



AIT Technology Event

Operation Model for Supply
Chain Performance
Transformation:
What does “good” look like?

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Presentation Contents

1. Definition:
 - Supply Chain
 - Performance Transformation
2. What does a good operation model look like?
3. Supply Chain Operation Model
4. Sample applications for configuring supply chain





Definitions:

Supply Chain and Performance Transformation



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Supply Chain Management

For management, means “the science of managing all the value creation processes that involve procuring, producing and delivering of products and services from the suppliers to the end-customers”

For information technology, means “a set of planning and execution applications that provide integration and collaboration of supplier’s, manufacturer’s and distributor’s processes into a cohesive, streamlining process.





Supply Chain Key Implications

- 1. Supply chain management is the core competency of modern enterprises:**
 - How value-added activities are driven and created.
 - How competitiveness is defined and executed.
 - How capabilities are built and sustained.
- 2. Supply chain covers the end-to-end processes: from buying to producing to distributing of goods and services within and external to the enterprise operation domain.**
- 3. Supply chain implements strategies by making and turning them into process executions and routine works across the enterprise operations.**





Performance Transformation

- *The fundamental change to the way a business operates, whether for moving into a new market or for improving operation capabilities.*
- *It is an attempt to align and organization activities relating to people, process and technology more closely with its business strategy and vision.*
- *The change is aimed to meet long term objectives”*

Types of Transformation:

1. Reorientation
2. Revitalization
3. Recreation

Required Capabilities:

1. Acquisitive capabilities
2. Operative capabilities
3. Adaptive capabilities
4. Innovative capabilities





The need for an operation model:

**What does a good operation
model look like?**

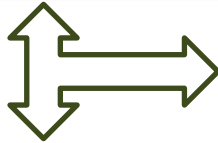


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Fundamental Improvements needs a Supply Chain Operation Model

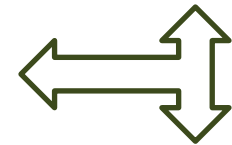
Supply Chain Performance Agenda



- Simplified supply chain
- Standardized procedures
- Lower operation costs
- Increase customer services
- Handle rapid changes
- Higher production flexibility
- Better KPIs for planning

Improved efficiency by xx%	
Improved customer service by xx%	
<i>For Current State</i>	<i>For Future State</i>
<i>Can we define how robust are our SC processes?</i>	<i>What are the capabilities each process needs?</i>
<i>What are the performance gaps or shortfalls?</i>	<i>How can we measure strategic performance?</i>
<i>What are the process capabilities we need?</i>	<i>What best practices or solutions do we need to enable?</i>
<i>How to monitor end-to-end SC performance?</i>	<i>How to set consistent SC measurements?</i>

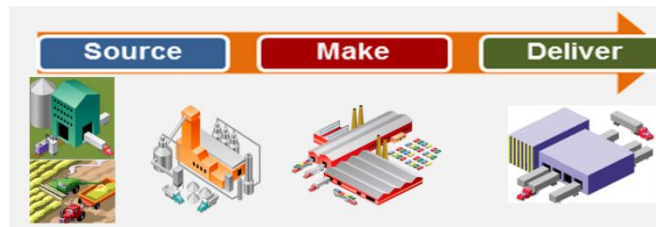
Competitive Advantages



- Lesser operation costs
- Efficient process alignment
- Leaner and faster op. cycles
- Higher demand fulfillments
- Faster review of plans
- Closer SC collaboration
- Cohesive set of SC metrics



Characteristics of Supply Chain Operation Model



- Cover supply chain from end-to-end
- Prescribe process definitions and standards
- Define efficient process flows
- Define process relationships
- Define process performance and attributes
- Link and drive process performance to strategies

- Align performance targets across SC processes and operation domains
- Define process measurements to targets
- Link process measurements at multi-levels
- Prescribe best practices and referable solutions
- Facilitate performance benchmarking



Supply Chain Council's:

Supply Chain Operation Reference Model - SCOR

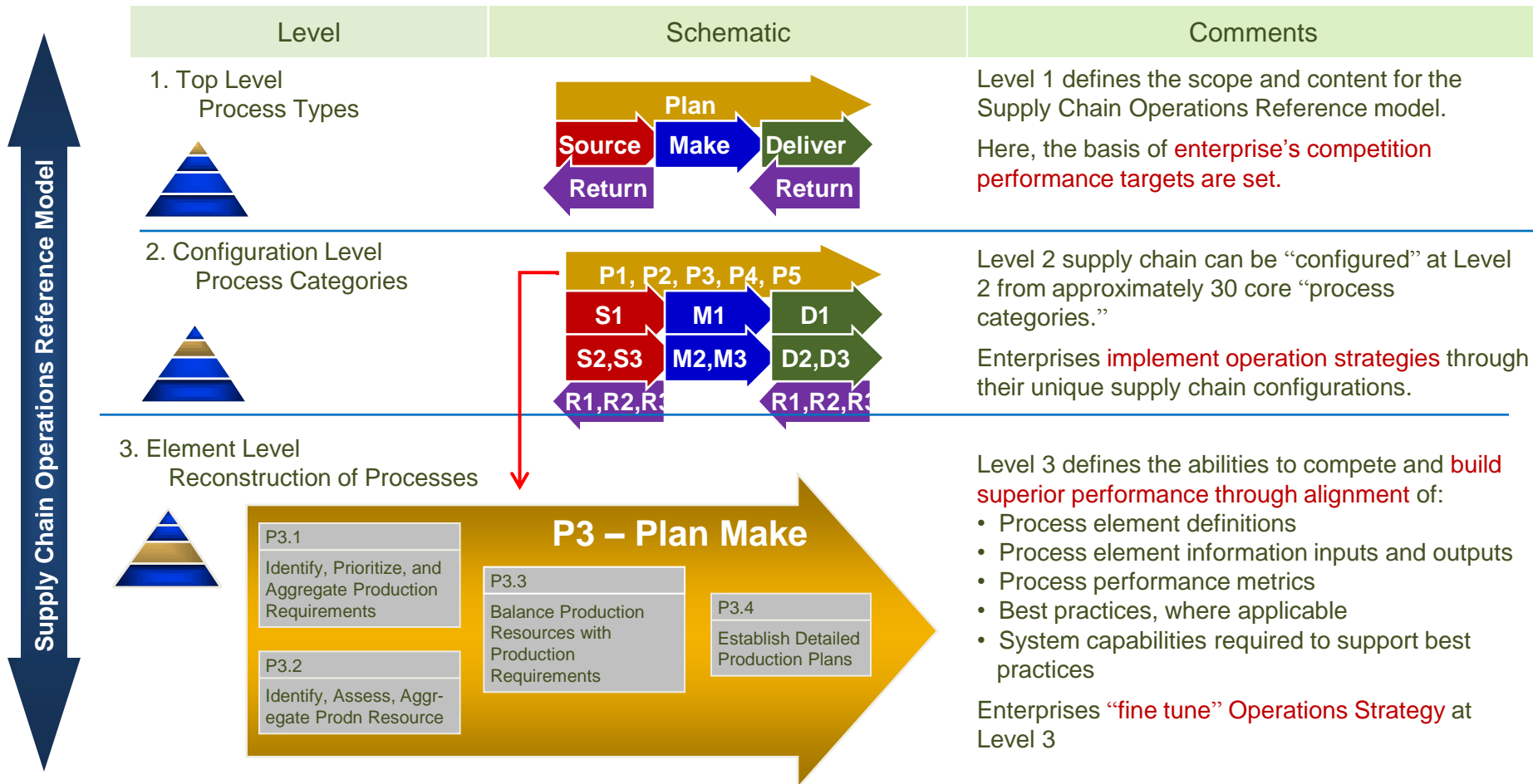


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Supply Chain Operation Reference Model

