

# SUPPLY CHAIN MANAGEMENT





# Introduction to Supply Chain Management

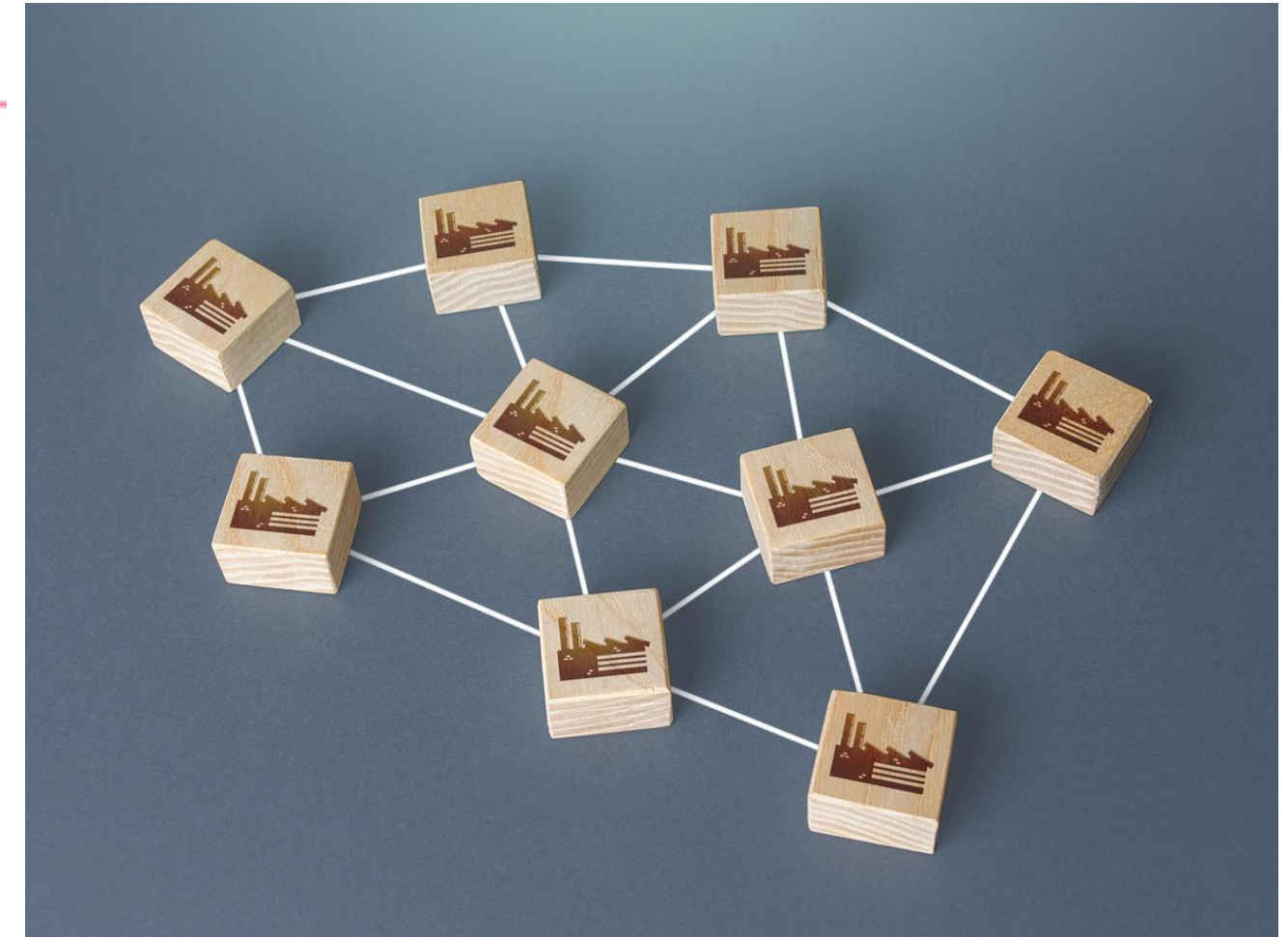
Also known as Value Chain, it is the design, management and control of the systems and processes related to the movement of materials and products from suppliers to manufacturers, then from manufacturers to distributors and then to the customers





# Supply Chain Umbrella

- ➔ Procurement of raw materials
- ➔ Production & quality control
- ➔ Inventory management
- ➔ Warehousing & distribution
- ➔ Logistics & transportation
- ➔ Order management
- ➔ Demand planning & forecasting
- ➔ Customer Service



