

SUPPLY CHAIN: AN INTRODUCTION

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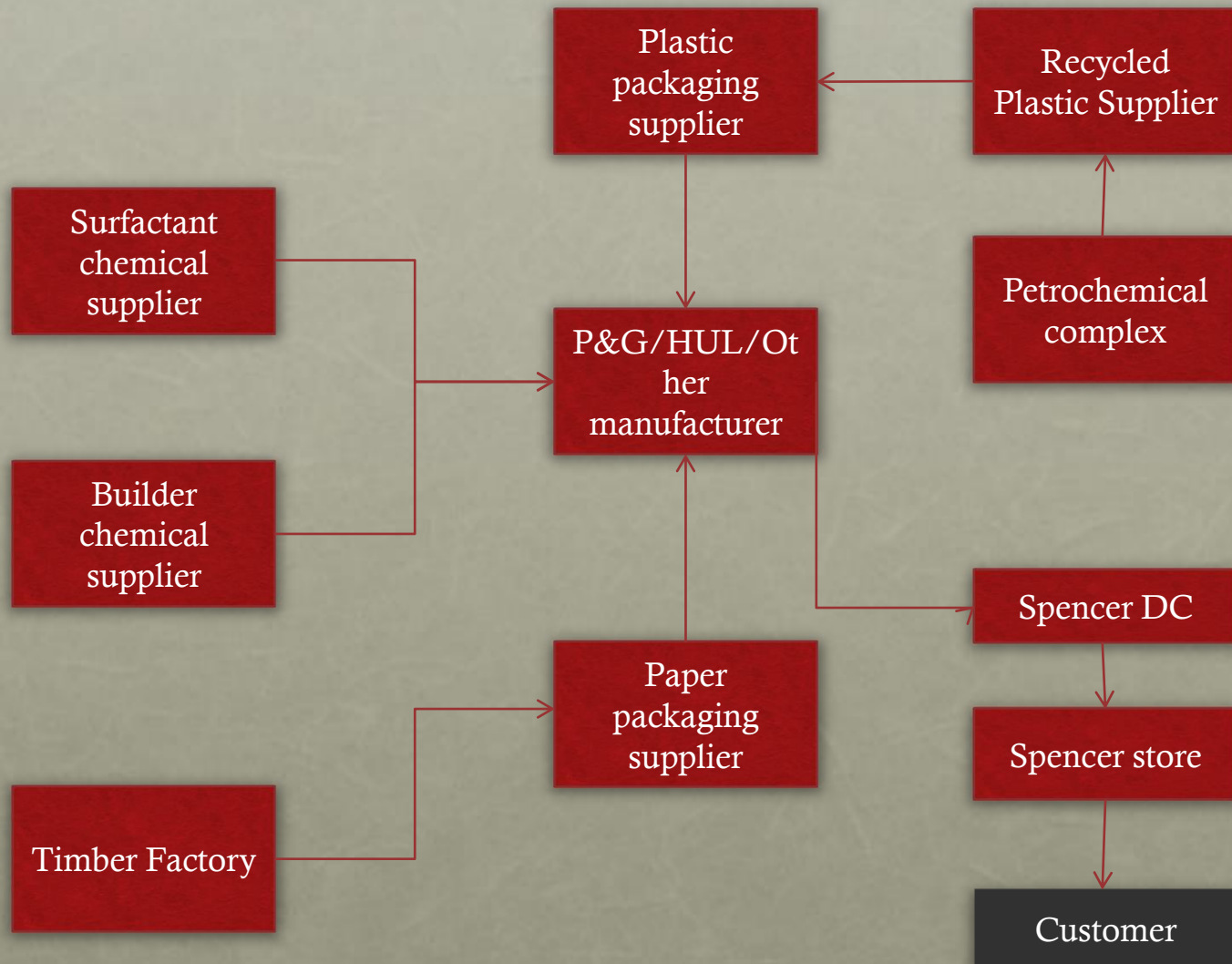


