

SUPPLY CHAIN MANAGEMENT

LESSON 4: SUPPLY CHAIN DRIVERS AND METRICS

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Chapter Description

- Aims
 - To provide knowledge related to supply chain drivers; the structure framework and details on the supply chain drivers
- Expected Outcomes

Students should be able to

 - Identify drivers in supply chain
 - Elaborate the structures of the drivers framework
- References
 - Chopra, Sunil, and Peter Meindl. (2016) Supply Chain Management: Strategy, Planning, & Operation. 6th. Ed. Upper Saddle River, NJ: Prentice Hall.



Content

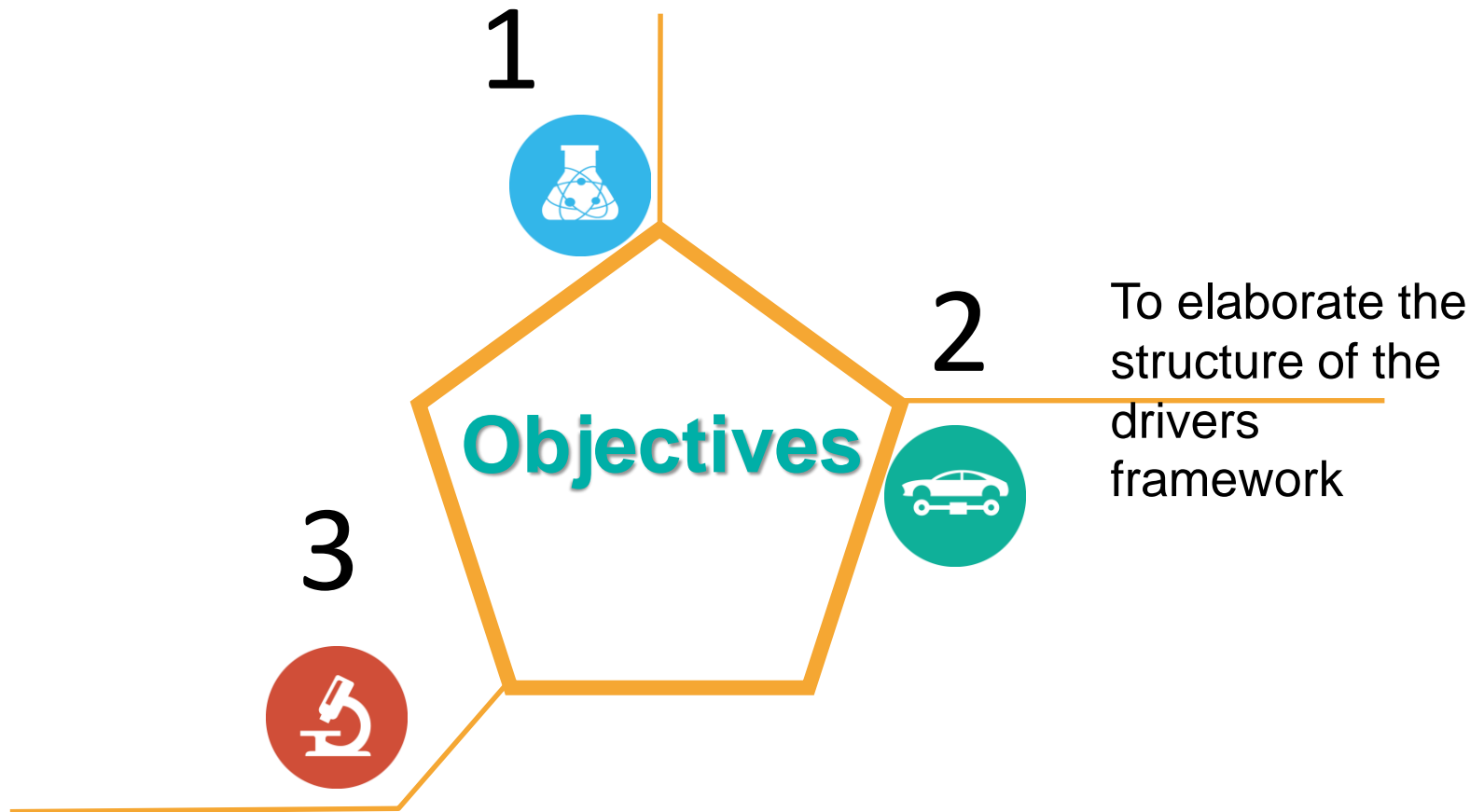
4.1 SC Drivers

4.2 Structuring Drivers Framework



LEARNING OUTCOMES

To identify SIX (6)
drivers in a Supply Chain

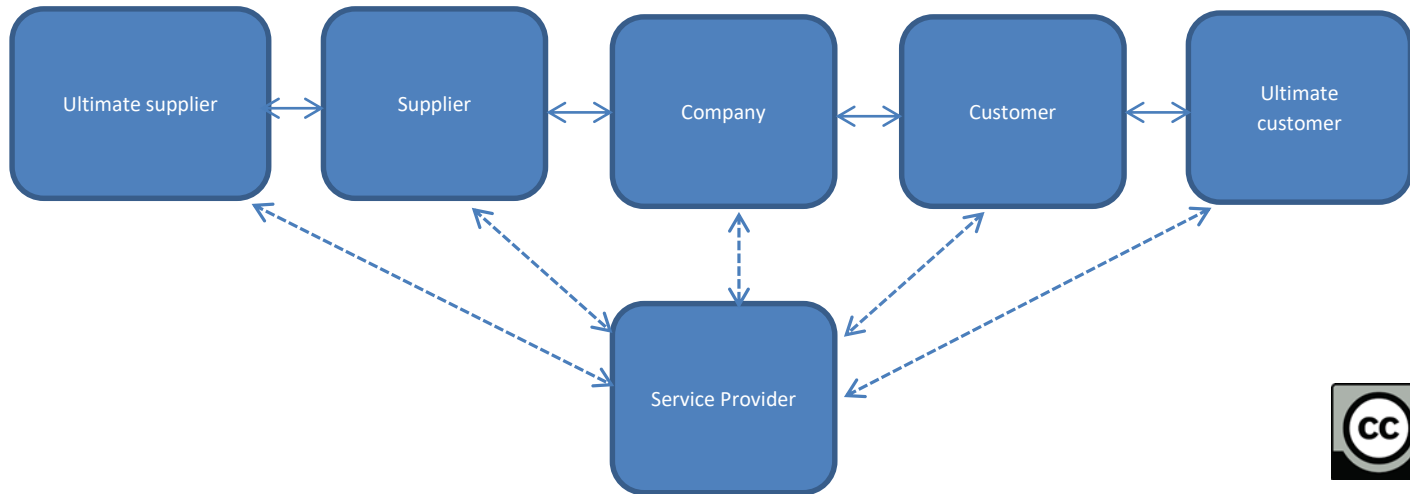