# Basic terms in supply chain

**Lead Time**

**Re-order point**

**Safety stock**

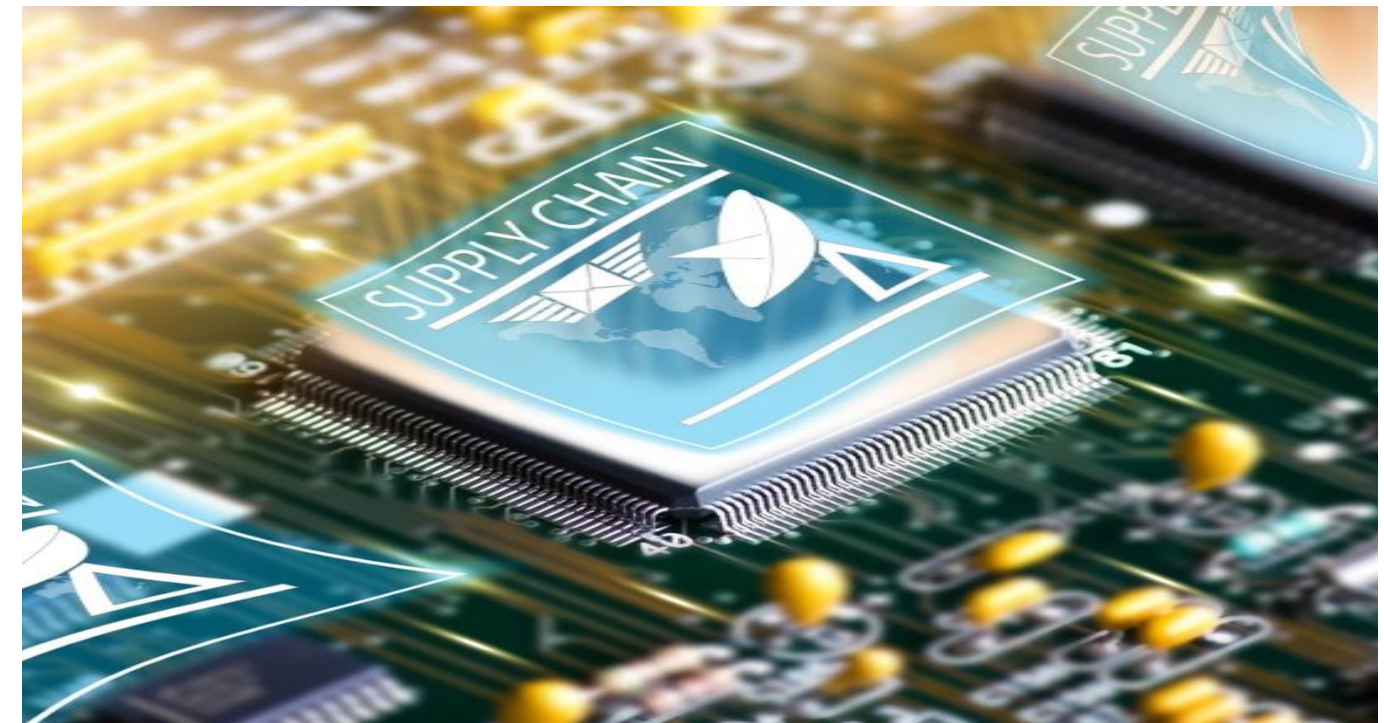
**Just in Time (JIT)**

**Economic Order  
Quantity (EOQ)**

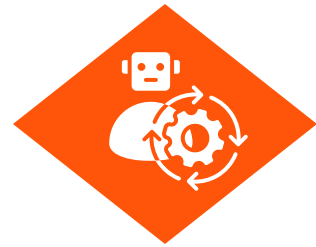


# Supply Chain & ERP

ERP systems have significantly transformed supply chain management by making operations faster, more responsive, and highly integrated. By linking every part of the supply chain through a single digital platform, ERP systems eliminate manual bottlenecks, reduce errors, enhance communication, and ensure that companies stay agile and competitive in a fast-paced environment.



# From order punching to product delivery: A complete ERP workflow



Order punching in ERP system



Inventory check



Procurement & Production

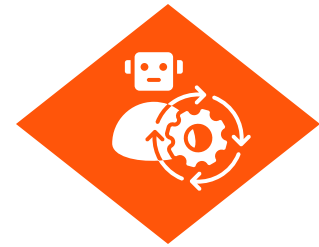


Warehouse processing & picking





# From order punching to product delivery: A complete ERP workflow



Logistics & shipment



Last mile delivery



Service & Customer feedback





# The 2021 Suez Canal Blockage

## Impact on Global Supply Chain:

- ✓ Trade Disruption
- ✓ Oil & Energy Prices
- ✓ Shipping Costs Increases
- ✓ Shortages & Delays
- ✓ Extended Supply Chain Issues





# Strategic Decision Making

Selecting the proper mode of transportation for a supply chain requires a strategic approach considering cost, speed, reliability, and the nature of goods being transported.



## 01 Roadways

- ✓ Flexible, door-to-door delivery
- ✓ Best for short to medium distances
- ✓ Moderate cost but may be affected by traffic or fuel price fluctuations

## 02 Railways

- ✓ Suitable for bulk and heavy goods
- ✓ More economical for long-distance inland transport
- ✓ Less flexible compared to road transport

## 03 Airways

- ✓ Fastest mode but very expensive
- ✓ Ideal for high-value, urgent, or perishable goods

## 04 Waterways

- ✓ Cost-effective for international and bulk shipments
- ✓ Slower transit time; suitable for non-urgent, large shipments