Introduction

Operations in a Restaurant

Operations in an Emergency Room

Operations from the Perspective of the Customer

Four Dimensions of Performance

Cost

- Efficiency

Quality

- Product quality (how good?)
- Process quality (as good as promised?)

Variety

- Customer heterogeneity

Time

- Responsiveness to demand

Important for

- Performance measurement
- Defining a business strategy

Four Dimensions of Performance: Measurements for a Sandwich Store

Cost

- Efficiency

Quality

- Product quality (how good?)
- Process quality (as good as promised?)

Variety

- Customer heterogeneity

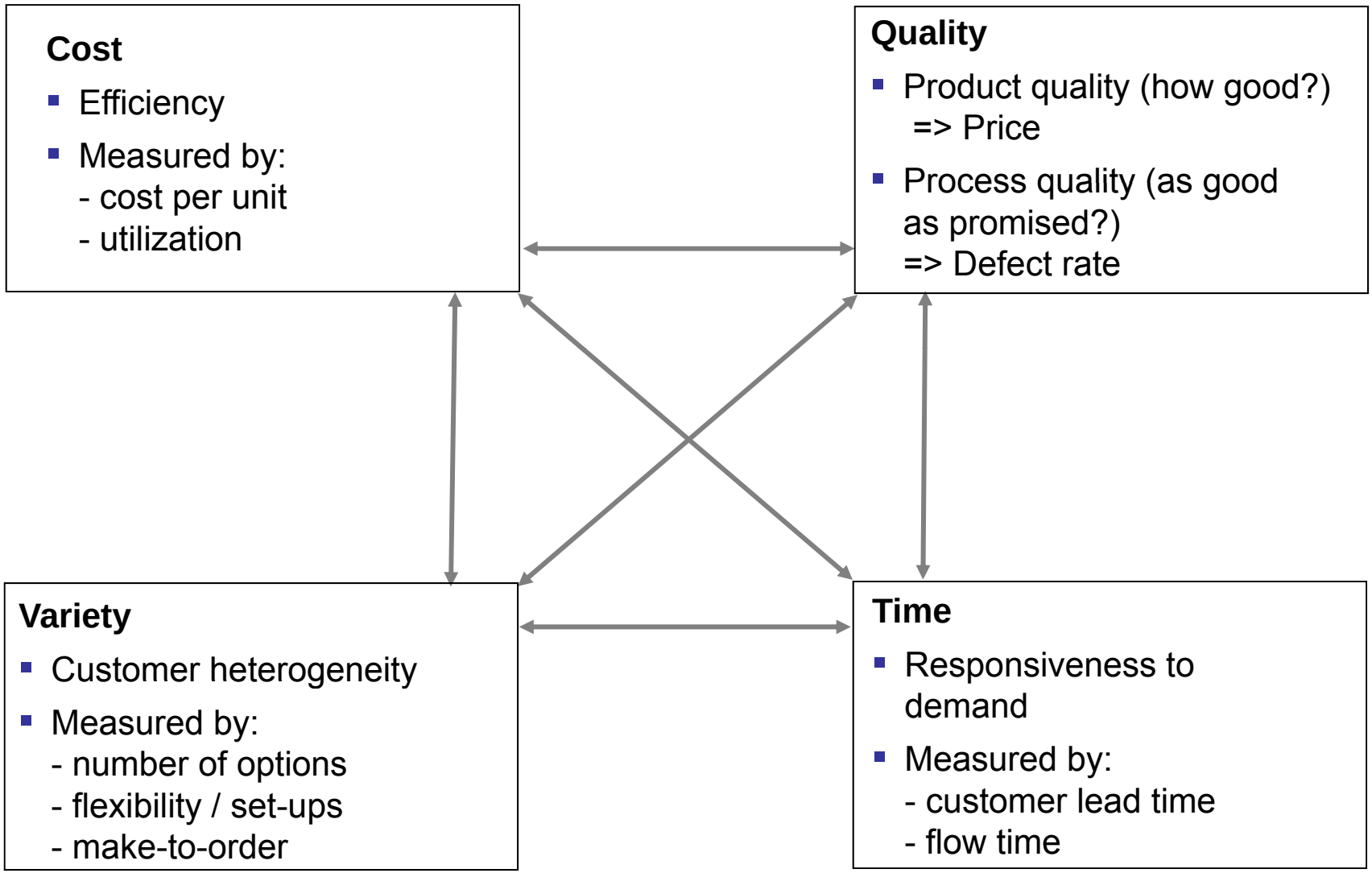
Time

- Responsiveness to demand

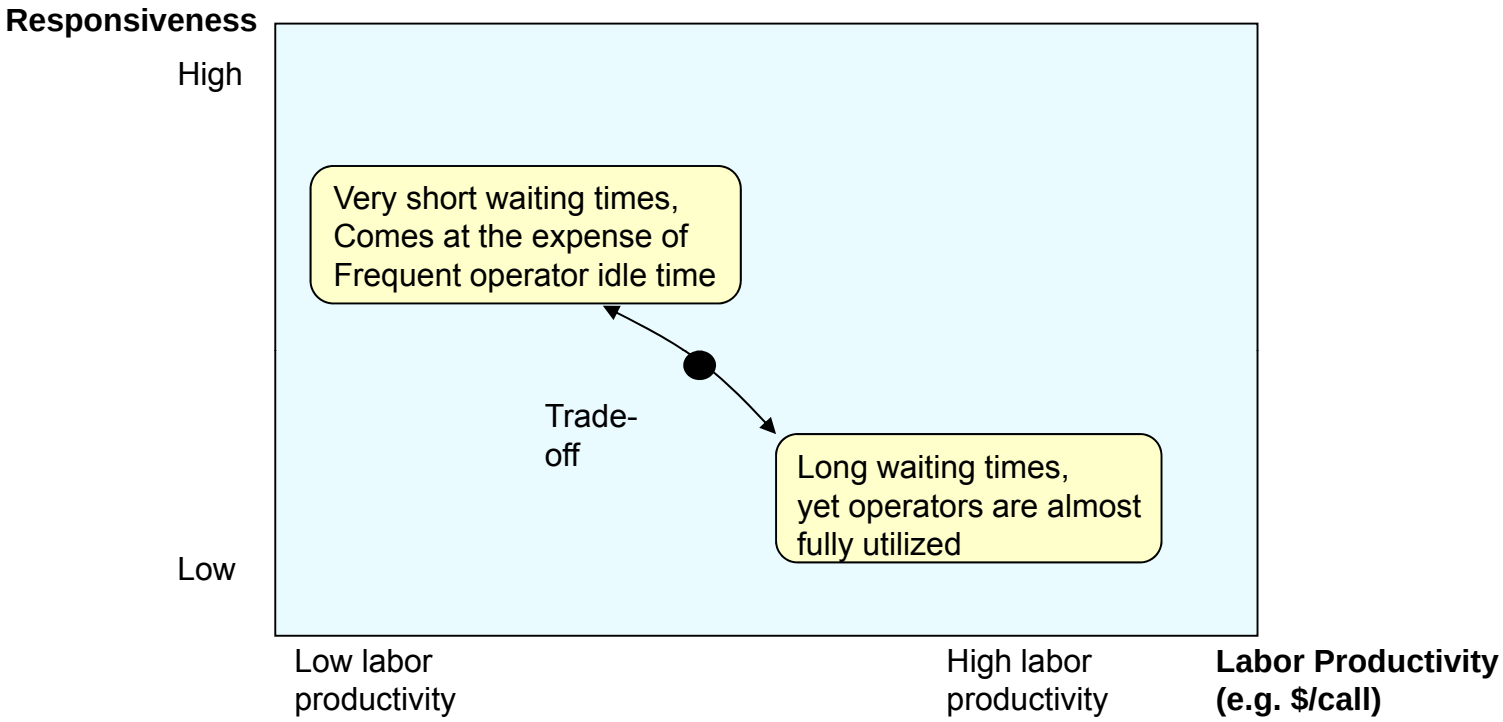
Introduction

Efficient Frontier

Four Dimensions of Performance: Trade-offs



What Can Ops Management (This Course) Do to Help?
Step 1: Help Making Operational Trade-Offs

