MGB 282: Supply Chain Management

Instructor: Sanjay Saigal

Class schedule: Fridays, 2-5 and 6-9 pm – 6/28, 7/12, 7/26, 8/9, 8/23

Final exam: Take home, open book (due by 8/30)

Office hours: 1 pm on Fridays before class, 4 pm on Saturdays following class days and Skype by pre-arrangement.

Description

Supply Chain Management (SCM) is concerned with the profitable creation and distribution of good and services. This course surveys operational and logistical functions of organizations, both intra-company and within the supply chain network. We discuss opportunities to improve efficiency and profitability, with emphasis on analytic problem solving in the context of management.

The key consideration in SCM is the interplay between efficiency and risk. A well-understood example is off-shoring. Offshoring manufacturing may lower costs. But it introduces lag into the design-to-market cycle, which in turn increases the risk that by the time the product reaches shelves its demand has dried up. (Or, equally bad, not enough of it is made to meet the eventual demand.) Off-shoring services can also significantly improve short-term profitability. But it introduces other sorts of risks –possibly lower quality of service, impact on customer retention, brand dilution, and so on.

MGB 282 will prepare you to:

1. Understand operational business functions, decision areas, and systems and tools within organizations and across supply chains
2. Recognize SCM-related opportunities to improve profits and reduce risk
3. Prepare to apply widely-practiced techniques and available tools for leverage improvement opportunities
4. Communicate the value of value-add process interventions to stakeholders and partners

Text

Our primary classroom text is:

David Simchi-Levi, Philip Kaminski & Edith Simchi-Levi

*Decision Designing and Managing the Supply Chain*

Third edition

McGraw-Hill

Other supplemental readings will be available on Smartsite.

Topics

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<tr>
<th>Day</th>
<th>Subject</th>
<th>Key concerns</th>
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<tr>
<td>6/28</td>
<td>Inventory</td>
<td>Cost efficiency, uncertainty, risk and response</td>
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<tr>
<td>7/12</td>
<td>Network effects</td>
<td>Distribution network design, postponement</td>
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<td>7/26</td>
<td>Contracts &amp; strategy</td>
<td>Supply contracts, procurement/outsourcing, globalization</td>
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<td>8/9</td>
<td>IT &amp; processes</td>
<td>The value of IT, SCM systems, S&amp;OP</td>
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<td>8/23</td>
<td>Sustainability</td>
<td>Social measurement, technical and economic factors, ethics</td>
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SCM is a large and complex field. A single-quarter course cannot cover every interesting or relevant area. But for this course, we’ll focus on the interplay of returns (e.g., profits) and risk, and on the use of quantitative methods to generate managerial insight.

With that in mind, expect to learn as much (perhaps more) through active problem-solving, classroom discussion, the occasional guest speaker and pre-class reading, as by passive listening.
Prerequisites
MGB 203A or equivalent familiarity with statistical analysis. Discuss with instructor if necessary.

Case reports
SCM cases will be analyzed by 3-student teams. Reports should briefly summarize each case and answer the assigned questions. Each team is also expected to present one case in class.

Grading scheme
Class participation: 25%
Homework assignments: 25%
Case reports and presentation: 25%
Final exam: 25%

Homework
Assignments will be handed out the evening of each Friday session. Completed assignments should be uploaded to Smartsite by midnight (PT) of the following Friday.
Assignments will be eligible for partial credit as follows: A day’s delay will incur a 30% penalty, two days 40%, and three days 50%. Four days or more, no credit.
Due to our tight course schedule, I will grant no exceptions for homework delays.

Absence
Given that we have only five sessions to cover our ambitious syllabus, missing a day means missing 20%. If you know you can’t make one or more sessions before you register, it’s better to skip the course this time around.

If, once the quarter begins, you believe you absolutely positively have to miss a day (or part-day), let’s discuss before you go AWOL so we have time to figure out a make-up strategy.

Examinations
The final written exam will be take-home, covering all class topics. It will be due by 8/29.