Supply Chain Flow

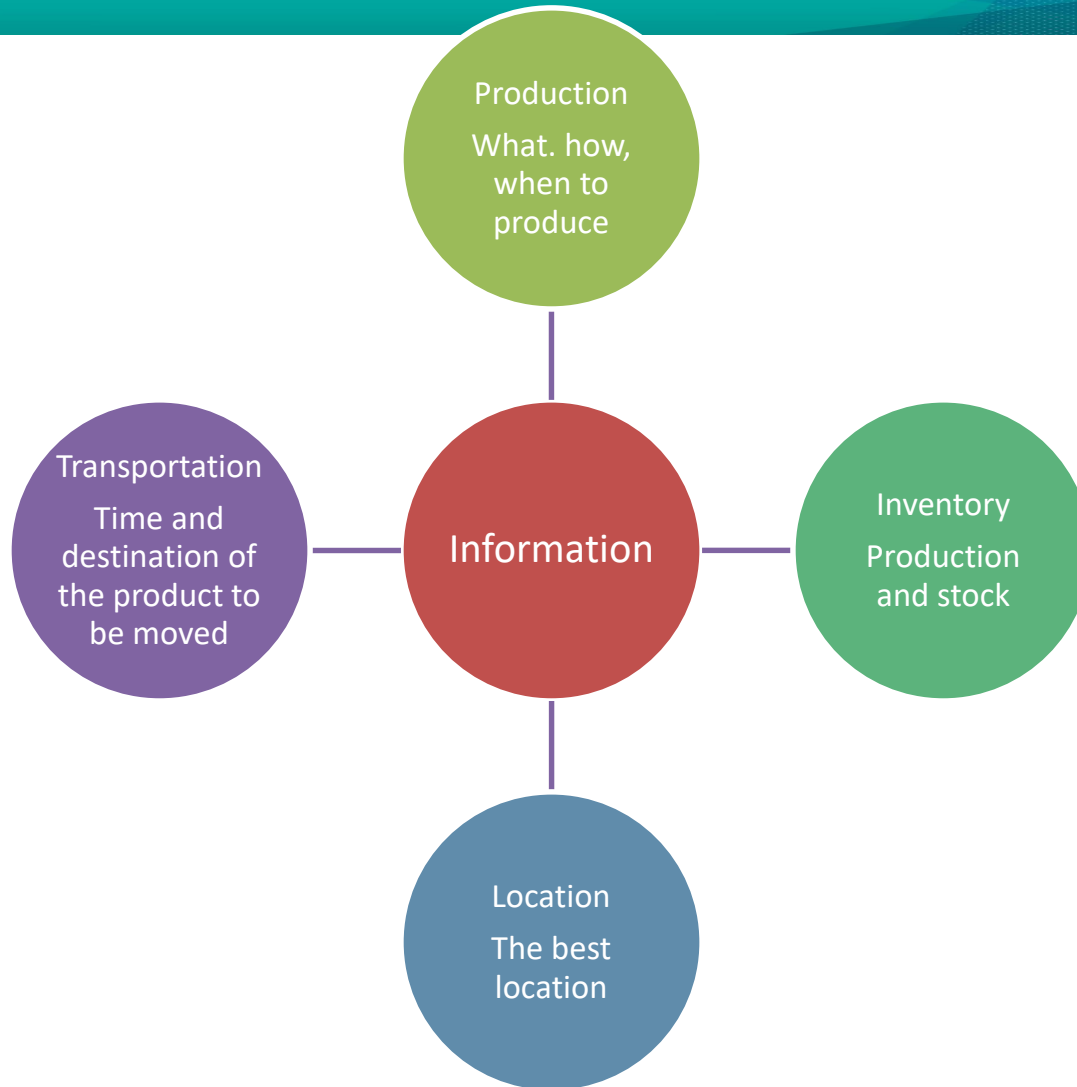
- Traditional flow of SC



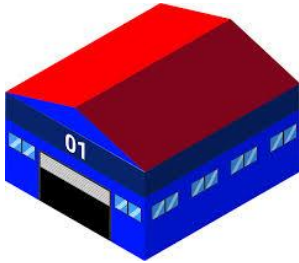
- Extended flow of SC



Classical Drivers in SCM



Extended drivers in SCM



Facilities



Inventory



Transportation



Information



Sourcing

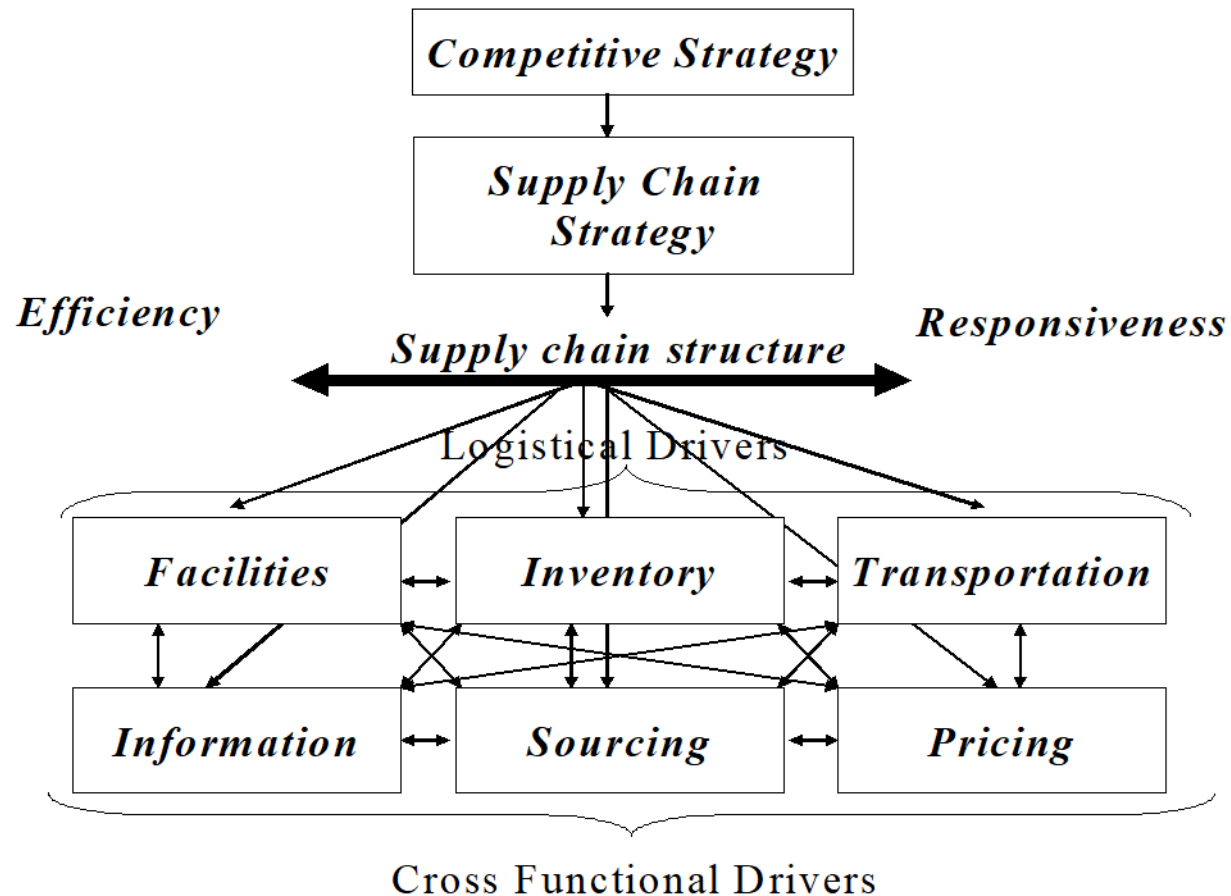


Pricing

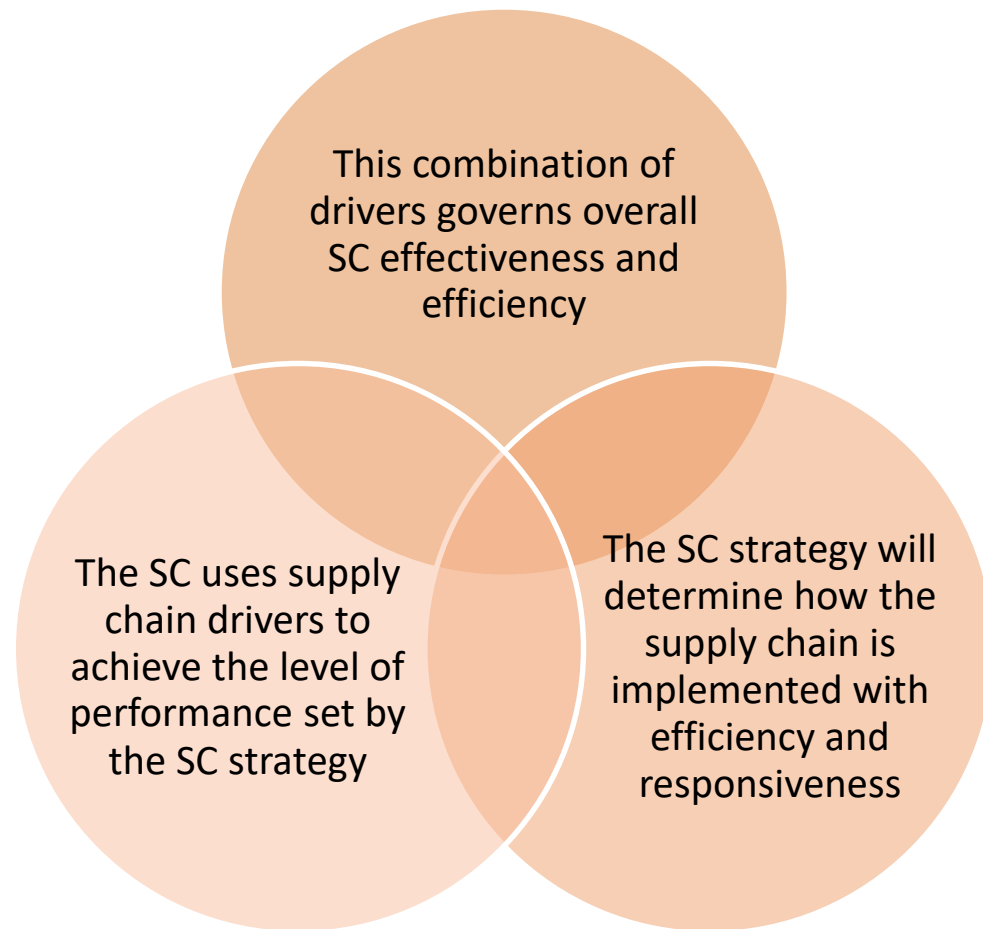


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A Framework for Structuring Drivers



A Framework for Structuring Drivers



DRIVERS ROLE IN SC, COMPETITIVE STRATEGY AND COMPONENTS IN THE DRIVERS DECISION

Driver	Role in SC	Role in Competitive Strategy	Components of the driver's decision