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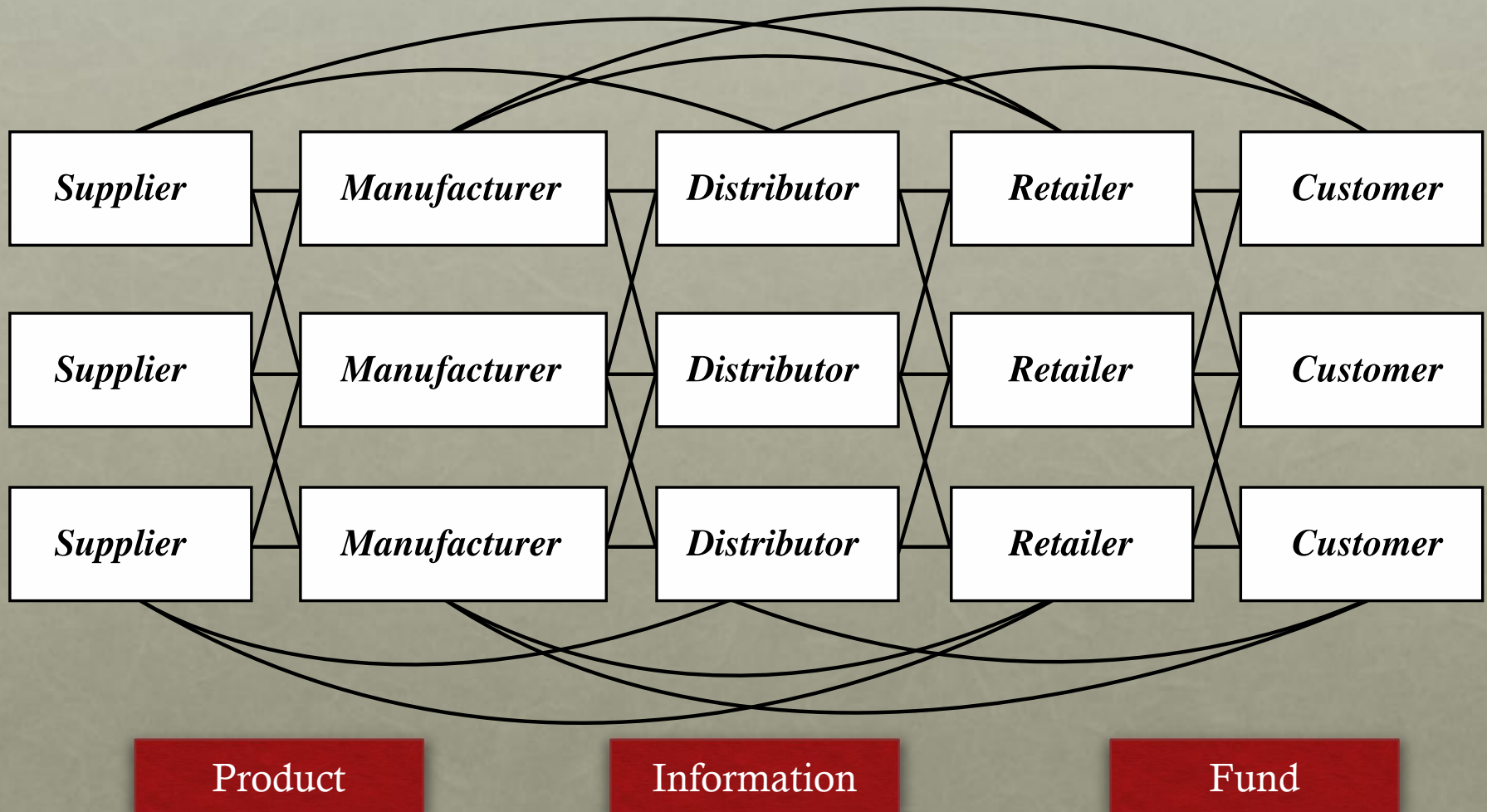


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STAGES OF SUPPLY CHAIN: EXAMPLE



