

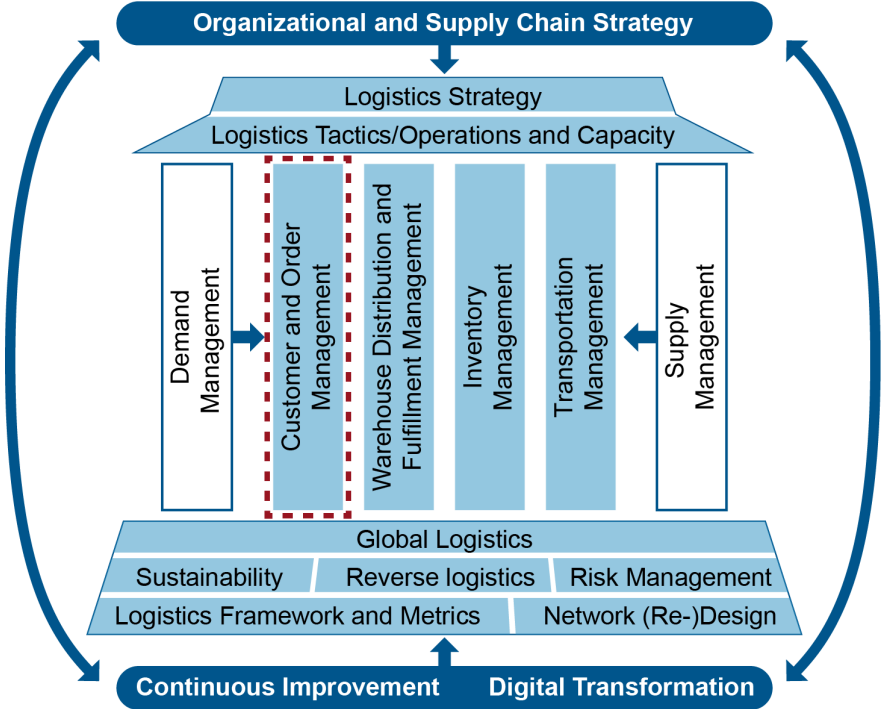
# CLTD

CERTIFIED IN LOGISTICS,  
TRANSPORTATION AND DISTRIBUTION

## MODULE 3: CUSTOMER AND ORDER MANAGEMENT

# Module 3: Customer and Order Management

## Module 3 Overview



# CLTD

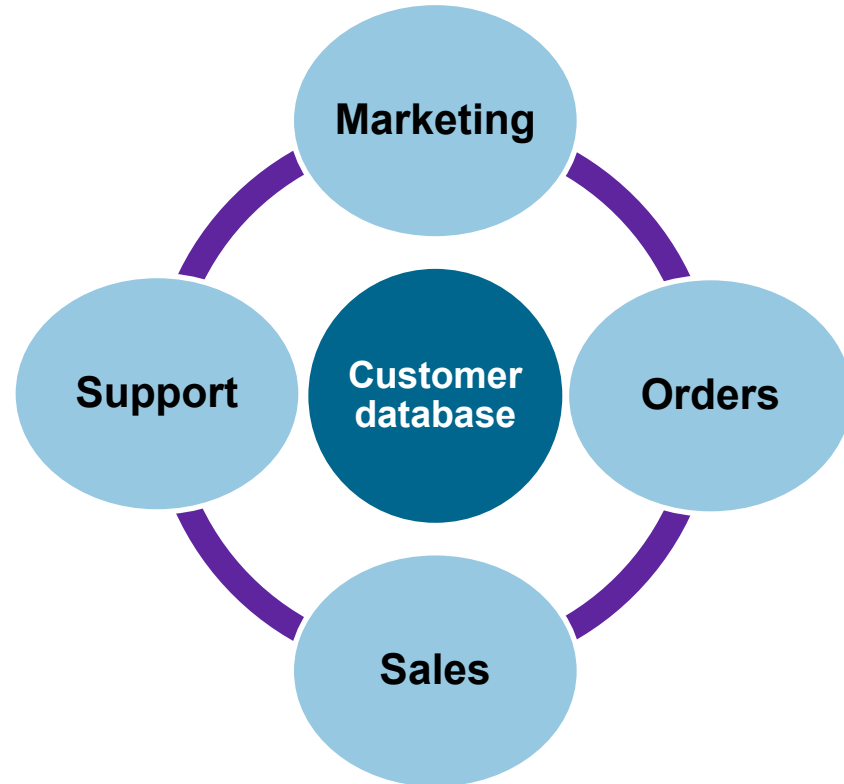
CERTIFIED IN LOGISTICS,  
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## MODULE 3, SECTION A: ENABLE CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

# Understand CRM and Apply Customer Segmentation

## CRM, Defined

- Marketing philosophy based on putting the customer first
- Support customer needs through:
  - Account management
  - Catalog and order entry
  - Payment processing
  - Credits and adjustments



## Customer Service Variables

### Pre-transaction variables

- Set customer expectations
- Customer service policy in writing
- User-friendly order taking

### Transaction variables

- Reliable, consistent, and professional
- Anticipate questions and concerns

### Post-transaction variables

- Quality follow-up
- Prompt and accurate invoicing process
- Communication is key

## Customer Segmentation

- Groups relevant to marketing
- Demographics and attributes
- Operationalized segmentation for logistics
  - Logistics requirements
  - Customer behavior
- Logistics service level

Segment customers by:

- Market
- Value
- Physical characteristics
- Geography
- Sales/demand
- Preferred mode
- Network
- Organization type

# Understand CRM and Apply Customer Segmentation

## Operationalizing Segments Based on Value Proposition

### Low-cost

- Lean supply chain
- Reliable, on time, in full, consistent quality, no surprises

### High demand variability

- Agile supply chain
- Timely response to volume/product change
- Flexible capacity

### Project-driven

- Plan-based approach with tight change control
- Timing and specifications compliance
- ETO to deadline

### Long-term collaboration

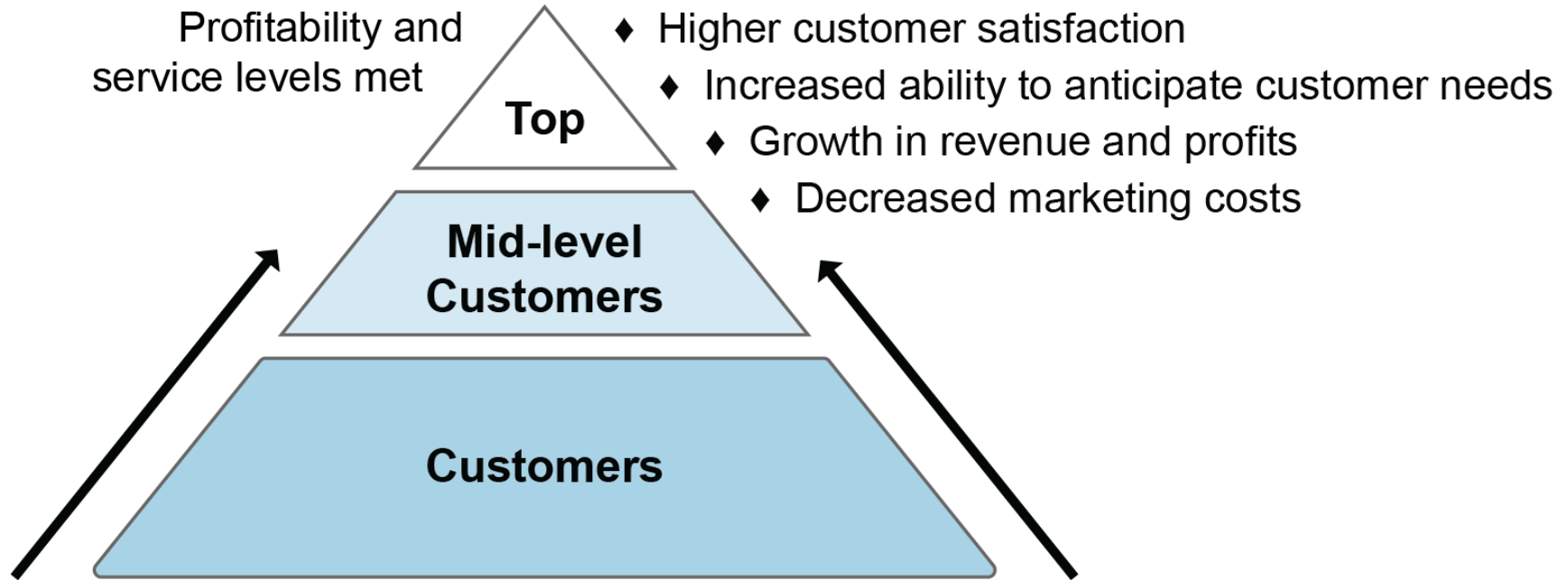
- Mutual gain: consistent quality, pricing, delivery timing, and supply
- Insights, strategy, tactics, operations