- SCOR -



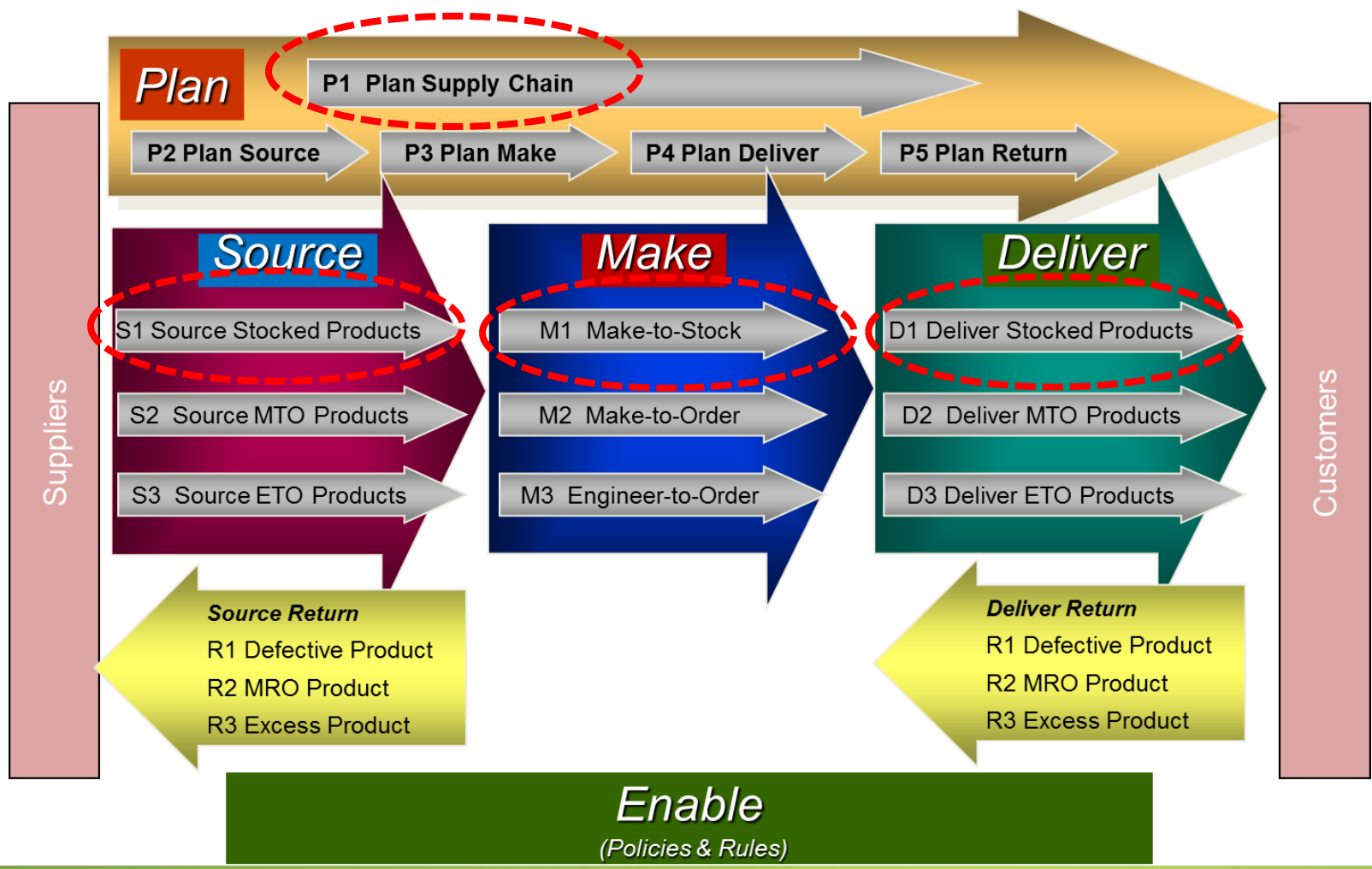


SCOR Background

1. SCOR model is developed by the Supply Chain Council since 1996, initially by 69 practitioner companies, now with over 1,000 members.
2. Supply Chain Council is an independent, not-for-profit organization.
3. The focus is on research, application and advancement of state-of-the-art SCM system and practices.
4. Now in version 11.0, SCOR is developed as a cross industry standards for SCM, and as re-engineering and benchmarking tools with best practices and latest solutions for SC performance improvement.
5. Ref. website - *www.supply-chain.org*

