

Supply Chain Performance Indicators

Executive Sharing – Alignment of Supply Chain Strategy with Corporate Strategy and Goals

1

1

เอกรัตน์ รุจิรเศรษฐกุล, CTSC, CPIM, ESLog

ที่ปรึกษากลยุทธ์ และผู้เชี่ยวชาญโลจิสติกส์และซัพพลายเชน
กรรมการผู้จัดการ บริษัท อินโน อินไซต์ จำกัด

ประสบการณ์

- 20 ปี การบริหารองค์กร ผู้บริหารซัพพลายเชนอาเซียน
- ที่ปรึกษาโลจิสติกส์และซัพพลายเชน ภาครัฐและเอกชน

ความเชี่ยวชาญ

- การวิเคราะห์หาจุดอ่อนและจุดเสี่ยงในกระบวนการโลจิสติกส์และซัพพลายเชน
- ออกแบบ วางระบบ การจัดการกลยุทธ์ห่วงโซ่อุปทาน
- การปรับปรุงกระบวนการทางธุรกิจแบบบูรณาการ
- กระบวนการวางแผนการขายและการปฏิบัติงาน (S&OP)
- การพยากรณ์ความต้องการ และการกระจายสินค้า



consult@innoinsight.co.th



@innoinsight



INNO INSIGHT
Your Success Partner

2





SUPPLY
CHAIN
Talk





Your Success Partner

INNO INSIGHT

3


Integrated Solutions






Process

- ตรวจเช็ค กระบวนการธุรกิจ
- ลดต้นทุนที่ไม่จำเป็นด้วยการจัดการซัพพลายเชน
- วางระบบ และเพิ่มประสิทธิภาพกระบวนการธุรกิจ




People

- Mindset คิดเหมือนเจ้าของ
- Critical Thinking วิธีการแก้ปัญหา และ เพิ่มประสิทธิภาพอย่างเป็นระบบ
- ตัดสินใจด้วยข้อมูล (Data-Driven Decision Making)



Technology

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



4

4

Accumulated Experience



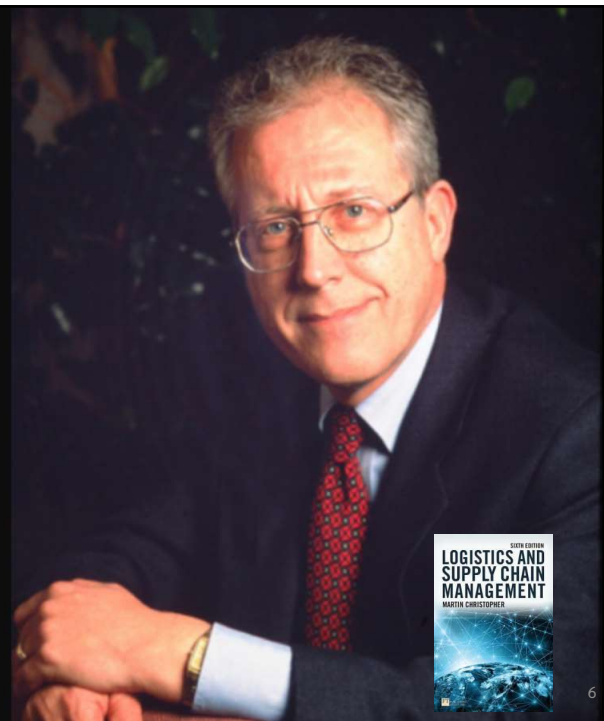
5

5

MARTIN CHRISTOPHER

"Supply chains compete, not companies"

