IT/IS Strategy

Advanced Information Systems and Business Analytics for Air Transportation

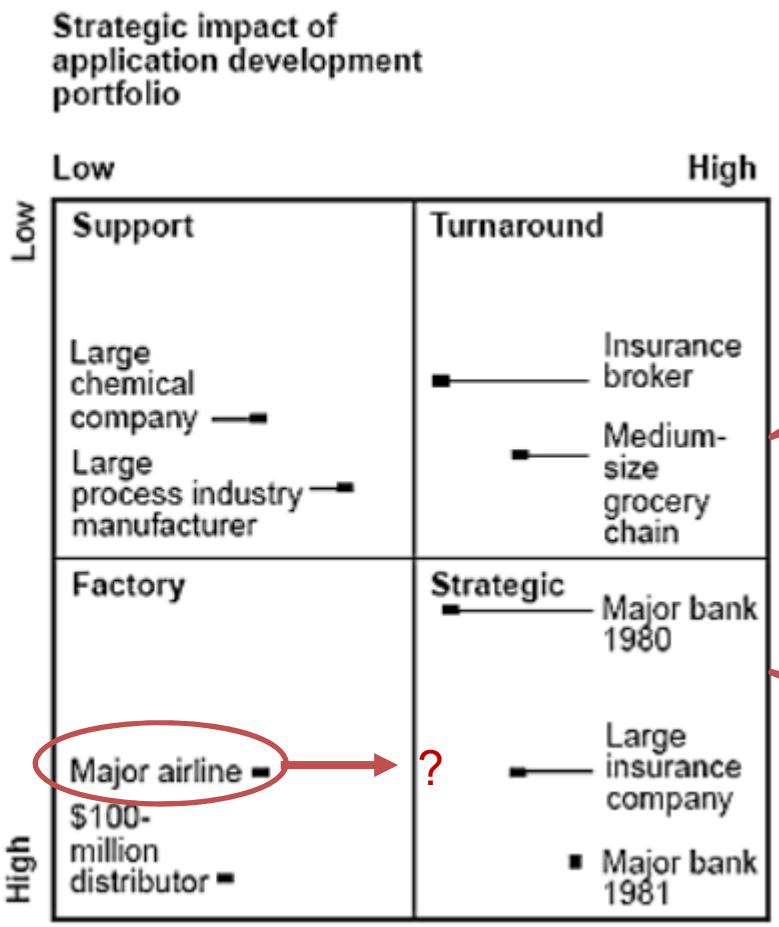
M.Sc. Air Transport Management

June 1-6, 2015

Slides prepared by Benny Mantin

Position of IS by company type

Operations do not depend on smooth IS functionality and IS is not critical to the competitive advantage



IS support necessary but not critical; applications are developed to achieve strategic goals

