

DSC5211A SUPPLY CHAIN COORDINATION AND RISK MANAGEMENT

AY2016/2017 Semester 1

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COURSE DESCRIPTION

Supply chains have become far-flung and global as companies expand their operations to new markets and new supply sources. Concurrently, a number of macro-trends are emerging and evolving which cause changes to traditional supply chains structures and assumptions. These include: rising costs in the usual outsourcing manufacturing sites, entering into emerging markets, changing country regulations and regional trade agreements, impact of technologies on new business models and process changes, cross-border M&A, and emerging marketing companies expanding regionally, etc.

Companies will have to continuously evaluate their strategies and adapt their supply chains to deal with these changes. They will need to improve their flexibility, coordination, and responsiveness to deal with the risks and opportunities.

LEARNING OUTCOMES

The course will cover functional areas of the supply chain and integration of these concepts into a holistic framework. It will examine how global supply chain configurations are changing and adapting, and how companies should prepare for the impact of macroeconomic trends and new technologies to their business models, distribution, and supply chains. Through case studies, simulation game, and project work, students will gain a better understanding of corporate strategies, and how to align their supply chains and manage risks.

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 global supply chains:
 - a. The impact of macroeconomic trends and country regulations
 - b. 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 12 Aug	Course Introduction		Goh Chp 1 "McDonald's and the Challenges of a Modern Supply Chain" "Starbucks' Howard Schultz: Finally, A CEO Who Gets the Importance of the Supply Chain"	

			<p>“Xiaomi May Turn Away Nine Out of 10 People Who Want a Mi4 In Its First India Sales”</p> <p>“Shining examples: How three large and successful companies are using their supply chains to compete”</p>	
<p>2 19 Aug</p>	<p>Managing procurement and procurement risks</p> <p>Sourcing segmentation – the Kraljic Metric</p> <p>Procurement contracts</p>	<p>Case: Walmart – procurement for competitive advantage</p> <p>Case: HP procurement risk management</p> <p>Case: Retail localization at IKEA</p> <p>Case: Risk sharing contracts at Stainless Structural Asia</p>	<p>Goh Chapter 2</p> <p>“Now Showing at Blockbuster: How Revenue-sharing Contracts Improve Supply Chain Performance”</p> <p>“This Wal-Mart tactic should send shivers across retail”</p> <p>“Stuff keeps getting cheaper”</p>	
<p>3 26 Aug</p>	<p>Manufacturing strategies and product design</p> <p>Manufacturing flexibility – analyzing trade-offs</p> <p>Changing product design paradigms</p> <p>Producing for new / emerging markets</p>	<p>Case: Manufacturing planning at Poh Seng Group</p> <p>Case: Benetton – re-organizing manufacturing through postponement</p> <p>Case: Italcementi – entering and growing in Asian</p>	<p>Goh Chapter 3</p> <p>“Fighting for the next billion shoppers”</p> <p>“Harley Fights Cheap Asian Bikes by Making Fewer Hogs “</p> <p>“How can a newcomer disrupt</p>	<p>Submission of teams for projects and simulation game</p>

		markets for a commodity product Case: Embraer – targeting niche markets	the course of an entire industry?” “GE Healthcare innovates in India for bottom of the pyramid”	
4 2 Sep	Managing distribution and inventory Inventory risk management Is inventory always bad?	Case: ST Logistics – Trading off between customer service and total logistics cost Case: Zara – trading off between inventory and distribution Case: Learning from toys	Goh Chapter 4 and Chapter 5 “The Downside of Just-in-Time Inventory” “Learning from toys: lessons in managing supply chain risk from the toy industry”	Finalization of teams for projects and simulation game Assignment 1 due
5 9 Sep	Global supply chain re-alignment Total landed cost Supply Chain clusters Global ecosystem framework Entering new markets Explanation of simulation game	Case: HP restructures its CD-RW supply chain Case: Bossard integrates supply and demand chains (A) Case: Panduit -- shortening delivery lead time in India	Goh Chapter 6 and Chapter 11 ” Why Amazon Can't Make A Kindle In the USA” “The Mint countries: Next economic giants?”	Class voting on simulation game scenario
6 16 Sep	Planning for supply chain risk and disruption Risk Management framework	Case: Nokia and Ericsson in 2000	Goh Chapter 7 “From Superstorms to Factory Fires: Managing Unpredictable	Simulation Round 1