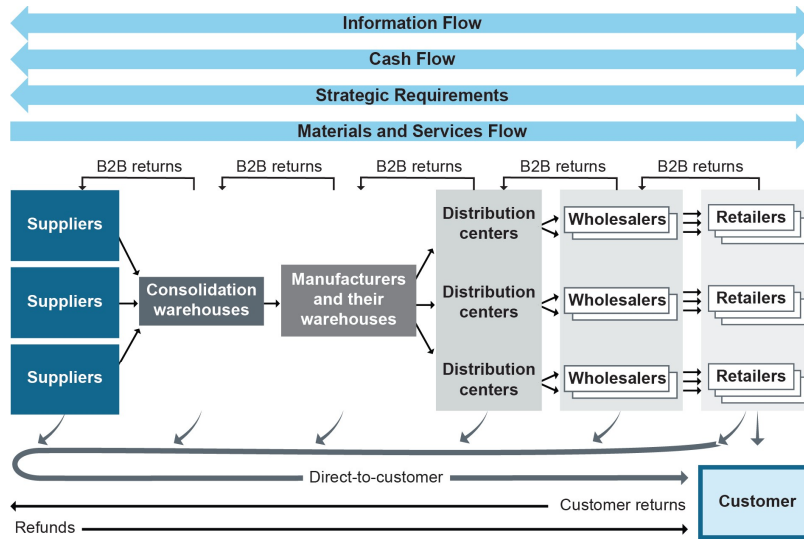
- The Era of Network Competition



6

6

Supply Chain as End-to-End Process



7

7

Type of organization	Organizational strategic competitive advantage	Strategic market elements	Supply chain strategic design elements	Supply chain strategic partnership focus
Energy utility company	High availability	Margin must ensure long-term investment for reliable delivery	<ul style="list-style-type: none"> Modern asset utilization High service levels Overlapping facilities and capabilities 	<ul style="list-style-type: none"> Rapid response Proactive risk High information sharing
Computer hardware manufacturer	Constant innovation and new products	<ul style="list-style-type: none"> Price and demand unstable Unexpected competitive pressures 	<ul style="list-style-type: none"> High flexibility Capable of rapid capacity growth and reduction 	<ul style="list-style-type: none"> High responsiveness High trust Risk sharing Quick learning
Commodity provider	Lowest price	Price to market essentially determines market share	<ul style="list-style-type: none"> Maximum efficiency Locations close to customers to minimize distribution cost 	<ul style="list-style-type: none"> High innovation and constantly reducing waste
Luxury goods manufacturer	High customer service	Highly customized designs see highest demand	<ul style="list-style-type: none"> Facilitates highest quality value-add service before and after product sale 	<ul style="list-style-type: none"> Highest skill Highest quality provider Precision, detail oriented

Source: APICS INSIGHTS AND INNOVATIONS

8

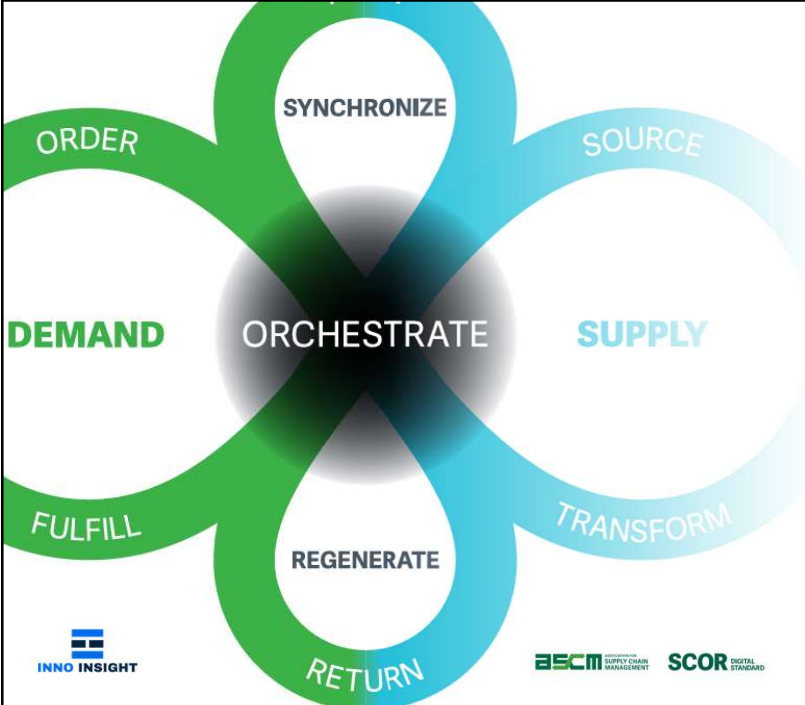
8

How to Align Supply Chain Strategy with Corporate Strategy and Goals

1. Understand Business Strategy
2. Identify Supply Chain Objectives
3. Select Metrics Aligned with Strategy
4. Build a E2E Set of Metrics
5. Establish Metric Thresholds or Target
6. Implement Governance and Communication