FLOWS IN A SUPPLY CHAIN



TYPES OF SUPPLY CHAIN

Figure 1 Serial Supply Chain

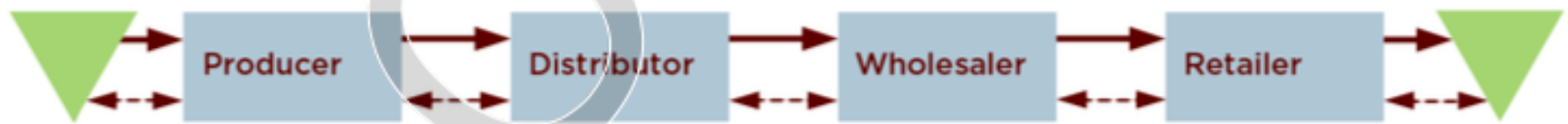


Figure 2 Distribution Supply Chain

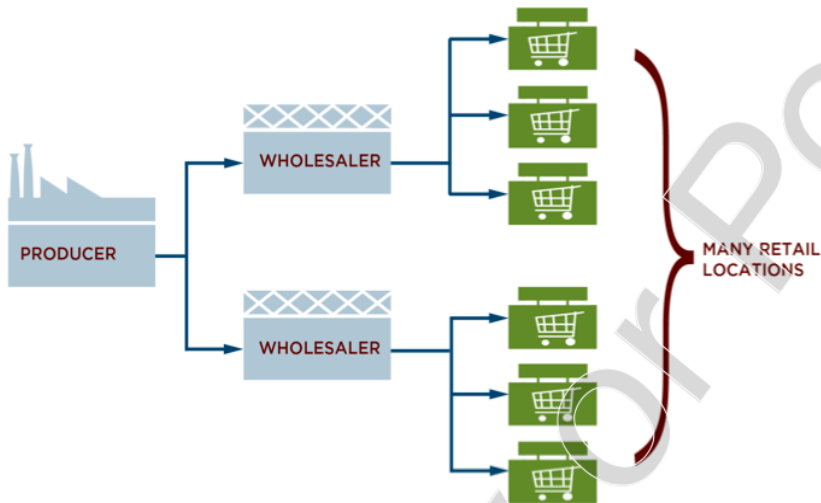
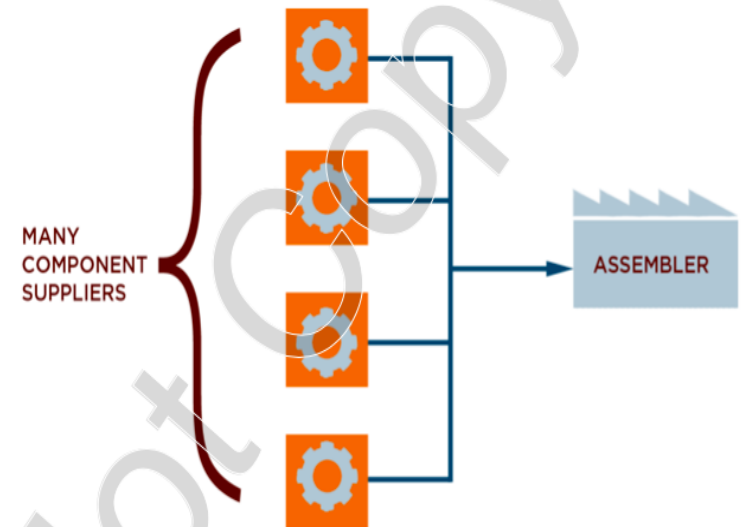


Figure 3 Assembly Network



BEFORE SUPPLY CHAIN MANAGEMENT

- Sourcing, procurement and supply management
 - Primarily in the purchasing area
 - Focuses in reduction of supplier cost and contribution toward bottom line
 - Focuses on the economic procurement and inflow of inputs into the enterprise
- Material management
 - Forecasting, inventory management, stock keeping, scheduling, production planning and control
 - 60% of the cost from materials in manufacturing
- Logistics and distribution
 - Plan, implement and control the forward and reverse flow of goods, services
 - And related information