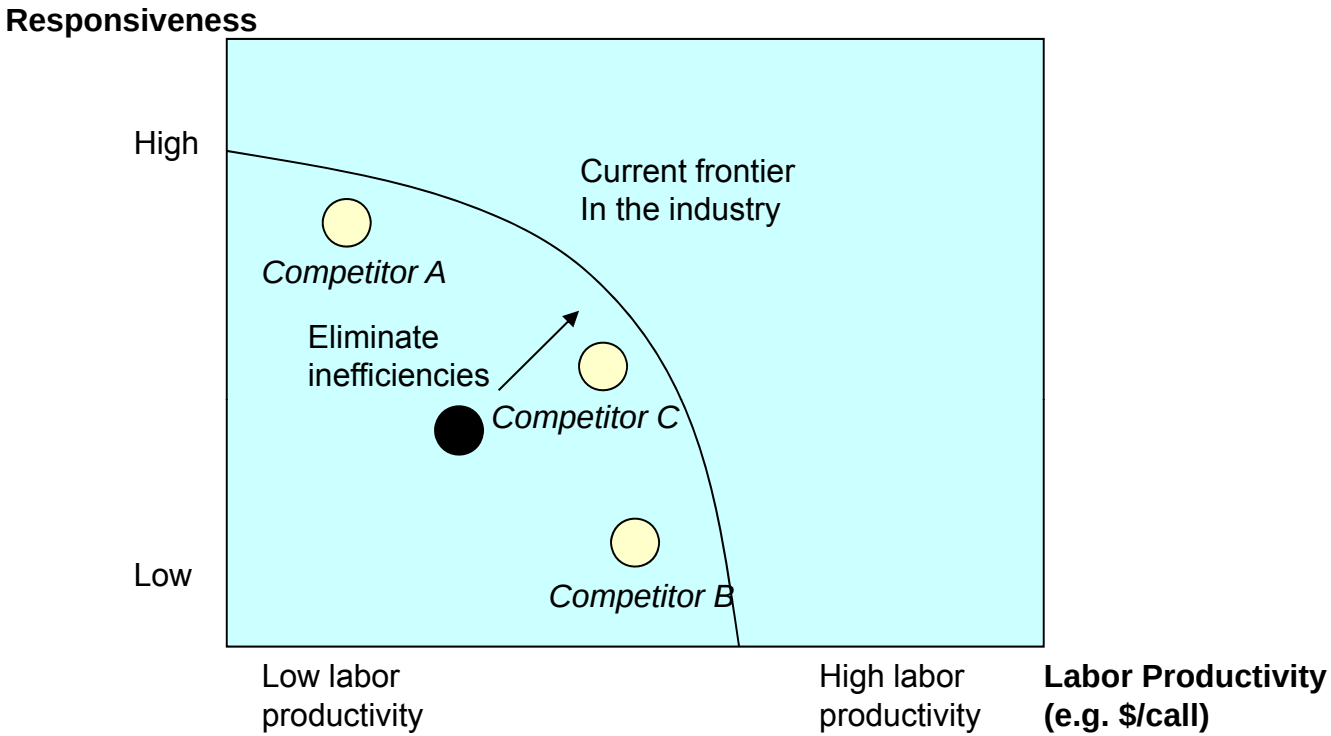


Example: Call center of a large retail bank

- objective: 80% of incoming calls wait less than 20 seconds
- starting point: 30% of incoming calls wait less than 20 seconds
- Problem: staffing levels of call centers / impact on efficiency

OM helps: Provides tools to support strategic trade-offs

What Can Ops Management (This Course) Do to Help?
Step 2: Overcome Inefficiencies