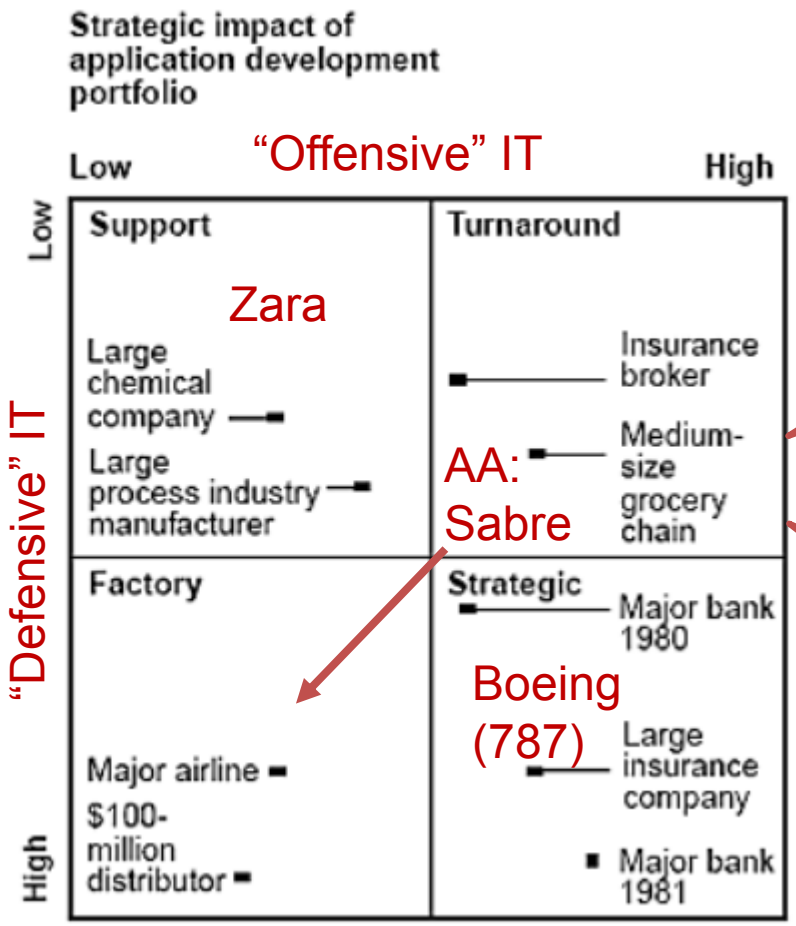
Depend heavily on IS for smooth operations, but IS not critical for ability to compete

Critically depend on IS and IS is vital to the competitive advantage

Source: HBR (1983)

IT and the board of directors

Minimal spending on IT – is money spent wisely? Shall we change mode?



Large IT investments; board oversight is critical: competitive advantage at stake

Board needs to ensure contingency plans are in plan in case of disruption

Board oversight critical; IT oversight committee; "Spend what it takes, and monitor results like crazy."

Source: HBR (1983)

