



IIT ROORKEE



NPTEL ONLINE
CERTIFICATION COURSE

SUPPLY CHAIN ANALYTICS

Evolution of Supply Chain Management

Dr. RAJAT AGRAWAL

DEPARTMENT OF MANAGEMENT STUDIES



Evolution of Supply Chain Management

- The First Revolution (Beginning of 20th century)
 - The Ford supply Chain
- The Second Revolution (around 1960s)
 - The Toyota supply chain
- The Third Revolution (around 1995)
 - The Dell supply chain



The Objective of a Supply Chain

- Sources of supply chain revenue: the customer.
- Sources of supply chain cost: flows of information, products, or funds between stages of the supply chain.
- ***Supply chain management is the management of flows between and among supply chain stages to maximize total supply chain profitability.***



Supply Chain Challenges

- Lack of synchronization between planning and execution.
- Lack of real-time data visibility, with no common view across all businesses and channels.
- Irregular reviews of safety stock levels, causing frequent stock-outs or excess inventory.
- Lack of flexibility in the network and distribution footprint, so that decision-makers find it difficult to prioritize between cost to serve and customer service levels, resulting in less profitability.
- Price volatility and difficulty in de-risking.
- Production line imbalance and suboptimal batch sizes, creating asset underutilization.

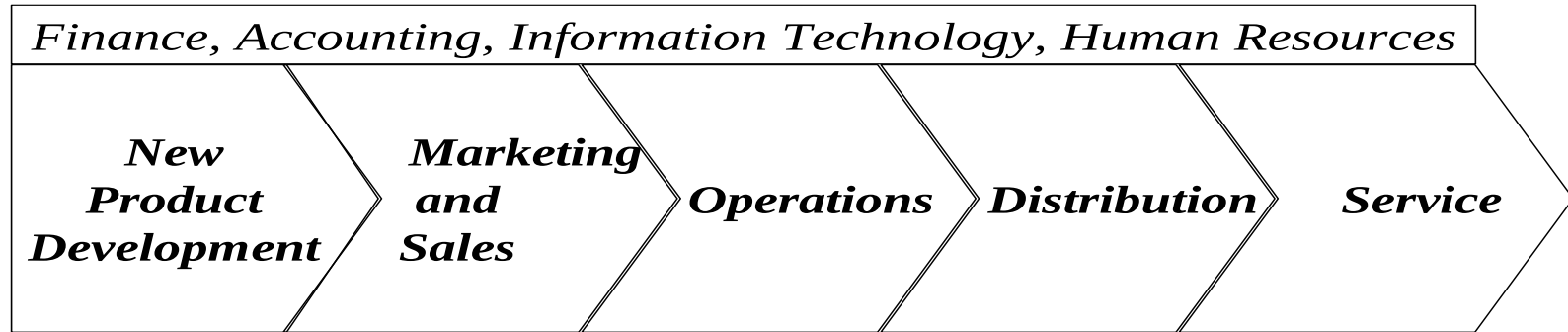


Supply Chain Analytics

- Supply Chain Analytics aims to improve operational efficiency and effectiveness by enabling data-driven decisions at strategic, operational and tactical levels.
- It encompasses virtually the complete value chain: sourcing, manufacturing, distribution and logistics.



The Value Chain: Linking Supply Chain and Business Strategy



THANK YOU

