

Logistics and Supply Chain Management in China

1. Course Description

“Logistics and Supply Chain Management in China” illustrates the key drivers in effective supply chain management in order to help students understand what creates a competitive advantage. We employ a strategic framework that identifies facilities, inventory, transportation, information, sourcing, and pricing as the key drivers of supply chain performance. The strategic framework and concepts discussed in the class are tied together through a variety of examples that show how a combination of concepts is needed to achieve significant increases in performance.

2. Course Objectives and Requirements

1. **Course Objectives** : When the course complete, students should understand the following key areas and their interrelationships:

- The strategic role of a supply chain
- The key strategic drivers of supply chain performance
- Analytic methodologies for supply chain analysis

2. **Requirements** : Students are expected to get prepared for lectures, finish and submit assignments as required.

3. Course Arrangement

| Course name | | Logistics and Supply Chain Management in China | Total Credit Hours | 36 |
|-------------|--------------|--|--|--|
| unit | Credit hours | Contents | Preparation of class and reading materials | Cases |
| 1 | 6 | Unit One : Building a Strategic Framework To Analyze Supply Chains 1. The definition of a supply chain and what it involves 2. The two views of a supply chain 3. The strategic framework that establishes a link between customer needs and supply chain capabilities through the implied demand and responsiveness spectrum. 4. Major obstacles to achieving strategic fit and the various countermeasures to these obstacles | 1. Chapter 1,2,3 of Textbook 2. Case : 7-Eleven Japan | 1. 7-Eleven Japan (Kellogg Case available at the Prentice Hall Web site) |
| 2 | 4 | Unit Two : Design The Supply Chain Network 1. The concepts that a firm must consider when designing their supply chain network 2. Build a strategic framework for facility decisions 3. Methodologies for network design. 4. The demand and financial uncertainties (prices and exchange rates) when designing the network. | 1. Chapter 4,5,6 of Textbook 2. Case : Applichem | 1. Applichem |
| 3 | 8 | Unit Three : Planning Demand And Supply In A Supply Chain 1. Demand forecasting | 1. Chapter 7,8,9 of Textbook 2. Case : Specialty | 1. Case : Specialty Packaging |



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|---|----|--|--|--|
| | | <ol style="list-style-type: none"> Aggregate planning decisions in supply chains Responding to predictable variability in a supply chain by managing supply and demand | <ol style="list-style-type: none"> Packaging Corporation (A) Case: Specialty Packaging Corporation (B) | <ol style="list-style-type: none"> Corporation (A) Case: Specialty Packaging Corporation (B) |
| 4 | 10 | Unit Four : Planning And Managing Inventory In A Supply Chain <ol style="list-style-type: none"> Cycle inventory in the supply chain Safety inventory in a supply chain Determining the optimal level of product availability How the level of product availability influences the profits in a supply chain. | <ol style="list-style-type: none"> Chapter 10,11,12 of Textbook Case: Delivery Strategy at MoonChem Case: Managing Inventories at ALKO Inc. | <ol style="list-style-type: none"> Delivery Strategy at MoonChem Managing Inventories at ALKO Inc. |
| 5 | 2 | Unit Five : Design And Planning Transportation Networks <ol style="list-style-type: none"> Various modes of transport, their cost structure The key problems faced by carriers The tradeoffs of inventory and customer response time when selecting appropriate transportation modes | <ol style="list-style-type: none"> Chapter 13 of Textbook (Scott Snell & George Bohlander) Case: Merloni | <ol style="list-style-type: none"> Merloni |
| 6 | 6 | Unit Six : Managing Cross-Function In A Supply Chain <ol style="list-style-type: none"> The impact of sourcing decisions on a variety of final product dimensions Key sourcing related practices Supplier evaluation Auctions and negotiations | <ol style="list-style-type: none"> Chapter 14,15,16,17 of Textbook Case: Barilla | <ol style="list-style-type: none"> Barilla |



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| | | <p>5. Pricing and revenue management in maximizing profitability from supply chain assets</p> <p>6. Information technology can play an important role in coordinating supply chain decisions</p> <p>7. The lack of coordination can hurt the performance of a supply chain</p> | | |
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5. Teaching Methods

Lectures、Discussions、Case Analysis, etc.