9



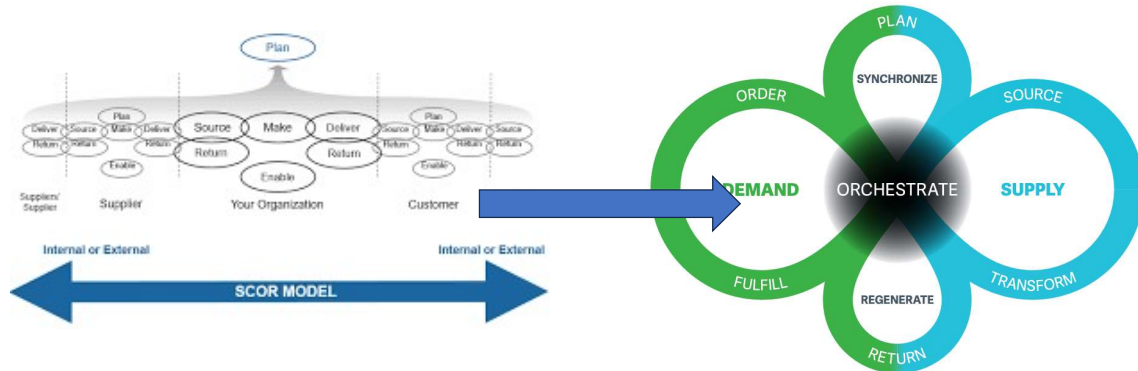
Supply Chain Operations Reference – SCOR DS

