

**THE UNIVERSITY OF SOUTHERN CALIFORNIA**  
**Marshall School of Business**  
**DSO 581 – Supply Chain Management– Fall 2014**

<b>Time:</b>	Thursdays, 6:30-9:30 pm	<b>Room:</b>	JKP 212
<b>Instructor:</b>	Dr. Greys SOŠIĆ	<b>Office:</b>	Bridge Hall 401E
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<b>Office hours:</b>	Wednesday, 2:00-3:00 pm Thursday, 2:00-3:00 pm		

### **COURSE SCOPE AND OBJECTIVES**

This course will be valuable for someone pursuing a career in consulting or a position in the operations, marketing or finance function in a manufacturing or a distribution firm. The course focuses on the management and improvement of supply chain processes and performance. We explore important supply chain metrics, the primary tradeoffs in making supply chain decisions, and the basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfillment and supply chain coordination. Several recent and influential innovations such as revenue management, revenue sharing, RFID, SaaS, and Internet of Things will be discussed. We also investigate topics such as global supply chain design, sustainable supply chains, e-commerce and outsourcing.

The class format includes lectures, case discussions, movie clips, simulation games, etc. The content covers both quantitative and qualitative materials. The cases will feature high-tech companies as well as firms in more traditional industries such as apparel and manufacturing.

### **COURSE MATERIALS**

**Required:** *Course Reader* (CR) – Package of cases and readings available at USC bookstore. In the syllabus, a number such as CR#5 refers to 5<sup>th</sup> article in sequence in the course reader.

Handouts (HO): Handouts posted on the Blackboard.

**Recommended:** *Supply Chain Management* by S. Chopra and P. Meindl, Prentice Hall, 2012.

*Managing Supply Chains* by A.V. Iyer, Hercher, 2013.

### **COURSE POLICIES**

This course covers both quantitative and qualitative materials, and uses cases for discussion of issues and illustration of approaches. We will use Excel as a modeling/solution finding tool when addressing several topics. Active participation in class is important throughout the course. To ensure everyone's participation, I may at times resort to cold calling.

You should arrive to classroom on time. If you have conflicting schedules that prevent you from that, please let me know at the beginning of the semester.

**GRADING**

Group case reports (4)	30%
Individual submissions	20%
Tests (2)	40%
Class participation	10%

**GROUP CASE REPORTS**

**Please form teams of up four persons within the first two weeks;** you will be working in these teams for the case write-ups. You should use the “Group” option on the Blackboard to join one of the teams.

The cases are to be discussed within your team and you will submit (as a team) a written report. This Syllabus provides some suggested questions that you should address in your analysis. Each team is required to submit a written report on four case studies (Eastman on 9/25, Plaza on 10/9, Sportsuff.com on 11/6, and Intel on 11/20). Case write-ups should be at most 4 pages and single-spaced (11 or 12 point font), with appendices attached (not included in the number of pages). They should be submitted on-line through the Blackboard.

Imagine that you, as a consultant, have to study an organization, to identify the main issues it faces, and to propose a set of recommendations. Your written report should begin with an executive summary, about half page long, summarizing the most important problems and your recommendations. The rest of the report should be organized as follows:

1. Brief description of the company and its environment
2. Brief description of the problems and issues to be addressed (the questions in the syllabus related to the specific case should guide you in identifying those issues).
3. Recommendations and implementation plan.
4. Analysis that discusses why the recommendations will solve the problems identified.

You may choose to organize the report differently; however, please ensure that the above aspects are covered and the report is well organized with clear section and sub-section headers. Please avoid repetition of case facts and long expositions (remember the page limit)! Consider what you believe are the most important factors (and why). General solutions to specific problems will get you little credit. Both quantitative and qualitative analysis is important. Creativity in analysis and suggestions that are grounded in case facts will be given high credit. Please state any assumptions made clearly.

The **Sportsuff.com** case contains less company information of a general nature, but includes more quantitative data and requires development of Excel models. As a result, you need to devote less space to items 1 and 2 listed above. However, you should build analytical models, develop solutions, and answer the questions posted in the case. In addition, as your model is based on the forecasted demand and because some costs in the models are estimated (forecasted), you should provide some what-if analysis that considers, e.g., different possible demand scenarios, changes in cost estimates, etc. The report for this case should include a description of your quantitative model; in particular, you should describe all variables and write the objective function and the constraints. Please submit the excel file through the Blackboard along with your write-up.

