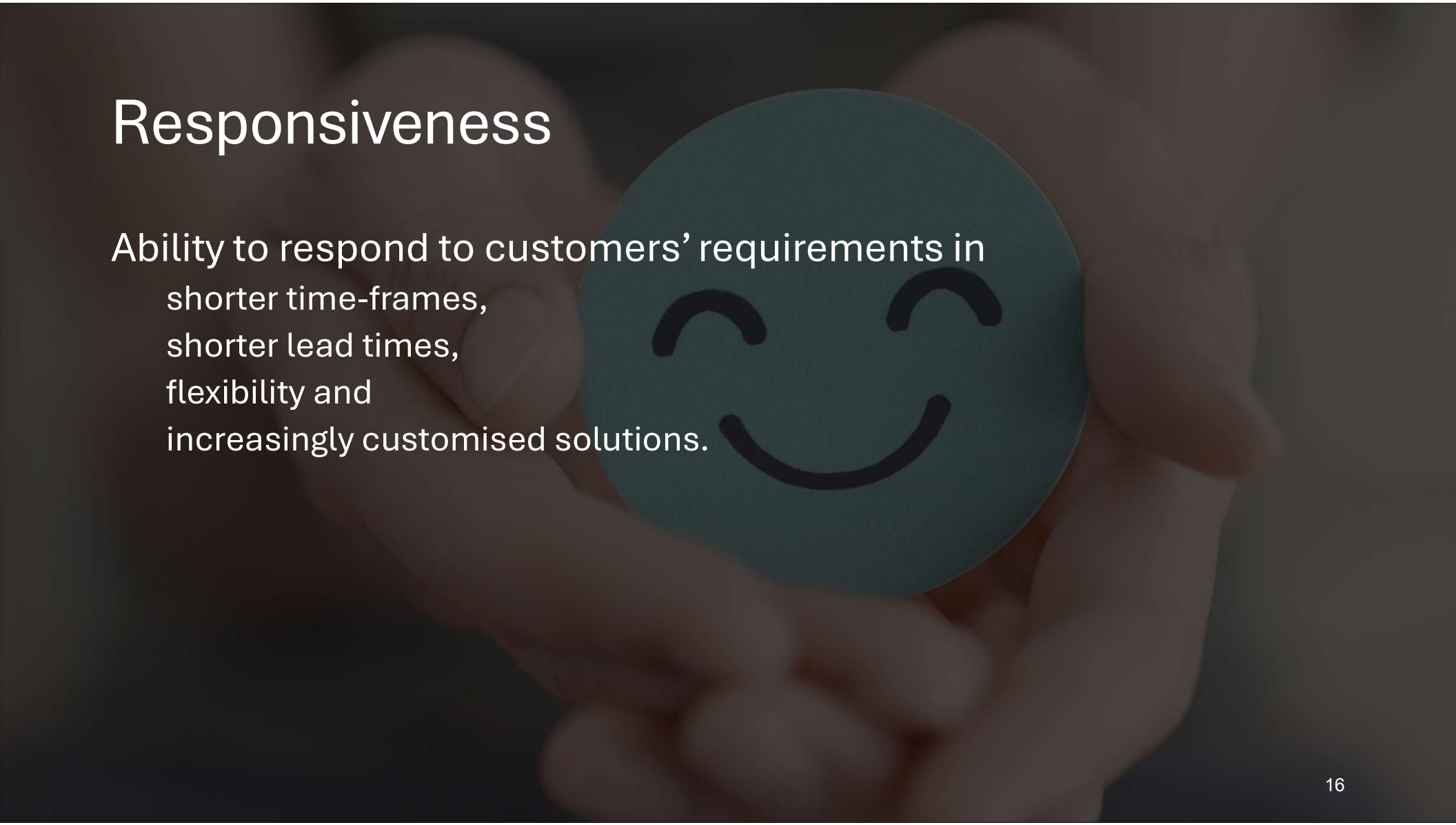
Ability to perform tasks as required.

Reliability focuses on the predictability of the outcome of a process.

Typical metrics for the reliability attribute include

- on-time,
- the right quantity,
- and the right quality.

Responsiveness



Ability to respond to customers' requirements in

- shorter time-frames,
- shorter lead times,
- flexibility and
- increasingly customised solutions.

Relationship

- “The management of relationships across complex networks of companies that, whilst legally independent, are in reality interdependent”
- Partnership sourcing
- win-win solutions based upon mutuality and trust

Resilience

The ability of a supply chain to anticipate, create plans to avoid or mitigate, and/or to recover from disruptions to supply chain functionality.

Sometime, called Risk-Hedged

Resilient Supply Chains A resilient supply chain is one that is agile and reliable.

Agile

the ability to respond quickly to unpredictable changes in customer needs by reconfiguring operations.

ASCM Dict 17th Ed.

Sustainable Supply Chain

- Environmental Responsibility
- Social Responsibility
- Financial Responsibility

A sustainable supply chain aims to minimize negative impacts on the environment and society while ensuring operational efficiency

Business Strategy – Cost Leadership

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Supply chain Focus - Efficiency

Supply Chain Strategy

- Streamlined logistics.
- Minimizing inventory holding costs.
- Negotiating favorable contracts with suppliers.
- Focusing on high volume production.

Business Strategy – Differentiation

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Supply chain Focus - Responsiveness and Agility (Flexibility)

Supply Chain Strategy

Ability to quickly adapt to changing customer preferences.

Emphasis on quality and reliability.

Potentially shorter, more agile supply chains.

Business Strategy – Focus/Niche Market

Supply chain Focus –
Tailored solutions

Supply Chain Strategy

- Highly specialized sourcing and production.
- Close relationships with niche suppliers.
- Flexible distribution to reach specific customer locations.

Business Strategy – Rapid Growth/Expansion

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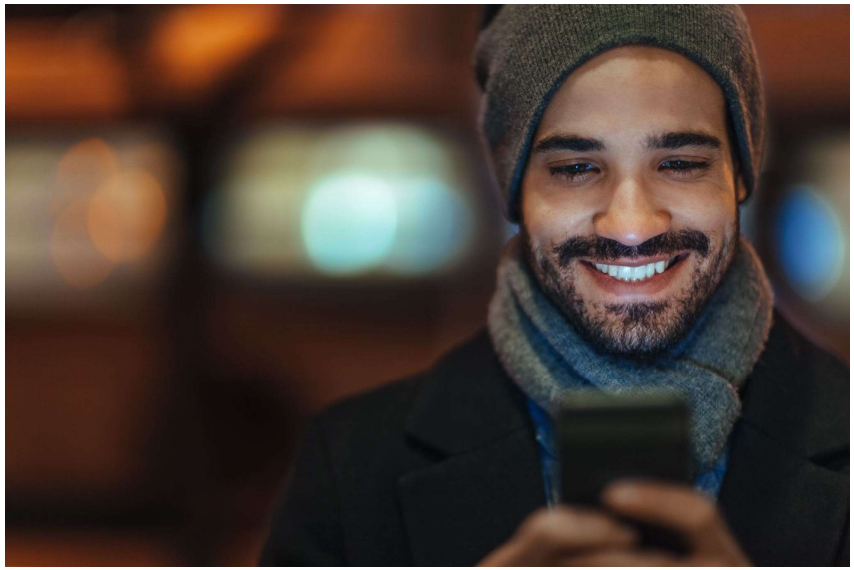
Supply chain Focus

Scalability and agility



Supply Chain Strategy

Building capacity to handle increased demand.

Establishing new distribution channels.

Developing contingency plans for potential disruptions.