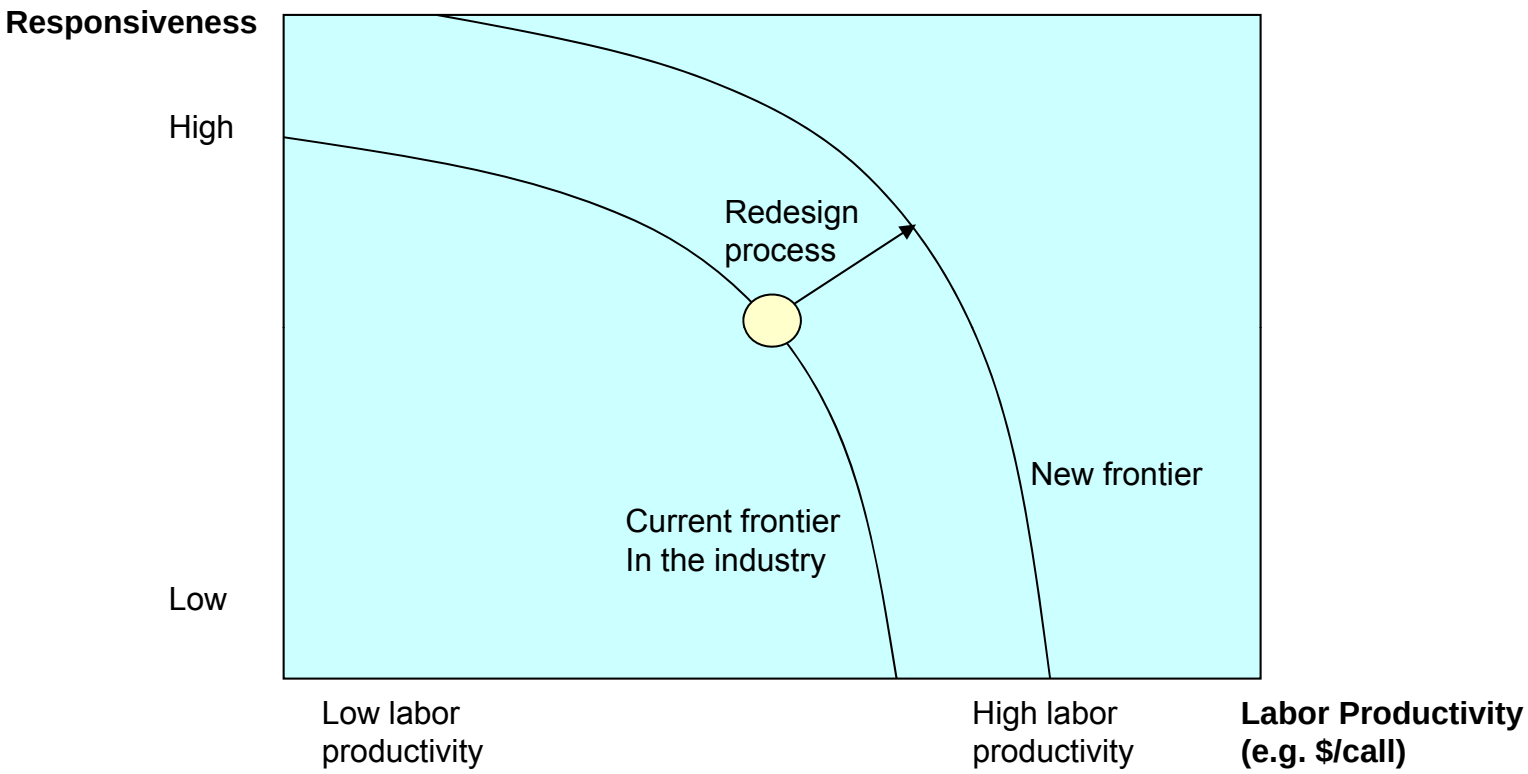


Example:
- Benchmarking shows the pattern above
- Don't just manage the current system… Change it!