**GROUP ASSIGNMENT EVALUATION**

Team assignments provide a valuable learning experience – how to work effectively and efficiently in groups, learning from others, and honing your ability to communicate to others. Although your team’s grade depends on each member’s efforts, some students can be tempted to let others carry their load. In order to provide an incentive for all students to make maximum contributions to the study group, you will be asked to grade each team member’s contributions. Your group grades will be adjusted to obtain

an individual grade based on performance feedback provided by other members of the group (the group assessment forms are posted on the Blackboard). If you do not submit your group assessment form, I will assume that you gave a rating of 100% to all your group members. The forms can be submitted in person or via e-mail, but no later than the exam date.

### **INDIVIDUAL (SHORT) SUBMISSIONS**

In addition to the cases for which you are required to submit group reports, we will be discussing other cases and articles. You should be prepared for class discussion, and this Syllabus provides some suggested questions that you should address. For the individual submissions, please prepare a short write-up answering the question(s) listed on p. 5, and submit it through the Blackboard before the class. The objective of this short submission is to ensure that you prepare the case. For that reason, no late submissions will be accepted.

Each student is required to submit answers to short submissions #4 and #8; these can be in form of Excel files, and the credit will depend on correctness of your solution.

The remaining submissions should be in the form of a Word document, between one-half and one page long, font 10-12, 1.5 spacing, typed. As long as your answer shows that you have given sufficient thought to the analysis, you will get full credit. Note that this in general requires answers that are longer than one sentence (as mentioned above, at least half page).

Each submission is worth up to 2 points, and the maximum number of points you can obtain for individual submissions is 20. If your total exceeds 20 points, it can improve your participation grade (note that in this case, each additional submission does not increase your participation by 2 points).

### **EXAM**

There will be two exams, and they will contain both qualitative and quantitative questions. The questions will have several formats: multiple choice/single answer, multiple choice/multiple answers, short answer/essay, and problems. The exams will be closed book; however, you can prepare a "cheat-sheet" for both exams: for each exam, you can prepare one letter-sized sheet of paper hand-written on both sides (for a total of 2 hand-written pages). I will remove all printed or photocopied material!

According to the USC Final Exam Schedule, the final exam is scheduled for **December 11, at 7 pm**. If there are extenuating circumstances that prevent you from taking an exam, you must discuss the reason with me before the time of the exam. You will not be given a make-up exam unless you obtain a permission from me in advance. In addition, you must be able to document the extenuating circumstance. If you miss the exam due to a medical emergency that can be documented and verified, then a make-up exam will be given. Otherwise, a grade of zero will be given for the missed exam. Note that a make-up exam cannot be taken before the actual exam date!

### **CLASS PARTICIPATION**

Class participation requires that you do the assigned readings, analyze the cases based on the questions given and participate actively in class. I prefer substantive comments based on good analysis rather than brief, general comments that add little to the discussion and learning. Be prepared to defend your suggestions or solutions!

If you are reluctant to talk in class or if you are not physically attending, but would like to show your preparation, please provide me with your analysis/comments through email. This may include material related to the topics covered in class from your work experience, from additional articles/videos that you have found, etc.

**GETTING HELP**

If you have questions about any aspect of the course, you can always talk to me. If it is a quick question, you can contact me before or after the class, or during the break. If you need more time or privacy, you can come to my office hours. If you cannot make my office hours, you can contact me and we can arrange for an alternative time. The best way to reach me is by e-mail.

**RETURN OF PAPERS AND EXAMS**

Graded paperwork that is unclaimed by a student will be discarded after 4 weeks. Students who miss class sessions when paperwork is returned are responsible for arranging for an appointment to retrieve the material. Disputes over graded material should be brought to my attention as soon as possible.

**NOTICE ON ACADEMIC INTEGRITY**

The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the student's work as unacceptable and assign a failing mark on the paper.

Academic dishonesty includes: (*Faculty Handbook*, 1994: 21-22):

- Examination behavior - any use of external assistance during an examination shall be considered academically dishonest unless expressly permitted by the teacher.
- Plagiarism - the appropriation and subsequent passing off of another's ideas or words as one's own. If the words or ideas of another are used, acknowledgment of the original source must be made through recognized referencing practices.
- Other types of academic dishonesty - submitting a paper written by or obtained from another, using a paper in more than one class without the teacher's express permission, obtaining a copy of an examination in advance without the knowledge and consent of the teacher, changing academic records outside of normal procedures and/or petitions, using another person to complete homework assignments without the knowledge or consent of the teacher.

