ISM 50
Midterm Study Guide

ROI Analysis
None on the midterm!

IT History
What distinguished the Data Processing Era from the Micro-Era?
What distinguished the Micro-Era from the Networking Era?
Why did Data Processing Managers feel threatened in the Micro-Era?

Messerschmitt 2.3
Information
Data
Browse, Navigate, Search
Hyperlink
Information Push
Information Pull

O'Brien Chapter 2
Porter's Competitive Forces
Why is Porter's Competitive model useful?
Porter's Strategies
  - Cost Leadership Strategy
  - Differentiation Strategy
  - Innovation Strategy
  - Growth Strategy
  - Alliance Strategy
Lock in customers and suppliers
Switching Costs
Barriers to Entry
Porter’s Value Chain
Business Function
Business Process (also in Messerschmitt 3.3.1)
Business Process Re-engineering
  (Also called Business Transformation in Messerschmitt 3.3.1)
Interenterprise Information Systems
Knowledge vs. Information
Knowledge Management

Messerschmitt 3.1
Departmental Applications
Enterprise Applications
Commerce Applications
Customer Care or Customer Relationship Management (CRM) (see Assignment 3)

Messerschmitt 3.2
Transaction Processing Systems (see lecture 7 slides)
Batch transaction processing (see lecture 7 slides)
On-line Transaction Processing (OLTP)
Workflow
Centralized Computing
Decentralized Computing
Human Resource Management (see Assignment 3)

Messerschmitt 3.3
Operations
Business Processes
Business Transformation
ERP (Enterprise Resource Planning)
Decision Support
Knowledge Management (also in O’Brien Ch2)

Messerschmitt 3.4
Electronic Commerce
  Inter-enterprise Commerce (B2B)
  • Direct Procurement
  • Indirect Procurement
  • Supply chain Management (SCM)
  • Mass Customization
  • Electronic Data Interchange (EDI)
Consumer Commerce (B2C)
  Interconsumer Commerce (C2C)
E-Commerce Transaction
  Matching Buyers and Sellers
  • Catalog, Advertising, Intermediary Recommendation
Negotiating Terms and Conditions
  • Auction, Fix Price, Price Discrimination
Consummation
  • Order, Fulfillment, Payment
Customer Service
Intermediaries

Messerschmitt 4
Data vs. Information
Information represented as data
Is it always possible to recover information from data?
Regeneration

Messerschmitt 4.3
System Architecture Elements
  • Decomposition
  • Functionality
  • Interaction
Why architect systems in this way?
Emergence

Messerschmitt 4.4
Software Layering
What is the benefit of architecting software with layers?
Operating System
Middleware
File System
Database Management System
Network Functions
Message
Packet
Network Topology
Storage
- File System
- Database
- DBMS (Database Management System)

Messerschmitt 4.5
internet
Internet
intranet
extranet
Mobile Internet Access
Nomadic Internet Access

Messerschmitt 5
Client Server Architecture
Peer to Peer Architecture
Three-tier Client Server Architecture
Thin Clients
World Wide Web

Case Studies

Cisco ERP
What are some of the actions that Cisco took that contributed to the successful deployment of ERP?

What mistakes did Cisco make?

What are the most important lessons that another company that wants to deploy ERP could learn from Cisco’s experience?

Frito-Lay Case
What was the HHC?
What were the main reasons why Frito Lay deployed the HHC?

What changes in marketing strategy did Frito-Lay believe the HHC data would help enable?

How might the HHC project change Frito-Lay’s competitive position with its direct competitors, new entrants, and its customers?

**Alibris Case**

How did Alibris plan to change Interloc’s revenue model?

What were the potential benefits and risks of this change?

How did Alibris plan to avoid becoming dis-intermediated?

Why did Alibris abandon Thunderstone software, and why did it choose to switch Oracle?

What made Alibris’ IT challenge particularly difficult compared to what other e-commerce companies faced?

**Sun Case**

Why is the total cost of ownership (TCO) of a Windows PC much higher than the purchase price?

What is a thin-client? Why might it have the potential to reduce the TCO?

What are the drawbacks of having thin-client vs. a traditional fat-client?