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

10

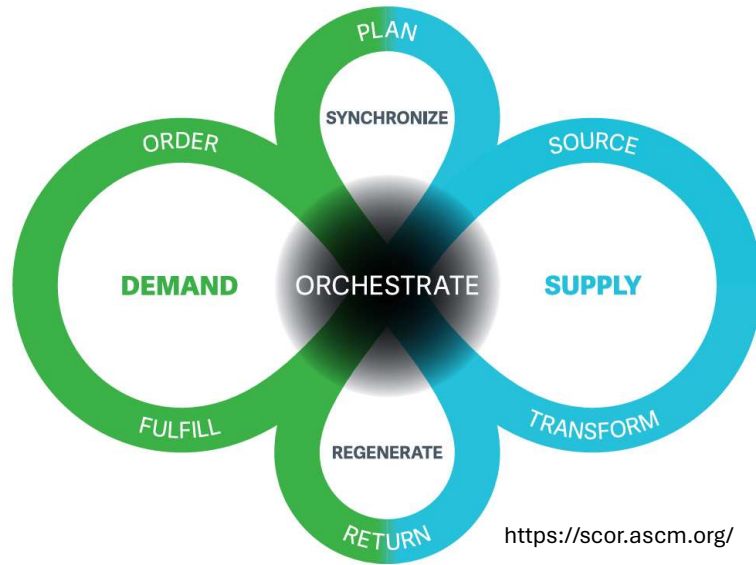
SCOR DS - Sept



11

11

SCOR Digital Standard



<https://scor.ascm.org/>

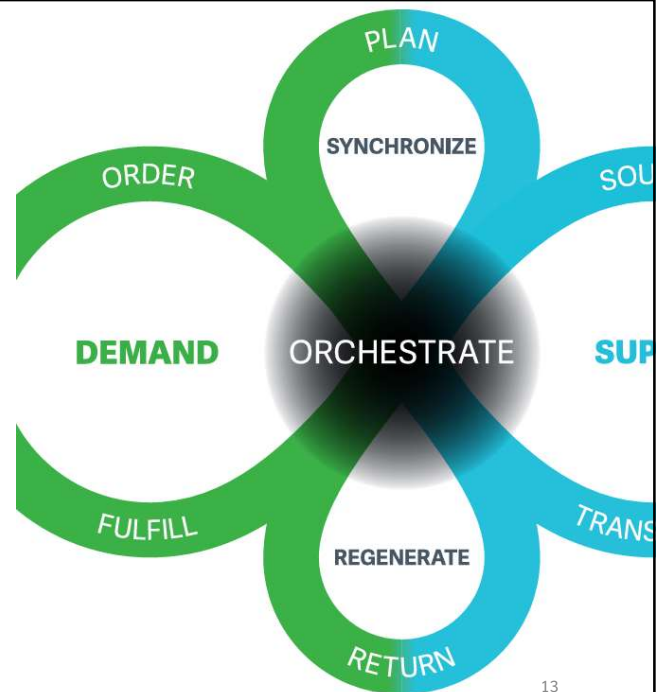


12

12

Four Major Sections Of SCOR Framework

1. **Performance**
includes standard metrics to describe process performance and define strategic goals.
2. **Processes**
offers standard descriptions of management processes and process relationships.
3. **Practices**
explains management practices that produce significantly better process performance.
4. **People**
comprises standard definitions for skills required to perform supply chain processes.



