

DOS 3704 – Operations Strategy

Course Objectives:

How did ZARA become one of the fastest growing and most profitable (if not most profitable) brands in fashion retailing? What drives Amazon's success? To a large extent the answer is that ZARA and Amazon view their operational capabilities as an important and integral part of their competitive advantage. As do other successful companies, such as UBER, Toyota, Southwest Airlines, Cisco, and Netflix. They invest strategically in physical plants and facilities, in process and information technology, in employee, supplier, and distributor relationships, and perhaps most importantly, in organizational practices and know-how. The objective of this course is to provide students with a set of qualitative frameworks and quantitative tools to analyze and guide the long-term, strategic decisions for a company's operations function. The course is recommended for those interested in consulting, general management, or operations careers, but also for finance specialists interested in assessing the risks, the opportunities, the competitive advantage, and ultimately the value embedded in a company's operations.

Prerequisites:

DSC2006 - Operations Management

Instructor:

Niyazi Taneri niyazi@nus.edu.sg

Course Material and Timeline:

Course material will either be distributed electronically. Slides from each session will be shared electronically within 24 hours after the session ends. Please do not post or share these slides on any other media. *Important Note:* The course will be in hybrid format but primarily be held online via Zoom.

Teams

The course will rely extensively on joint work. You will form teams to work on 1) Paper Presentations 2) Case Studies, and 3) a Team Project. You will have the chance to form *your* own teams. Each of the joint work aspects of the course are described in further detail below.

Plagiarism and Cheating

The course will have a zero tolerance policy for plagiarism and cheating in any of the assessed material. Plagiarism and cheating will result in a zero grade.

Text

• *The Goal,* by Goldratt and Cox (Any edition. Available in the library, for purchase or as an audio book).

Assessment

•	Participation	10%
•	Case and paper presentations/exercises	30%
•	Team project	30%
•	Final Test	30%

Session Format and Participation

The sessions will involve lots of participation on your part during case discussions, paper discussions, and lectures. Individual students will be asked to participate, and the concepts and situations covered by the cases will be seen on the exams. An important requirement: *display your name as a username in Zoom*. This helps both your instructor and your classmates. As in a business meeting, when you talk, you should address everyone (not just the instructor). Such cross-communication is easier if we can all see each other's names.

Case Studies. Case Discussions and Case Presentations

Some sessions involve case studies, which are listed on page 4 of the syllabus. The cases typically involve one or more multinational companies based in Singapore or elsewhere.

Each student is expected to come to class ready to discuss the assigned case studies. To prepare for such discussions, read the assigned case prior to the class, with the exception of Session 1 for which time will be allocated during the lecture. Going over the case with your classmates prior to the class can also help you prepare.

For some case studies, we will also have breakout sessions where you will work in your teams and prepare a presentation. Each team is required to submit their presentation and some teams will be selected to present in class.

Team Projects

The team project is a key element of the course. You will form your own teams and identify your own projects. The task of each team is to identify emerging technologies and identify how these technologies have or will enable a particular company or industry to change how it provides its product.

For example, the availability of smartphones, GPS and mobile connectivity have enabled companies like Uber, Grab and Go-Jek to fundamentally transform how transport services are provided. How will (or how have) other technological advancements – e.g. machine learning, artificial intelligence, virtual reality, augmented reality, blockchain, – change(d) the way companies deliver their product or service?

Each team, formed by Week 2, will select a coordinator by Week 3 who will manage communications with the instructor. The teams will pitch project ideas on Week 8. The class and instructor will provide feedback during those presentations.

The final grade for the project will be based on both the pitch and in-class presentation at the end of the semester. The presentation should address the following areas where relevant: Technologies identified, problems addressed by the technology, industry relevance, methodology adopted, analysis and interpretation of results, managerial implications, and guidelines provided.

Papers, Paper Discussions and Paper Presentations

Some sessions involve short papers, typically from Harvard Business Review. These papers demonstrate important concepts and are carefully selected to complement the material covered in class. Similar to the case studies, each student is expected to come to class ready to discuss the assigned papers.

For each paper, a single team will be assigned to read the paper in more detail than their classmates and come prepared to give a 15-minute presentation about the paper. There will be an additional 5 minutes for questions and class discussion. In addition to summarizing the main ideas in the paper (assuming everyone has read it), your role as a presenter is to provide a critical assessment, describing both the usefulness of the concepts described and their limitations. In preparing your presentation, feel free to provide additional background or perspectives. This may require additional research on your part or to draw on your own experience. Most importantly, your role is to engage and lead the class in a lively discussion throughout the presentation, or at least in the final 5 minutes. For this purpose, your slides should contain open-ended questions or other interactive material.

Paper #	Paper Details
Paper 1	Vijay Govindarajan and Ravi Ramamurti, "Delivering World-Class
	Health Care, Affordably," Harvard Business Review, 91, 11, 117-125,
	2013.
Paper 2	Stefan Thomke and Donald Reinerton, "Six Myths of Product
	Development," Harvard Business Review, 90, 5, 84-94, 2012.
Paper 3	Kevin Boudreau and Karim Lakhani, "Using the Crowd as an Innovation
	Partner," <i>Harvard Business Review</i> , 91, 11, 60-68, 2013.
Paper 4	Barsade, Sigal, Adam Waytz, Rob Cross, Reb Rebele, and James R. Detert.
	2016. Collaborative overload: your most helpful employees are burning
	out: here's what to do about it. <i>Harvard Business Review</i> . 94: 74-79.
Paper 5	Netessine, S., & Yakubovich, V. (2012). "The Darwinian Workplace."
	Harvard Business Review, 90(5), 25-28.
Paper 6	Narayanan, V.G. and Raman, Ananth (2004). "Aligning incentives in
	supply chains." Harvard Business Review, 82(11), 94-102.
Paper 7*	Luca, M., Kleinberg, J., & Mullainathan, S. (2016). Algorithms Need
	Managers, Too. Harvard Business Review, 94, 96-101.
Paper 8*	Chase, R. B., & Dasu, S. (2001). "Want to Perfect Your Company's
_	Service? Use Behavioral Science." Harvard Business Review, 79(6), 78-
	84.

^{*}Papers 7 and 8 to be discussed only if the number of groups reaches 7 or 8.

Course Timeline:

Session	Title		
Session 1	Operations for Strategic Advantage		
Session 2	Quality: When things turn ugly!		
Session 3	Re-thinking Process Analysis		
Session 4	Valuing a Company's Operation		
Session 5	Forecasting		
Session 6	Managing Uncertainty		
RECESS WEEK			
Session 7	Emerging Topics in Operations		
Session 8	Agile Supply Chain		
Session 9	Managing a Global Supply Chain		
Session 10	Business Model Innovation		
Session 11	Test		
Session 12	Disruption Workshop		
Session 13	Project Presentations		

Notes:

Elements of some sessions may be removed, amended, swapped or combined into a single session.