**FOR STUDENTS WITH DISABILITIES**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

**STATEMENT ON TECHNOLOGY USE**

Please note that communication devices such as cell phones, smart phones, tablets, etc. capable of sending and/or receiving electronic communication and all entertainment devices are to be turned off and kept off throughout the class session. Receiving or sending communication or entertainment during class disrupts the learning environment and is rude to those around you.

**Course plan at a glance (tentative)**

	<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Cases</b>	<b>Submission</b>
1	8/28	Introduction to Supply Chain Management Key Supply Chain Concepts	The Seven Principles of Supply Chain Management (CR#1)		
2	9/4	Supply chain strategy Inventory management – Cycle inventory		Zappos (CR#2)	short #1 – Zappos (q.#1)
3	9/11	Inventory management – Safety inventory	Note on Inventory Models (CR#3) §1 Inventory-driven costs (CR#4) Retail inventory (CR#5)		short #2 – Inventory-driven cost (q.#1) short #3 – Retail inventory (q.#2)
4	9/18	Product availability - Newsvendor model Decentralized supply chains; double marginalization	Note on Inventory Models (CR#3) §2, 3		short #4 – Cycle inventory (p.6, under Week4, q.#1-2)
5	9/25	Supply chain pricing and capacity allocation Supply chain alignment		Eastman Tritan (CR#6)	Group #1 –Eastman Tritan
6	10/2	Supply chain evolution Product design and variety		Movie rental business (CR#7)	short #5- Movie rental (q.#6) short #6 –Mass customization (p.7, under Week 6, q.#2)
7	10/9	Design for supply chain management Network design in supply chains	Optimization Models for Restructuring BASF North America's Distribution System (CR#9)	Plaza (CR#8)	group #2 – Plaza short #7 –BASF (q.#3)
8	10/16	Logistics	Reverse Logistic Program Design (CR#11)		short #8 – Inventory centralization (p.8, under Week 8, q.#1,2) short #9 – e-commerce (p.9, q.#3)
9	10/23	<b>MIDTERM</b>			
10	10/30	Sustainability in supply chains Forecasting and quick response Demand forecasting	Note on forecasting (CR#14)	Wal-Mart (CR#12) World Co. (CR #13)	short #10– Wal-Mart (q.#5) short #11– World Co (q.#3)
11	11/6	Aggregate planning Revenue management	Aggregate planning (CR #15) Note on the "Retail inventory and pricing game" (HO)		group #3 – sportsuff.com (CR#10)
12	11/13	Supplier scorecard; supplier management		HTC (CR#16) Li&Fung (CR#18)	short #12 – HTC (q.#4) short #13 – Li & Fung (q.#2)
13	11/20	Supplier management and outsourcing Facility location	Supply chain disruptions (CR #17)	Intel (CR#19)	group #4 – Intel
14	11/27	<b>Thanksgiving Day – no classes</b>			
15	12/4	IT in supply chain; ERP		SAP (CR#20)	short #14–SAP (q.#1)
	12/11	<b>FINAL EXAM</b>			

## Detailed course plan

### Week 1 Introduction to Supply Chain Management and Key Supply Chain Concepts

#### Readings:

- *The Seven Principles of Supply Chain Management*, D.L. Anderson, F.F. Britt, D.J. Favre, *Supply chain management review*, 1997

### Week 2 Supply chain strategy: Inventory management-Cycle inventory

**Case study:** (Stanford case #GS65): *Zappos.Com: Developing a Supply Chain to Deliver Wow!*

#### Discussion Questions:

1. What are Zappos' core competencies and sources of competitive advantage? How sustainable are they? What role does corporate culture play in these questions?
2. How important is next-day air shipment to the customer experience? Is it worth the cost? How might you change it in the cost-conscious environment facing the company in late 2008?
3. How would you expand the business? Would you add more products, more geographies, or by selling private labels? As you expand the business, how can the company become more profitable, particularly in light of the costs associated with the focus on service?
4. How would you expect the environment of a more cost-conscious consumer to affect Zappos' business? What can Zappos do in such an environment to maintain sales growth?

### Week 3 Inventory management-Safety inventory

#### Readings:

- *Note on Inventory Models §1*
- *Inventory-driven costs* (HBR #R0503)

#### Discussion Questions:

1. What are the hidden costs of inventory? What impact can neglect of those costs have on supply chain performance?
- *Retail Inventory: Managing the Canary in the Coal Mine* (CMR #560)

#### Discussion Questions:

1. How is the concept "inventory turns" used in inventory management?
2. Is "lean" always good? What are the different perspectives that retailers, investors, lenders, and suppliers can have when evaluating appropriate inventory levels for a retailer?
3. How should an appropriate inventory level at a retailer be determined?

