



Calcutta Business School

Post Graduate Diploma in Management Programme (PGDM)

Subject Code: DM 22306

Course Name: Supply Chain Management (SCM) :

Term- III (PGDM 2020 - 2022)

Academic Year: 2020 – 2021

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Course Overview:

Students develop the ability to conceptualize, design, and implement supply chains aligned with product, market, and customer characteristics. Business competition is now between supply networks rather than individual corporations. Managing the flow of products, information, and revenue across supply chains differentiates the ability of supply networks to fulfill customer needs. Students develop the ability to evaluate how information flows can substitute for the stock of physical resources, such as inventory, and why such systems succeed or fail. They assess how internet technologies, dynamic markets, and globalization are impacting supply chain strategies and practices, including logistics, digital coordination of decisions and resources, inventory and risk management, procurement and supply contracting, product and process design, and revenue management.

Over the last few years that firms have started focusing on logistics and supply chain management as a source of competitive advantage. There is a realization that no company can do any better than its logistics and supply chain. This becomes even more important given that product life cycles are shrinking and competition is intense. Logistics and supply chain management today represents a great challenge as well as a tremendous opportunity for most firms. Another term that has appeared in the business jargon recently is *demand chain*. From our perspective we will use the phrases, supply chain management and demand chain management interchangeably.

Course Objectives (CO):

1. To provide an introduction to key principles, strategies, models and techniques used by organizations in the management of their supply chains.
2. To demonstrate the application of operations management mechanisms within the business environments and to explain how supply chain decisions impact the performance of the firm. The key is to understand the link between supply chain structures and logistical capabilities in a firm.

3. To enable students to learn different analytical tools for problem solving in such areas as inventory management, aggregate planning, location and capacity planning and layout planning.

Learning Outcomes (LO):

After completing this course, the students shall be able to

1. Explain the concept and scope of supply chain management in a business - Conceptualize supply chain designs, which are aligned with business models for manufacturing and service companies.
2. Configure logistics networks and assess their performance impacts on efficiency and service levels
3. Manage inventory efficiently and pool inventory risks across time, products, channels, and geography.
4. Design supply chain contracts for effective governance of supply chain relationships.
5. Diagnose information integration problems across the supply chain and their consequent impacts in deploying physical and financial resources
6. Evaluate alternate information sharing and lead time compression strategies, and supply chain coordination structures, and their organizational and performance implications.
7. Align supply chain integration strategy with the uncertainty conditions of supply and demand.
8. Optimally position the push-pull boundary to leverage economies of scale and economies of scope.
9. Evaluate distribution strategies to balance responsiveness and efficiency.
10. Evaluate strategic alliances for logistics and retailer-supplier relationships, such as vendor managed inventory.
11. Design implementation processes for partnerships, such as vendor managed inventory, that involve information sharing and shared governance of processes and infrastructure.
12. Evaluate outsourcing decisions by applying the buy-make framework.
13. Manage the benefits and risks of outsourcing.
14. Design e-procurement strategies for a firm's procurement portfolio of products and services.
15. Evaluate how the logistics process can be constrained by product design, and the implications of constraint reduction on logistics performance and market responsiveness.
16. Determine when and how a supplier should be integrated into the new product development process.
17. Determine the IT infrastructure requirements and IT integration strategy for supply chain management.
18. Determine the decision support system requirements for supply chain management.
19. Evaluate the risks and advantages of international supply chains.
20. Evaluate the implications of regional differences in logistics while designing international supply chains.
21. Evaluate a selection of frameworks used in the design of supply chains.
22. Appraise the appropriateness and applicability of a range of supply chain management systems and models in the control of business.
23. Understand how supply chain decisions impact the performance of the firm. Understand the link between supply chain structures and logistical capabilities in a firm.

Pedagogy:

1. The course relies on a combination of lectures, readings, class participation, quiz, case discussions, project work and a mid-term and an end-term examination.
2. The sessions, of 1.5 hours each, shall include review of the previous learning, lecture on the topics and interactive discussion and analysis of the cases/articles pertaining to the respective topics.
3. Experts and practitioners will be invited to participate in the course as guest lecturers. Some sessions shall be taken by industry practitioners.
4. This will be an interactive course whereby students are expected to participate in class discussions and come up with useful analysis and solutions to problems related to the subject matter.

- Students will also be encouraged to read beyond texts assigned, and to identify on their own further sources of information for complementing their studies. Informal group discussions amongst participants are recommended.