### Innovative/emergency capacity

- New types of capacity developed rapidly
- Innovative solutions

# Understand CRM and Apply Customer Segmentation

## Lifetime Customers



## Lifetime Customer Value (LCV)

- Customer profitability metric
- Predict net present value of future profits
- Focus on long-term health
- Rate and cost of customer acquisition
- Customer marginal profit increases and retention

# Understand CRM and Apply Customer Segmentation

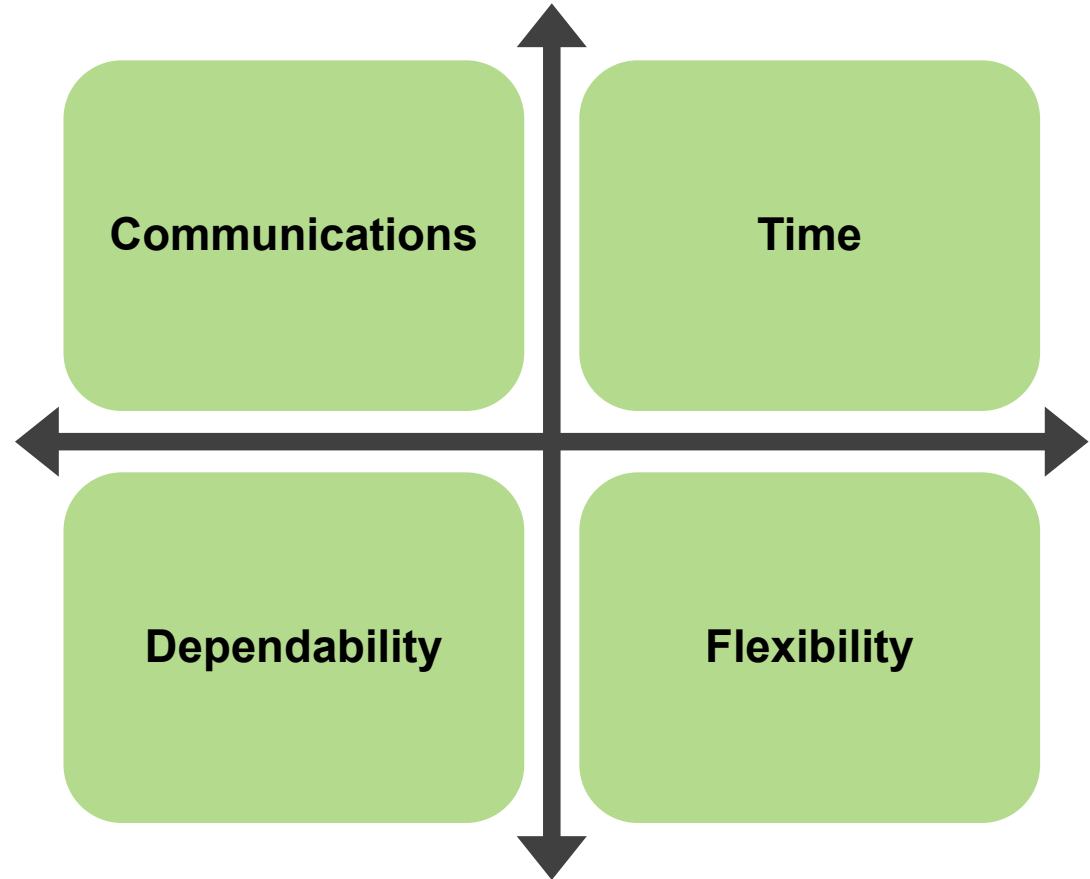
## Operating Profit versus Cost

	Low Cost	High Cost
High Operating Profit	Protect	Improve or transform supply chain
Low Operating Profit	Build relationship	Influence, upcharge, shift, or avoid

# Understand CRM and Apply Customer Segmentation

## Customer Expectations of Buying Experience

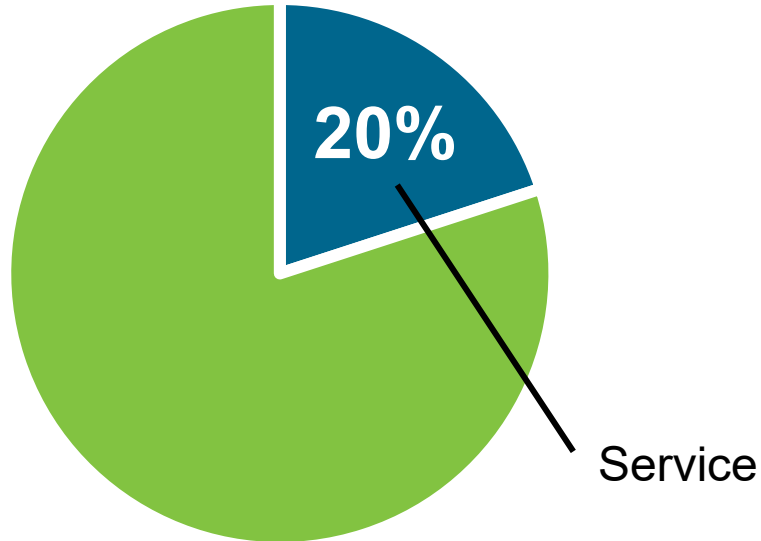
Ease of doing business in four areas



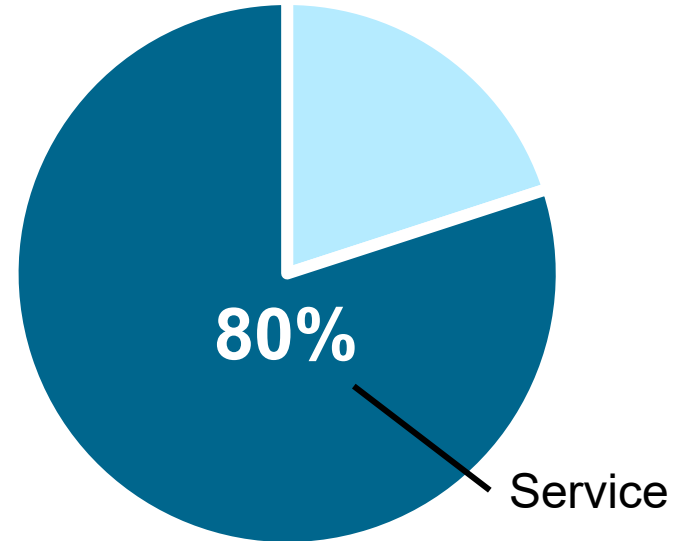
# Understand the CRM Process

## Service and the 80-20 Rule

**Total costs**

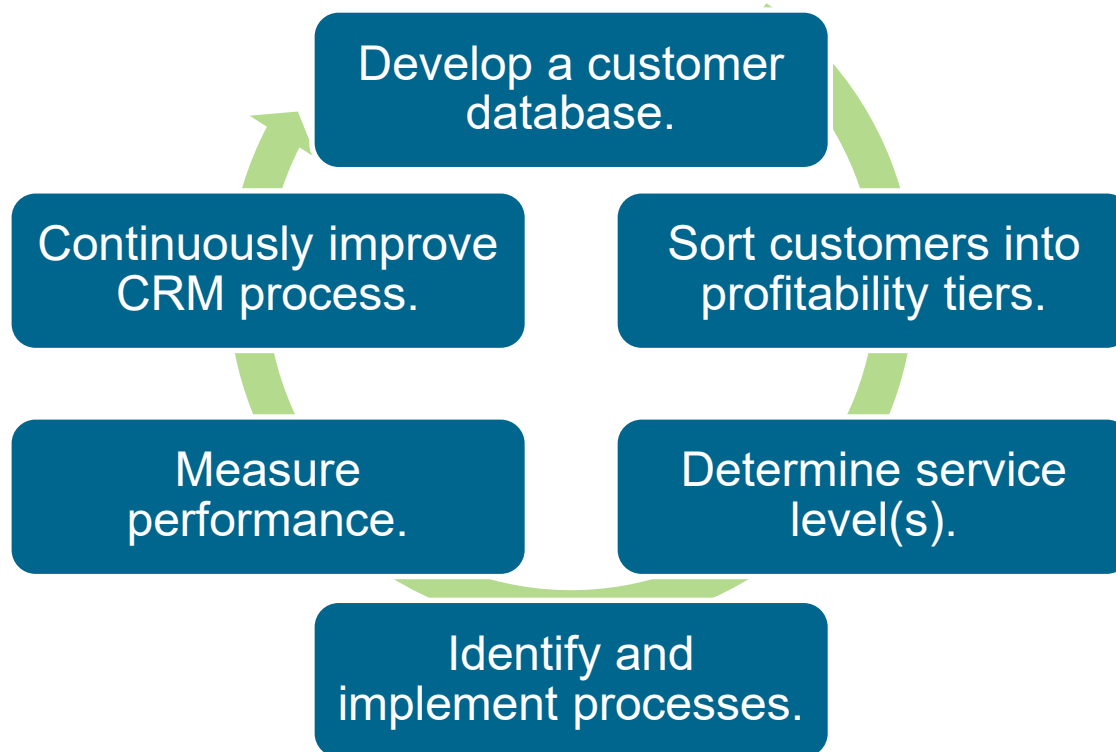


**Customer satisfaction**



# Understand the CRM Process

## Steps to the CRM Process



## Methods for Determining Customer Profitability

Use results to rank from high to low and group into tiers by profitability.