13

13

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



14

14

SCOR-DS Performance



	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 – DS Performance

Reliability (RL)	Responsiveness (RS)	Cost (CO)	Environmental (EV)
RL1 Delivery Performance to Original Customer RL2 Percentage of Orders Delivered to Full from the Supplier RL3 Delivery Performance to Original Customer Current Data RL4 Customer Order Documentation Accuracy RL5 Customer Order Fulfillment Condition RL6 Delivery Risk Accuracy to the Customer RL7 Delivery Quantity Accuracy to the Customer RL8 Customer Current Data Adherence RL9 Delivery Customer Location Accuracy RL10 Customer Order Compliance Documentation Accuracy RL11 Customer Order Date Required Documentation Accuracy RL12 Customer Order Payment Documentation Accuracy RL13 Customer Order Shipping Documentation Accuracy RL14 Customer Order Percentage of Invoices Held Retained RL15 Percentage of Customer Orders on Line Received Damage Free RL16 Customer Orders Delivered Damage Free Confirmation RL17 Customer Orders Delivered Defect Free Confirmation RL18 Percentage of Orders Received to Full from the Supplier RL19 Delivery Performance to Original Supplier Current Data RL20 Supplier Order Documentation Accuracy RL21 Supplier Order Fulfillment Condition RL22 Delivery Risk Accuracy from the Supplier RL23 Delivery Quantity Accuracy from the Supplier RL24 Supplier Order Compliance Documentation Accuracy RL25 Supplier Order Date Required Documentation Accuracy RL26 Supplier Order Payment Documentation Accuracy RL27 Supplier Order Shipping Documentation Accuracy RL28 Supplier Order Percentage of Invoices Held Retained RL29 Percentage of Supplier Orders on Line Received Damage Free RL30 Supplier Orders Delivered Damage Free Confirmation RL31 Supplier Orders Delivered Defect Free Confirmation	RS1 Customer Order Delivery Cycle Time RS2 Order Cycle Time RS3 Invoice Cycle Time RS4 Transform Cycle Time RS5 Return Cycle Time RS6 Percentage of Orders Booked/Managed Perfectly RS7 Build Lead Cycle Time RS8 Cancelable Order Cycle Time RS9 Receive, Configure, Order, and Validate Order Cycle Time RS10 Receive, Reconfigure, and Deliver Order Cycle Time RS11 Supplier Order Response Cycle Time RS12 Monthly Service of Supply Cycle Time RS13 Receive Product Cycle Time RS14 Schedule Delay Return Product Cycle Time RS15 Supplier Order Response Cycle Time RS16 Supplier Product Cycle Time RS17 Verify Raw Material or Product Cycle Time RS18 Finish Production Engineering Cycle Time RS19 Produce and Test Cycle Time RS20 Release Finished Product to Deliver Cycle Time RS21 Release Product from Invoice or Transform Cycle Time RS22 Ship Product Cycle Time RS23 Package Cycle Time RS24 Install Product Cycle Time RS25 Lead Product A Generate Shipping Documents Cycle Time RS26 Pack Product Cycle Time RS27 Pick Product Cycle Time RS28 Receive and Verify Product by Customer Cycle Time RS29 Receive Product from Invoice or Transform Cycle Time RS30 Ship Shipments Cycle Time RS31 Schedule Installation Cycle Time RS32 Select Carton and Pallet Shipments Cycle Time RS33 Assess Delivery Performance Cycle Time RS34 Assess Supplier Performance Cycle Time RS35 Address Defective Product Return Cycle Time RS36 Address Return Product Return Cycle Time RS37 Address Maintenance, Repair and Overhaul (MRO) Product Return Cycle Time RS38 Enter Order, Confirm Resources and Launch Program Cycle Time RS39 Issue Invoices and Process Product Cycle Time RS40 Diagnostic Cycle Time	CO1 Total Logistics Costs Management Cost CO2 Order Management Cost CO3 Material Acquisition Cost CO4 Inventory Carrying Cost CO5 Supply Chain Finance & Planning Cost CO6 Supply Chain Cost CO7 New Product Release Phase In and Maintenance CO8 Create Customer Order CO9 Order Entry and Maintenance CO10 Contract Program and Channel Management CO11 Installation Planning CO12 Order Fulfillment CO13 Distribution CO14 Transportation, Outbound Freight and Duties CO15 Installation CO16 Materials (Commodity) Management and Planning CO17 Supplier Quality Engineering CO18 Inbound Freight and Duties CO19 Inventory CO20 Inventory Inspection CO21 Material Process and Component Engineering CO22 Sourcing CO23 Opportunity CO24 Sourcing CO25 Warehouse and Totes CO26 Total Obligations for Raw Material, WIP and Finished Goods Inventory CO27 Contract Obligations CO28 Field Service Risk Obligations CO29 Supply Chain Finance Costs CO30 Demand/Supply Planning Costs	EV1 Recycled Paper EV2 Renewable Materials Used EV3 Non-Renewable Materials Used EV4 Recycled Products and their Packaging Materials EV5 Recovery Potential of Materials Used EV6 Actual Recovery of Materials EV7 Percentage of Circularity EV8 Recycled Paper Materials Used EV9 Carbon Recovery Per Product Family (PP) Through Salvage/ Circular Efforts EV10 Virgin/Recycled/Shell/Spent Materials Used EV11 Energy Intensity EV12 Renewable Energy Consumed EV13 Non-Renewable Energy Consumed EV14 Energy Intensity EV15 Renewable Energy Sold EV16 Non-Renewable Energy Sold EV17 Water Withdrawal EV18 Water Discharge EV19 Water Recycling EV20 Water Rejected and Reused EV21 GHG Emissions EV22 Direct GHG Emissions EV23 Energy Intensity (Scope 2) GHG Emissions EV24 GHG Emissions Intensity EV25 GHG Emissions Intensity EV26 General Waste Diverted From Disposal EV27 General Waste Diverted to Disposal EV28 Waste Diverted From Disposal for Reuse EV29 Waste Diverted From Disposal for Recycling EV30 Waste Diverted From Disposal for Other Recovery Options EV31 Waste Diverted to Disposal for Incineration EV32 Waste Diverted to Disposal for Landfilling EV33 Waste Diverted to Disposal for Other Disposal Options
AG1 On-Time AG2 In Full (Current Product) AG3 Current Documentation AG4 Perfect Condition AG5 Inventory and Returns AG6 Percentage of Identified Maintenance, Repair and Overhaul (MRO) Products Returned to Service AG7 Percentage of Item Location Accuracy AG8 Percentage of Items Product Returns Submitted Correctly to the Designated Return Center AG9 Percentage of Seamless Invoices	AM1 Order Chain Agility AM2 Order Supply Chain Agility AM3 Source Supply Chain Agility AM4 Transform Supply Chain Agility AM5 Full Supply Chain Agility AM6 Return Supply Chain Agility	SC1 Diversity and Inclusion SC2 Wage/Labor SC3 Training SC4 Employment SC5 Non-employee Fees SC6 Employee Turnover SC7 Anti-Corruption SC8 Occupational Safety & Health SC9 Work Related Injuries SC10 Work Related Health SC11 Fair Equity SC12 Payroll Loss SC13 Child Labor SC14 Career and Development	AM7 Inventory AM8 Inventory AM9 Inventory AM10 Inventory AM11 Inventory AM12 Inventory AM13 Inventory AM14 Inventory AM15 Inventory AM16 Inventory AM17 Inventory AM18 Inventory AM19 Inventory AM20 Inventory AM21 Inventory AM22 Inventory AM23 Inventory AM24 Inventory AM25 Inventory AM26 Inventory AM27 Inventory AM28 Inventory AM29 Inventory AM30 Inventory AM31 Inventory AM32 Inventory AM33 Inventory AM34 Inventory AM35 Inventory AM36 Inventory AM37 Inventory AM38 Inventory AM39 Inventory AM40 Inventory AM41 Inventory AM42 Inventory AM43 Inventory AM44 Inventory AM45 Inventory AM46 Inventory AM47 Inventory AM48 Inventory AM49 Inventory AM50 Inventory AM51 Inventory AM52 Inventory AM53 Inventory AM54 Inventory AM55 Inventory AM56 Inventory AM57 Inventory AM58 Inventory AM59 Inventory AM60 Inventory AM61 Inventory AM62 Inventory AM63 Inventory AM64 Inventory AM65 Inventory AM66 Inventory AM67 Inventory AM68 Inventory AM69 Inventory AM70 Inventory AM71 Inventory AM72 Inventory AM73 Inventory AM74 Inventory AM75 Inventory AM76 Inventory AM77 Inventory AM78 Inventory AM79 Inventory AM80 Inventory AM81 Inventory AM82 Inventory AM83 Inventory AM84 Inventory AM85 Inventory AM86 Inventory AM87 Inventory AM88 Inventory AM89 Inventory AM90 Inventory AM91 Inventory AM92 Inventory AM93 Inventory AM94 Inventory AM95 Inventory AM96 Inventory AM97 Inventory AM98 Inventory AM99 Inventory AM100 Inventory



