

### How to optimize pricing and product availability?

**Demand Forecasting** 

Four Core Concepts of RM

Overselling

# What is revenue management?

- Based on predicting consumer behavior at the micro-market level
- By managing product availability and price
- In order to maximize revenue or profit

# Yield management at American Airlines

- Pioneered by Robert Crandall
- Former Chairman and CEO of American Airlines
- In response to competition from PEOPLExpress in the 1980s





VS



Legacy carrier (founded 1926)

High cost per seat mile

**High** prices

**Complex** fare structure

**Advanced IT system** 

Low-cost carrier (founded 1981)

Low cost per seat mile

Low prices

**Simple** fare structure

Basic IT system

# How could American Airlines compete with the lower costs and prices of PEOPLExpress?



### How American Airlines fought back

- Insight AA has zero marginal costs for flights with many empty seats
- Use data to forecast demand accurately (advanced IT system)
- Offer very cheap tickets for flights with many empty seats
  - AA's "Ultimate Super Saver" fares were cheaper than PEOPLExpress fares

# Restrictions / fences in the airline industry

- Two types of customers:
  - Business customers pay more but book late
  - Leisure customers pay less but book early
- Use fences to keep \$\$\$ customers from buying \$ seats
  - Advance purchase restrictions (at least 14 days before departure)
  - Non-refundable and non-changeable

### Impact of AA's yield management system (1985)



+14.5%

revenue

+47.8%

profit





Profitable → losing money

Ceased operations in 1987

# Applications of revenue management





Royal Caribbean Cruises Ltd.