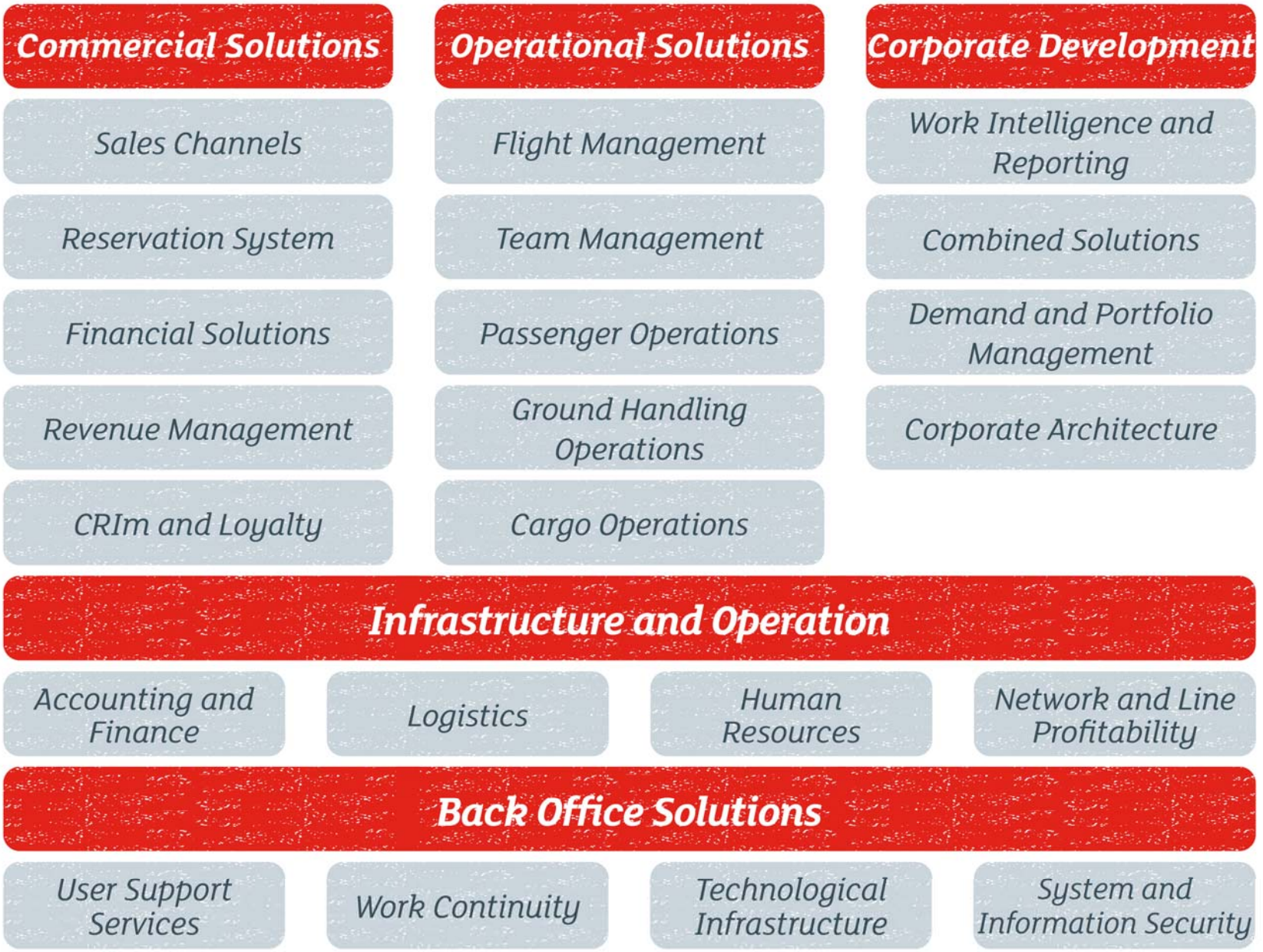
IT/IS strategy

- Supports the firm's strategy
- Key features:
  - Automation
  - Optimization
  - Data
  - Accessibility/connectivity; real-time
  - Speed
- Considerations:
  - In-house or outsource
  - Global vs ad-hoc solutions
  - Degree of flexibility; personalization

IT at THY

- Kerem Kiziltunç, CIO
- "Our IT organization is pretty young. We are about 450 people – half of whom joined in the last five years. We use around 300 applications. We manage about 180 contracts and work with more than maybe 100 technology partners."
- In 2013:
  - 130m website visitors
  - 680k Fly Turkish app download
  - 27,084 devices in service

Source: SITA 2014



Source: THY annual report

THY IT Strategy

- Two phases:
  - First: 2010-2013, back office and revenue related
    - Flight planning
    - Mobile application
    - Overhaul of website
    - Fares and pricing infrastructure
    - Crew planning and transfer
    - Passenger management for the Istanbul hub
    - Large scale ERP transformation program (SAP)
  - Second: 2014-2017, customer aspect and operational efficiencies
    - Website, mobile app overhaul/upgrade
      - Web 3.0: personalization, high performance, ease of use, flexible architecture
      - Mobile 2.0: multiple platforms, multiple functions (ticketing, reservations, check-in, M&S, etc.)
    - Enhancements to CRM
    - New data center
    - Replace in-house Passenger Service System?
      - PSS is generally composed of the reservation system (CRS), the inventory system (RMS), and departure control system

FOCUS ON OUTSOURCING

Why outsource?