RL-1.1 PERFECT CUSTOMER ORDER FULFILLMENT

<https://scor.ascm.org/>

INNO INSIGHT

17

17

Reliability (RL)	
RL.1.1 Perfect Customer Order Fulfillment	RL.1.2 Perfect Supplier Order Fulfillment
RL.2.1 Percentage of Orders Delivered In Full to the Customer	RL.2.5 Percentage of Orders Received In Full from the Supplier
RL.2.2 Delivery Performance to Original Customer Commit Date	RL.2.6 Delivery Performance to Original Supplier Commit Date
RL.2.3 Customer Order Documentation Accuracy	RL.2.7 Supplier Order Documentation Accuracy
RL.2.4 Customer Order Perfect Condition	RL.2.8 Supplier Order Perfect Condition
RL.3.1 Delivery Item Accuracy to the Customer	RL.3.13 Delivery Item Accuracy from the Supplier
RL.3.2 Delivery Quantity Accuracy to the customer	RL.3.14 Delivery Quantity Accuracy from the Supplier
RL.3.3 Customer Commit Date Achievement	RL.3.15 Supplier Achievement to Original Organization Commit Date
RL.3.4 Delivery Customer Location Accuracy	RL.3.16 Delivery Organization Location Accuracy
RL.3.5 Customer Order Compliance Documentation Accuracy	RL.3.17 Supplier Order Compliance Documentation Accuracy
RL.3.6 Customer Order Other Required Documentation Accuracy	RL.3.18 Supplier Order Other Required Documentation Accuracy
RL.3.7 Customer Order Payment Documentation Accuracy	RL.3.19 Supplier Order Payment Documentation Accuracy
RL.3.8 Customer Order Shipping Documentation Accuracy	RL.3.20 Supplier Order Shipping Documentation Accuracy
RL.3.9 Customer Order Percentage of Faultless Installations	RL.3.21 Supplier Order Percentage of Faultless Installations
RL.3.10 Percentage of Customer Orders or Lines Received Damage Free	RL.3.22 Percentage of Supplier Orders or Lines Received Damage Free
RL.3.11 Customer Orders Delivered Damage Free Conformance	RL.3.23 Supplier Orders Delivered Damage Free Conformance
RL.3.12 Customer Orders Delivered Defect Free Conformance	RL.3.24 Supplier Orders Delivered Defect Free Conformance
	RL.1.3 Perfect Return Order Fulfillment
	RL.2.9 On Time
	RL.2.10 In Full (Correct Product)
	RL.2.11 Correct Documentation
	RL.2.12 Perfect Condition
	RL.3.25 Warranty and Returns
	RL.3.27 Percentage of Identified Maintenance, Repair and Overhaul (MRO) Products Returned to Service
	RL.3.28 Percentage of Item Location Accuracy
	RL.3.29 Percentage of Excess Product Returns Delivered Complete to the Designated Return Center
	RL.3.30 Percentage of Faultless Invoices

