#### Unit 4: Co-ordination in a Supply Chain

- □ Lack of Supply Chain co-ordination and the Bullwhip effect
- □Effect of lack of co-ordination on performance
- □Obstacles to co-ordination in a Supply chain
- ☐ Managerial Levers to achieve coordination.
- □Role of IT in coordination, forecasting and Replenishment

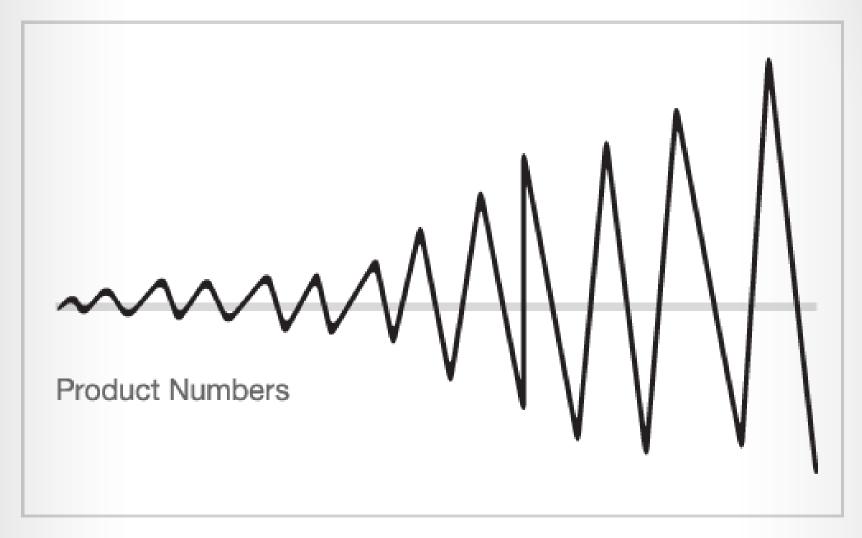
## □ Lack of Supply Chain co-ordination and the Bullwhip effect

- Supply chain coordination means integrating and managing all parties and processes involved in fulfilling customer request from origin to consumption.
- Supply Chain coordination improves if all stages of the chain take actions that are aligned and increase total supply chain surplus. It requires each stage of supply chain to share information and take into account the impact its actions have on other.
- A lack of coordination occurs either because different stages of the supply chain have local objectives that conflict or because information moving between stages is delayed and distorted.

#### ☐The Bullwhip effect

#### **□**Bullwhip Effect

- The bullwhip effect means fluctuations in orders increase as they move up the supply chain from customer to retailers to wholesalers to manufacturers to suppliers.
- The bullwhip effect is a distribution channel phenomenon in which forecasts yield supply chain inefficiencies.
- It refers to increasing swings in inventory in response to shifts in customer demand as one moves further up the supply chain.
- Distorts demand information within the supply chain, where different stages have very different estimates of what demand looks like results in a loss of supply chain coordination.
- It is a phenomenon on forecast driven distribution channels.
- It is defined as the increasing variability of order as it moves from customers to the manufacturer.
- Examples: Proctor G. & GUPTA Gamble LEUR (Pampers); HP (printers);



Customers

Manufacturer

## □Effect of lack of co-ordination on performance

- Manufacturing cost (increases)
- Inventory cost (increases)
- Replenishment lead time (increases)
- Transportation cost (increases)
- Labor cost for shipping and receiving (increases)
- Level of product availability (decreases)
- Relationships across the supply chain (worsens)
- Profitability (decreases)



# □Obstacles to co-ordination in a Supply chain

- Incentive Obstacles
- Information-processing Obstacles
- Operational Obstacles
- Price Obstacles
- Behavioral Obstacles

## ☐ Managerial Levers to achieve coordination

- Aligning Goals And Incentives
- Improving Information Visibility And Accuracy
- Improving Operational Performance
- Designing Pricing Strategies To Stabilize Order
- Building Strategic Partnership And Trust

### □ Role of IT in coordination, forecasting and Replenishment

- Quantify the bullwhip effect
- Get top management for coordination
- Devote resource to coordination
- Focus on communication with other stages
- Try to achieve coordination in the entire supply chain network
- Use technology to improve connectivity in the supply chain