Provides tools to identify and eliminate inefficiencies => Define Efficient Frontier

Types of inefficiencies:
-Poor process design
- Inconsistencies in activity network

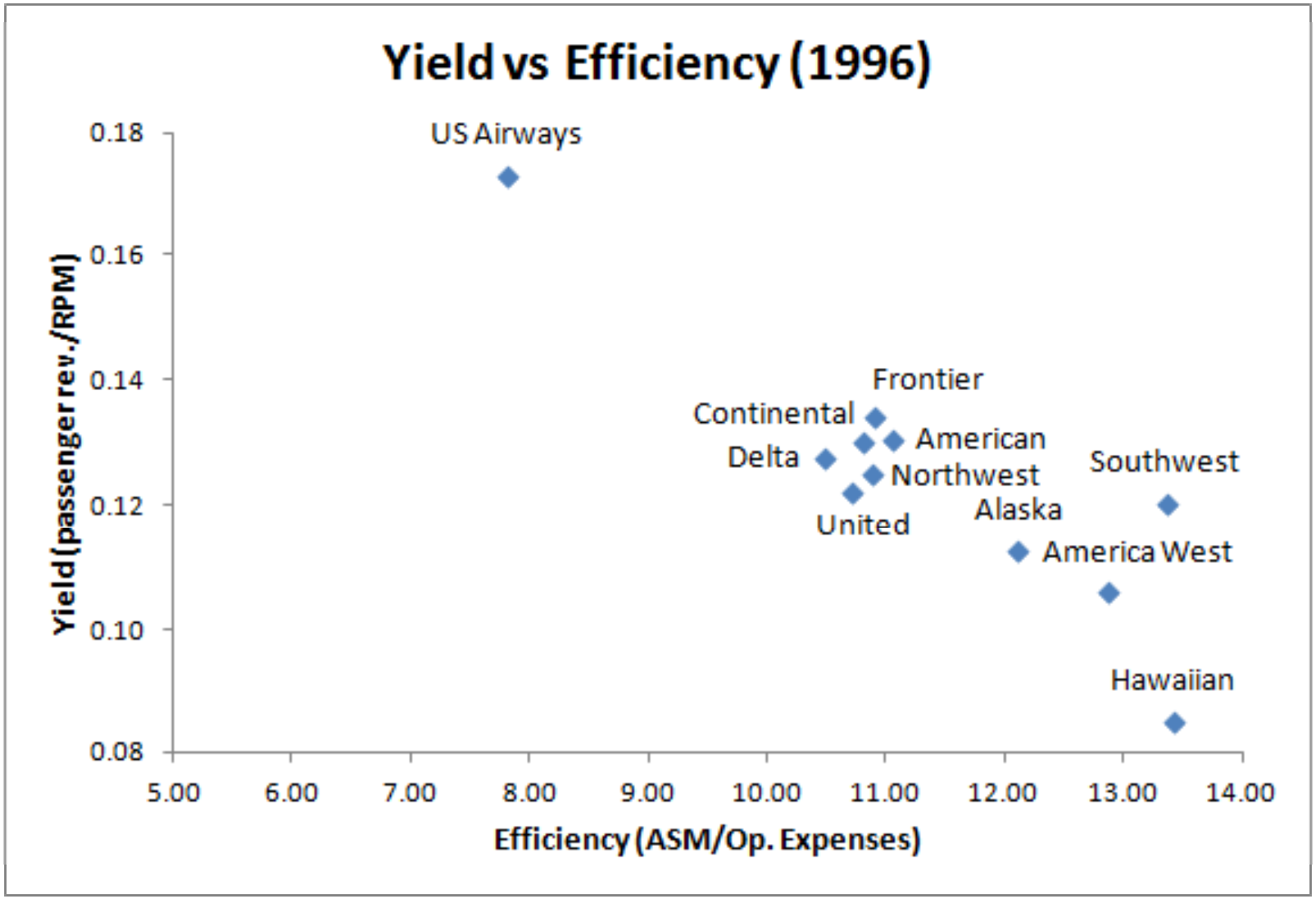
What Can Ops Management (This Course) Do to Help?
Step 3: Evaluate Proposed Redesigns/New Technologies