Reliability (RL) – Level 2 and 3 metrics

INNO INSIGHT

18

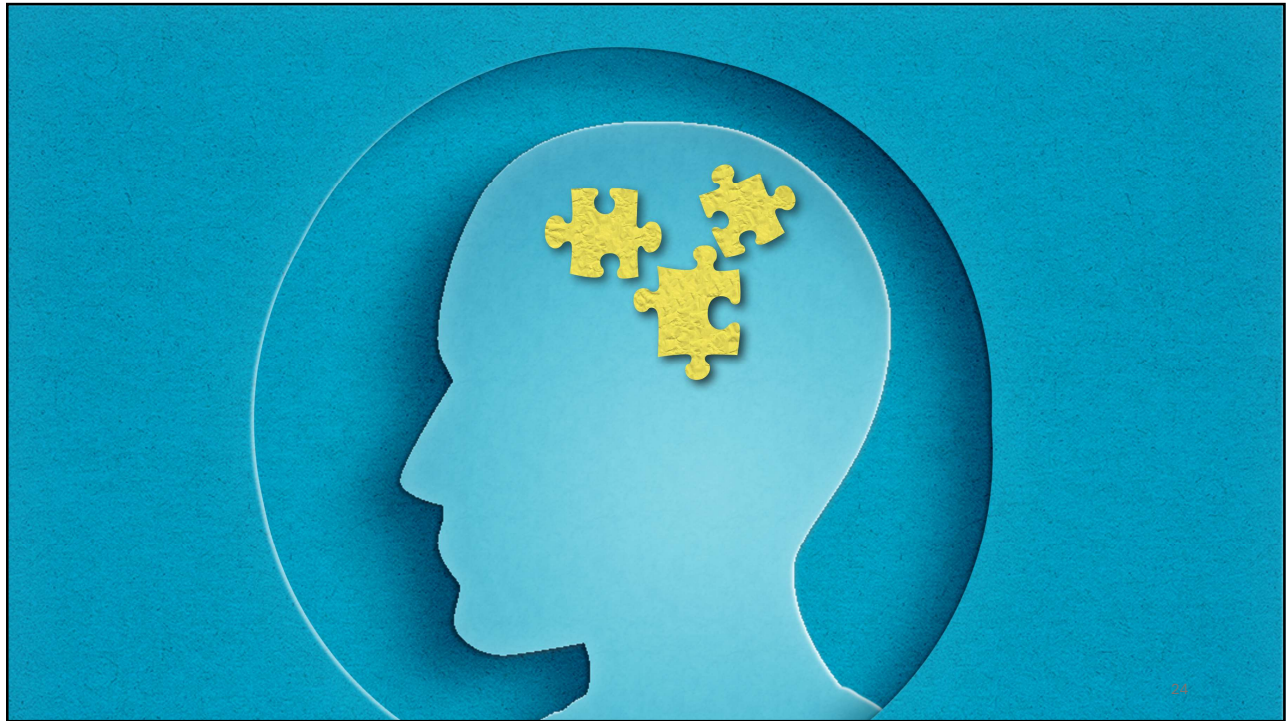
18



19

<p>Transform your supply chain</p> <p>Transforming your supply chain operating model provides the agility your company needs to survive and thrive. Prepare your supply chains for true competitive advantage with the SCOR Digital Standard.</p> <p>SCOR Digital Standard →</p>	<p>SCOR DIGITAL STANDARD</p>
<p>DCM DIGITAL CAPABILITIES MODEL</p>	<p>Develop digital supply networks</p> <p>Take your supply chain to the next level with a reference model to guide the development of digital supply networks.</p> <p>Digital Capabilities Model →</p>
<p>Identify gaps for continuous improvement</p> <p>Assess your supply chain's alignment to our global standards for ethical, economic and ecological metrics.</p> <p>Enterprise Certification for Sustainability Standards →</p>	<p>ASCM ENTERPRISE CERTIFICATION FOR SUSTAINABILITY</p>

23



24

Contact us

 **Website**
www.innoinsight.co.th

 **Email**
consult@innoinsight.co.th

 **Line**
[@innoinsight](https://line.me/tv/@innoinsight)


INNO INSIGHT





25