Current Trend in Supply Chain Strategy

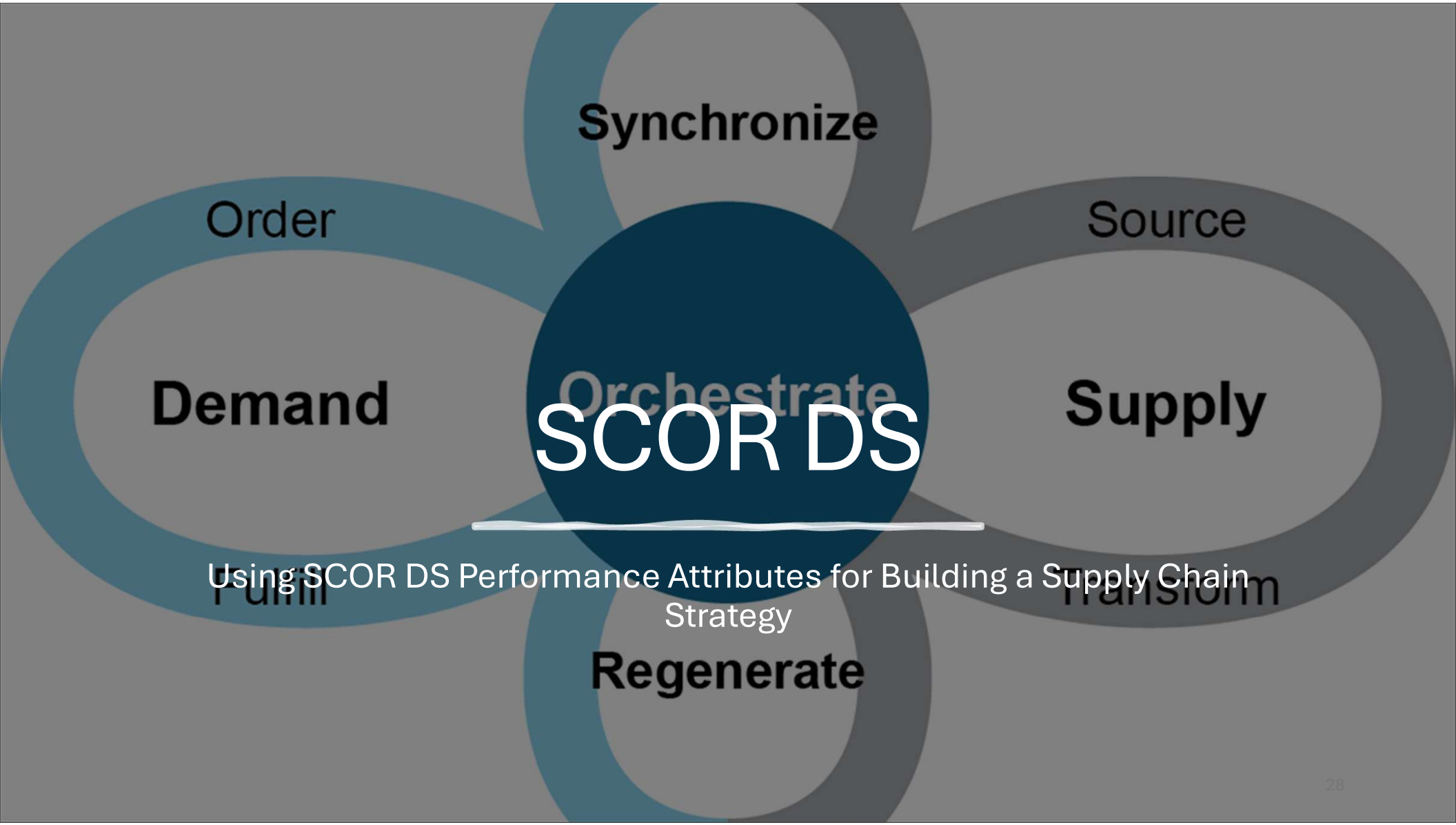
Business Strategy	Supply Chain Strategy	Example
Direct-to-Consumer (DTC) and Omnichannel Excellence:	**digital supply chain** capabilities, including advanced analytics and automation,	Nike is investing heavily in digital supply chain capabilities, including advanced analytics and automation, to optimize its DTC operations
Supply Chain Resilience and Diversification	**building redundancy** into supply networks and investing in technology to track and manage potential disruptions.	Global electronics manufacturers are diversifying their production away from single-source locations, exploring alternative manufacturing hubs in Southeast Asia and other regions.
The Rise of the Circular Economy	prioritizing **sustainable** materials and circular flows.	IKEA
Advanced Data Analytics and AI	**Creating a foundation of data and AI.**	Amazon use AI to enable fulfilments to operate with exceptional efficiency and speed

Activity 2 – Supply Chain Strategy Alignment

Business Strategy	Supply chain Strategy
1	1
2	2
3	3
4	4

Case Study – BYD Hybrid Supply Chain Strategy

Business Strategy	Supply Chain Focus	Supply Chain Strategy
Vertical Integration	**Vertically Integrated Supply Chain**	BYD controls a large portion of its supply chain, reducing reliance on external suppliers
Cost Leadership	**Efficiency**	BYD's integrated approach allows them to streamline processes and optimize their supply chain for efficiency.
Technological Innovation	**Automation**	BYD supply chain is geared towards supporting their technological advancements, with investments in manufacturing and R&D.
Rapid Model Development	**Agility**	BYD's expertise in battery manufacturing is a key strength. They have significant battery production capacity, which supports their EV production



SCOR DS

Using SCOR DS Performance Attributes for Building a Supply Chain Strategy

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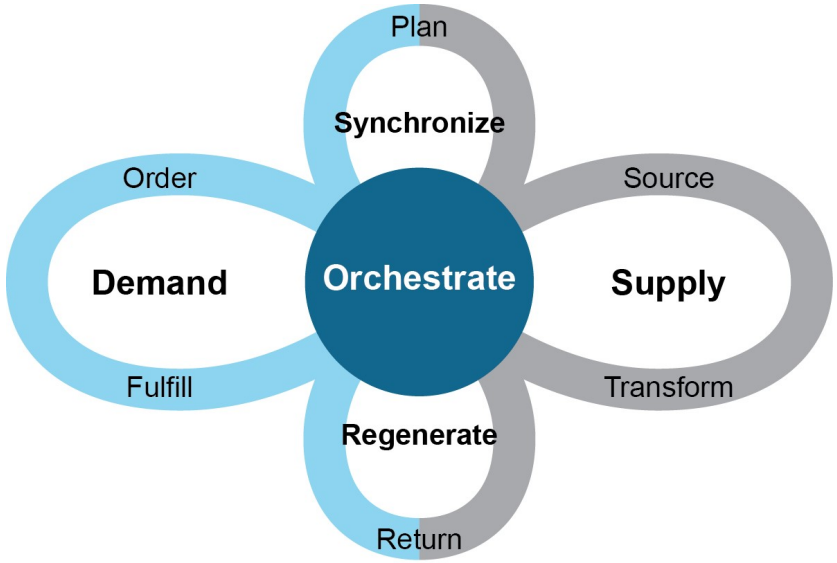
Supply Chain Operations Reference – SCOR DS