- Single allocation criteria
- Activity-based costing
  - Operating Profit Contribution  
= Gross Profit – (Invoices × Average Cost/Invoice)
- Cost-to-serve

## Determine Proper Customer Service Levels

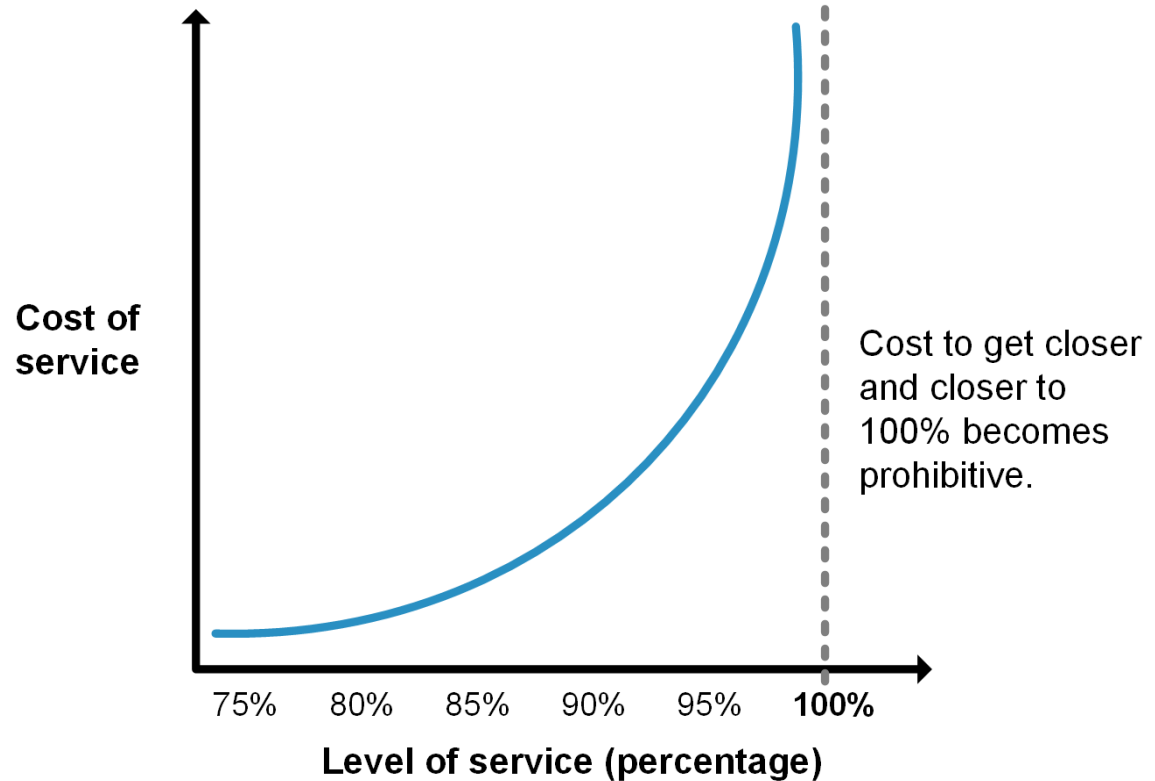


1. Identify what each customer segment values.
2. Categorize service components.
3. Prioritize by segment or customer tier.
4. Establish service level metrics.
5. Benchmark vs. competitors: relative service.
6. Do a gap analysis.
7. Design product/service to exceed minimum requirements.
8. Analyze business case.
9. Monitor and control.

# Understand the CRM Process

## Economic Constraints on Level of Service Offered

Excessive safety stock and preparedness measures become unprofitable near 100% service level.



# Facilitate Customer Service Management (CSM)

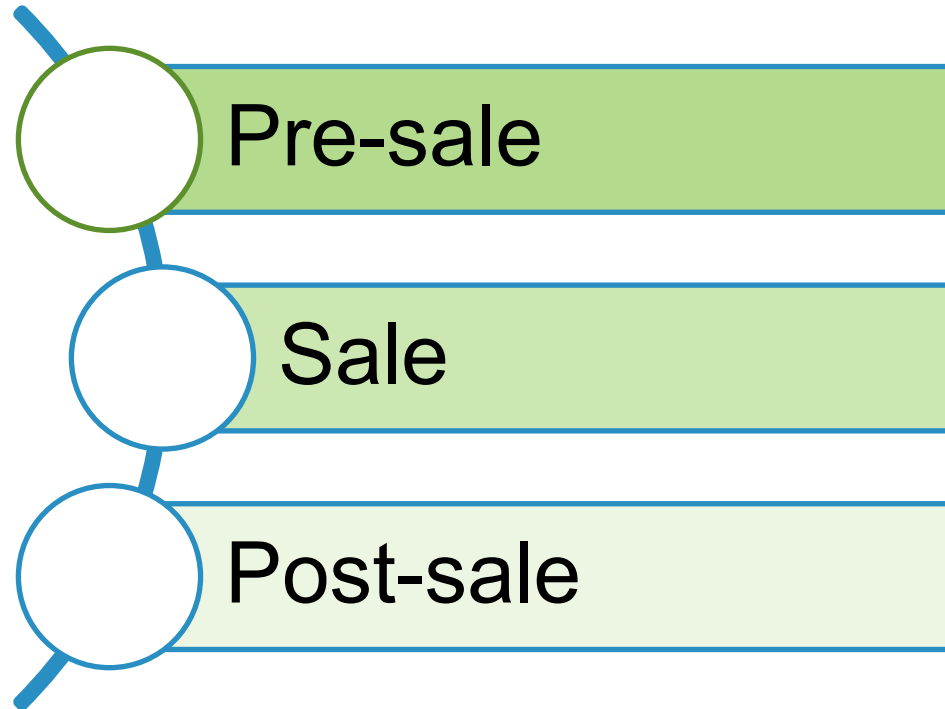
## Customer Management Elements

Measure over time against goals and benchmark competitors.

- Reputable
- Accessible
- Informed
- Informative
- Responsive
- Confidential
- Capable
- Honest
- Consistent
- Dependable

# Facilitate Customer Service Management (CSM)

## Service Level Agreements (SLAs): Metrics for



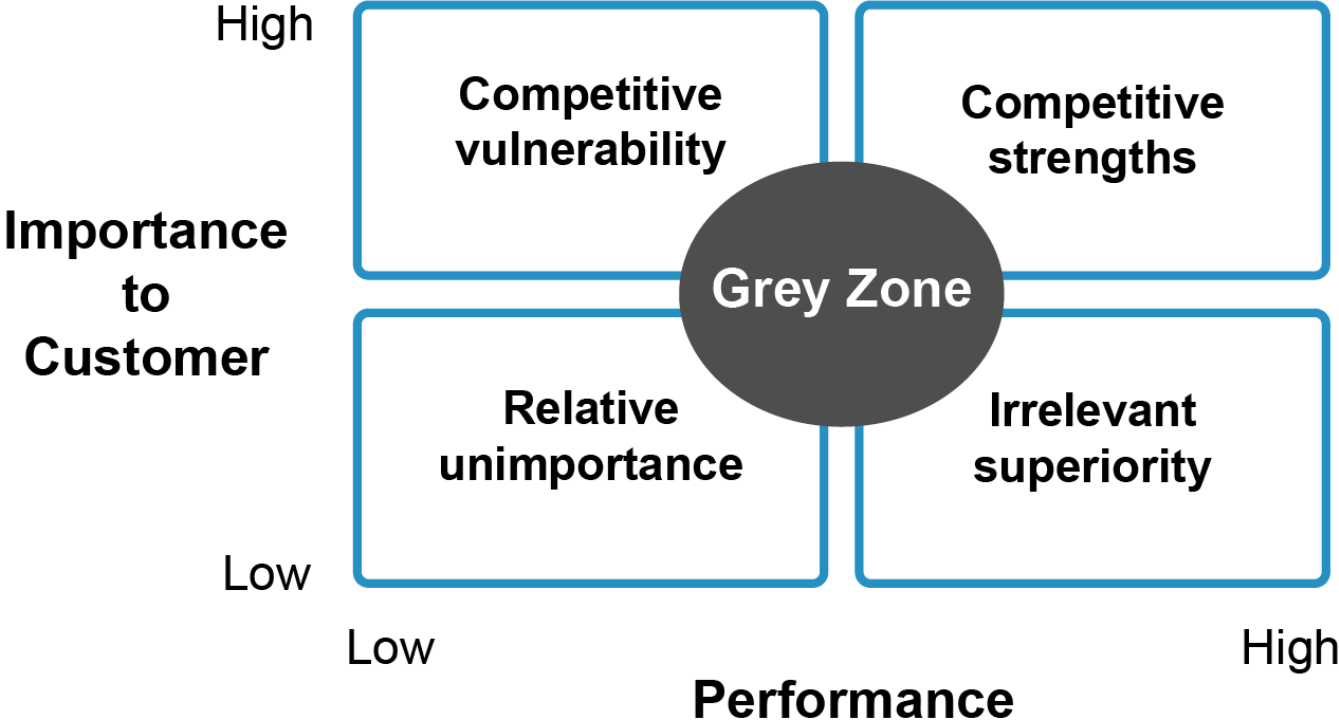
# Facilitate Customer Service Management (CSM)

