

DSC5211A SUPPLY CHAIN COORDINATION AND RISK MANAGEMENT

AY2014/2016 Semester 1

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COURSE DESCRIPTION

Supply chains have become far-flung and global. At the same time, increasing macroeconomic volatility and uncertainty create a more difficult operating environment for companies. Companies will have to look at the design of the supply chain to improve both system and process flexibility, as well as to work with others to improve overall coordination and to manage and share risks.

The growth of emerging markets, evolving government regulations, and regional trade agreements will further impact the structure of a company's operations.

LEARNING OUTCOMES

This course aims to expose students to the design, integration, and execution of an agile and responsive supply chain. Through case studies, simulation game, and project work, students will gain a better understanding of corporate strategies and supply chain alignment.

TOPICS

- 1) Key supply chain concepts and strategies
- 2) Global supply chain configuration and re-alignment
- 3) Planning for supply chain risk and disruption
- 4) Impact of e-commerce and technology on business models and supply chains
- 5) Simulation game
- 6) Managing supply chains globally:
 - a. The impact of macroeconomic trends and regulations
 - b. Managing supply chains in emerging markets
- 7) Group project

READINGS

Textbook: Supply Chain Management: A Concise Guide, 2nd Edition, by Puay-Guan Goh, Pearson 2015

Article readings: Refer to Course Schedule

PREREQUISITE

Nil

PRECLUSION

Nil

ASSESSMENTS

Components	Weight
Individual Assignment	15%
Midterm Test	25%
Class Participation	10%
Group Simulation Game	20%
Group Project	30%
Total	100%

COURSE SCHEDULE

Instructional Week	Content	Cases / Examples	Reading (s)	Deadlines
1 14 Aug	Course Introduction		Goh Chp 1 "McDonald's and the Challenges of a Modern Supply Chain" "Xiaomi May Turn Away Nine Out of 10 People Who Want a Mi4 In Its First India Sales"	
2 21 Aug	Managing procurement and procurement risks Sourcing segmentation Procurement contracts	Case: HP procurement risk management Case: Aggregated Demand at Samsung Electronics Case: Risk sharing contracts at	Goh Chapter 2 "Now Showing at Blockbuster: How Revenue-sharing Contracts Improve Supply Chain Performance" "Karl Kempf, Intel's Money-	

		Stainless Structurals Asia	Saving Mathematician”	
3 28 Aug	Manufacturing strategies and product design Supply chain flexibility Changing product design paradigms	Case: Push-pull strategy at Dell and Lenovo Case: Modularization at Hyundai Mobis Case: P&G’s detergent wars Case: Targeting new customer segments at HTC, and Haier	Goh Chapter 3 “Yamaha Plans to Sell \$500 Motorcycle in India” “Appliances For Everyone”	Submission of teams for projects and simulation game
4 4 Sep	Integrated supply chains Total landed cost New distribution methods Inventory risk management Is keeping more inventory always bad?	Case: ST Logistics – Distributing consumer goods in China Case: Dabbawala – distribution in India Case: Kiva systems	Goh Chapter 4 and Chapter 5 “The Downside of Just-in-Time Inventory” “15,000 robots usher in Amazon’s Cyber Monday” “Wahaha . . . China’s Leading Beverage Producer”	Finalization of teams for projects and simulation game Assignment 1 due
5 11 Sep	Global supply chain realignment FDI considerations Supply Chain clusters New distribution capabilities and innovations emerge Explanation of Simulation Game	Case: HP restructures its CD-RW supply chain Case: London Metal Exchange in North Asia	Goh Chapter 5 and Chapter 6 “The future of Factory Asia: A Tightening Grip” “Foxconn plans 10-12 new Indian facilities by 2020: chairman” “Four Reasons Mexico Is Becoming a Global Manufacturing	Release of Simulation Game scenario

			Power” “China and Europe: Reconnecting Across a New Silk Road”	
6 18 Sep	Planning for supply chain risk and disruption Simulation Game Round 1	Case: Nokia and Ericsson in 2000 Case: Solectron’s contingency planning Case: Supply chain tracking at Charoen Popkhand Foods	Goh Chapter 7 “Ford Curbs Black, Red Paint Use Amid Japan Quake Shortage” ““No magic in how Walt Disney avoided the risk of US west coast supply chain chaos”	Assignment 2 due
Recess Week 25 Sep	Recess Week – no class			
7 2 Oct	Deconstructing the value chain Outsourcing and offshoring Integrating information and physical flows Simulation Game Round 2	Case: Integrating the value chain at Mentor Media Case: e-Choupal Case: Vertical integration at Esquel	Goh Chapter 8 and Chapter 9 'The Democratization of Fashion': William Fung and Vera Wang on the Implications of Going Global”	
8 9 Oct	Midterm test Simulation Game Round 3			
9 16 Oct (e-learning week)	Impact of technologies on business models and supply chains Simulation Game Round 4	Case: Walmart’s “In-Store” App Case: Bossard’s Vendor Managed Inventory using Smart Bin	Goh Chapter 9 “Real-life Star Trek 'replicator' prepares meal in 30 seconds” “Driverless trucks	

			<p>roam Australian mines”</p> <p>“3-D Printing Will Change the World”</p>	
<p>10 23 Oct</p>	<p>Impact of e-commerce on business models and supply chains</p> <p>Simulation Game Round 5</p> <p>Industry guest speaker (TBC)</p>	<p>Case: Kozmos</p> <p>Case: Amazon.com</p> <p>Case: Flipkart.com</p>	<p>Goh Chapter 10</p> <p>“Anatomy of a Dot- Com”</p> <p>“Crumbling infrastructure? Etailers like Flipkart, Amazon & eBay are widening logistics networks in India”</p> <p>“Amazon to Open First Brick and Mortar Site”</p>	
<p>11 30 Oct</p>	<p>Managing global supply chains</p> <p>Impact of macroeconomic developments and regulations</p> <p>Managing supply chains in emerging markets</p> <p>Simulation game review</p>	<p>Case: Yamaha uses free trade zones in the USA</p> <p>Case: Siam Cement Group and Italcementi strategies in the cement industry</p> <p>Case: Shortening the Indian supply chain at Panduit</p>	<p>Goh Chapter 11</p> <p>“How Rising Fuel Costs Are Transforming Distribution Strategies”</p>	<p>Submission of simulation game report</p>
<p>12 6 Nov</p>	<p>Group project presentations</p>			<p>All presentations and reports due before class starts</p>
<p>13 13 Nov</p>	<p>Group project presentations</p> <p>Course wrap up: The future of supply chains</p>		<p>Goh Chapter 12</p> <p>“The Mint countries: Next economic giants?”</p>	