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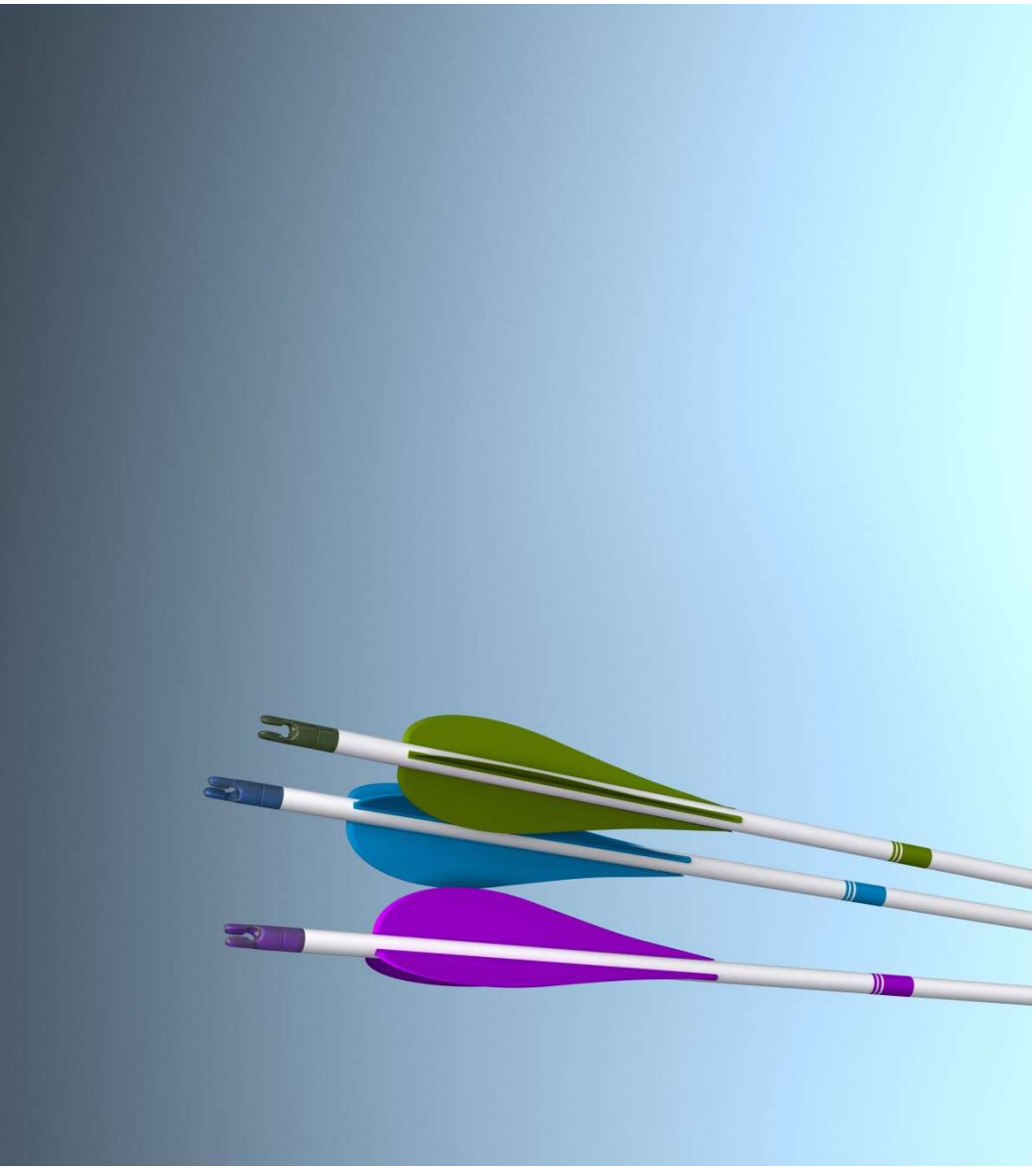
- A unique framework that links business processes, metrics, best practices, and technology
- into a unified structure to support communication among supply chain partners
- to improve the effectiveness of supply chain management and related supply chain improvement activities.

ASCM ASSOCIATION FOR SUPPLY CHAIN MANAGEMENT SCOR DIGITAL STANDARD



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Advantages of Using the SCOR Framework

- Scope of the SCOR framework applies to the entire supply chain
- Orients supply chain improvements around standardized set of performance, process, practice, and skills metrics
- Enables supply chain performance and practice benchmarking
- Centers supply chain improvement efforts on creating value for customers
- Applies detailed supply chain metrics to measure supply chain performance

Four Major Sections Of SCOR Framework

- **Performance**

  includes standard metrics to describe process performance and define strategic goals.

- **Processes**

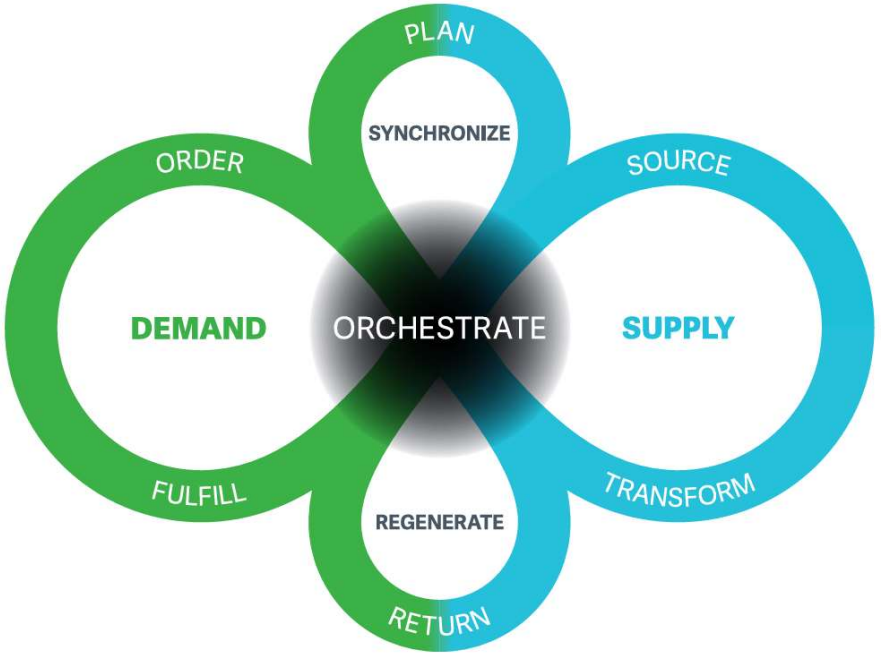
  offers standard descriptions of management processes and process relationships.

