

SUPPLY CHAIN MANAGEMENT

Course Objectives

Supply Chain Management involves the flows of materials and information among all of the firms that contribute value to a product, from the source of raw materials to end customers. Elements of supply chain management have been studied and practiced for some time in marketing, logistics, and operations management.

Successful completion of the course means students will be able to :

-) Develop an understanding of key drivers of supply chain performance and their inter-relationships with strategy and other functions of the company such as marketing, manufacturing and accounting.
-) Impart analytical and problem solving skills necessary to develop solutions for a variety of supply chain management and design problems and develop an understanding for use of information technology in supply chain optimization.
-) Understand the complexity of inter-firm and intra-firm coordination in implementing programs such as e-collaboration, quick response, jointly managed inventories and strategic alliances.
-) Understand which information should be exchanged in a supply chain and how it should be used to benefit the entire supply chain.
-) Identify improvement opportunities that exist within supply chains in different industries and to quantify the improvements that various supply chain strategies offer.
-) Understand which barriers companies face during the implementation of new supply chain strategies.

Course Contents

-) Introduction to supply chain management.
-) Supply chain strategy
-) SCM Decisions
-) Warehousing
-) Forecasting
-) Inventory Management
-) Transportation

-) Linear Programming – Excel Solver – Lab sessions
-) Bullwhip effect
-) Double Marginalization
-) Job shop scheduling, ERP JIT and lean production
-) Outsourcing and Supplier Relationships
-) Project presentations

Reference Books

-) William J. Stevenson, Operations Management, 14th Edition, Jan 2011
-) Sunil Chopra, Supply Chain management, 5th Edition, Feb 2012