6. Learning Outcomes Expected

| Category | Learning Outcomes |
|--------------------------------|---|
| Master of Knowledge | <ol style="list-style-type: none"> 1. Understand the strategic framework that can be used to analyze design, planning, and operational decisions in a supply chain. 2. Familiar with several customer service oriented measures that influenced by the design of a distribution network 3. Familiar with different methods in forecasting 4. Understand the of linear programming model for aggregate planning 5. Understand the meaning of managing capacity and discounting strategies. 6. Master the EOQ model 7. Understand the impact of demand uncertainty and supply uncertainty on safety demand 8. Familiar with the models that focus on linking the level of product availability to profits. 9. Understand the bullwhip effect |
| Intellectual abilities learned | <ol style="list-style-type: none"> 1. Have the ability to analyze the pull/push boundary of a supply chain 2. Have the ability to analyze the inappropriate distribution networks of a supply chain and design distribution network 3. be engaged in HRM with the idea of sustainable development meet the global challenges 4. Have the ability of forecasting customer demand 5. Have the abilities to build aggregate planning model 6. Have the comprehensive management abilities to control both cycle inventory and safety inventory 7. Have the abilities of systematically trade off inventory, customer response and transportation |
| Practical skills learned | <ol style="list-style-type: none"> 1. Master forecasting skills of customer demand 2. The skills of design distribution network 3. The skill of using inventory model to decide key parameters of inventory control 4. The skill of using contract to coordinate supply chain |

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|--|--|
| | 5. The skill of choose suitable transportation solution |
| Personal competences and characters Cultivated | 1. The competence of thinking questions by using globalization view and the idea of sustainable development 2. The competence of critical acceptance of knowledge and innovative 3. The competence of flexibly contingency management according to different external environment 4. Have the charm of leadership and responsibility 5. The team spirit of cooperation |

7. Performance Evaluation: Means & Ratio

| Evaluation Means | Ratio (%) | Link with learning outcomes expected |
|---------------------------------|-------------|---|
| Team and individual assignments | 25 | Focusing on case analysis, evaluate the abilities of using SCM knowledge related to analyses and solve the practical problems |
| Attendance and Engagement | 25 | Evaluate the abilities of understand and application of SCM knowledge related and the abilities of team participation and effective communication |
| Exam | 50 | Emphasis on the evaluating the degree of mastering the basic concepts and important theories on these modules. |

8. Textbook, References and Reading Materials

1) Textbook

Chopra, S., and Meindl, P. Supply Chain Management: Strategy, Planning, and Operation, 3rd Ed., Prentice Hall, New Jersey.

2) Online resources

- [1] <http://www.lib.tongji.edu.cn/>
- [2] www.prenhall.com/chopra
- [3] <http://www.ocsamse.org>
- [4] www.astlo.rg
- [5] www.cscmp.org
- [6] www.supplychain.Org
- [7] www.epfl.ch

3) Periodicals and Magazines

- [1] Supply Chain Management Review
- [2] Harvard Business Review
- [3] Management World
- [4] Management Review
- [5] Nankai Business Review
- [6] Sloan Management Review
- [7] Journal of Manufacturing and Operations Management
- [8] Distribution

9. Cases

- [1] 7-Eleven Japan
- [2] Applichem
- [3] Specialty Packaging Corporation (A)
- [4] Specialty Packaging Corporation (B)
- [5] Delivery Strategy at MoonChem
- [6] Managing Inventories at ALKO Inc.
- [7] Merloni
- [8] Barilla

10. Assignment Requirements

Select the typical cases and analyze the existing logistics process and give improvement suggestion. The general guidelines for the assignment are as follows:

1. Executive summary
2. Define the process and the context (business unit) in which it operates.
3. What is the strategy / market of the business unit?
4. What does this imply in terms of the logistics process you are studying? What must this process be able to do particularly well in terms of cost, time, quality, and flexibility? The headings mentioned here are broad. You are expected to identify specific dimensions along which the process is expected to do particularly well.
5. Describe the current process structure in terms of information, inventory, transportation, and location.
6. Discuss the process capabilities, given the current structure, in terms of the specific dimensions identified by you in 4.
7. Discuss existing problems and weaknesses in the current process. What additional capabilities does the process need to develop.
8. How should the process be restructured to develop these capabilities? Discuss why the changes suggested by you will have the desired effect along the key dimensions identified by you.
9. Discuss how the suggested changes should be implemented with a time line. Explain any resistance you may face in implementing the changes.

The criteria of assignment evaluation (100 points)

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| 1) Whether the case material collection is completed or not | 20 points |
| 2) Whether the case analysis is system in-depth or not | 25 points |
| 3) Whether the insights is linked with work practice closely or not | 25 points |
| 4) Participation of group members in case discussion | 20 points |
| 5) Whether the PPT and document is made seriously and beautiful | 10 points |

Appendices:

1. The course PPT
2. Case material
3. Other teaching material (such as reading materials, the articles)
4. Study guide