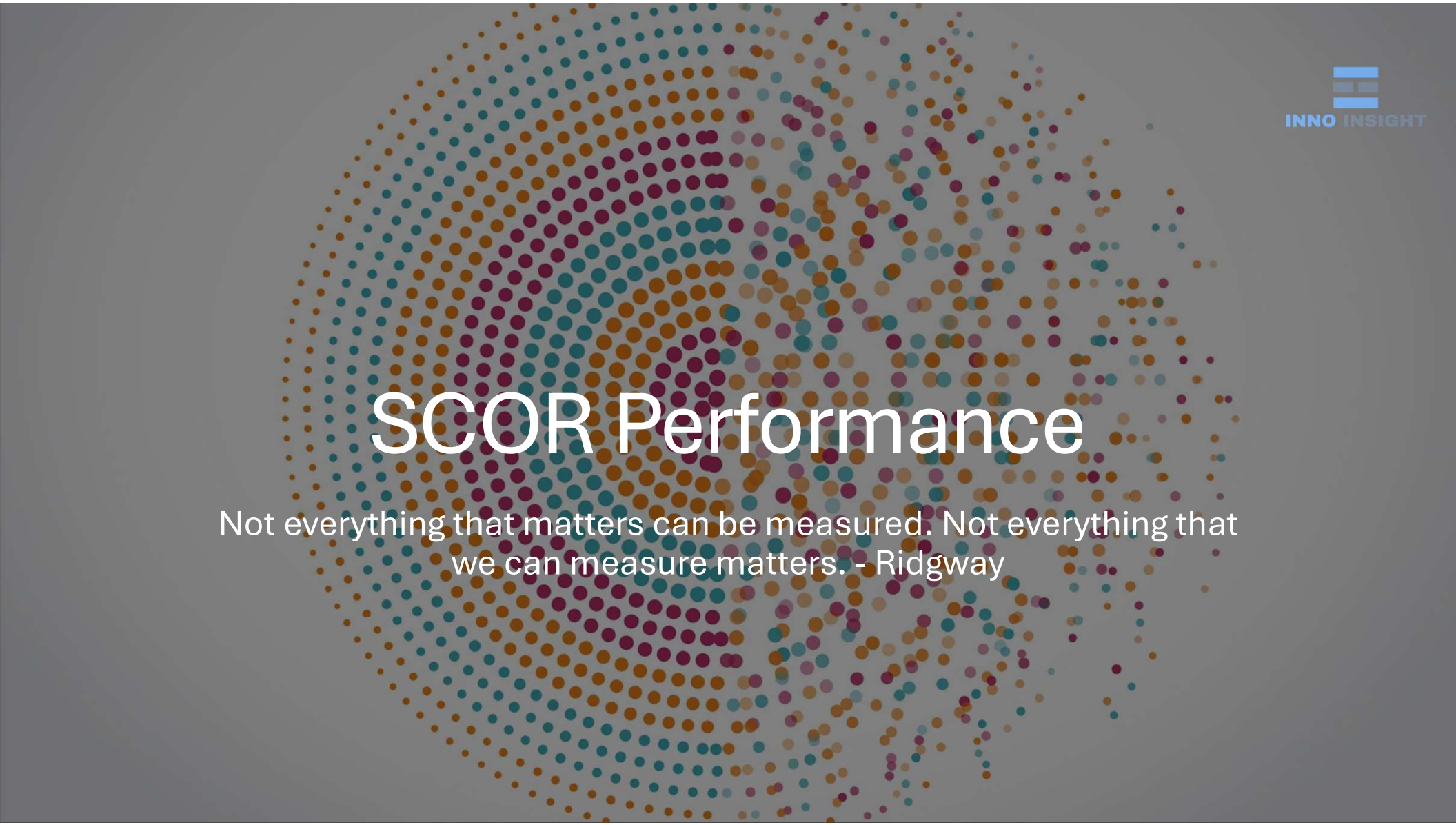
- **Practices**

  explains management practices that produce significantly better process performance.

- **People**

  comprises standard definitions for skills required t perform supply chain processes.





SCOR Performance

Not everything that matters can be measured. Not everything that we can measure matters. - Ridgway

Objectives of SCOR Performance

- Translate business strategy to supply chain strategy
- Measure supply chain performance
- Understand relative performance compared to competitors
- Identify and monitor processes that most likely cause the performance gaps

SCOR-DS Performance Attribute

	Performance Attributes	Definition
Resilience	**Reliability (RL)**	The ability to perform tasks as expected. Reliability focuses on the predictability of the outcome of a process. Typical metrics for the Reliability attribute include delivering a product on time, in the right quantity, and at the right quality level.
	Responsiveness (RS)	The speed at which tasks are performed and the speed at which a supply chain provides products to the customer. Examples include cycle-time metrics.
	Agility (AG)	The ability to respond to external influences and marketplace changes to gain or maintain a competitive advantage.
Economic	**Costs (CO)**	The cost of operating the supply chain processes. This includes labor costs, material costs, and management and transportation costs.
	Profit (PR)	The Profit attribute describes the financial benefit realized when the revenue generated from a business activity exceeds the expenses, costs, and taxes involved in sustaining the activity.
	Assets (AM)	The ability to efficiently utilize assets. Assets' strategies in a supply chain include inventory reduction and insourcing rather than outsourcing.
Sustainability	**Environmental (EV)**	The Environmental attribute describes the ability to operate the supply chain with minimal environmental impact, including materials, water, and energy.
	Social (SC)	The Social attribute describes the ability to operate the supply chain aligned with the organization's social values, including diversity and inclusion, wage, and training metrics.

Table 1: The SCOR performance attributes

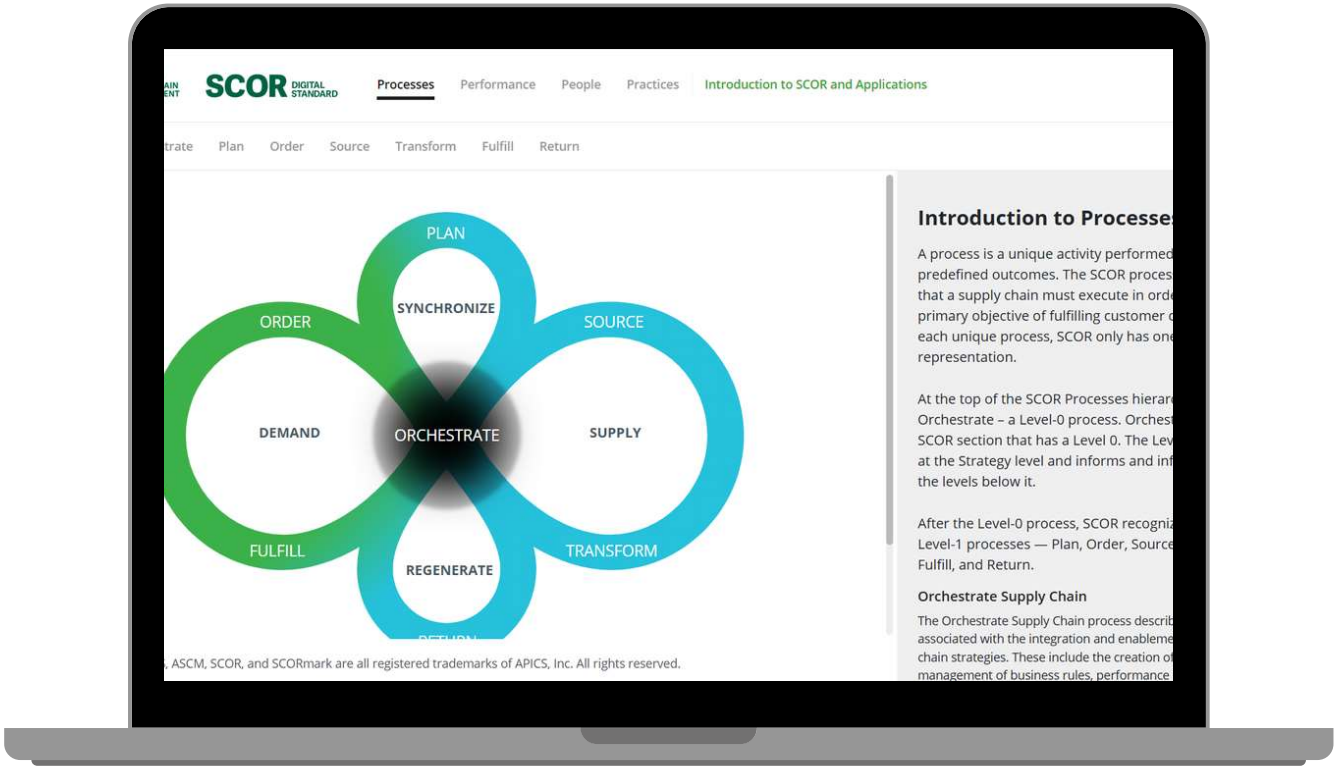
SCOR Performance Metrics – Levels

LEVEL	DESCRIPTION	SCHEMATIC	COMMENTS
	Performance Attribute	Reliability (RL)	Reliability (RL) – Ability to perform a process as expected
1	**Level 1** Diagnostic Metrics	RL.1.1 Perfect customer order fulfillment	RL.1.1 – Perfect customer order fulfillment - Percentage of orders meeting delivery performance to the customer
2	**Level 2** Diagnostic Metrics	RL.2.1 RL.2.2 RL.2.3 RL.2.4	RL.2.1 – % of orders delivered in full to the customer RL.2.2 – Delivery performance to original customer commit date RL.2.3 – Customer order documentation accuracy RL.2.4 – Customer order perfect condition
3	**Level 3** Diagnostic Metrics	RL.3.1 RL.3.2 RL.3.3	RL.3.1 – Delivery item accuracy to the customer RL.3.2 – Delivery quantity accuracy to the customer RL.3.3 – Customer commit date achievement