- Reduce costs
- Speed up delivery time
- Need to replace IT
- Reliability is of essence
  - Defensive IT: Cannot afford down time
- Many providers can do the job; access focused skills
- Financial considerations
  - Balance Sheet
  - Fixed to variable cost
- Bargaining consideration

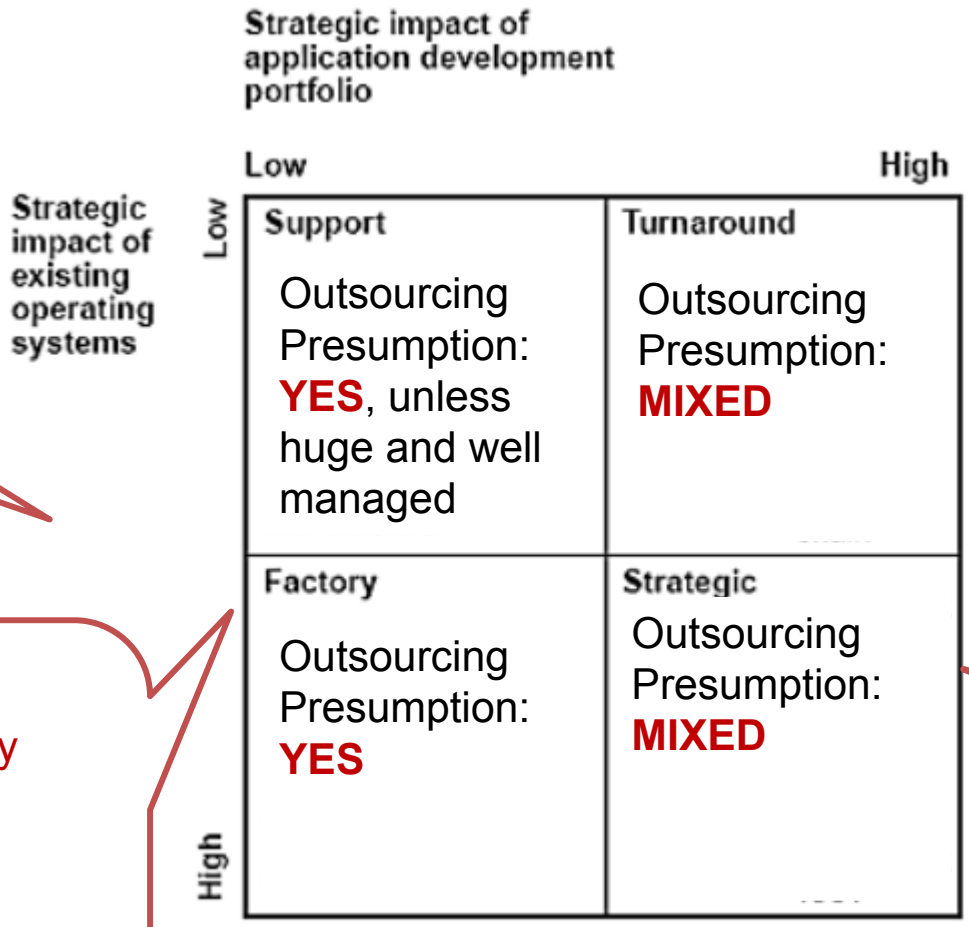
Outsourcing risks

- Loss of control
- Cost savings not there (complex conversion)
- Mostly one-way street
- Vendor stability/inadequate skills/ Doesn't stay on leading edge
- Contract inflexibility/divorce complicated
- Interface between companies poorly conceived
- Benefit timing mismatch

Pros and cons

- Economies of scale (for smaller firms)
- Higher quality of service and backup
- IT solutions with global reach

- Access to higher IT professionalism
- Problematic low priority addressed
- Access to current IT technologies
- Reduces risks of inappropriate IT architectures



- Access to leading-edge technology applications and industry skills
- Assure bullet-proof reliability
- Rescue an out-of-control internal IT unit

- Access to leading-edge technology application and industry skills

Source: HBR (1983)

Pros and cons

- Decision influences/influenced by
  - Position on strategic grid
  - Current structure IT
    - Segregated organization facilitates outsourcing
  - Industry standards
  - Industry patterns
    - Cascading (everyone is using this system…)
  - A web of relationships
    - Ownerships, outsourcers may outsource as well