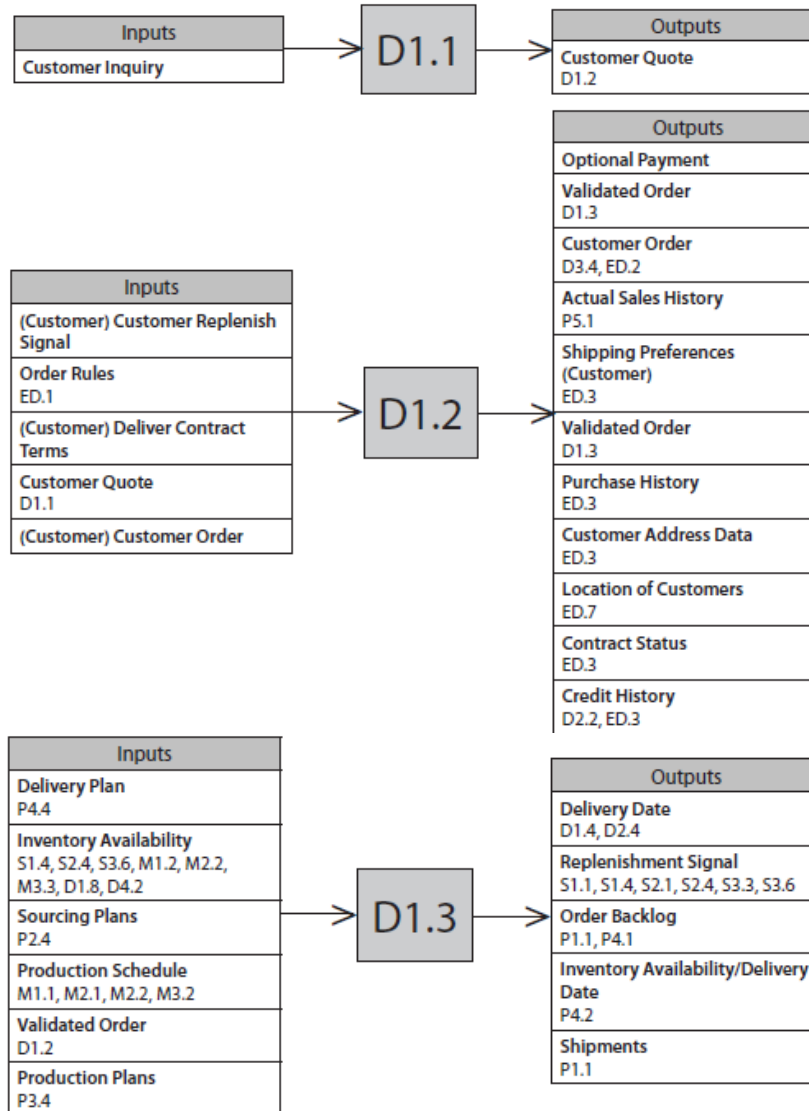


SCOR defines SC into 5 Process Categories and 20 Process Types





1) Ref. Standard Process Types and Elements



*Close up
View of
Process
Elements*



2) Ref. Process Terms, Attributes, Metrics and Best Practices

Process Element: Schedule Product Deliveries		Process Element Number: S11
Process Element Definition <i>Scheduling and managing the execution of the individual deliveries of product against an existing contract or purchase order. The requirements for product releases are determined based on the detailed sourcing plan or other types of product pull signals.</i>		
Performance Attributes	Metric	
Reliability	% Schedules Generated within Supplier's Lead Time % Schedules Changed within Supplier's Lead Time	
Responsiveness	Schedule Product Deliveries Cycle Time	
Flexibility	None Identified	
Cost	Schedule Deliveries Costs as a % of Product Acquisition Costs	
Assets	Return on Supply Chain Assets	
Best Practices	Features	
Utilize EDI transactions to reduce cycle time and costs	EDI interface for 830, 850, 856, and 862 transactions	
Mechanical (Kanban) pull signals are used to notify suppliers of the need to deliver product	Electronic Kanban support	
Consignment agreements are used to reduce assets and cycle time while increasing the availability of critical items	Consignment inventory management	
Advanced ship notices allow for tight synchronization between SOURCE and MAKE processes	Blanket order support with scheduling interfaces to external supplier systems	
Vendor Managed Inventory (VMI)	See Glossary	