Full Set of SCOR DS Level 1 and Level 2 Metrics

Category	Performance Attributes	SCOR DS Level 1 and Level 2 Metrics
Resilience	Reliability (RL)	**Perfect Customer Order Fulfillment (RL.1.1):** RL.2.1 to 2.4 (in full, commit date, documentation, and condition) **Perfect Supplier Order Fulfillment (RL.1.2):** RL.2.5 to 2.8 (in full, commit date, documentation, and condition) **Perfect Return Order Fulfillment (RL.1.3):** RL.2.9 to 2.12 (on time, in full, documentation, and condition)
	Responsiveness (RS)	**Customer Order Fulfillment Cycle Time (RS.1.1):** RS.2.1 to 2.5 (cycle times for order, source, transform, fulfill, and return)
	Agility (AG)	**Supply Chain Agility (AG.1.1):** AG.2.1 to 2.5 (agility for order, source, transform, fulfill, and return)
Economic	Costs (CO)	**Total Supply Chain Management Cost (CO.1.1):** CO.2.1 to 2.5 (costs for ordering, acquisition, inventory carrying, supply chain finance/planning, and IT) **Cost of Goods Sold (COGS) (CO.1.2):** CO.2.6 to 2.8 (costs for direct material, direct labor, and indirect)
	Profit (PR)	**Earnings Before Interest and Taxes (EBIT) as a Percent of Revenue (PR.1.1):** (no level 2 metrics) **Effective Tax Rate (PR.1.2):** (no level 2 metrics)
	Assets (AM)	**Cash-to-Cash Cycle Time (AM.1.1):** AM.2.1 to 2.3 (days sales outstanding, inventory days of supply, and days payables outstanding) **Return on Fixed Assets (AM.1.2):** AM.2.4 to 2.5 (revenue and fixed assets) **Return on Working Capital (AM.1.3):** AM.2.6 to 2.8 (accounts payable, accounts receivable, and inventory)
Sustainability	Environmental (EV)	**Materials Used (EV.1.1):** EV.2.1 to 2.2 (renewable and nonrenewable) **Energy Consumed (EV.1.2):** EV.2.3 to 2.4 (renewable and nonrenewable) **Water Consumed (EV.1.3):** EV.2.5 to 2.6 (withdrawal and discharged) **GHG Emissions (EV.1.4):** EV.2.7 to 2.9 (direct, energy indirect, and other indirect) **Waste Generated (EV.1.5):** EV.2.10 to 2.11 (diverted from disposal and directed to disposal)
	Social (SC)	**Diversity and Inclusion (SC.1.1):** (no level 2 metrics) **Wage Level (SC.1.2):** (no level 2 metrics) **Training (SC.1.3):** (no level 2 metrics)

SCOR DS
Practice - Performance



https://scor.ascm.org

Activity 4

Activity 3 – How do you measure the success?

Business Strategy	Supply chain Strategy	SCOR Metrics
1	1	RL, RS, CO, AM, EV, SC
2	2	RL, RS, CO, AM, EV, SC
3	3	RL, RS, CO, AM, EV, SC
4	4	RL, RS, CO, AM, EV, SC

Sustainable Supply Chain Management

Managing supply chain activities to make them more environmentally friendly.

ASCM Supply Chain Dictionary, 18th edition

Integrated Supply Chain Management

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Component	Key Result
Customer-Centricity	Service levels, product availability, and delivery times.
Demand Management and Planning	Accurate Forecasting, Demand visibility and coordination.
Supply Management and Procurement	A reliable supply of materials and components.
Inventory Management	Optimizing inventory levels to balance supply and demand, minimize costs, and avoid stockouts.
Logistics and Transportation	Efficiency and cost-effectiveness
Technology and Information System	visibility, communication, and decision-making across the supply chain
Risk Management and Resilience	Identify and mitigating potential disruptions
Sustainability and Ethical Practices	Integrating environmental and social considerations into supply chain operations
Collaboration and Partnerships	Building strong relationships to improve coordination and collaboration


Sustainable Logistics

Definition and Importance

Sustainable Logistics Defined

Sustainable logistics involves managing logistics activities to reduce environmental impact while maintaining economic efficiency.

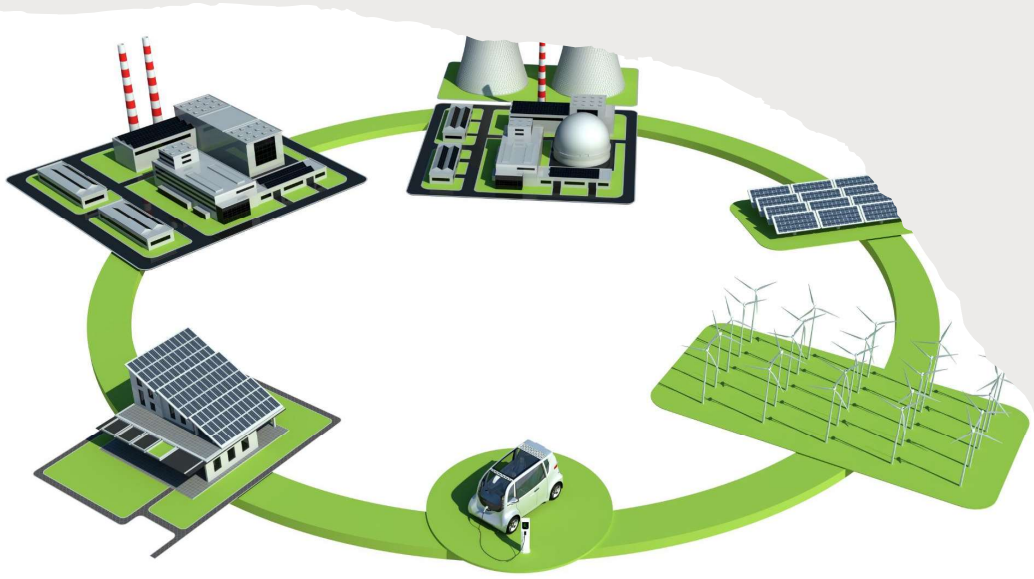
Resource Conservation

This approach plays a critical role in conserving resources, ensuring they are used efficiently and responsibly.

Brand Reputation Enhancement

Implementing sustainable logistics helps companies enhance their brand reputation and appeal to environmentally-conscious consumers.

Key Principles of Sustainability in Logistics



Reducing Emissions

Reducing emissions is crucial for sustainable logistics, focusing on lowering carbon footprints through efficient transportation methods.

Optimizing Resource Use

Optimizing resource use helps logistics companies minimize fuel consumption and maximize efficiency, leading to more sustainable operations.

Minimizing Waste

Minimizing waste in logistics involves practices like recycling and repurposing materials to reduce environmental impact.

Enhancing Social Responsibility

Enhancing social responsibility ensures logistics companies consider their impact on communities and invest in ethical practices.