Evaluation Scheme:

Emphasis will be given on continuous evaluation of the students. The overall grade in the course will be determined by your performance on the following components:

Sl. No.	Particulars	Percentage
1	End – Term Examination	40
2	Mid – Term Examination	20
3	Quiz (Individual) I & II	10
4	Presentations (Group)	10
5	Case Analysis and Written Reports (Group) – I & II	10
6	Class Participation (Individual) - Attendance	10
Total		100

Text Book, Reference Books & Journals:

Text Books:

- David Simchi-Levi, Philip Kaminsky, Edith Simchi-Lavi, Ravi Shankar, “Designing and Managing the Supply Chain – Concepts, Strategies and Case Studies”, Tata McGraw-Hill

Reference Books:

- Sunil Chopra, Peter Meindl, D.V. Kalra, “Supply Chain Management Strategy, Planning and Operation”, Fourth Edition, Pearson Education
- Robert Monczka, Robert B.Handfield,Larry.G, James. P, Purchasing and Supply Chain Management by, Thomson Edition(Cengage Publishing)

Cases:

- HP Deskjet Printer (Text Book) & HP Network Printer (Text Book)
- Barilla SPA (Text Book)
- Zara (Text Book)
- Dell (Text Book)
- Reebok (Text Book)
- Sport Obermeyer (Text Book)

Apart from the above case studies, students will be given some caselets during classes for discussion on concerned topics.

Session Plan:

	Module	Session	Reading	Hrs.
1	Introduction to Supply Chain Management	What is supply Chain Management (SCM)? Definitions of Logistics and SCM, Evolution of SCM, The Development chain, Global Optimization Key issues in SCM	Sunil Chopra Ch 1	1.5

2	Inventory Management and Risk Pooling	Inventory Control, Risk Pooling Centralised versus Decentralised System Managing Inventory in the Supply Chain (Case discussion + Assignment)	Simchi Levi Ch 2	3.0
3	Planning Demand and Supply in a Supply Chain.	Forecasting Quantitative & Qualitative Models Moving Average, Time series and Seasonality Exponential Model, Forecasting accuracy Aggregate Planning in a Supply Chain Aggregate Planning Problems Aggregate Planning Strategies	Sunil Chopra Ch 7 and 8	3.0
4	Network Planning	What is Network Planning? Network Design Inventory Positioning and Logistics Coordination Resource Allocation	Simchi Levi Ch 3	1.5
5	Supply Contracts	What are Supply Contracts? Strategic Components – Supply Contracts, Limitations Contracts for Make-to-Stock & Make-to-Order Supply Chains Contracts for Non-Strategic Components	Simchi Levi Ch 4	1.5
6	The Value of Information	The Bullwhip Effect Information Sharing and Incentives, Effective Forecasts Information for the Coordination of Systems Locating Desired Products, Lead-Time Reduction Information and Supply Chain Trade-Offs Decreasing Marginal Value of Information (Case Barilla)	Simchi Levi Ch 5	3.0
7	Coordination in a Supply Chain	Building Strategic Partnership and Trust within a Supply Chain Continuous Replenishment Vendor Managed Inventory (VMI) Collaborative Planning Forecasting and Replenishment (CPFR) Role of IT in Coordination	Sunil Chopra Ch 17	3.0
8	Supply Chain Integration	What is Supply Chain Integration? Push, Pull and Push-Pull Systems The Impact of Lead Time Demand Driven Strategies The Impact of Internet on Supply Chain Strategies. (Case Dell)	Simchi Levi Ch 6	1.5
9	Procurement and Outsourcing Strategies	What is Procurement and Outsourcing? Outsourcing Benefits and Risks A Framework for Buy and Make Decisions	Simchi Levi Ch 9	3.0

		Procurement Strategies, Supplier Footprint E-Procurement. (Case Zara)		
10	Coordinated Product and Supply Chain Design	A General Framework for Product and Supply Chain Design Design of Logistics Supplier Integration into New Product Development Mass Customisation (HP Case discussion + Assignment)	Simchi Levi Ch 11	3.0
11	IT Application in Supply Chain Management	Information systems in SCM, E-Procurement Internet-enabled supply chains ERP and supply chains, CRM, SRM, Business Intelligence E-Commerce and M-Commerce in SCM RFID, Digital Networks in SCM, Innovations in SCM	Sunil Chopra Ch 16	1.5
12	Supply Chain Issues in E-Commerce companies	The role of E-Business E-Business evolution and concepts E-Business and IT Integration E-Business enabled ERP system E-Procurement as an E-Enabled supply chain solution	Article by Claudia Maria Wagner will be provided to the students	1.5
	Case Study Presentation	All the groups presenting the cases in the class. Attendance is must. Cases given in the middle of the course		
				30.0

Total: 30 Hrs.

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