## Customer Service Management Strategy Development

1. Analyze current relationships.
2. Research expectations and preferences.
3. Benchmark other organizations.
4. Identify strengths/weaknesses per service element.
5. Calculate benefit-cost ratio and other financial analysis.
6. Select tools and technologies.
7. Implement strategy.
8. Measure performance and identify improvement areas.

# Facilitate Customer Service Management (CSM)

## Service Element Analysis



Adapted from source: David F. Ross, *Distribution Planning and Control—Managing in the Era of Supply Chain Management*, third edition. Used with permission.

# Facilitate Customer Service Management (CSM)

## Implement Strategy

### Customers

- Value-added services
- Better communication

### Employees

- Streamline workflows
- Encourage continuous improvement

### Supply channel participants

- Competitive pricing
- Benefits: Incentive to keep customer as priority

### Shareholders

- Return on investment
- Earn customers' loyalty

# Facilitate Customer Service Management (CSM)

## Sales and Marketing Support



Customer contact team



Customer service policies



Troubleshooting

# Facilitate Customer Service Management (CSM)

## Technical Support, Service, and Parts

- Product recalls
- Replacement parts
- Claims and returns
- Repairs, installation, and warranties

# Facilitate Customer Service Management (CSM)

## Customer Service Ratio (Fill Rate)

- A measure of delivery performance of finished goods
- Percentage of product delivered compared to the amount ordered by the customer
- Variations in fill rate include:

Monetary  
value

Unit  
(SKU,  
eaches)

Line item

Order

## Stockout Frequency

Evaluates management of stockouts.

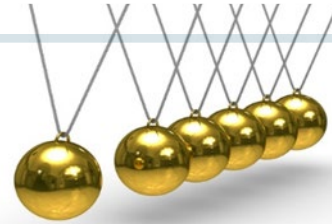
- Monetary value of items ordered that are in stockout
- Percentage of items that are in stockout
- Average age of stockouts
- Average time to recover items from stockout

# Facilitate Customer Service Management (CSM)

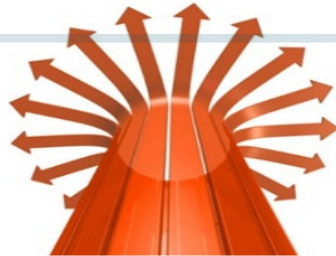
## Lead Time Monitoring



Speed of performance



Flexibility



Consistency



Malfunction recovery

## Speed of Performance

### **Common metrics for measurement**

- Delivery lead time
- Time to process a customer-requested change
- Time to respond to a customer query
- Average wait time to connect on 800 number or chat
- Percentage of calls that encounter a busy signal
- Percentage of abandoned calls to customer service

# Facilitate Customer Service Management (CSM)

## How Effective at Doing What Matters to Customer?



### Process

- Delivery lead time
- Profit margins
- Billing adjustments
- Customer complaints
- Emergency response
- Customer order perfect condition
- Damaged goods
- Inventory distance
- On-time delivery



### Product

- Design, attractiveness
- Fitness for use, ease of use
- Packaging convenience (protection, information, quantities, storage)
- Service frequency
- Failure rate



### Satisfaction

- Customer access to inventory and order status
- Customer complaint analysis/response analysis
- Customer social media/comments
- Focus group feedback

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## MODULE 3, SECTION B: ENABLE OUTBOUND AND INBOUND ORDER MANAGEMENT

# Set Strategy and Tactics for Outbound and Inbound Orders

## Order Management Process

### Purchasing Orders

- Order placement
- Monitoring
- Receiving
- Acceptance
- Payment of supplier

### Manufacturing Orders

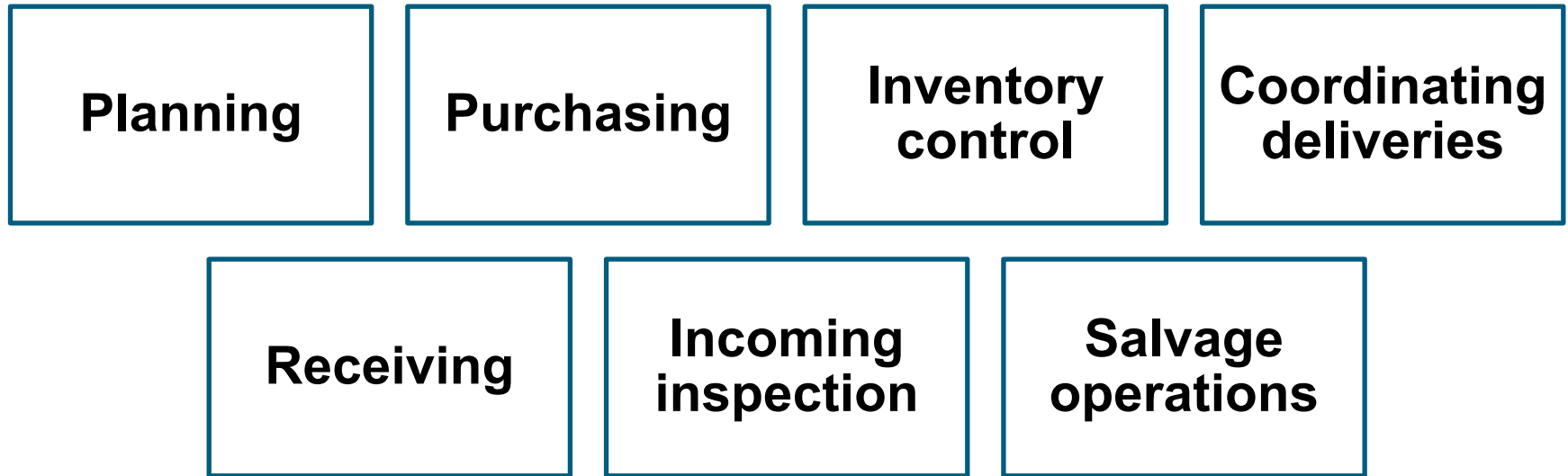
- Order release
- Scheduling and routing
- Production and control
- Customer receipt or receipt into finished goods inventories

### Customer Orders

- Order promising
- Order entry
- Order pick
- Pack and ship
- Billing
- Account reconciliation

# Set Strategy and Tactics for Outbound and Inbound Orders

## Procurement and Inbound Logistics



# Set Strategy and Tactics for Outbound and Inbound Orders

## Intracompany, Transfer, and Outbound Orders

### Intracompany Orders

- Same legal entity
- No legal restrictions
- No tax implications

### Transfer Orders

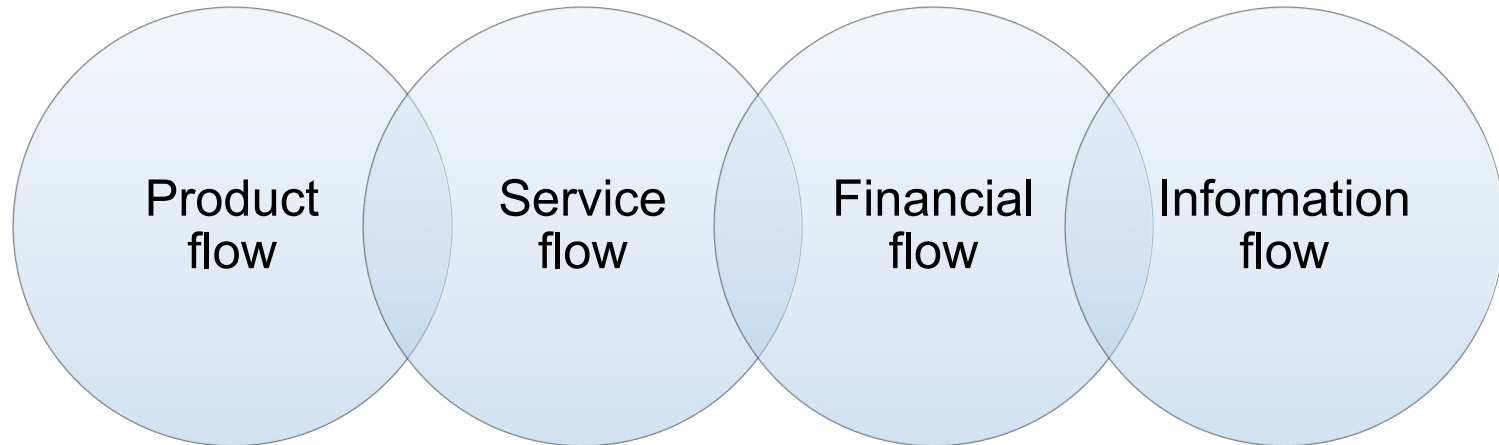
- Not same legal entity (e.g., different divisions)
- Legal restrictions
- Tax implications
- Transfer pricing if international