Adoption of Eco-Friendly Vehicles

Transition to Eco-Friendly Vehicles

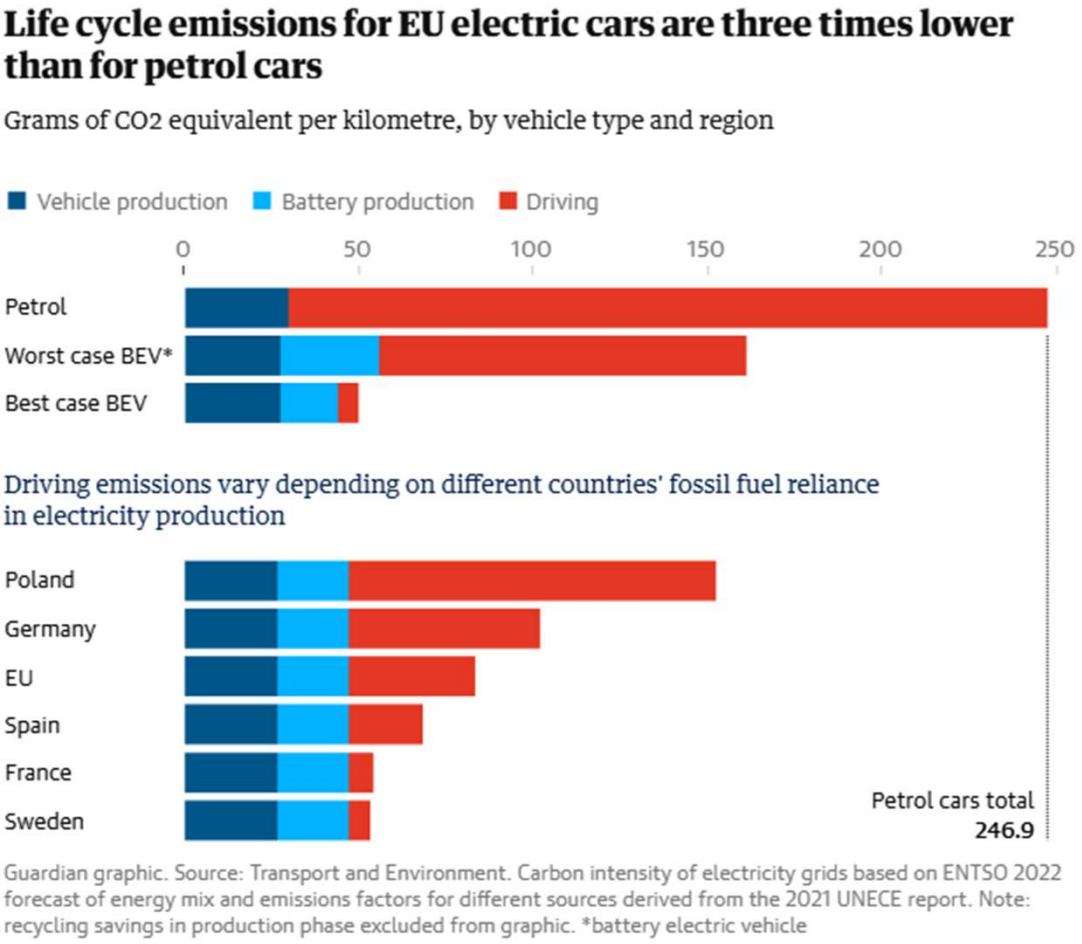
Logistics companies are increasingly adopting eco-friendly vehicles to meet environmental standards and reduce their carbon footprint.

Lower Emissions Benefits

Electric and hybrid trucks produce significantly lower emissions compared to traditional diesel trucks, contributing to cleaner air.

Operational Cost Savings

Transitioning to eco-friendly vehicles can lead to significant reductions in operational costs over time due to lower fuel and maintenance expenses.



Optimizing Routes for Fuel Efficiency

Advanced Routing Software

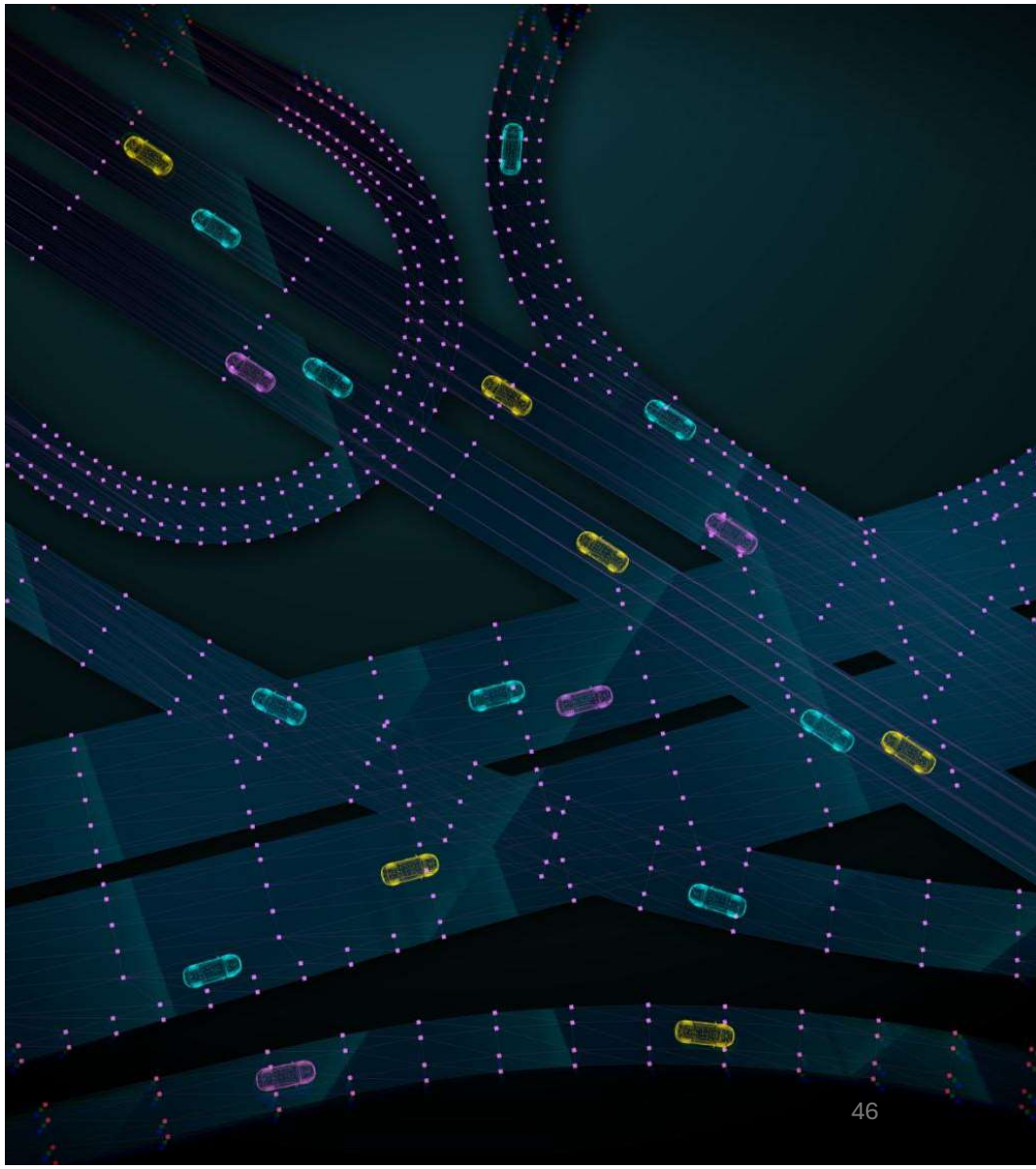
Advanced routing software helps to minimize travel distances, making deliveries more efficient and cost-effective.

Fuel Efficiency Benefits

Optimizing routes leads to significant fuel savings, contributing to lower operational costs and reduced environmental impact.

Lower Emissions

By reducing travel distances, companies can significantly lower their emissions, promoting a greener delivery process.