STAKEHOLDERS

- Customers

Competitor

Market

- Retailers

- Wholesalers/Distributors

- Manufacturers

- Component/raw material manufacturers

Motivator

Enabler

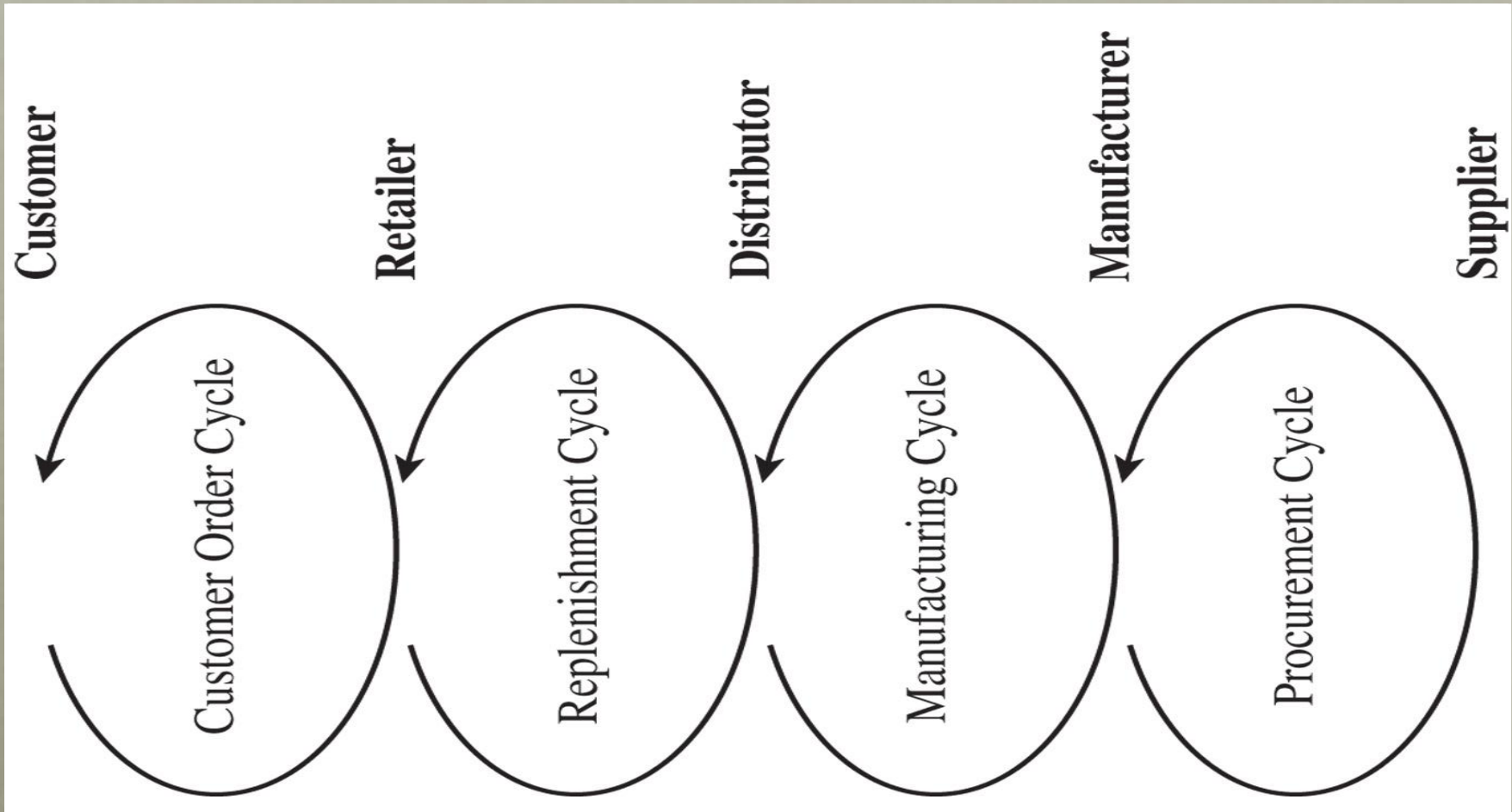
THE OBJECTIVE OF A SUPPLY CHAIN

Retailing in US	Retailing in India
<p>Customers:</p> <ul style="list-style-type: none">- Comfortable in purchasing bulk quantities from malls- Product variety required- Availability required- Quality and brand conscious- Self selection (independent)- Traveling to malls is convenient	<p>Customers:</p> <ul style="list-style-type: none">- Comfortable in purchasing smaller quantities from local Kirana Shops- Product variety not that important- Availability required- Not so much concerned about brands (and quality)- Shop owners opinion counts- Inconvenience in traveling
<p>Costs incurred in supply chain:</p> <ul style="list-style-type: none">- Transportation cost- Inventory holding cost	<p>Costs incurred in supply chain:</p> <ul style="list-style-type: none">- Transportation cost- Inventory holding cost