Facilities	<ul style="list-style-type: none"> • Flexible. Dedicated or combined • Product focus or functional focus 	<ul style="list-style-type: none"> • Economies of scale • Higher numbers or smaller facilities 	<ul style="list-style-type: none"> • Location • Capacity • Facility-related Metrics
Inventory	<ul style="list-style-type: none"> • How much/many? • Cost 	<ul style="list-style-type: none"> • Is it the cost? (JIT) <p>Or</p> <ul style="list-style-type: none"> • Quantity? 	<ul style="list-style-type: none"> • Cycle, Safety and Seasonal inventory • Availability of the product • Inventory-related metric
Transportation	<ul style="list-style-type: none"> • Faster mode is good but will incur higher cost 	<ul style="list-style-type: none"> • Faster mode = greater responsibility 	<ul style="list-style-type: none"> • Design of transportation network • Choice of transportation mode • Transportation-related metric



DRIVERS ROLE IN SC, COMPETITIVE STRATEGY AND COMPONENTS IN THE DRIVERS DECISION

Driver	Role in SC	Role in Competitive Strategy	Components of the driver's decision
Information	<ul style="list-style-type: none"> allows coordination of all stages 	<ul style="list-style-type: none"> enable efficient flow of information 	<ul style="list-style-type: none"> Push vs pull Coordination and information sharing Sales and operations planning Enabling technologies Information-related metrics
Sourcing	<ul style="list-style-type: none"> crucial for efficient supply chain 	<ul style="list-style-type: none"> Fully vertically 'Virtual integration' 	<ul style="list-style-type: none"> In-house or outsource Supplier selection Procurement Sourcing-related metrics



DRIVERS ROLE IN SC, COMPETITIVE STRATEGY AND COMPONENTS IN THE DRIVERS DECISION

Driver	Role in SC	Role in Competitive Strategy	Components of the driver's decision
Pricing	<ul style="list-style-type: none">• Amount to be charged	<ul style="list-style-type: none">• Optimal pricing strategies	<ul style="list-style-type: none">• Pricing and economies of scale• Everyday low vs high low pricing• Fixed vs menu pricing• Pricing-related metrics



Conclusion of The Chapter

- **Conclusion #1**
 - SC drivers influence SC strategy performance.
- **Conclusion #2**
 - There are 6 drivers in a SC; facilities, inventory, transportation, information, sourcing, pricing and each of these drivers have their own roles in the drivers decision.