3) Ref. Process Inputs and Outputs Definitions

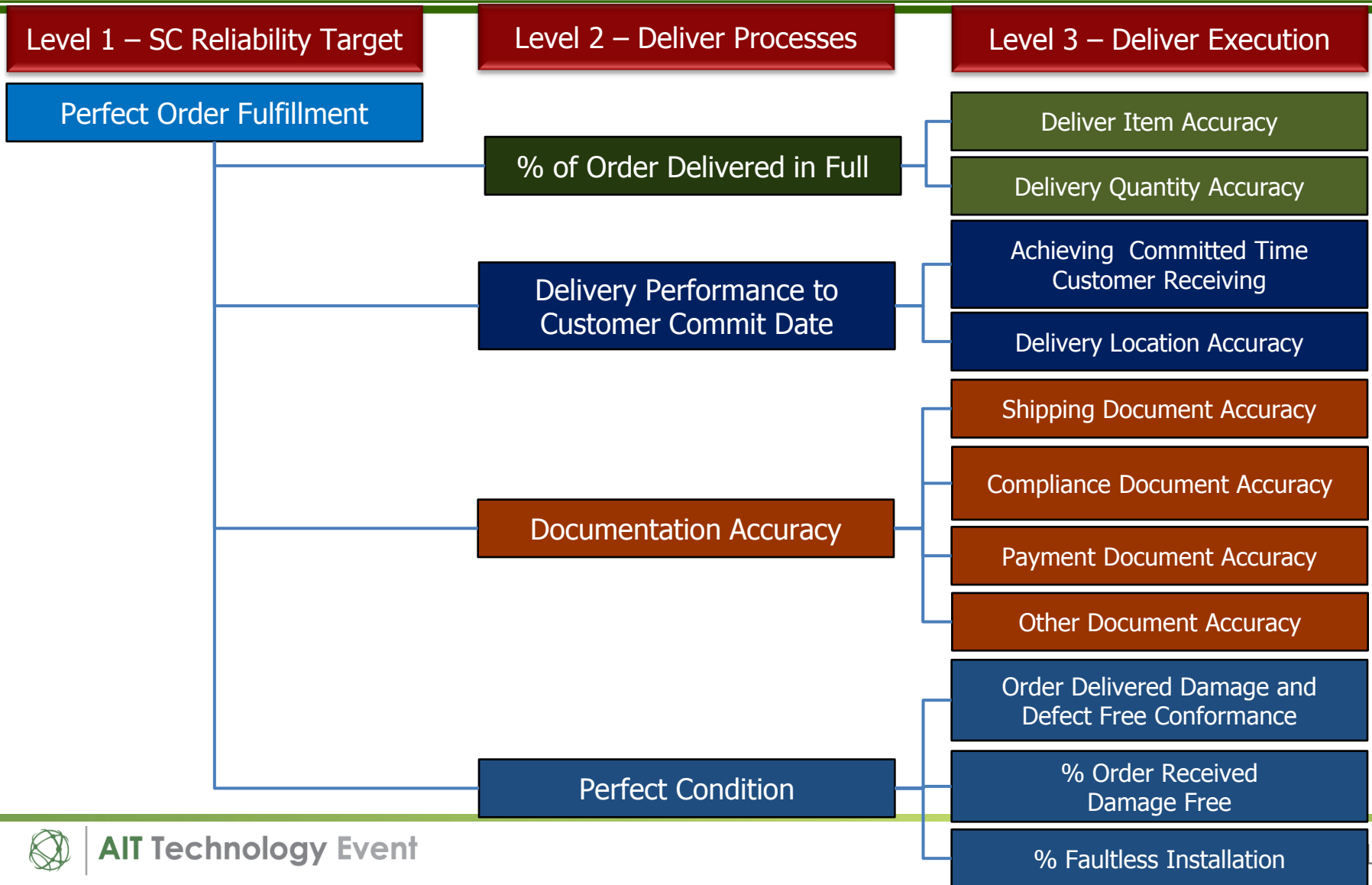
Input/Output	Definition	Process
Order Backlog	Orders that have been received and entered into the order processing system and are in a queue waiting to be processed and shipped.	P4.1: Identify, Prioritize and Aggregate Delivery Requirements D2.3: Reserve Inventory and Determine Delivery Date P1.1: Identify, Prioritize and Aggregate SC Requirements D1.11: Load Vehicle & Generate Shipping Docs D1.3: Reserve Inventory and Determine Delivery Date D3.3: Enter Order, Commit Resources Launch Program
Order Information	The function encompasses receiving and entering all data necessary on orders, so the order can be finalized and entered into the order system.	D3.3: Enter Order, Commit Resources Launch Program M3.1: Finalize Production Engineering
Order Quote (CUSTOMER)	A statement of price, terms of sale, and description of goods or services offered by a supplier to a prospective purchaser; a bid. When given in response to an inquiry, it is usually considered an offer to sell.	D2.1: Process Inquiry and Quote D2.2: Receive, Configure, Enter and Validate Order
Order Rules	Rules for the function that encompasses receiving, entering, and promising orders from customers, distribution centers, and interplant operations.	ED.4: Manage Finished Goods Inventories D2.2: Receive, Configure, Enter and Validate Order D1.2: Receive, Enter and Validate Order D3.2: Negotiate and Receive Contract ED.1: Manage Deliver Business Rules ED.5: Manage Deliver Capital Assets



4) Ref. Key Performance Attributes for SC Performance

Level 1 Metrics	Performance Attributes				
	Customer-Facing			Internal-Facing	
	Reliability	Responsiveness	Flexibility	Cost	Assets
Perfect Order Fulfillment	✓				
Order Fulfillment Cycle Time		✓			
Upside Supply Chain Flexibility			✓		
Upside Supply Chain Adaptability			✓		
Downside Supply Chain Adaptability			✓		
Supply Chain Management Cost				✓	
Cost of Goods Sold				✓	
Cash-to-Cash Cycle Time					✓
Return on Supply Chain Fixed Assets					✓

5) Ref. Performance Alignment with Multi-level Metrics





SCOR and Global Enterprises





Thank You



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