

XAVIER INSTITUTE OF MANAGEMENT, BHUBANESWAR

XIM University

“If your supply chain runs without any problems, you either have a great supply chain or running very fat” ~ EverythingSupplyChain.com

Course Name	Supply Chain Management
Programme	EMBA
Batch	2023-24
Term	Term-IV
Credits	3.0
Course Instructor	Professor W. S. William

Course Introduction and Objectives

We consume a variety of products and services on a regular basis. If we take a closer look at how these are produced and eventually delivered to you, you will realize that each step in this process is meticulously planned, executed, and controlled for ensuring a high degree of customer satisfaction. Let us take the example cornflakes. To make cornflakes available on your breakfast table numerous functions, activities, transactions and people are involved in planting, cultivating, processing and delivering it to the consumers. All these activities are integrated as a chain or a maze of connected flows through which physical products, information and fund flows back and forth all the time. Thus, supply chain involves four primary actors: supplier, manufacturer, distributor and finally consumer. The goal is to maximize value creation through effective coordination among various actors.

This course is designed to deepen the understanding of students pertaining to the factors that go into designing and sustaining excellence in supply chain. The course design leverages discussion forum, case studies, videos, interactions with industry practitioners to enhance both conceptual and practical aspects of the supply chain management. The content for this course is designed to include emerging trends in supply chain.

Course Content

- a) Role of supply chain in value creation and organization's competitiveness
- b) Supply chain decision phases
- c) Drivers of supply chain performance
- d) Network design for supply chain

- e) Coordination in a supply chain
- f) Inventory decisions and service level
- g) Emerging technologies and supply chain design
- h) Strategic sourcing
- i) Role of transportation, warehousing, and logistics network in value creation
- j) Close-loop supply chain
- k) Manage uncertainty and risk in supply chain

Course Learning Outcomes (CLO)

- a) CLO 1: Students will appreciate supply chain as an important business function.
- b) CLO 2: Students will identify important supply chain levers to enhance firm competitiveness and use analytical techniques to solve business problems.
- c) CLO 3: Students will exhibit voluntary cooperation and effective teamwork in a group setting.

Reading and References

Book: Sunil Chopra and D V Kalra, “Supply Chain Management – Strategy, Planning, and Operation”, Pearson, 7th Edition

Other materials: Lecture Notes, Selected Articles and Cases, to be shared by the instructor

Pedagogy and Students Workload

The primary teaching methodology will be lecture and time to time relevant articles and/or research paper and/or cases will be discussed. In some cases, small video clippings (Introductory videos and examples from the industries) will be shown to augment the learning.

At least 1.5 hours of Pre-readings are expected from the students before every class so that meaningful class participation is possible. For the group project, each student should spend at least 10-15 hours of productive time. Overall, each student should spend at least 6 hours. per week for the course apart from the classroom delivery, to ensure better learning outcomes.

Session Plan

Session	Topic	Session Learnings	Reading Materials
1	Discussions on Course-outline, plan of study and pedagogy Introduction to Supply Chain Management	<ul style="list-style-type: none"> • Supply chain perspectives: past, present, and future • How the partners are connected through flow of information, product, and fund • What supply chain aims to achieve? Industry 4.0 and 	Textbook Ch – 1 Short video

		changing roles of supply chain managers.	
2, 3	Understanding the Supply Chain Management	<ul style="list-style-type: none"> • Understand three key supply chain decision phases and its significance • Understand cycle, push/pull and macro processes of a supply chain 	Textbook Ch – 1 Key concept notes to be given by the instructor
4	Achieving Strategic Fit Supply Chain Drivers and Metrics	<ul style="list-style-type: none"> • Appreciate the importance of achieving strategic fit between supply chain strategy and competitive strategy • Identify major drivers of supply chain 	Textbook Ch – 2,3 Examples from industry practices
5,6	Network Design for Supply Chain	<ul style="list-style-type: none"> • Understand role of network design in a supply chain • Developing optimization models 	Textbook Ch – 5 Case studies: Bloomex ca (HBR) 1. Coolwipes (Textbook)
7	Basics of Sales and Operations Planning	<ul style="list-style-type: none"> • Understand how to manage supply and demand • Get to know how S&OP can be used to maximize profitability 	Textbook Ch – 9
8	The Bullwhip effect and coordination in a Supply Chain	<ul style="list-style-type: none"> • Learn about managerial levers that help improve coordination in a supply chain 	Textbook Ch – 10 Notes on key concepts by the Instructor
9,10,11	Managing Economies of Scale in a Supply Chain – Cycle Inventory	<ul style="list-style-type: none"> • Introduces methodologies to obtain optimal batch sizes and discusses managerial levers that help reduce cycle inventory without hurting costs. 	Textbook Ch – 11,12,13 Exercises and case studies