	<p>Strategic and operational contingency planning</p> <p>Supply chain flexibility</p> <p>Simulation Game Round 1</p>		<p>Supply-Chain Disruptions”</p> <p>“Is Japan ready for the ‘Big One’?”</p> <p>“Fashion’s Fair-Weather Supply Chain”</p> <p>“Why Nissan’s Disaster Recovery Bested Rivals”</p>	
<p>7</p> <p>23 Sep</p> <p>Recess week</p>	<p>No class (note this week may be used as make-up week in case of changes in class schedule)</p>			<p>Assignment 2 due</p>
<p>8</p> <p>30 Sep</p>	<p>Managing the global value chain</p> <p>Mapping the value chain</p> <p>Outsourcing vs inhouse decisions</p> <p>Offshoring vs local productions decisions</p>	<p>Case: Esquel – the use of vertical integration in the textiles supply chain</p> <p>Case: Lego – outsourcing versus inhouse manufacturing</p> <p>Case: Bossard – integrating supply and demand chains (B)</p>	<p>Goh Chapter 8 and 12</p> <p>“The 10 hidden costs of outsourcing”</p>	<p>Simulation Round 2</p>
<p>9</p> <p>7 Oct</p>	<p>Midterm</p> <p>Simulation Round 3</p>			
<p>10</p> <p>14 Oct</p>	<p>Future-scaping supply chains: The Impact of macroeconomic forces and regulations</p>	<p>Case: Casella Wines</p> <p>Case: Yamaha Inc uses Free Trade Zones in the US</p>	<p>“Foxconn plans 10-12 new Indian facilities by 2020: chairman”</p> <p>“How Hard is the Yuan Devaluation</p>	<p>Simulation Round 4 and 5</p> <p>Project outline submission</p>

	<p>FDI considerations</p> <p>Impact of macroeconomic developments</p> <p>Impact of country and trade regulations</p> <p>Regional and global coordination</p>		<p>Hitting the New Apple iPhone? “</p> <p>“Four Reasons Mexico Is Becoming a Global Manufacturing Power”</p>	
<p>11 21 Oct</p>	<p>Future-scaping supply chains: Impact of technologies on business models and supply chains</p> <p>Industry guest speaker (TBC)</p>	<p>Case: Amazon.com – expanding “rich” and reach</p>	<p>Goh Chapter 9</p> <p>“3-D Printing Will Change the World”</p> <p>“FDA Approves First 3-D Printed Drug”</p> <p>“Unlocking the potential of the Internet of Things”</p> <p>“The rise of the sharing economy”</p>	<p>Simulation game report due</p>
<p>12 28 Oct</p>	<p>Future-scaping supply chains: The Impact of new sales and distribution channels</p> <p>New distribution capabilities and innovations emerge</p> <p>Integrating information and physical flows</p> <p>Review of Simulation Game</p>	<p>Case: Online and offline fulfillment at Netflix.com</p> <p>Case: Extending “rich” and reach at Amazon.com</p>	<p>Goh Chapter 10</p> <p>“E-Commerce and New Delivery Paradigms Shape Future of Global Logistics”</p> <p>“China and Europe: Reconnecting Across a New Silk Road”</p> <p>“Uniqlo operator plans logistics hub</p>	

	Prize presentation		to speed delivery of online orders” “Amazon expands logistics reach in China”	
13 4 Nov	Supply chains of the future Group Project Presentations			All presentations and reports due before class starts
14 11 Nov	Group project presentations Group Project Debrief			

Article Readings:

“Shining examples: How three large and successful companies are using their supply chains to compete”, Economist, Jun 15th 2006, accessed at <http://www.economist.com/node/7032179>

“McDonald’s and the Challenges of a Modern Supply Chain”, New, Steve, Harvard Business Review, Feb 04, 2015, accessed at <https://hbr.org/2015/02/mcdonalds-and-the-challenges-of-a-modern-supply-chain>

“Starbucks’ Howard Schultz: Finally, A CEO Who Gets the Importance of the Supply Chain”, Berman, Jeff, SupplyChain 247, Oct 03, 2015, accessed at <http://www.supplychain247.com/article/starbucks-howard-schultz-a-ceo-who-gets-supply-chain/news>

“Xiaomi May Turn Away Nine Out of 10 People Who Want a Mi4 In Its First India Sale”, Arakali, Harichandan, International Business Times, accessed at <http://www.ibtimes.com/xiaomi-may-turn-away-nine-out-10-people-who-want-mi4-its-first-india-sale-1800226>

“Now Showing at Blockbuster: How Revenue-sharing Contracts Improve Supply Chain Performance”, Knowledge @ Wharton, Oct 16, 2000, accessed in Oct 2013 at <http://knowledge.wharton.upenn.edu/article/now-showing-at-blockbuster-how-revenue-sharing-contracts-improve-supply-chain-performance/>

“This Wal-Mart tactic should send shivers across retail”, Gustafson, Krystina, CNBC, 19 May 2016, accessed at <http://www.cnbc.com/2016/05/19/wal-marts-low-price-commitment-should-send-shivers-across-retail.html>

