Global Logistics Management

Part III

Learning Objectives

- To demonstrate the different types of global logistics problems.
- Understanding the global logistics complexities and uncertainties.
- To explain different approaches to collaboration across global logistics.

Global Logistics Problems

- Demand forecast uncertainties

Competition

Global Logistics Problems

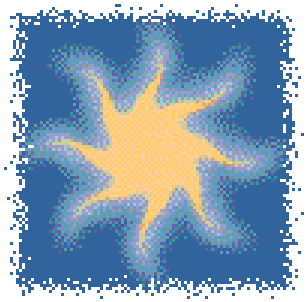
- Demand forecast uncertainties

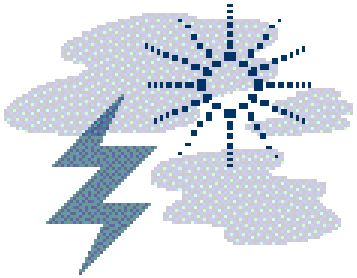
Prices

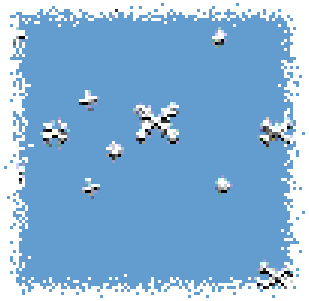
Global Logistics Problems

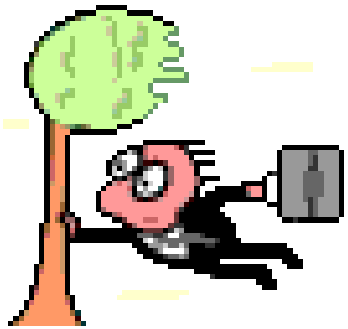
- Demand forecast uncertainties

Weather Condition