	<p>Managing Uncertainty in a Supply Chain – Safety Inventory</p> <p>Optimal level of product availability – News Vendor problems</p>	<ul style="list-style-type: none"> • Introduces methodologies to obtain safety inventory and discusses managerial levers that help reduce safety inventory without hurting product availability • Identify factors affecting the optimal level of product availability and use managerial levers to improve profitability 	
12	Supply Chain Logistics	<ul style="list-style-type: none"> • Understand relative strengths and weaknesses of various transportation network • Understand how to make effective use of warehouse space, efficient retrieval, and proper monitoring 	Textbook Ch – 14 Handout to be given by the Instructor Case study
13.14	Sourcing Decision in a Supply Chain	<ul style="list-style-type: none"> • Understand the meaning of strategic sourcing • Understand the factors that affect the decision to outsource a supply chain function 	Textbook Ch – 15 Key concepts note to be given by the Instructor
15	Managing Risks in Supply Chain Agile supply Chain	<ul style="list-style-type: none"> • Understand techniques for identifying supply chain risks and strategies for mitigating risks 	Key concepts note to be given by the Instructor HBR article Lessons from practice
16	Emerging Technologies and Digital Supply Chain	<ul style="list-style-type: none"> • Get to know how emerging technologies such as IIoT, 3D manufacturing, Digital twin and 	Handout to be given by the Instructor HBR Article Video

		Blockchain are increasingly used in supply chain design	
17	Sustainable Supply Chain Close Loop Supply Chain	<ul style="list-style-type: none"> Understand the meaning of sustainability in a supply chain Learn about cradle-to-cradle supply chain design 	Textbook Ch – 17 Articles and blogs
18	Interactions with Industry Professionals	To be announced	
19	Group Project Presentations	Details to be announced	
20	Course Wrap up and Concluding Remarks		

Assessment Scheme

Component	Weightage (%)	Assessment of Course Learning Outcome(s) (CLO)
Class Participation*	10%	CLO1
Online Quizzes (2 quizzes)	30%	CLO1
End-term	40%	CLO2
Group Project Presentation	20%	CLO3

Class participation will include Attendance + contributing towards group learning

What happens when you miss a Quiz?

There will not be any make-up quiz for those who fail to appear. If any student misses a scheduled Quiz-I, her/his Quiz-I marks will be decided based on the performance of Quiz-II. If anyone misses Quiz-II, her/his marks for Quiz-II will be calculated on the basis of the performance in the end-term.

Group Project: Each group (2 to 3 members) will be assigned a broad topic to work on. The topic cannot be changed by the group once finalized. Slight modification may be possible after discussions with the faculty. The projects may either be a field project or a desk project. More details will be provided during the class.

Academic Discipline and Integrity

Utmost care is taken as to maintain class decorum, follow the exact evaluation norms, conduct fair examinations, fair and transparent evaluation of examination papers to maintain the highest academic integrity.

Some General Instructions:

1. No request will be entertained to change the group project, once finalized by the group. Plagiarism beyond 20% found in the submission (including reproduction from books, online sources, journals or from peers) will be awarded zero marks.
2. Institute's manual of policies (MoP) will be followed regarding academic integrity.
3. Please be present for every online quiz. The quiz dates will be announced in advance and it is your responsibility to appear on the date of quiz. Request for make-up quiz will not be entertained at all.

Mapping Course Learning Outcomes (CLO) with the Program Learning Goals (PLG)

PLG#	Program Learning Goal	Trait	Addressed by Course	
			Yes	No
PLG1	Functional and Business Skills	The students will demonstrate understanding of elements of all functional areas	Yes	
PLG2	Analytical Skills	The students will use analytical techniques to identify a business problem, and suggest a solution	Yes	
PLG3	Collaboration and teamwork attributes	The students will exhibit voluntary cooperation and effective teamwork in a group setting	Yes	
PLG4	Ethical responsibility	The students will understand the ethical complexities of conducting business. The students will adopt techniques in scenarios involving ethical dilemma and offer resolution		No
PLG5	Communication	The students will produce reasonably good quality business documents. The students will become effective and confident communicators		No

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