### Week 4 Product availability-Newsvendor model; Decentralized supply chains; double marginalization

#### Readings:

- *Note on Inventory Models §2;3*

❖ **Cycle inventory assignment:** In solving the problems below, it may be best to set up spreadsheets to compute the answers (please submit it through the Blackboard). In all problems, assume that the annual holding cost is 12% of product cost,  $h=0.12$ .

1. Motor Company purchases components from three suppliers: Components from supplier Alpha cost \$10 and are used at the rate 500 units/month; components from supplier Beta cost \$12 and are used at the rate 2,000 units/month; components from supplier Gamma cost \$25 and are used at the rate 300 units/month. The trucking company is charging a fixed cost of \$800/truck (for the purpose of this exercise, assume that you do not need to worry about the truck capacity). Currently, they purchase separate truckloads from each supplier. What is the corresponding minimal annual cost? What is the cycle inventory of each component?

- Motor Company is considering aggregating orders from all three suppliers. In addition to \$800 fixed truck cost for deliveries with one pickup, the trucking company is charging \$70 for each additional pickup. What is the corresponding minimal annual cost? What is the cycle inventory of each component?

Week 5 Supply chain pricing and capacity allocation; Supply chain alignment; Contracts

**Case study:** (*Darden case #UV6748*): *Eastman Tritan*

Discussion Questions:

- What are the characteristics of the chemical industry that make it unique? What makes Tritan's supply chain easier or harder to manage than other, more traditional supply chains?
- From Eastman customers' perspective, what are the potential risks to switching to Tritan from polycarbonates? What are the potential benefits?
- Using the data in case Exhibit 5 and the newsvendor model, what is the optimal mix of customers that Eastman should target in 2008? What prices should Eastman charge each customer, and what are Eastman's expected profits (use the provided spreadsheet)?
- Taking into account both your financial analysis and other strategic factors, which customers do you recommend Eastman target for the launch?
- Going forward, which additional markets (e.g., sunglass frames, infant care, and medical devices) do you recommend that Eastman target?

➤ **Case study report on Eastman Tritan due at the beginning of class**

Week 6 Supply chain evolution; Product design and variety

**Case study:** (*Kellogg case #KEL616*): *Movie Rental Business: Blockbuster, Netflix, and Redbox*

Discussion Questions:

- How do different players in the movie rental value chain provide and capture value?
- What factors led to the growth of Netflix? How should Blockbuster have responded to the challenge posed by Netflix?
- What factors led to the growth of Redbox? How and why was it able to capture market already dominated by big players such as Blockbuster and Netflix?
- What are the key success factors in the movie rental business? How do Redbox, Blockbuster and Netflix compare on those dimensions?
- How would you advise these companies to modify their strategies and structures going forward?
- What are the pros and cons of the revenue-sharing contract in video industry? Consider the following:
  - How does a revenue sharing contract affect Blockbuster's inventory stocking policy and service level on **VHS**? Is revenue sharing always a win-win to Blockbuster and studios?
  - How significant are the benefits if Blockbuster uses revenue sharing contracts on **DVDs**? How does it compare with VHS?
  - What is the role of revenue sharing contracts in Netflix's DVD business? How does it differ from Blockbuster?
  - How suitable is revenue sharing for Netflix's streaming videos? Why? How about VOD?

❖ **Mass customization assignment:**

Visit and explore three different mass customization websites for customized products—shoes at Nike iD ([nikeid.nike.com](http://nikeid.nike.com)), jeans at Getwear (<http://getwear.com/design> -- make sure you select "Custom fit" option), and dolls at My Twinn (<http://www.mytwinn.com/customdoll/>).

Discussion Questions:

- Are there any differences between their approaches to mass customization?
- Which model is most difficult to implement and why?

3. What are the main difficulties/issues that mass customization imposes on supply chains designed for mass production?

Week 7 Design for supply chain management; Network design in supply chains

**(Bring your laptops to class. Please download the files for network design from the Blackboard before the class)**

**Case study:** (HBS #9-609-113): Plaza, the Logistics Park of Zaragoza

Discussion Questions:

1. Calculate total relevant cost of each option for a park customer.
2. How would the customer's conclusions change if the following assumption changed:
  - a. Demand was more/less uncertain
  - b. The number of units per container changed
  - c. The service level increased
  - d. The product cost increased/decreased
3. What other issues (besides the one listed above) should the customers take into account?
4. What opinion would you have about setting up more than one DC to cover Europe (i.e., one in Plaza and one in Rotterdam)?