Global Logistics Problems

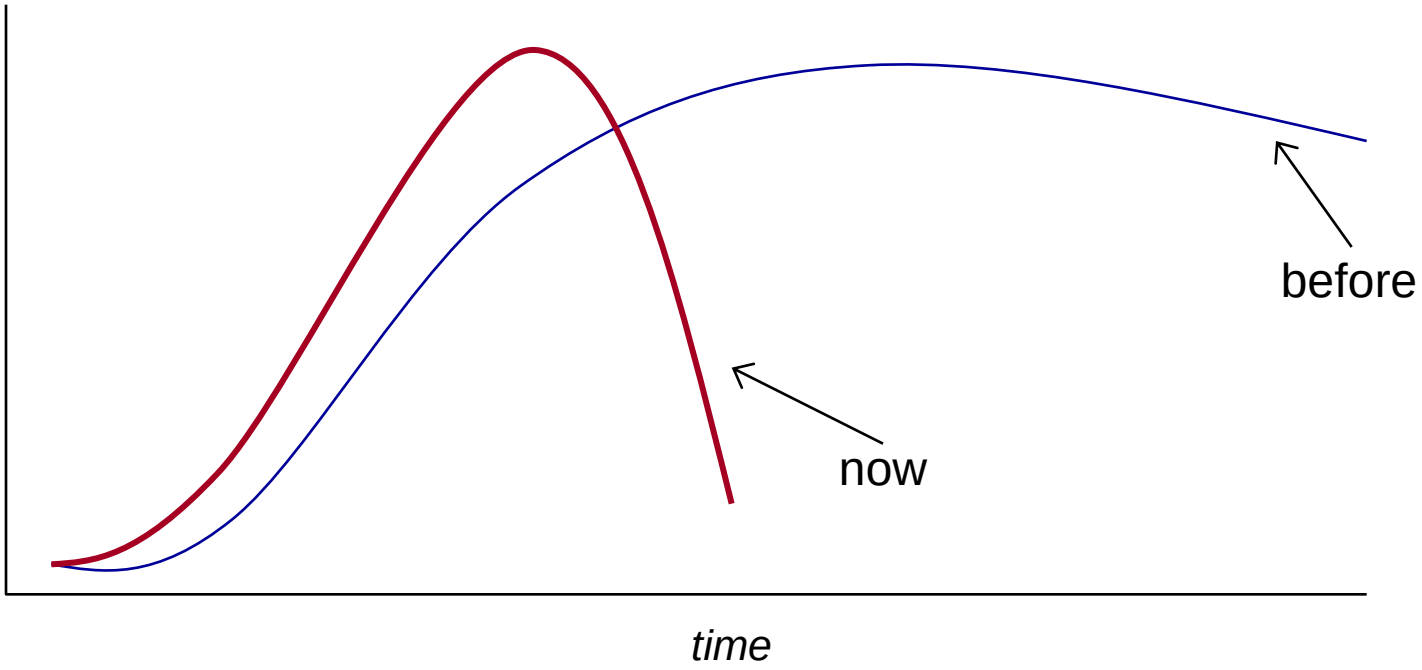
- Demand forecast uncertainties

<u>Technological development</u>

Global Logistics Problems

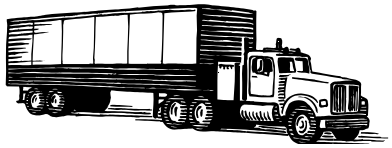
- Demand forecast uncertainties

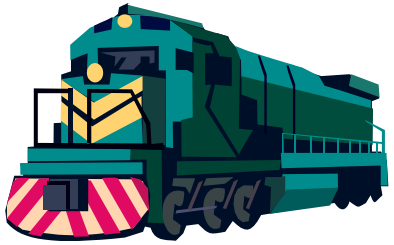
<u>Short life-cycles</u>



Global Logistics Problems

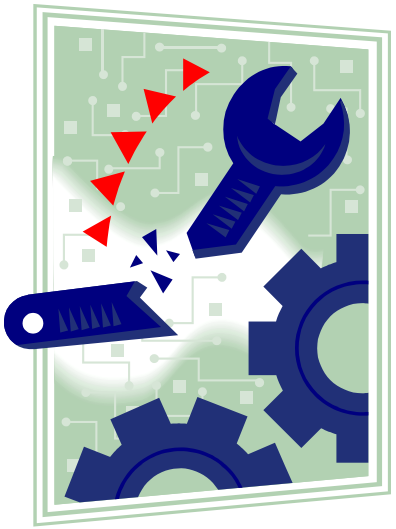
- Transportation uncertainties





Global Logistics Problems

- Production uncertainties



Global Logistics Problems

- Supply uncertainties

  Quality

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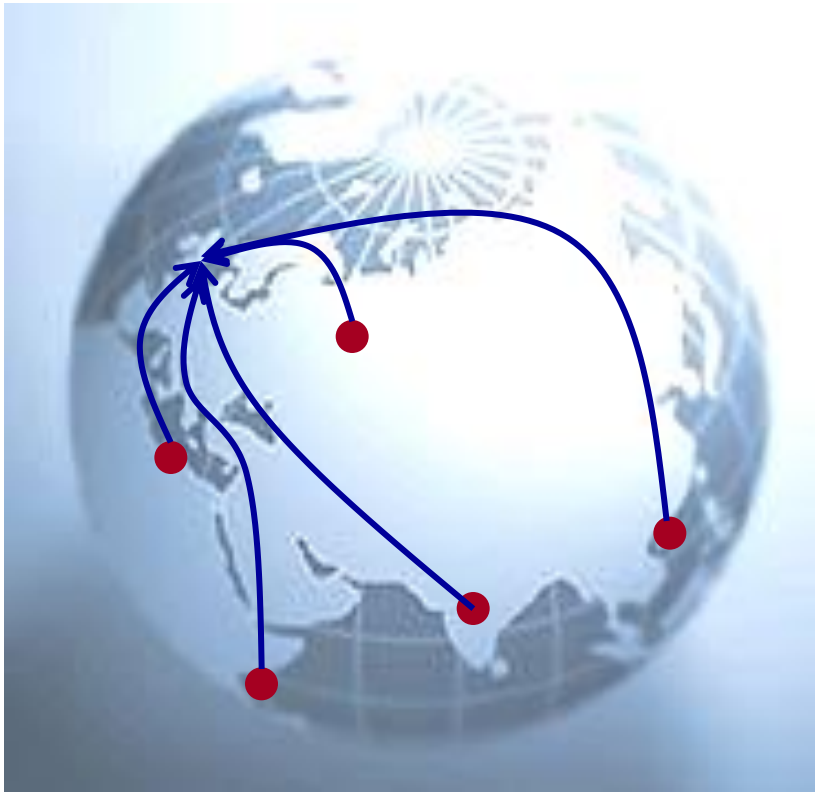
Global Logistics Problems