### Outbound Orders

- Shipping and holding completed products until received by customer
- Core logistics responsibility
- Sales and marketing are stakeholders
- Coordinate flows and minimize total cost

## Supplier Relationship Management (SRM)

- Uninterrupted flows of materials and services
- Competitively priced raw materials and components
- Ability to prescreen suppliers



## Vendor-Managed Inventory (VMI)

- Vendors and customers collaborate on inventory planning.
  - For raw materials or finished goods per service level agreement (SLA).
  - Know what items are vendor managed and report issues.
- Vendor manages restocking.
  - Gets demand information directly: shorter lead time.

# Set Strategy and Tactics for Outbound and Inbound Orders

## Retail Order Management

- Inbound from many sources
- Prevent inventory accumulation
- Perishability
- Seasonality
- Inventory management system
- Planograms



## Inbound Lead Time

- Make suppliers aware of order earlier to shorten their lead times.
- Time components:
  - Order preparation
  - Queue
  - Processing
  - Move/transportation
  - Receiving
  - Inspection



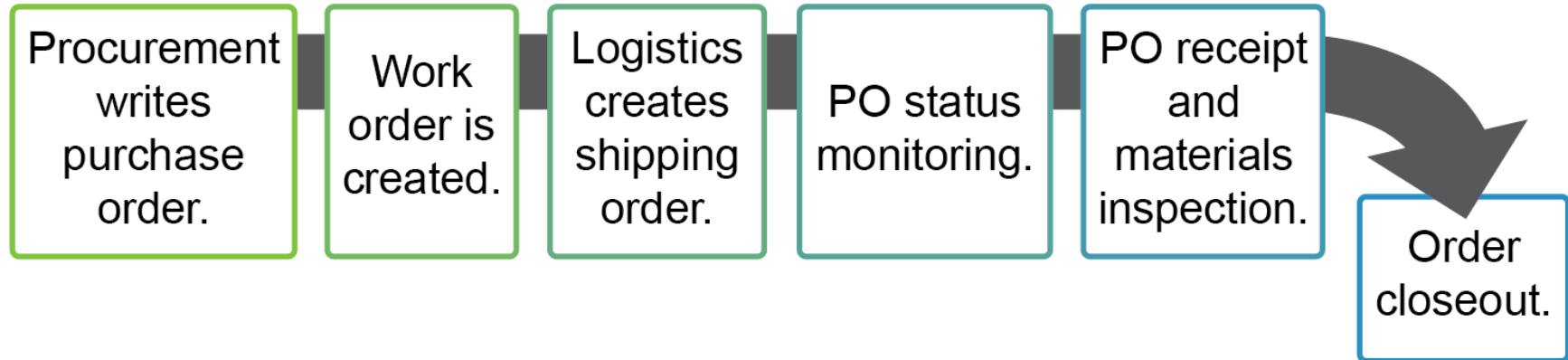
## Tactical Level: Routing Guides

Simple list of carriers or detailed inbound, outbound, freight returns, regional routing information, origin-destination tables

- Order management software requirements
- Shipper setup (before first shipment), CTPAT validation, user profile
- DC addresses and codes
- General shipping instructions
- Supplier packaging constraints:
  - Dimensions for racking
  - Weight limits
  - Material-handling equipment
- Approval-to-ship instructions
- Traffic, road construction, tolls
- Customer order schedule

## Operational Level: Inbound Logistics Process

- Work order: ERP directs inbound logistics to procure shipping services.
- Shipping order: May be for multiple POs. Instructions.



## Transportation Plan

- Optimum carrier/vehicle
  - Freight consolidation opportunities
  - Delivery data
- TMS
- Factory gate pricing
- Freight forwarders

## Advanced Shipping Notices (ASNs)

- Give consignee (buyer) time to plan shipment arrival
- Allow buyer time to arrange delivery appointments
- Enable buyer to redeploy shipment contents
- Reduce uncertainty in order replenishment
- Many countries require ASN to customs authorities.
  - U.S. example: Importer Security Filing or “10+2 rule”

## Ensuring Timely Arrival

### Order tracking (mainly B2C)

- Ability to determine physical location and supply chain status
- Supply chain event management systems

### Order visibility (mainly B2B)

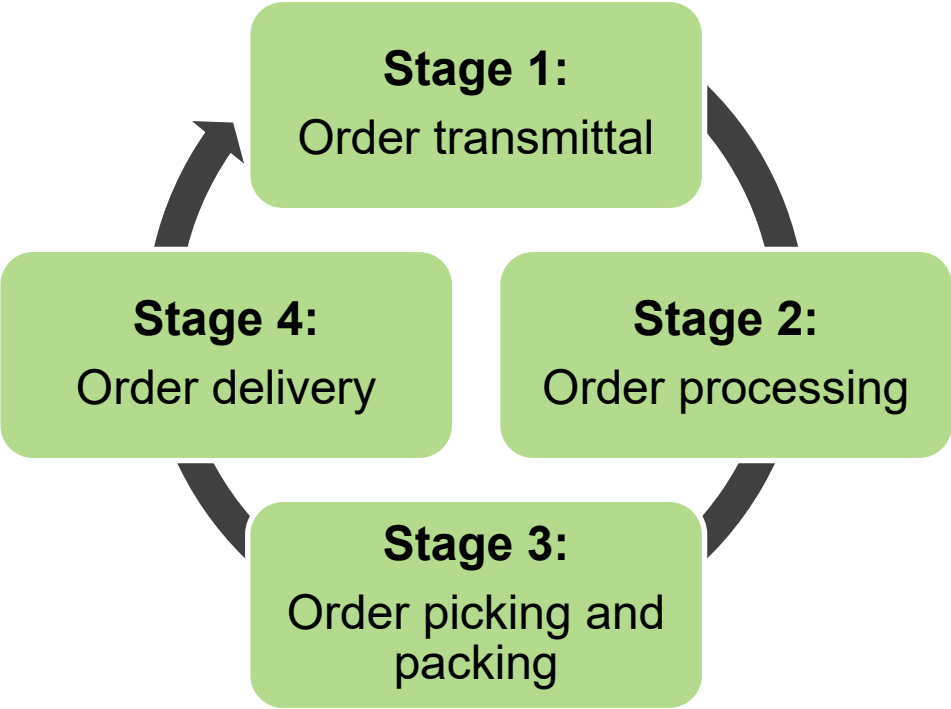
- Ability to locate and view real-time status.
- POs, SKUs in transit
- Role-specific views
- Documentation and regulatory compliance of suppliers

## Order Receipt and Quality Inspection: Effective Receiving



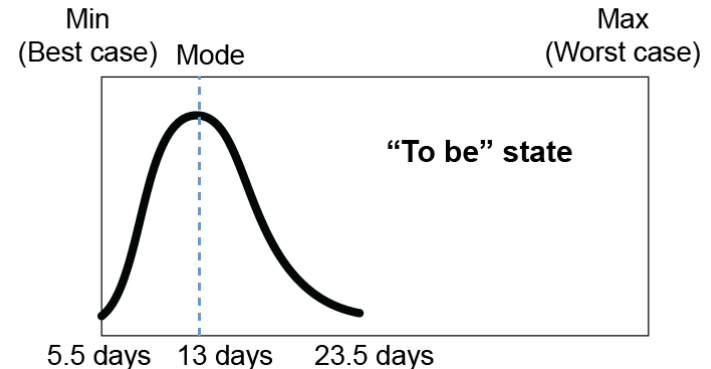
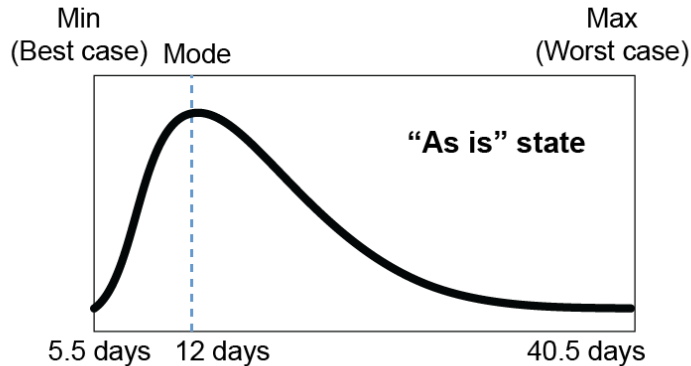
- Coordinate delivery schedule with carriers.
- PO and freight bill vs. receipt date.
- Combine products into groupings.
- Prepare receiving report.
- Move materials and ensure recipient sign-off.
- Coordinate receiving with put-away.