**Readings:**

- *Optimization Models for Restructuring BASF North America's Distribution System*, S. Sery, V. Presti, D.E. Shobrys, Interfaces (Nov-Dec. 2001)

Discussion Questions:

1. What are the key issues and objectives of BASF in developing this application?
2. What are the benefits of this model to BASF? How did it compare with their current approach to distribution planning?
3. What are the major simplifying assumptions made in the model and their implications?
4. What are the main limitations of the approach?

➤ **Case study report on Plaza due at the beginning of class**

Week 8 Logistics

❖ **Inventory centralization assignment:** In solving the problems below, it may be best to set up spreadsheets to compute the answers.

1. Epson produces printers for sale in Europe in its Taiwan factory. Printers sold in different countries differ in terms of the power outlet as well as the language manuals. Currently Epson assembles and packs printers for sale in individual countries. Weekly demand in different countries is normally distributed with mean and standard deviation as shown in table:

Country	Mean weekly demand	Standard deviation of weekly demand
France	30,000	5,000
Germany	23,000	4,000
Spain	14,000	2,500
Italy	34,000	7,000
Portugal	21,000	4,500
UK	45,000	6,000

Assume demand in different countries to be independent. Given that the lead time from the Taiwan factory is eight weeks, how much safety inventory does Epson require in Europe if it targets 92 % probability of no stock out (CSL)?

2. Epson decides to build a central DC in Europe. It will ship base printers (without power supply) to the DC. When an order is received, the DC will assemble power supplies, add manuals, and ship the printers to the appropriate country. The base printers are still to be manufactured in Taiwan with a lead-time of eight weeks. How much savings of safety inventory can Epson expect as a result if it still targets 92 % CSL?

❖ **E-commerce assignment:**

Visit and explore three different e-commerce websites and focus on underlined products: buying groceries at vons.com, buying books at amazon.com, and buying personal computers at dell.com.

Discussion Questions:

1. What are the main benefits of e-commerce for supply chains?
2. What are the main challenges that e-commerce imposes on supply chains?
3. Which of the three products (books, groceries, PCs) are most suitable for e-commerce? Which products are least suitable for e-commerce? Why? Would your answer have been different five or ten years ago? What (if anything) has changed?

**Readings:**

- *Reverse logistics program design: A company study*, S.E. Genchev, Business Horizons (2009)

Discussion Questions:

1. What is reverse logistics? What are some of the examples of its use?
2. What are the main differences between forward logistics and reverse logistics? What are the potential dangers if reverse channels are established by mimicking forward flows?
3. What operational considerations must be taken into account when designing the reverse flows?
4. What steps should be addressed by reverse logistic protocols?

Week 9 MIDTERM

Week 10 Sustainability in supply chains: Demand forecasting

**Case study:** (Stanford case #OIT 71): *Wal-Mart's Sustainability Strategy*

Discussion Questions:

1. Given the fact that Wal-Mart's customers generally are unwilling to pay a premium for environmentally friendly products, how is the company deriving business value from its sustainability strategy?
2. As evidenced by Exhibit 9, Wal-Mart's sustainability strategy has generally been very profitable. However, two initiatives described in the case benefit society and the environment, but apparently decrease Wal-Mart's profits—holding recycling/take-back events as part of its e-waste project, and reducing its prices on CFLs and foregoing incandescent light bulb sales. Imagine that you are their internal champion; how would you justify pursuing them?
3. How is Wal-Mart motivating its suppliers to share information about and continuously reduce the environmental impacts of products and processes? How can it stimulate the development of disruptive, breakthrough innovations?
4. Imagine that you are Andy or Tyler, evaluating the progress of the electronics, seafood, and textiles networks. What factors explain the success (or lack of success) of these networks?
5. Think of one new game changer or innovation projects not described in the case. To support your proposal, outline the environmental benefits, the profit opportunity for Wal-Mart, the greatest challenges in implementation, and how Wal-Mart could overcome them.

**Case study:** (HBS #9-601-072): *Supply Chain Management at World Co., Ltd.*

Discussion Questions:

1. Examine the features of fashion retailing in Japan. How can a company use its supply chain to compete in this environment?
2. Identify important aspects of World's supply chain focusing on the processes for manufacturing, demand forecasting and inventory planning.
3. How do the features of the supply chain explain the company's remarkably short lead times (relative to U.S. apparel supply chains)? Examine the features of the supply chain and identify why the company is able to respond so effectively.
4. Can the World's supply chain processes be replicated at other companies? Identify potential barriers.