- Supply uncertainties

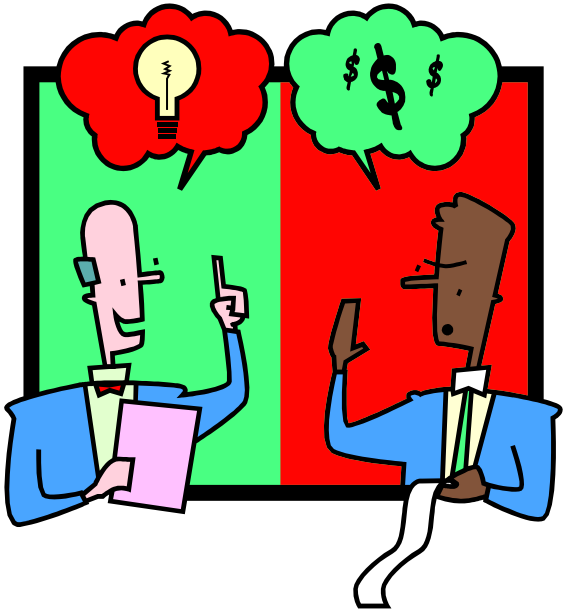
Delivery



Global Logistics Problems

- Supply uncertainties

  Cost

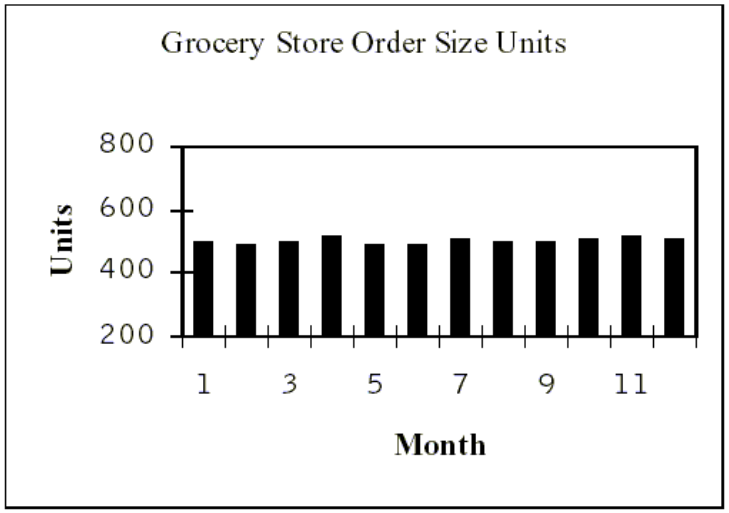


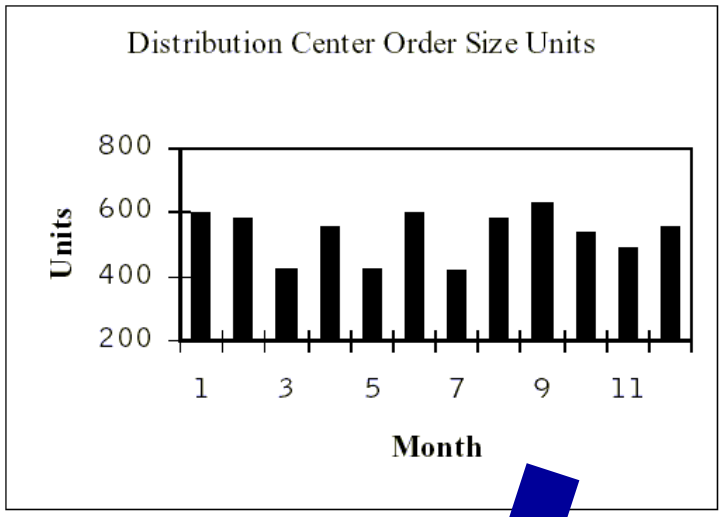
Global Logistics Problems

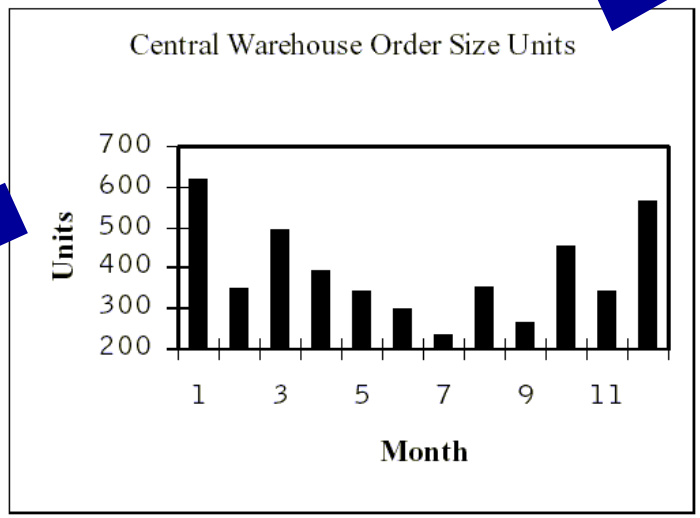
- Bullwhip effect refers to erratic shifts in orders up and down the supply chain because of poor demand forecasting, price fluctuation, order batching, and rationing within the chain.
  Even slight demand uncertainties and variability become magnified if each distinct entity, on the chain, makes ordering and inventory decisions with respect to its own interest above those of the chain. Distorted information can lead to tremendous inefficiencies, excessive inventories, poor customer service, lost revenues, ineffective shipments, and missed production schedules.

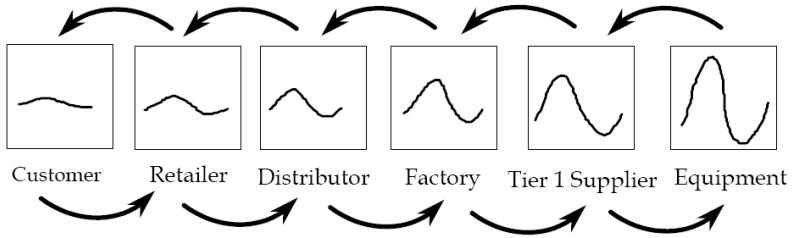
Global Logistics Problems

- Bullwhip effect









Global Logistics Problems

- Bullwhip effect consequences

  Lower revenues

  - Stockouts and backlogs mean lost sales, as customers take their business elsewhere.

Global Logistics Problems

- Bullwhip effect consequences

  Higher costs
  - High carrying cost
  - Stockout cost
  - Distributors need to expedite orders (at higher shipping expenses)
  - Manufactures need to adjust jobs (at higher setups and changeover expenses, higher labor expenses for overtime, perhaps even higher materials expenses for scarce components.)