# Outbound Logistics and Order Cycle Stages



## Order Cycle Time

- Example: To-be plan is to reduce variance.
- Tradeoff: Slightly longer mode.



Source: Adapted from Donald J. Bowersox, David J. Closs, M. Bixby Cooper, and John C. Bowersox. *Supply Chain Logistics Management*, 2013.

## Order-to-Cash (OTC) Cycle

- Factors in time for receipt of payment for order.
- Performance used as metric for customer service:
  - Longer order cycles require buyers to have more inventory.
  - High variability in order cycle requires more safety stock.
  - Longer and more variable cycles require investing more cash.



## Tracking and Measuring Supplier Performance

Delivery reliability

Quality

Price index

Delivery date

Responsiveness

Promised quantity

## Key Performance Indicators (KPIs) for Carriers

### Service Quality

Perfect order

Freight safety and protection

Billing accuracy

Transit time

### Service Efficiency

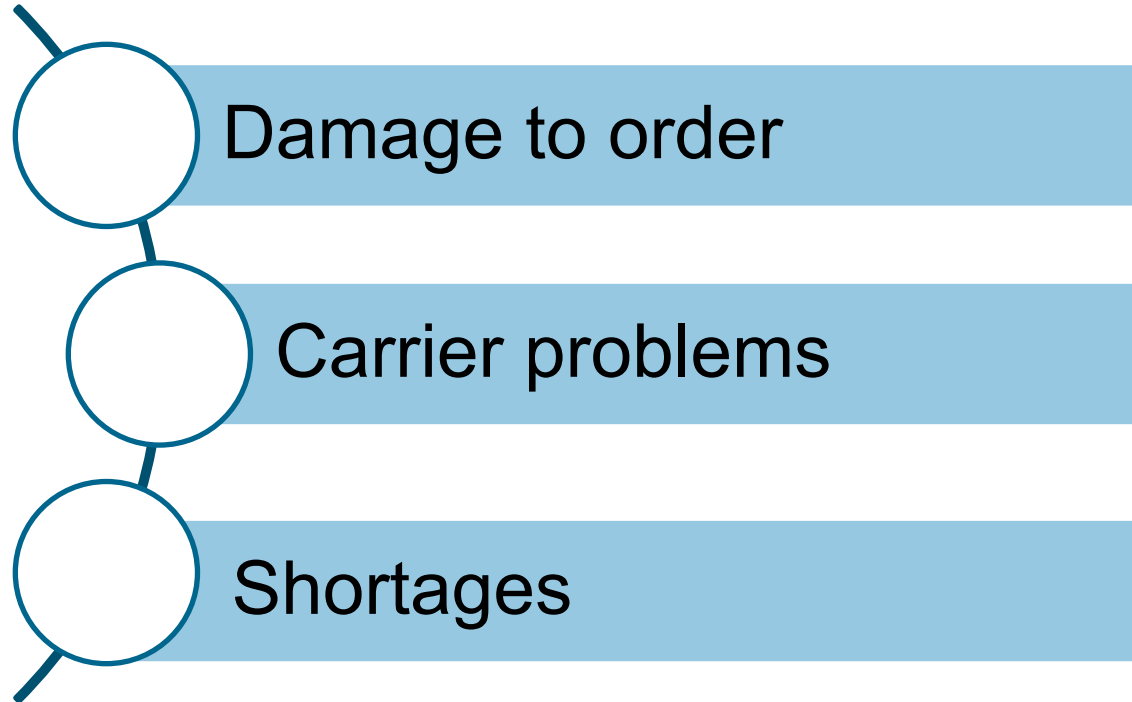
Value added

Aggregate efficiency

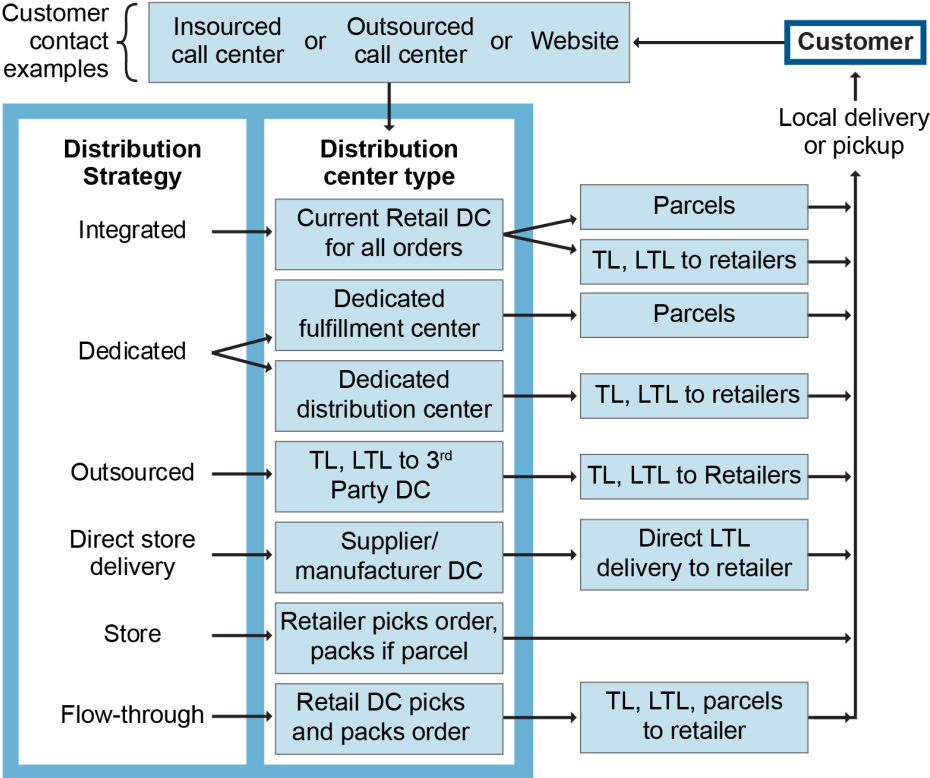
Equipment efficiency

Organizational efficiency

## Exceptions and Change Management



# Order Channels and Distribution Strategies

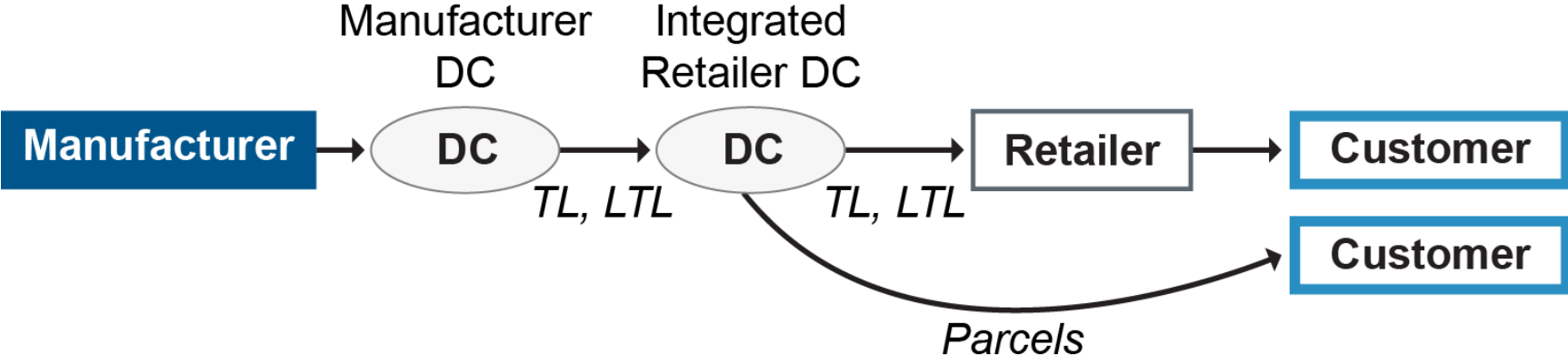


Basic functions of any distribution network:

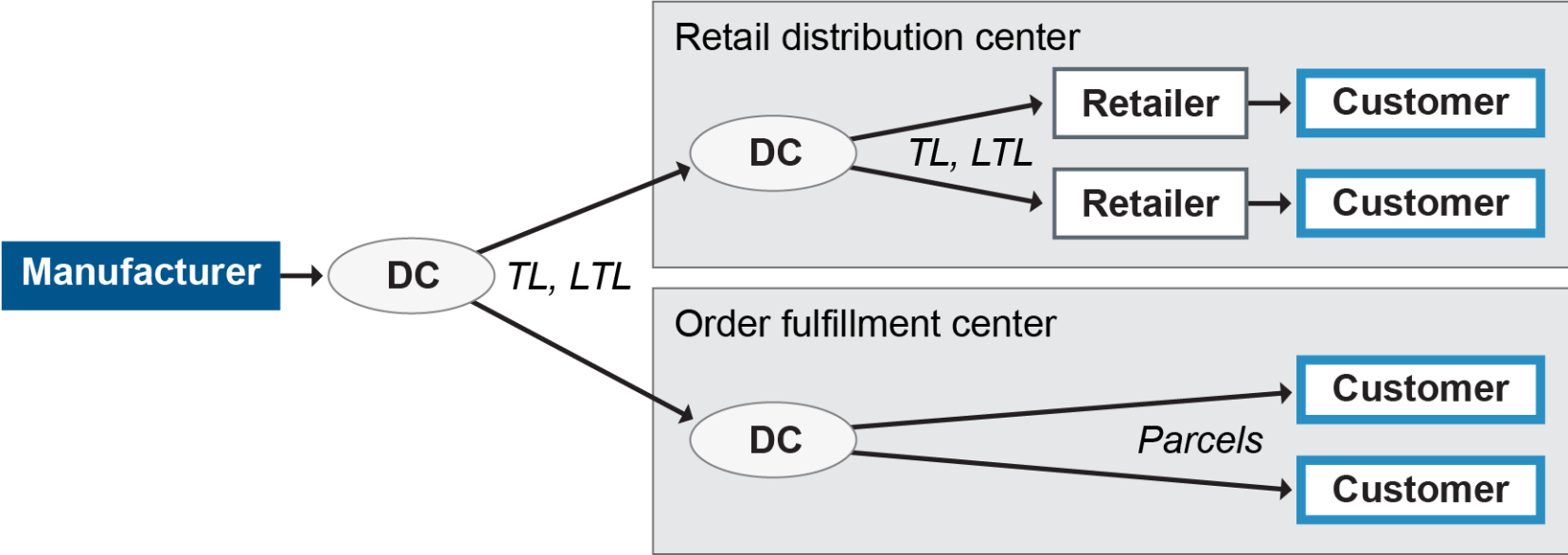
- Sortation
- Accumulation
- Allocation
- Assortment assembly

# Integrated Fulfillment

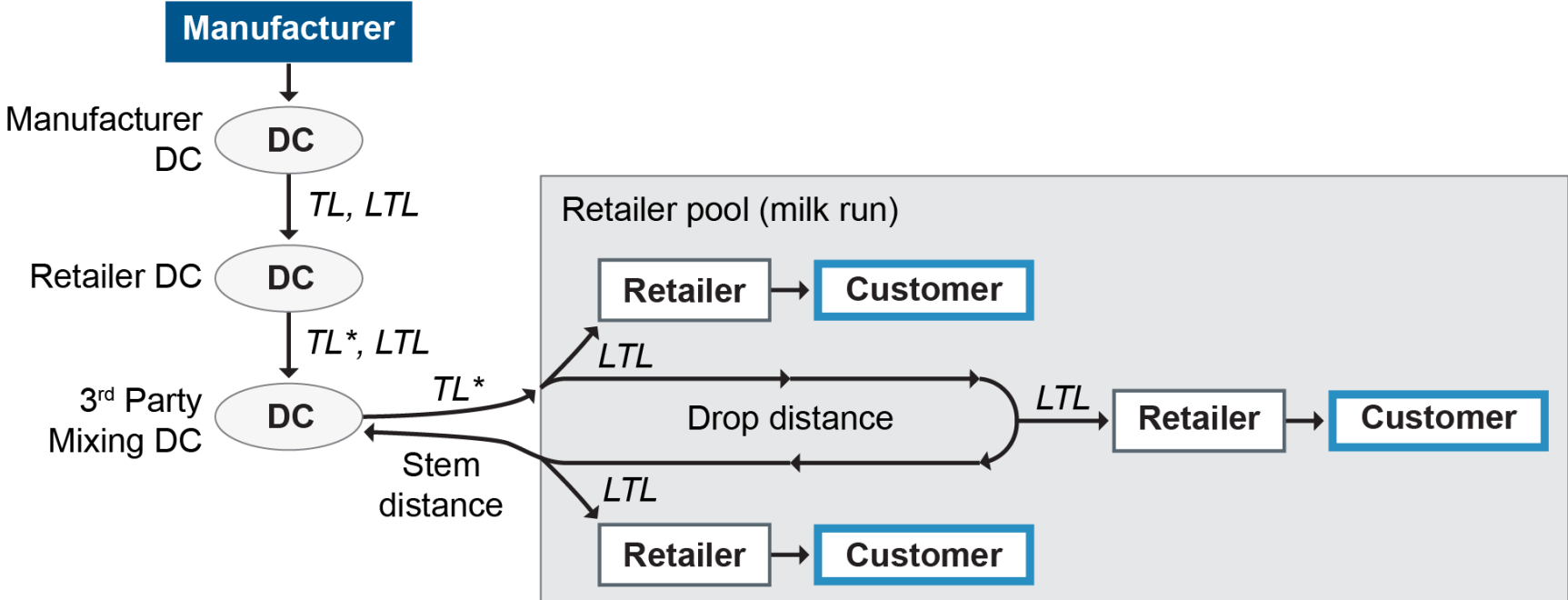
- Leverage existing retail DC to add internet parcel fulfillment without large capital expenses



# Dedicated Fulfillment



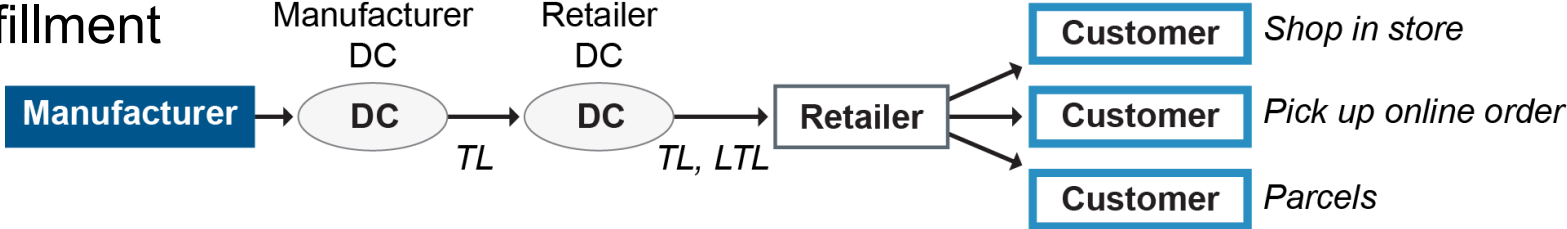
# Outsourced Fulfillment (e.g., Pool Fulfillment)



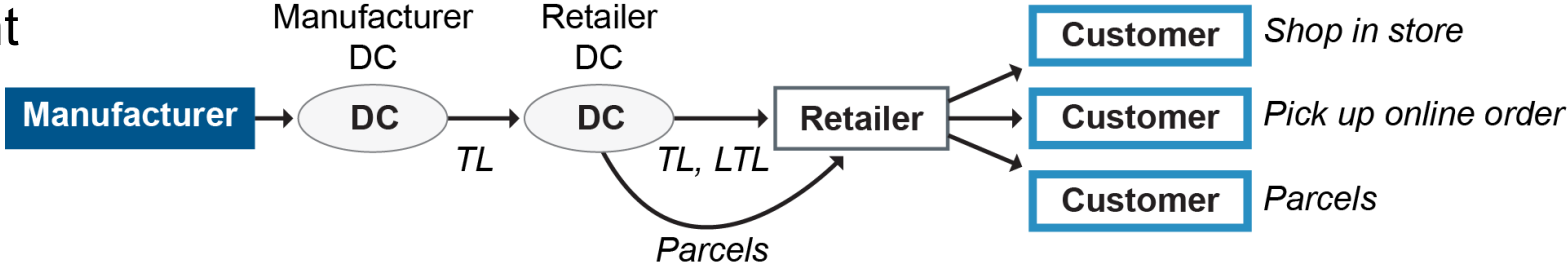
$TL^*$  = Full TL shipments of multiple LTL orders

