

Course Outline of MBA 664: Supply Chain Management

Instructor: Prof. RRK Sharma

Contact: 7172 (O); 8631 (R); e-mail: rrks@iitk.ac.in

Introduction:

Logistics, distribution, warehousing, location of plants and warehouses, inventory management etc. have become important issues for the modern day corporation. It includes outbound supply chain (flow of finished goods from plants to markets) and inbound supply chain (flow of raw materials from vendors to plants); and also the in plant supply chain (flow of materials in the plants). Considerable gains have been reported with the improvement efforts. Information sharing, HRM, organization structure, cost minimization, deterministic and uncertain cases leads to interesting scenarios in the related supply chains. It is planned to appraise the students of this course with the selected and the best past (old) contributions and bring them up to the STATE OF THE ART.

Short Abstract of the course:

We consider modelling different supply chain situations, typically the cost minimization models for multi commodity and multi period cases (that consider raw material movement cost; FG movement cost; cost of storage at warehouses at different stages, and shortage cost at the retailer). Eight chapters from the HBS on supply chains; Zara's business model with reference to supply chains; Tripple As of supply chains. IT and supply chain strategy; Buffering and Bridging strategy; Category management; SCOR (supply chain operations reference model) model its advantages and its limitations; BPR and global supply chains; HR practices and supply chains; Quality and Supply chains; RFID; Use of IT and command and control to humans for flexibility in supply chains; Role of culture in improved agility and adaptability; postponement as a strategy to manage risks in supply chains. Case Studies in logistics and warehousing are scheduled.

References:

1. 22 articles (of 12 MB in size) will be circulated on e-mail. Please keep enough space in your mail boxes.
2. HBS (Harvard Business School) on Supply Chains: A book with 8 articles. This is 50 MB in size. Please keep enough space in your mail boxes.
3. Sharma, RRK, "Few Contributions to Warehouse Location Theory", unpublished manuscript containing about 14 articles of location-distribution theory that are already published with reputed journals. (articles will be mailed to you).
4. Sunil Chopra and Peter Meindl, Supply Chain Management, Pearson Education India, 2001.
5. H Stadler and C Kilger, Supply Chain management and Advanced Planning, Concepts, Models, Software, and Case Studies; 4 th edition, SPRINGER.
6. Analysis of Inventory Systems, Hadley and Whitin, DB Taraporewallah Sons & Co Pvt Ltd., by arrangement with Prentice Hall, Inc, Bombay, 1979.
7. G. Raghuram and N Rangaraj, "Logistics and Supply Chain management: Cases and Concepts", MacMillan, 2010.

Session Wise plan: (total of 28 sessions of 1.5 hrs each)

1. 7 sessions on detailed discussion on reference number (3) above.
2. 1 sessions on inventory management from reference (6) (ch 4 (upto ch. 4.2) and ch 5 (upto ch 5.2)).
3. (Organization) Structure and Strategy for Supply Chains: 1 session.
4. 2 sessions for INCLASS Exams.
5. 15 sessions (2 presentations + 1 case (from reference (5) and (7)) in each class) for student presentations of 30 articles in references (1) and (2). Guidelines for reading a journal article: Read and Present the literature review, theoretical framework and discussion of results, conclusions and implications for the supply chain manager. The methodology and analysis of results is to be ignored for the present course (as this is NOT a Ph D level course). At the end of each presentations, instructor will take the question and answer and discussion session related to the paper scheduled/presented.
6. 3 sessions on term paper/project presentations.

Project:

Read at least 7 articles (download from EBSCO/EMERALD databases of the e-library) from the references of the article you presented in class; and present an integrated framework/review in the form of a term paper. You must discuss these 7 papers with the instructor at least one month in advance.

Evaluation Scheme:

In Class Exam 1	: 20 %
In Class Exam 2	: 20 %
End Sem	: 20 %
Project (term paper)	: 20 %
Article Presentation	: 20 % (in Group).

Weights of the above are SUBJECT TO CHANGE without prior notice.