  - All entities in the supply chain must also invest heavily in outsized facilities (plants, warehouses) to handle peaks in demand, resulting in alternating under or over-utilization.

Global Logistics Problems

- Bullwhip effect consequences

  Worse quality

  - Quirky, unplanned changes in production and delivery schedules disrupt and subvert control processes, begetting diverse quality problems that prove costly to rectify.

Global Logistics Problems

- Bullwhip effect consequences

  Poorer service

  - Irregular, unpredictable production and delivery schedules also lengthen lead time, causing delay and customer dissatisfaction.

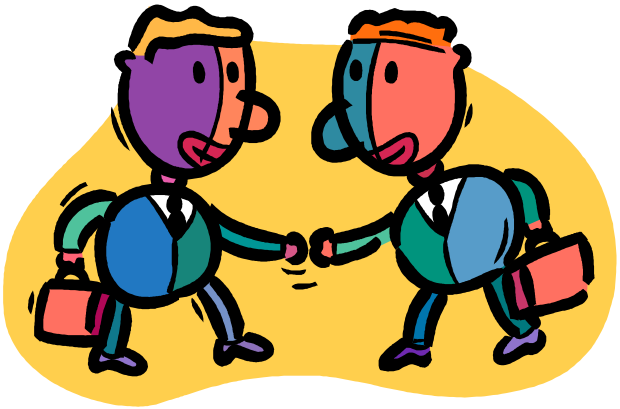
Global Logistics Problems

- How will you communicate with suppliers?
- How will you communicate with customers?
- What information will you need from suppliers, how will you get it?
- How will you identify new sources of supply?
- How will you determine what to build?
- What will your competition be doing?
- What will you need to stay in the game?

How Collaboration helps

Definition

- The ability for manufacturers, their customers and suppliers, to share information and transact business in real-time within trusted e-supply chain communities.



Benefits of Collaboration

- Reduced inventory
- Improved customer service
- More efficient use of human resources
- Reduced cycle times
- Faster speed to market for new products
- Stronger focus on core competencies
- Greater trust and interdependence
- Increased sharing of information, ideas, technology
- Stronger emphasis on end-to-end supply chain
- Competitive advantage over other supply chains