# Store Fulfillment and Flow-Through Fulfillment

## Store Fulfillment

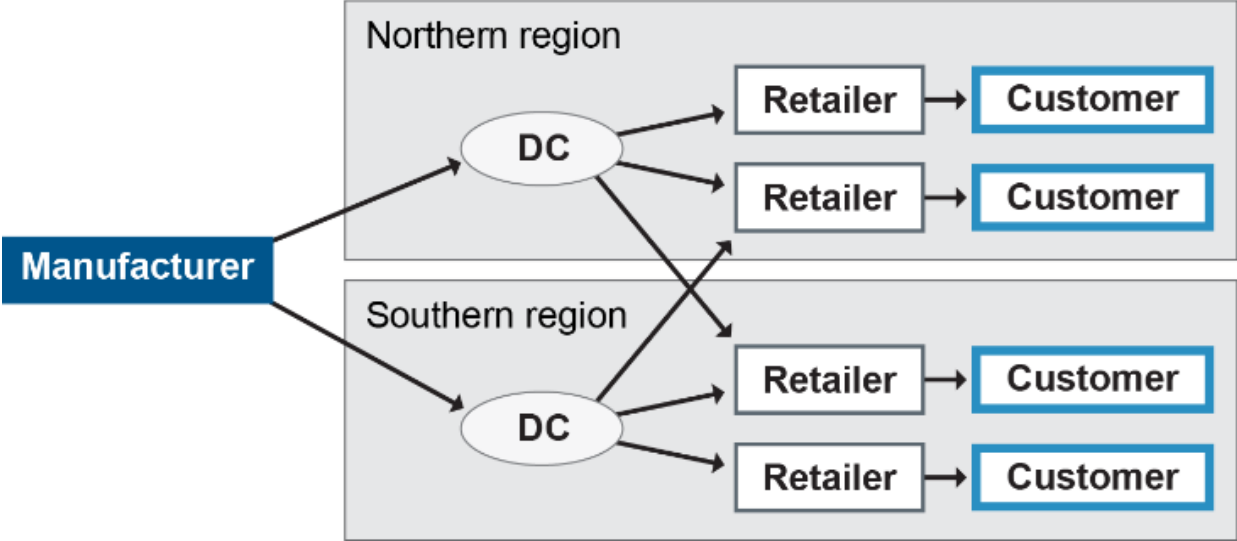


## Flow-Through Fulfillment



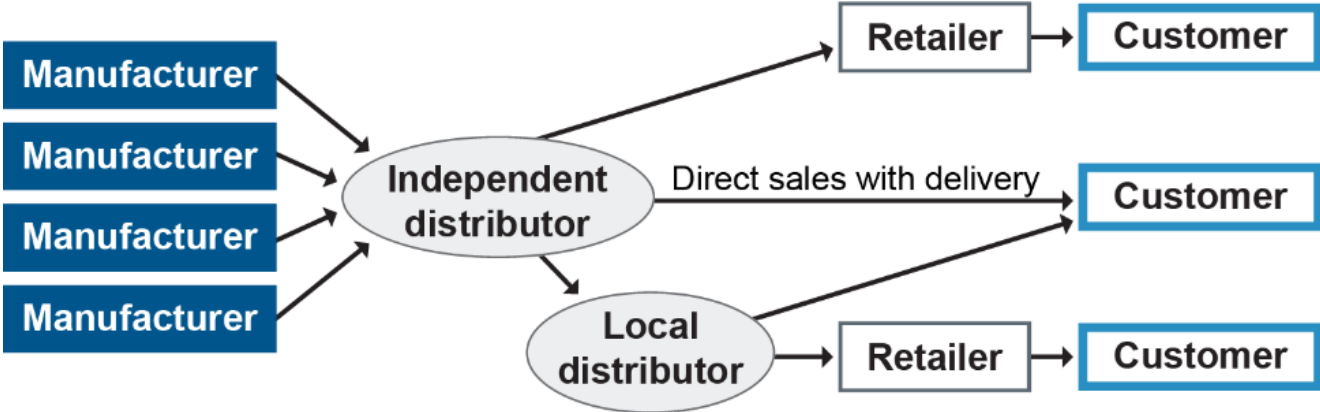
# Distribution Networks: Manufacturer to DC to Retailer

Traditional supply  
chain



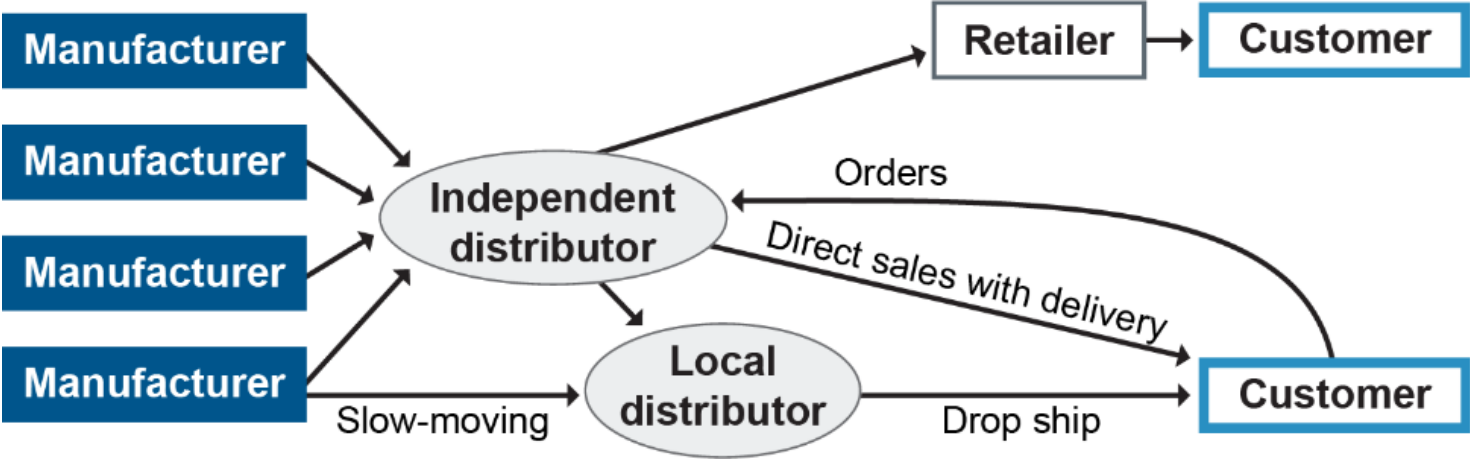
# Distribution Networks: Independent Distributor Omni-Channel

One-stop shop for  
retailers, local  
distributors,  
wholesalers



# Distribution Networks: Independent Aggregator E-Business Network

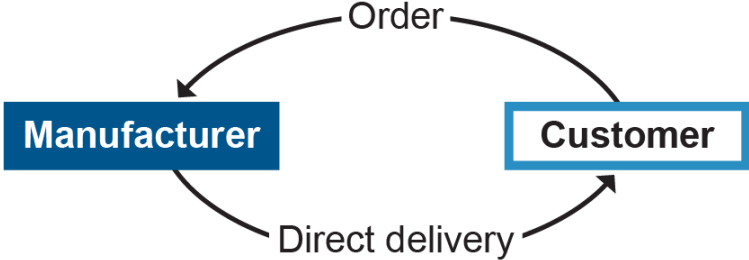
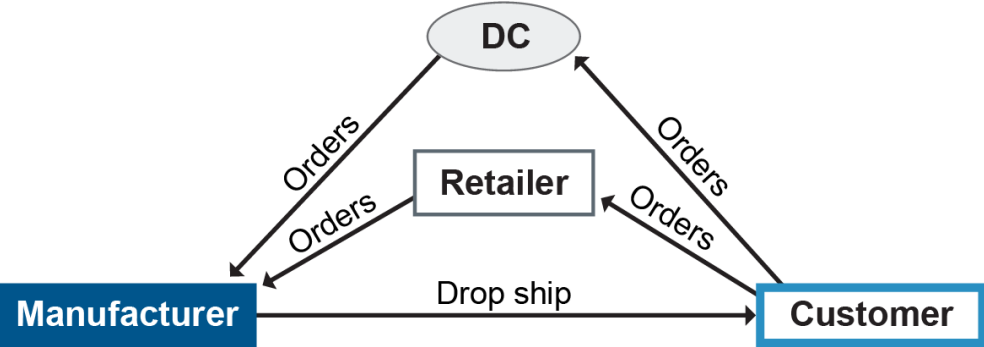
- Amazon
- Alibaba



# Order Fulfillment Channels (Specific Network Route)

## Manufacturer Storage with Drop Ship

## Manufacturer Storage with Direct Deliver



## Aligning Order Channels and Order Fulfillment Channels

- E-commerce plus faster order cycle and cash flow velocity
  - Shorter order delivery lead times
  - Same-day delivery
- Collect customer information
- Sell-buy-make model

### **Promoting e-commerce:**

- Order visibility
- Cost-effective shipping methods
- Non-penalizing customer return policy
- Optional sites for in-person pickup, dropoff of returns

# Global Flow of Outbound Goods



Transaction channel



Communication channel



Distribution channel