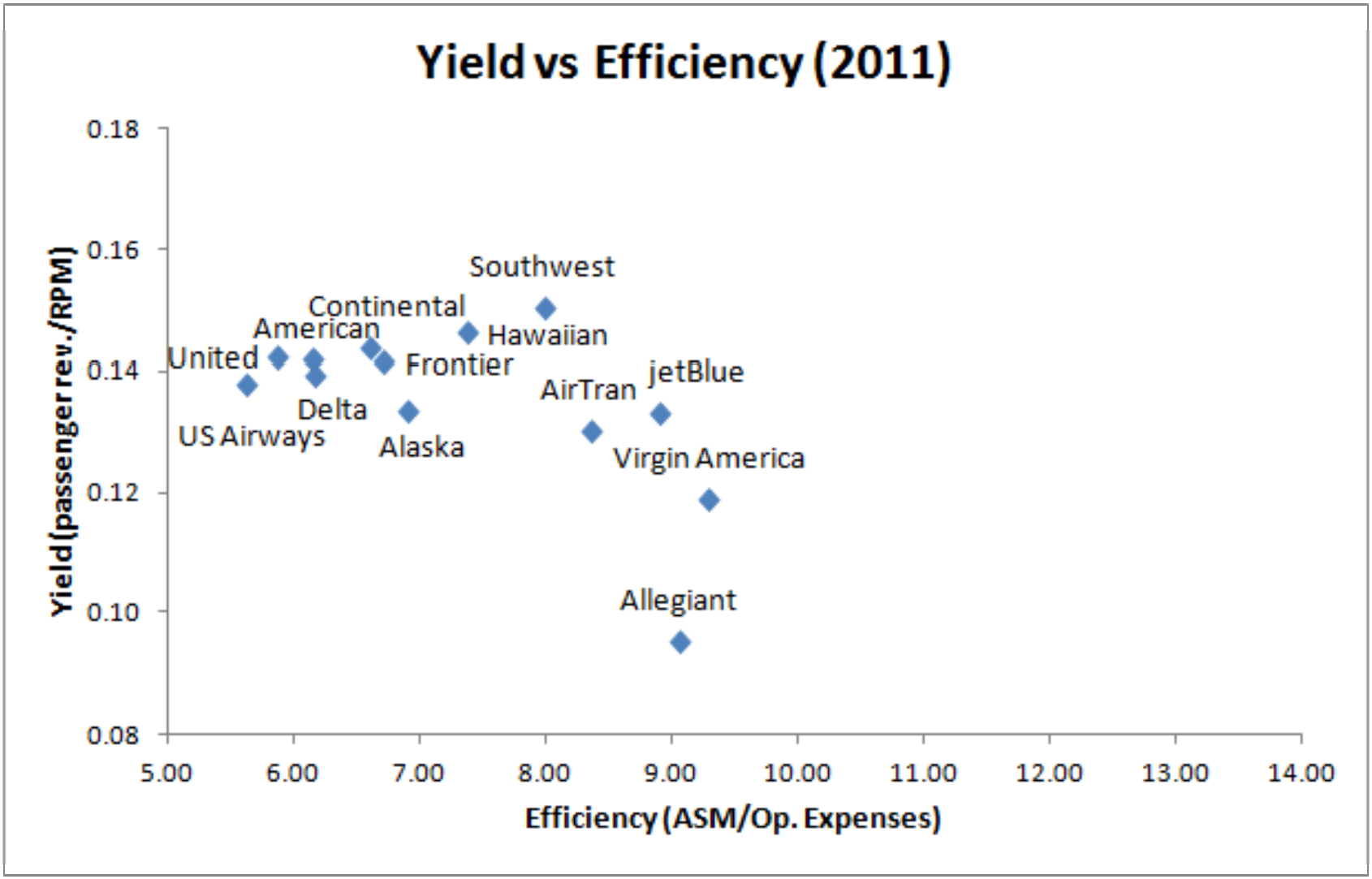
Example:
- What will happen if we develop / purchase technology X?
- Better technologies are always (?) nice to have, but will they pay?