Alternative Fuels and Energy Sources

Biodiesel and Its Benefits

Biodiesel is a renewable alternative that can significantly reduce greenhouse gas emissions compared to traditional diesel fuels.

Hydrogen Fuel

Hydrogen is a clean fuel that can be used in fuel cells to power vehicles with zero emissions, promoting environmental sustainability.

Natural Gas Usage

Natural gas is a cleaner alternative to traditional fossil fuels and can be used in various transportation and logistics applications.

Integrating Renewable Energy

Integrating renewable energy sources, such as solar and wind, into logistics can enhance overall sustainability and reduce reliance on fossil fuels.


Efficient Resource
Management

Reduction of Waste Through Recycling and Reuse

Recycling Strategies

Implementing effective recycling strategies helps divert waste from landfills and promotes resource conservation.

Reuse of Packaging

Reusing packaging reduces the need for new materials and minimizes waste generation in logistics.

Circular Economy

Adopting recycling and reuse contributes to a circular economy, promoting sustainability and reducing environmental impact.

Sustainable Packaging Solutions

Recyclable Materials

Using recyclable materials for packaging reduces waste and supports a circular economy, contributing to sustainability.

Biodegradable Options

Biodegradable packaging options break down naturally, decreasing environmental pollution and promoting eco-friendliness.

Innovative Solutions

Innovative packaging solutions can reduce environmental impact while ensuring product safety during transit.

SUSTAINABLE FROM THE START

- We design our packages with reclaimed materials that would have been sent to landfills otherwise. With LimeLoop, you're upcycling and reducing the need for future virgin materials.
- So many today are focusing on "recycling" instead of implementing ways to reduce and reuse.
- With LimeLoop, you reduce and reuse with ease, all while cutting back on costs.

	LimeLoop	Recycled Cardboard	Cardboard
CO2 Emissions	10 kg	170 kg	219 kg
Water Use	15 liters	2,036 liters	3,820 liters
Land Use	0 square meters*annum	30 square meters*annum	119 square meters*annum

SUSTAINABLE FROM THE START

LimeLoop - SUSTAINABLE FROM THE START

Inventory Management to Minimize Overstock and Obsolescence

Reduce Overstock

Implementing effective inventory management strategies can significantly reduce overstock, minimizing storage costs and waste.

Minimize Obsolescence

By optimizing inventory levels, businesses can greatly reduce the risk of product obsolescence, ensuring items are sold before they expire.

Just-in-Time Inventory

The just-in-time inventory technique helps businesses align stock levels closely with actual demand, reducing waste and excess.

Technology and Innovation in Sustainable Logistics

Role of Automation and AI

- **Enhanced Logistics Efficiency**
  - Automation and AI improve logistics by streamlining operations and reducing human errors, leading to increased efficiency.
- **Automated Warehousing**
  - Automated warehousing systems use robotics and AI to manage inventory, streamline storage, and facilitate faster order processing.
- **Predictive Analytics**
  - Predictive analytics in inventory management helps businesses anticipate demand, optimize stock levels, and reduce waste.

Implementation of IoT for Real-Time Tracking

- **Real-Time Shipment Tracking**
  - IoT technology enables real-time tracking of shipments, ensuring visibility and accountability throughout the supply chain.
- **Enhanced Transparency**
  - By implementing IoT, businesses gain enhanced transparency in their logistics operations, facilitating better communication and trust.
- **Timely Decision-Making**
  - IoT allows for timely decision-making based on accurate data, optimizing logistics performance and resource allocation.

Blockchain for Transparency and Accountability

Secure Transaction Records

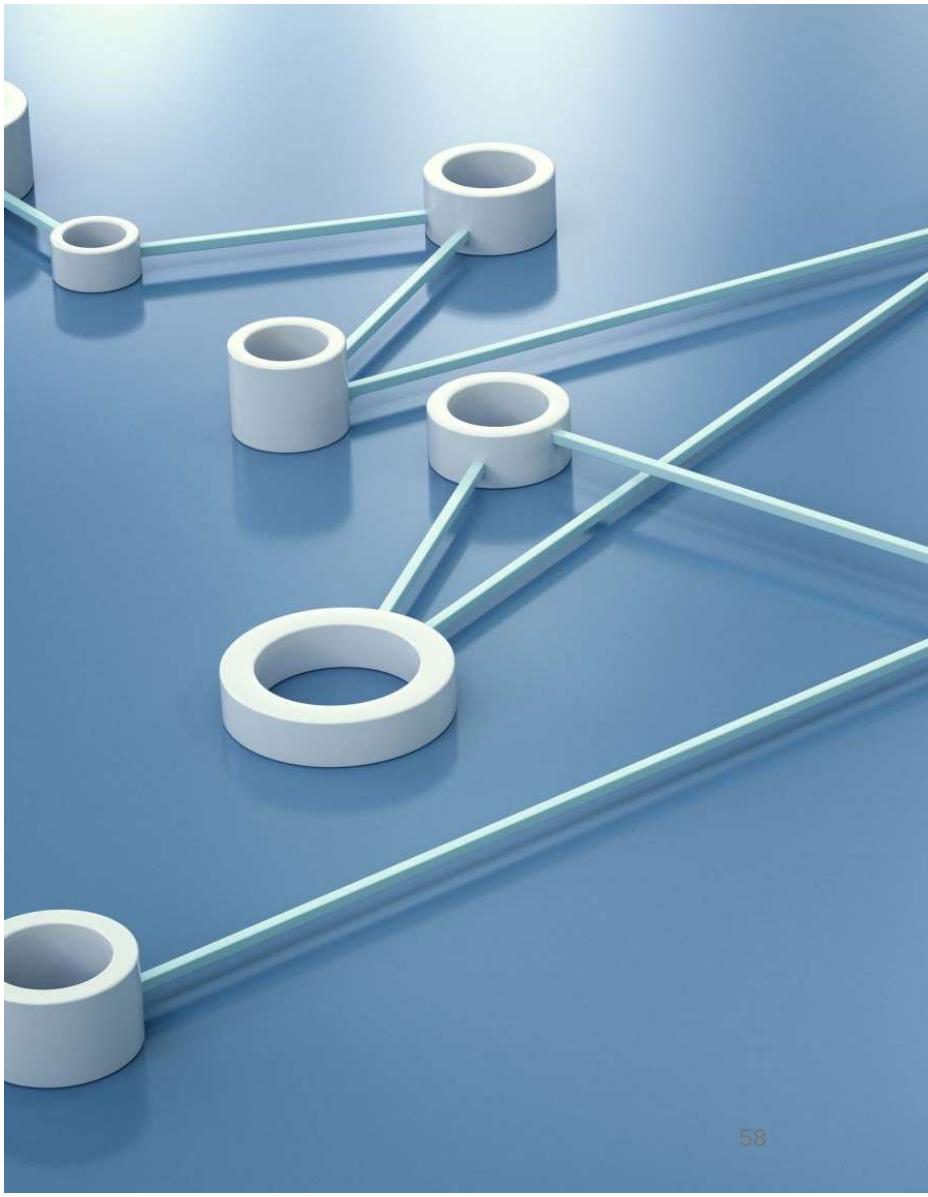
Blockchain provides a secure and immutable record of all transactions, ensuring data integrity and reliability.

Fostering Trust

By enhancing transparency, blockchain fosters trust among stakeholders in the logistics supply chain.

Supply Chain Integrity

Blockchain enhances supply chain integrity by providing clear visibility into transactions and processes.



Walmart's food safety solution using IBM Food Trust built on the IBM Blockchain Platform


Collaborative Approaches and Partnerships

Engaging with Suppliers and Partners

Collaboration Benefits

Engaging with suppliers fosters collaboration, allowing logistics companies to share best practices for operational efficiency.