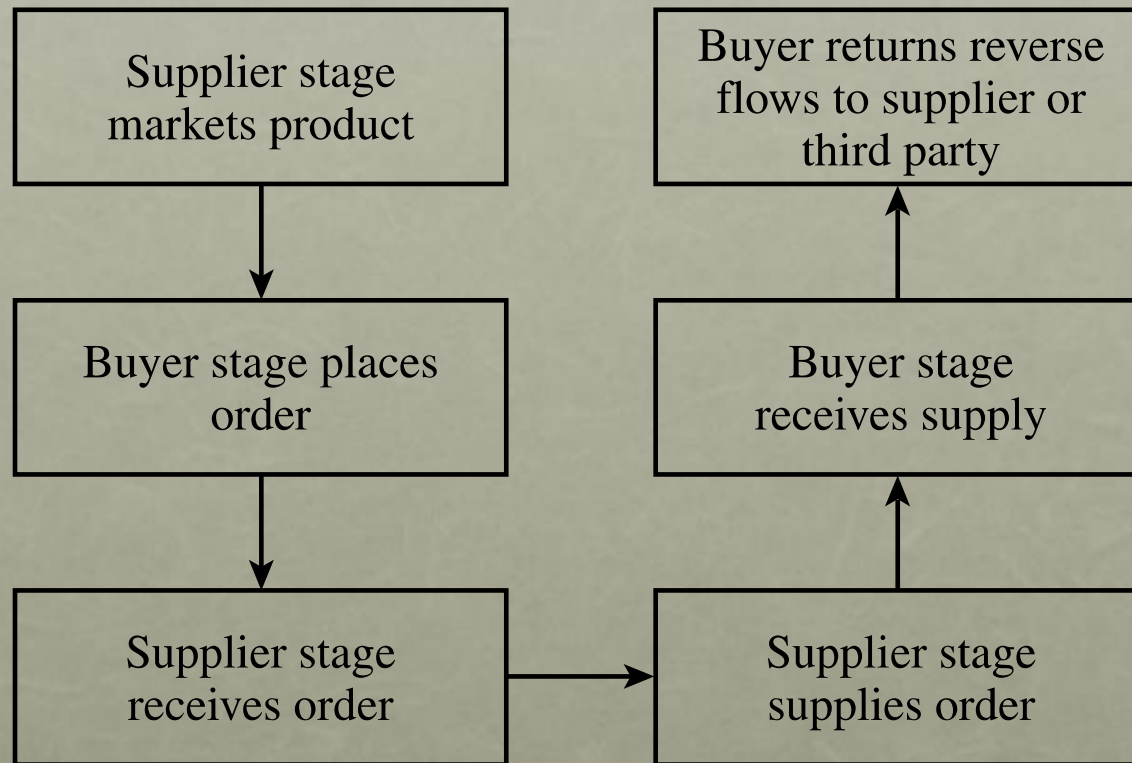
PROCESS VIEWS OF A SUPPLY CHAIN

1. **Cycle View:** The processes in a supply chain are divided into a series of cycles, each performed at the interface between two successive stages of the supply chain.
2. **Push/Pull View:** The processes in a supply chain are divided into two categories, depending on whether they are executed in response to a customer order or in anticipation of customer orders. Pull processes are initiated by a customer order, whereas push processes are initiated and performed in anticipation of customer orders.

CYCLE VIEW OF SUPPLY CHAIN PROCESSES



CYCLE VIEW OF SUPPLY CHAIN PROCESSES



KEY POINT

A cycle view of the supply chain clearly defines the processes involved and the owners of each process. This view is useful when considering operational decisions because it specifies the roles and responsibilities of each member of the supply chain and the desired outcome for each process.