• *Note on forecasting*

Discussion Questions:

1. What are key variables that need to be forecasted from an operations perspective and why?
2. What forecasting methods are used?
3. When would time-series models versus other models (e.g. causal models) be used?
4. What are the operational implications of fluctuations in demand and forecast errors?

Week 11 Aggregate planning; Revenue management

***(Bring your laptops to class. Please download the required files for aggregate planning and for the retail game from the Blackboard before the class)***

**Readings:**

- Chapter 8 *Aggregate Planning* (pp. 203-227) in *Supply Chain Management: Strategy, Planning, and Operation* by S. Chopra and P. Meindl, Prentice Hall, Second Edition, 2004

Discussion Questions:

1. What is the main purpose of aggregate planning?
2. What are the main strategies used for aggregate planning? What are their main differences?
3. How can you solve aggregate planning problems?

***Retail inventory and pricing game.***

**Case study:** *Sportstuff.com*

Guidelines:

- The case offers you the option to select one of the three possible forms for the inventory cost function. Please use the linear format of the cost function and keep in mind that the formula addresses inventory flow from a *single warehouse*, and should not be applied on total inventory shipped by sportstuff.com.
- As the model contains binary/integer variables, Solver may not give you the optimal solution in a first try – please make sure that your results make sense and do not contain inconsistencies that can be spotted by inspection (this may require some fine-tuning). Moreover, your solution may depend on the initial values – Solver may end in a local optimum, instead of the global optimum.

➤ **Case study report on sportstuff.com due at the beginning of the class**

Week 12 Supplier management and outsourcing

**Case study:** (HKU case HKU950): *Strategic Performance Measurement of Suppliers at HTC*

Discussion Questions:

1. What is the purpose of the supplier scorecard at HTC? Is it achieving that goal?
2. What are the strengths and weaknesses of the supplier scorecard at HTC?

3. What should be done with suppliers receiving B grades? Should they be dropped? What alternatives would you suggest?
4. For each supplier (A, B, C, D, and E), should orders be increased or decreased? Why? Explain your recommendation.
5. What other considerations may affect future allocations of orders with the five suppliers?

**Case study:** (HBS #9-312-102) *Li & Fung 2012*

Discussion Questions:

1. How does Li&Fung make the supply chain more responsive (i.e. reduce response time)?
2. In light of American recession and the “Foxconn effect”, what did Li&Fung do to continue expanding its business and reach its target of US\$20 billion for the period 2008-2010?
3. How do “three year plans” fit Li&Fung strategy and growth? What are growth opportunities available to Li&Fung?
4. How can the company further develop its internal resources to enhance competitiveness? What about external environment?

Week 13 Supplier management and outsourcing; Facility location

**Readings:**

- *Reducing the Risk of Supply Chain Disruptions*, S. Chopra, M.S. Sodhi, (SMR #484)

Discussion Questions:

1. How can companies protect their supply chains from major disruptions? Think of the following:
  - a. Supply chain efficiency vs. risk reduction
  - b. Performance improvement vs. risk reduction
  - c. Cost efficiency vs. risk reduction

**Case study:** (HBS #9-713-406): *Intel: Strategic Decisions in Locating a New Assembly and Test Plant (A)*

Discussion Questions:

1. What criteria would you use to select the site for Intel’s AT plant in 2005? Why?
2. Where would you build the new plant? Why?
3. If you were Intel, what package of incentives would you seek from the government of your chosen location? Why?

➤ **Case study report on Intel due at the beginning of the class**

Week 14 No classes – Thanksgiving Day

Week 15 IT in supply chains: ERP

**Case study:** (Stanford case #SM-214): *SAP and Cloud Computing in 2012 and Beyond*

Discussion Questions:

1. How is ERP different from, say, SCM? Can a company adopt ERP without SCM? SCM without ERP?
2. How is SAP different from Oracle?
3. What is the role of cloud computing in ERP adoption and implementation? What is the difference between IaaS, PaaS, and SaaS? What are the drawbacks of cloud computing?
4. As a consequence of the acquisitions, SAP had many technology platforms.
  - a. How will SuccessFactors be presented to users? Should they be presented inside the SAP portal, to leverage other SAP components? Should they be a separate operating unit, keeping the on-premise and cloud business in their own worlds?
  - b. What was customers’ view of the acquisition?
  - c. How did competitors evaluate the move?