

Operations Strategy 15.769

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Professor Donald Rosenfield**

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Massachusetts Institute of Technology
Cambridge, Massachusetts 02142**

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Charles H. Fine

- a. Joined Sloan faculty in January 1983
Operations Management Group
PhD, Stanford Business School
- b. Experience in Auto, Aero, Elect, Telecom, CP
- c. Taught: Intro to Ops, Service Ops, SC, Ops Strat, ...
- d. Research in
 - i. Economics of Quality Improvement
 - ii. Economics of Flexible Manufacturing
 - iii. Supply Chain Design
 - iv. Value Chain Dynamics & Roadmapping

Donald B. Rosenfield

- a. Director, Leaders For Global Operations Program
Senior Lecturer, Sloan
- b. Joined MIT part time in 1980, full time in 1988,
after 12 years in consulting
Ph.D in OR from Stanford, 3 degrees from MIT
Operations Management Group
- c. Worked extensively with LGO companies
- d. Taught: Intro ops, DMD, Ops Strat, Service ops,
Practice of ops
- e. Work in ops strategy, supply chain management

“Housekeeping”

1. Course Materials:

Books: *Clockspeed*, by C. Fine, Perseus Books, 1998.

Operations Strategy, Beckman & Rosenfield, Irwin/McGraw Hill, 2007

2. Grading

Class participation	30%
Case write-ups (3)	45%
Two individual	
One “extended” (group)	
Final project (group)	25%

3. Values

Academic Integrity--”Do your own work”

Behavioral Integrity -- “Do unto others . . . “

Values, Integrity, & Professional Standards

1. Sloan core values: *integrity, respect, collaboration, innovation, and positive impact.*
2. Do unto others . . . (laptops & phones off; timeliness; respect)
3. Academic Integrity: Understand the definition of Plagiarism.
4. Regular case write-ups are *individual work*.
5. Extended case write-ups and final projects are *group work*.
6. For group work in this class: Please use Type 3 collaboration: “Each team member must contribute substantially to the deliverable and understand the whole as well as the parts.”

Academic Integrity

The general policy for this class is that you should **learn through your own work**, feel free to **build on the work of others**, and clearly **delineate which is which**. You should feel free to surf the web and the universe to your heart's content in search of relevant knowledge and ideas for this course. However, **do not represent the ideas or work of others as your own** and be sure to **acknowledge your debts to others**.

Class Participation

- a. Do you attend class?
- b. Do you participate positively to the learning experience in the class?
- c. Do you distract others inappropriately?

Grade=f(contribution to classroom learning process)

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Class 1 - Course introduction; Innovation and operations discipline

Case: “McDonald’s Corp, (Abridged)”

Class 2 - Frameworks for strategy, and the decision category approach

Case: “Zara”

Class 3 - Developing an operations strategy; application of decision category approach and the capabilities approaches

Case: “BYD Company, Ltd”

Class 4 - Value Chain Dynamics & Operations Decisions

Clockspeed, *Chapters 1-4*

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Class 5 - Value Chain Dynamics: Lessons from the Auto Industry
The Machine that Changed the World, Womack, et al, Chapters 1-3

Class 6 - Enterprise Architecture and Operations Strategy
Case: “Southwest Airlines: In a Different World”

Class 7 - Vertical integration and Outsourcing
Case: “Boeing Commercial Airplanes’ 787 Dreamliner”

Class 8 - Business Processes
Case: “Pharmacy Service Improvement at CVS (A)”

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Class 9 - Process technology decisions and multiple plants
Case: “ITT Automotive: Global Manufacturing Strategy”

NO CLASS – Columbus Day

Class 10 - Capacity Strategy - How to make decisions on Capacity and Capacity expansion
Case: “Capacity Planning at Genentech”

NO CLASS – SIP Week

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Class 11 – Facilities Strategies and Globalization, Comparisons of Plant Productivity

Case: “Applichem”

Class 12 – Summary Lecture on Facilities Strategy and Globalization
Chapter 5 of Beckman and Rosenfield on facilities strategy

Class 13 - Sourcing and Supplier Management

Case: “Toyota Supplier Relations: Fixing the Suprima Chassis (A)”

Class 14 - Information systems and the impacts of the electronic economy

Case: “Amazon Web Services”

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Class 15 – Logistics Systems and the Fulfillment Supply Chain

Case: “Dell Inc.: Improving the Performance of the Desktop PC Supply Chain”

Class 16 – Competing on Quality: Sources of Quality and Different Measures of Quality

Case: “Delamere Vineyard”

Class 17 - Competing on Cost Versus Competing on Availability

Case: “New Balance Athletic Shoe”

Class 18 - Competing on Cost Versus Competing on Features and Innovativeness: Types of Quality and the Product Development Process

Case: “BMW: The 7-Series Project”

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Class 19 – Competition in the Housing Industry: Improving Cost, Quality and Availability

Case: “House Building Disrupted: Supply Chain Re-Engineering during an Epic Disaster”

Class 20 – Models for Gaining Advantage in a Global Environment, How to Position Within a Value Chains

Case: “Fast, Global, & Entrepreneurial: Supply Chain Management, Hong Kong Style”, (Li and Fung)

Class 21 - Globalization, Joint Ventures Sourcing Overseas, and Macroeconomic Effects of Off Shoring

Case: “Chiang-Sho, Ltd”

Class 22 - Supplier Power and Overseas Sourcing, Moving Up the Value Chain in Outsourcing

Case: “Flextronics International”

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Class 23 – Presentations Part 1

Finish Chapter 11 of Beckman and Rosenfield

Class 24 – Presentations Part 2 and Wrap Up

Themes in Operations Strategy

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System Integrity and consistency as core to operations excellence.

e.g., Toyota, McDonald's, Southwest, Zara

Fit Business, Operations and functional strategies

e.g., Auto industry, Southwest, BYD

Operations Innovation as source of Advantage

SWA, Toyota, Dell, McDonald's, BYD

Strategy is the pattern of operations decisions

Boeing, ITT, CVS, Genentech, Applichem, Amazon, Toyota, Dell

Processes embody distinctive and core capabilities

"Any process is better than no process." -- M. Hammer

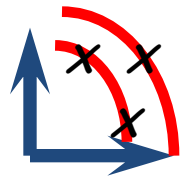
Operations Strategies are the selection of competitive dimensions and require design tradeoffs

BMW, Delamere, New Balance, Housing

You are never done -- continuous improvement/innov is mandatory

McD, Toyota, BYD

(RFP <----> CI)



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