PUSH/PULL VIEW OF SUPPLY CHAINS

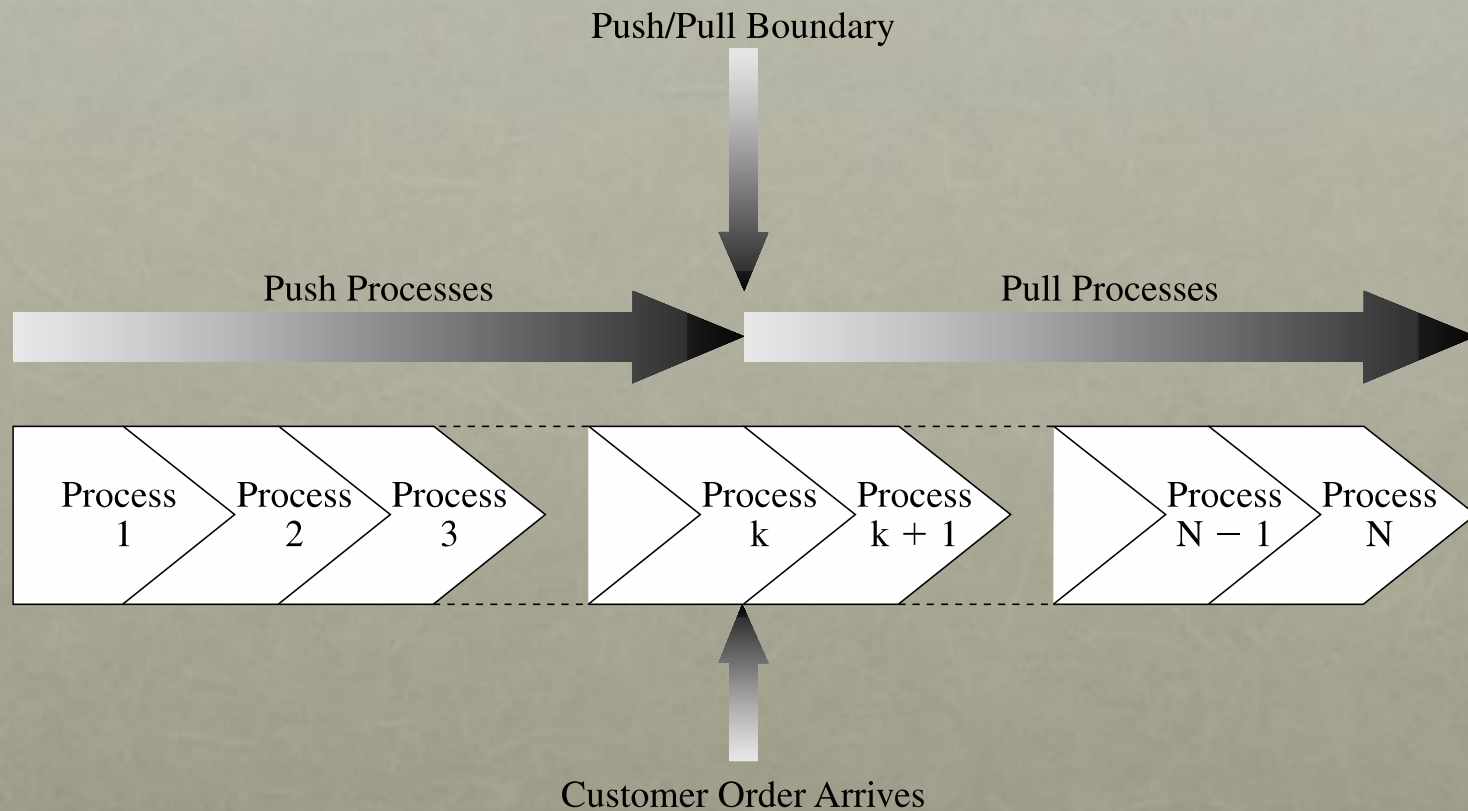


FIGURE 1-5

PUSH/PULL VIEW OF SUPPLY CHAIN PROCESSES

- Supply chain processes fall into one of two categories depending on the timing of their execution relative to customer demand
- Pull: execution is initiated in response to a customer order (*reactive*)
- Push: execution is initiated in anticipation of customer orders (*speculative*)
- *Push/pull boundary* separates push processes from pull processes

QUESTIONS

- What are different types of supply chains? How do they fit different product market requirements?
- What should be the goal of a supply chain—efficiency or responsiveness?
- How can a supply chain be coordinated across all organizations and activities to deliver greater value?
- What are the sources of supply chain risk, and how can this risk be managed?

ATTRIBUTES OF SUPPLY CHAIN TYPES

	Efficient SC	Market Responsive SC
Primary purpose	Meet perishable demand at lowest cost	Minimize excess inventory and stockouts by responding quickly to unpredictable demand
Manufacturing focus	Achieve high efficiency	Have excess capacity
Inventory strategy	Minimize inventory throughout the supply chain	Deploy sufficient inventory to respond to uncertainty
Lead time focus	Reduce lead time as long as cost remains low	Aggressively reduce lead time
Supply chain coordination	Collaborate; centralize; share information to cut costs	Achieve speed and flexibility
Product design strategy	Maximize performance; minimize cost	Invest in new product development to improve effectiveness