Sustainability Initiatives

Joint sustainability initiatives with partners can lead to innovative solutions for reducing environmental impact within the supply chain.

Best Practices Sharing

Sharing best practices among partners enhances knowledge transfer and improves overall supply chain performance.

Industry-Wide Sustainability Initiatives

Collaboration for Sustainability

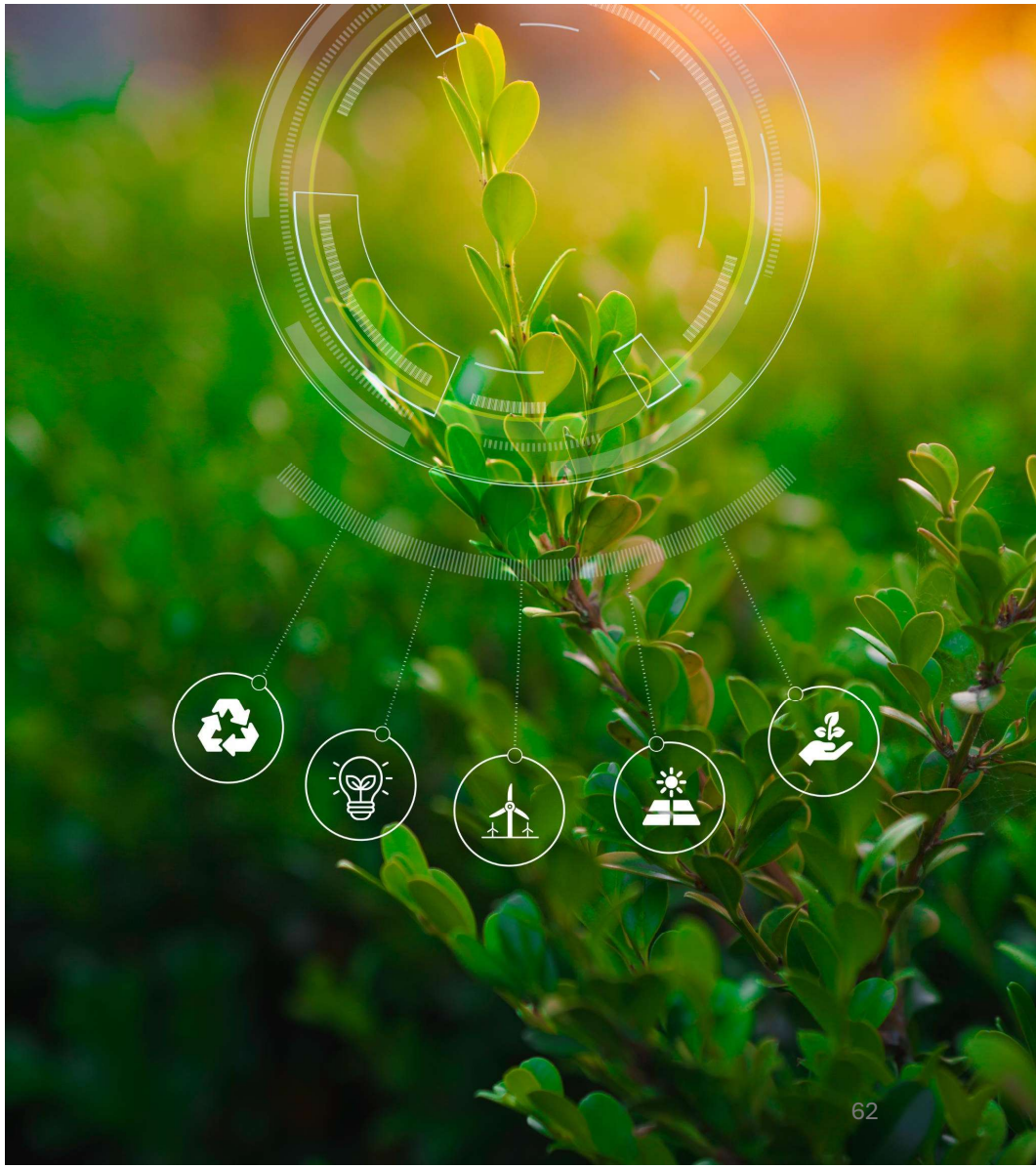
Industry-wide initiatives enable companies to work together towards common sustainability goals, fostering collaboration.

Knowledge Sharing

Sharing knowledge among companies enhances best practices and drives effective sustainability efforts across the industry.

Driving Collective Action

Collective action among industry players leads to significant progress in creating a greener logistics sector.



Case study – Sustainable Partnership

- Established long-term sustainability goals.
- Require first-tier suppliers to set their own long-term sustainability goals.
- Include lower-tier suppliers in the overall sustainability strategy.
- They task a point person on staff with extending the firm's sustainability program to first- and lower-tier suppliers.

Source: A More Sustainable Supply Chain, HBR, 2020

Corporate Social Responsibility and Consumer Engagement

Importance of CSR

Corporate social responsibility is crucial for businesses to demonstrate their commitment to ethical practices and sustainability.

Consumer Engagement

Engaging consumers in sustainability efforts can foster a deeper connection and enhance brand loyalty over time.

Sustainable Logistics Solutions

Promoting sustainable logistics can drive demand among environmentally conscious consumers, supporting a greener future.

Case Study- Consumer Engagement

INNO INSIGHT

กฎหมายและข้อบังคับที่เกี่ยวข้องกับการบริหารจัดการซัพพลายเชน

- พระราชบัญญัติวัตถุอันตราย พ.ศ. 2535
  - ประกาศกรมโรงงานอุตสาหกรรม
  - ข้อกำหนดของประเทศไทยสำหรับ การขนส่งสินค้าอันตรายทางถนน (TP2 / ADR)
- กฎหมายเกี่ยวกับการขนส่ง
  - พระราชบัญญัติการขนส่งทางบก พ.ศ. 2522
  - พระราชบัญญัติจราจรทางบก พ.ศ. 2522
  - พระราชบัญญัติรถยนต์ พ.ศ. 2522
- กฎหมายเกี่ยวกับการนำเข้าและส่งออก
  - พระราชบัญญัติศุลกากร พ.ศ. 2560
- กฎหมายและระเบียบอื่น ๆ
  - กฎหมายและระเบียบเกี่ยวกับสินค้าควบคุม เช่น ยา อาหาร และสินค้าอันตรายกฎหมายและระเบียบเกี่ยวกับทรัพย์สินทางปัญญา
- กฎหมายและระเบียบเกี่ยวกับภาษีอากร
  - พระราชบัญญัติภาษีศุลกากร
  - พระราชบัญญัติภาษีสรรพสามิต พ.ศ. 2560
- ประเด็นสำคัญเพิ่มเติม
  - ข้อตกลงทางการค้าระหว่างประเทศ
  - กฎระเบียบของหน่วยงานที่เกี่ยวข้อง
  - เงื่อนไขทางการค้า (Incoterms)
- มาตรฐาน ISO 14001 และ ISO 26000
- การบริหารการจัดซื้อจัดจ้างอย่างยั่งยืน ISO20400

Activity 4 – How to get there?

Business Strategy	Supply chain Strategy	SCOR Metrics	Supply Chain Initiatives
1	1	RL, RS, CO, AM, EV, SC	xx yy
2	2	RL, RS, CO, AM, EV, SC	xx yy
3	3	RL, RS, CO, AM, EV, SC	
4	4	RL, RS, CO, AM, EV, SC	

การบริหารจัดการ ซัพพลายเชนเชิงรุก

ปรับองค์กร นำหน้า การเปลี่ยนแปลง

SUPPLY CHAIN Talk

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