OM helps: Evaluates system designs before they occur

Example: The US Airline Industry



Example: The US Airline Industry



Introduction

Format of the course

Course Outline / Grading / Homework

Objective of the course:
Understanding and improving business processes
Performance measures
How-to
Mix of industries: healthcare, restaurants, automotive, computers, call centers, banking, etc

Course Outline
Introduction (0.5 weeks)
1. Process analysis (1.5 weeks)
2. Productivity
3. Product variety
4. Responsiveness
5. Quality

Requirements / Prerequisites:
There are no prerequisites for the course

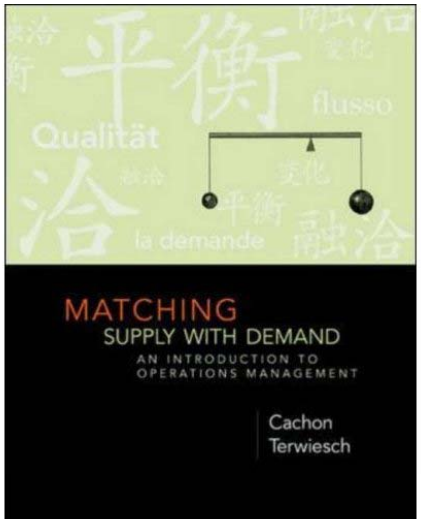
Some modules require statistical knowledge (standard deviation, normal distribution)

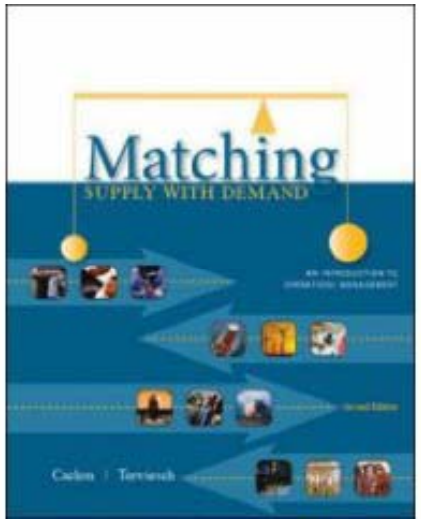
Homework assignments
One large assignment after each module (five assignments); 10% each

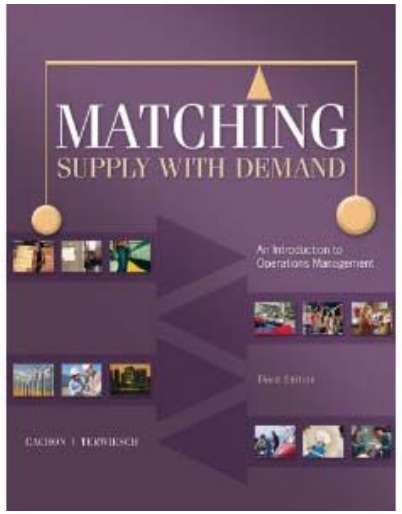
Final exam with questions from all modules; 50%

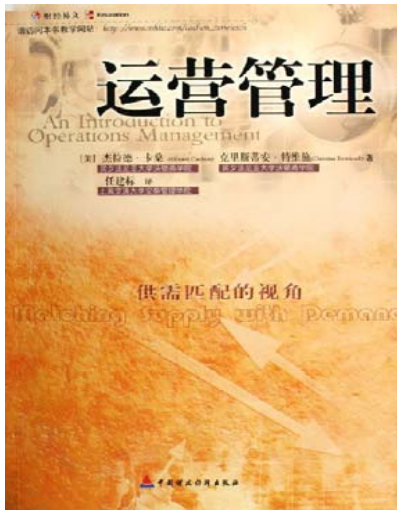
Text Book

Course book
Cachon, Gerard, Christian Terwiesch, *Matching Supply with Demand: An Introduction to Operations Management*, 3rd edition, Irwin - McGraw Hill, 2012 (ISBN 978-0073525204, 507 pages)









Personal Introduction

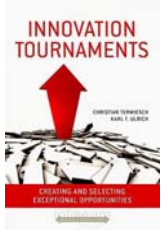
MBA core course: Operations Management: Quality and Productivity

Taught ~ 60 times ~ 4000 MBA students

McKinsey Ops Practice ~ 500 new associates

Research:
Operations Management, focus on Healthcare Management

Innovation tournaments and contests



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