



MS5235 Operations Forensics

Instructor: R K Amit*

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Lectures: Tue (13:00—14:50) & Fri (08:00—09:50)

Venue: DoMS 401

The mathematician Gödel proved that a system of axioms can never be based on itself: statements from outside the system must be used in order to prove its consistency.

About the Course

Since the publication of seminal book “The Modern Corporation and Private Property” by Berle and Means in 1932, issues at the separation between ownership and control have been at the centre of management science. This course on Operations forensics adds to this tradition by understanding operations of an organisation from an external view point. Three dimensions of operations forensics—operational indicators, operational due diligence, and operational turnarounds—will be discussed in the course.

Readings

Richard Lai. **Operations Forensics**, MIT Press, 2013.

Jan A. Van Mieghem and Gad Allon. **Operations Strategy**, Second Edition, *Dynamic Ideas*, 2015.

Additional Readings: Selected recent academic and business articles and cases.

Grading

The grading for this course will be based on relative performance.

End-Quarter Exam: 30%

Class Presentations: 20%

Class Discussions: 20%

Poster Presentation (Group ≤ 3): 30% (presentation, uniqueness, and relevance)

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⊗ stands for readings.

We will use Acadly (<https://app.acadly.com/home>) as learning management system.



Course Topics

Operations Strategy

Operating system, Three views of Operations, Analysing competitive threat using trade-offs

- ⊗ Christensen and Overdorf (2000). Meeting the Challenge of Disruptive Change. Harvard Business Review (HBR).
- ⊗ Skinner (1969). Manufacturing-missing link in corporate strategy. Harvard Business Review (HBR).
- ⊗ Stalk, Evans and Shulman (1992). Competing on capabilities: The new rules of corporate strategy. Harvard Business Review (HBR).
- ⊗ Hayes and Upton (1998). Operations-based strategy. California Management Review.

Operations Forensics: Introduction

What is operations forensics? Understanding the dimensions of operations forensics—operational indicators, operational due diligence, and operational turnarounds. What financial statements may or may not reveal?

- ⊗ Berman (2005). King of the retail jungle. Fortune.
- ⊗ Bowman (1984). Content Analysis of Annual Reports for Corporate Strategy and Risk. Interfaces.

Operational Indicators

Indicators of accounting performance. Indicators of disruption. Indicators of Distress. Benford's law

- ⊗ Kirby and Stewart (2007). The Institutional Yes: How Amazon's CEO Leads Strategic Change in a Culture Obsessed with Today's Customer. Harvard Business Review (HBR).
- ⊗ Cusumano, Mylonadis and Rosenbloom (1992). Strategic maneuvering and mass-market dynamics: The triumph of VHS over Beta. Business history review.

Operational Due Diligence

The many facets of operational due diligence. Assessing the customer base. Assessing risks. Assessing options.

- ⊗ Kaplan (2012). When to Drop an Unprofitable Customer. Harvard Business Review (HBR).
- ⊗ Spear and Bowen (1999). Decoding the DNA of the Toyota Production System. Harvard Business Review (HBR).
- ⊗ Smith, Leimkuhler and Darrow (1992). Yield Management at American Airlines. Franz Edelman Award Papers, Interfaces.

Operational Turnarounds

Turning around purchasing. Turning around production. Turning around distribution. Sustaining the turnaround

- ⊗ Degraeve and Roodhooft (2001). A Smarter Way to Buy. Harvard Business Review (HBR).
- ⊗ Fischer, Raman and McClelland (2000). Rocket Science Retailing. Harvard Business Review (HBR).
- ⊗ Hammer (1990). Reengineering Work: Don't Automate, Obliterate. Harvard Business Review (HBR).
- ⊗ Geraghty and Johnson (1997). Revenue Management Saves National Car Rental. Franz Edelman Award Papers, Interfaces.