“Stuff keeps getting cheaper”, Fox, Justin, Bloomberg, Feb 26, 2016, accessed at <https://www.bloomberg.com/view/articles/2016-02-26/stuff-keeps-getting-cheaper>

“Learning from toys: lessons in managing supply chain risk from the toy industry”, Eric, Johnson M., California Management Review, Spring 2001, Vol. 43, Issue 3

“The Downside of Just-in-Time Inventory”, Ray, Susanna, and Thomas Black, Business Week, Mar 24, 2011, accessed on http://www.businessweek.com/magazine/content/11_14/b4222017701856.htm

“How can a newcomer disrupt the course of an entire industry?”, Patiky, Mark, May 1, 2013, accessed on: <http://www.forbes.com/sites/businessaviation/2013/05/01/how-can-a-newcomer-disrupt-the-course-of-an-entire-industry/>

“Fighting for the next billion shoppers”, Jun 30th 2012, The Economist, accessed at: <http://www.economist.com/node/21557815>

“Harley Fights Cheap Asian Bikes by Making Fewer Hogs “, Stock, Kyle, Bloomberg, July 21, 2015, accessed on <http://www.bloomberg.com/news/articles/2015-07-21/harley-fights-back-against-cheap-asian-bikes-by-making-fewer-hogs>

“GE Healthcare innovates in India for bottom of the pyramid”, Roy, Subir, Business Standard, May 4, 2009, accessed at http://www.business-standard.com/article/companies/ge-healthcare-innovates-in-india-for-bottom-of-the-pyramid-109050400019_1.html

“From Superstorms to Factory Fires: Managing Unpredictable Supply-Chain Disruptions”, Simchi-Levi et al, Harvard Business Review, Jan-Feb 2014, accessed at <https://hbr.org/2014/01/from-superstorms-to-factory-fires-managing-unpredictable-supply-chain-disruptions>

“Why Nissan’s Disaster Recovery Bested Rivals”, Nunn, Peter, Edmunds Auto Observer, December 5, 2011, accessed at <http://www.edmunds.com/autoobserver-archive/2011/12/why-nissans-disaster-recovery-bested-rivals.html>

“Fashion’s Fair-Weather Supply Chain”, Phillips, Erica E., The Wall Street Journal, Oct 29, 2015, accessed at <http://www.wsj.com/articles/fashions-fair-weather-supply-chain-1446136510>

“The 10 hidden costs of outsourcing”, Burton, Terence T., Supply Chain Quarterly, Quarter 2 2013, accessed at <http://www.supplychainquarterly.com/topics/Procurement/20130621-the-10-hidden-costs-of-outsourcing/>

“ Why Amazon Can't Make A Kindle In the USA”, Denning, Steve, Forbes, 8/17/2011, accessed at <http://www.forbes.com/sites/stevedenning/2011/08/17/why-amazon-cant-make-a-kindle-in-the-usa/>

“Foxconn plans 10-12 new Indian facilities by 2020: chairman”, Carsten, Paul, Reuters, May 26, 2015, accessed at <http://www.reuters.com/article/2015/05/26/us-foxconn-investment-india-idUSKBN0OB16X20150526>

“China and Europe: Reconnecting Across a New Silk Road”, Chen, Xiangming, and Julia Mardeuz, European Financial Review, Feb 10, . 2015 accessed at <http://www.europeanfinancialreview.com/?p=4143>

“Four Reasons Mexico Is Becoming a Global Manufacturing Power”, Coy, Peter, Bloomberg, June 27, 2013, accessed in Nov 2013 at <http://www.businessweek.com/articles/2013-06-27/four-reasons-mexico-is-becoming-a-global-manufacturing-power>

“How Hard is the Yuan Devaluation Hitting the New Apple iPhone? “, The Wall Street Journal, Sep 20, 2015, accessed at <http://blogs.wsj.com/chinarealtime/2015/09/10/how-hard-is-the-yuan-devaluation-hitting-the-new-apple-iphone/>

“3-D Printing Will Change the World”, D’Aveni, Richard A., Harvard Business Review, Mar 2013, accessed at: <https://hbr.org/2013/03/3-d-printing-will-change-the-world>

“FDA Approves First 3-D Printed Drug”, Szczerba, Robert, Forbes, Aug 4, 2015, accessed at <http://www.forbes.com/sites/robertszczerba/2015/08/04/fda-approves-first-3-d-printed-drug>

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“Amazon expands logistics reach in China”, Saito, Mari and Brendan Goh, Reuters, Feb 10, 2016, accessed at <http://www.reuters.com/article/us-amazon-com-logistics-china-idUSKCN0VI21F>

ACADEMIC HONESTY & PLAGIARISM

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. **In case of any doubts, you should consult your instructor.**

Additional guidance is available at:

<http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct>

Online Module on Plagiarism:

<http://emodule.nus.edu.sg/ac/>