Case Study for Information Management
資訊管理個案

IT Infrastructure and Emerging Technologies: Salesforce.com (Chap. 5)

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Wed 6, 7, 8 (13:10-16:00) B701

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課程大綱 (Syllabus)

週次　日期　內容（Subject/Topics）

1 102/09/18 Introduction to Case Study for Information Management

2 102/09/25 Information Systems in Global Business: UPS (Chap. 1)

3 102/10/02 Global E-Business and Collaboration: NTUC Income (Chap. 2)

4 102/10/09 Information Systems, Organization, and Strategy: iPad and Apple (Chap. 3)

5 102/10/16 IT Infrastructure and Emerging Technologies: Salesforce.com (Chap. 5)

6 102/10/23 Foundations of Business Intelligence: Lego (Chap. 6)

課程大綱 (Syllabus)

週次　日期　內容（Subject/Topics）

7 102/10/30 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7)

8 102/11/06 Securing Information System: Facebook (Chap. 8)

9 102/11/13 Midterm Report (期中報告)

10 102/11/20 期中考試週

11 102/11/27 Enterprise Application: Border States Industries Inc. (BSE) (Chap. 9)

12 102/12/04 E-commerce: Amazon vs. Walmart (Chap. 10)

課程大綱 (Syllabus)

週次　日期　內容（Subject/Topics）

13 102/12/11 Knowledge Management: Tata Consulting Services (Chap. 11)

14 102/12/18 Enhancing Decision Making: CompStat (Chap. 12)

15 102/12/25 Building Information Systems: Electronic Medical Records (Chap. 13)

16 103/01/01 開國紀念日(放假一天) (New Year's Day)(Day off)

17 103/01/08 Final Report (期末報告)

18 103/01/15 期末考試週

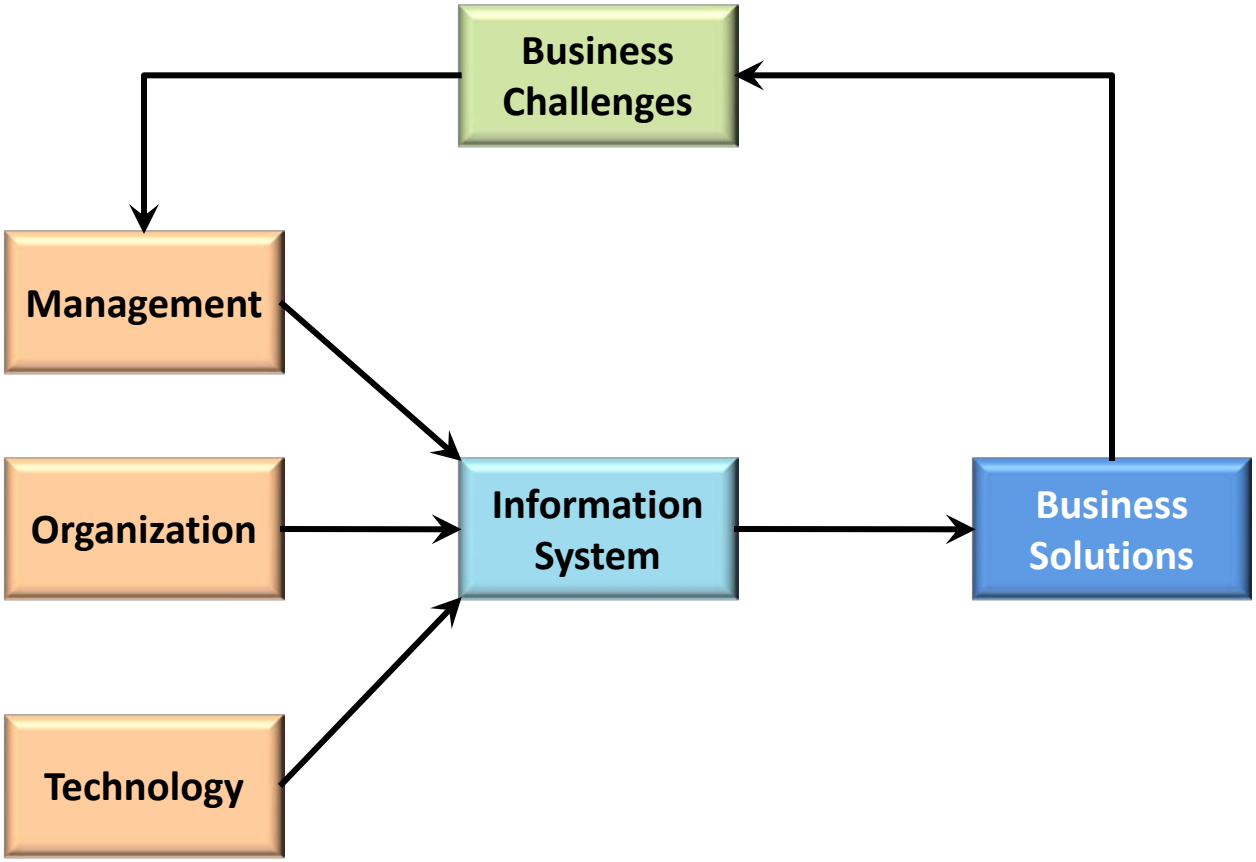
Chap. 5
IT Infrastructure and Emerging Technologies: Salesforce.com

Case Study: Salesforce.com (Chap. 5) (pp.233-235)

Salesforce.Com: Cloud Services Go Mainstream

1. How does Salesforce.com use cloud computing?
2. What are some of the challenges facing Salesforce as it continues its growth? How well will it be able to meet those challenges?
3. What kinds of businesses could benefit from switching to Salesforce and why?
4. What factors would you take into account in deciding whether to use Salesforce.com for your business?
5. Could a company run its entire business using Salesforce.com, Force.com and App Exchange? Explain your answer.

Overview of Fundamental MIS Concepts



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

BART Speeds Up with a New IT Infrastructure

- Problem: Aging systems no longer able to provide information rapidly enough for timely decisions; too unreliable for 24/7 operations
- Solutions: Replaced and upgraded hardware and software and used leading-edge technology
  - Grid computing
  - Virtualization
  - Blade servers
- Demonstrates IT's role in using resources more efficiently; reducing computing energy usage, modernizing services

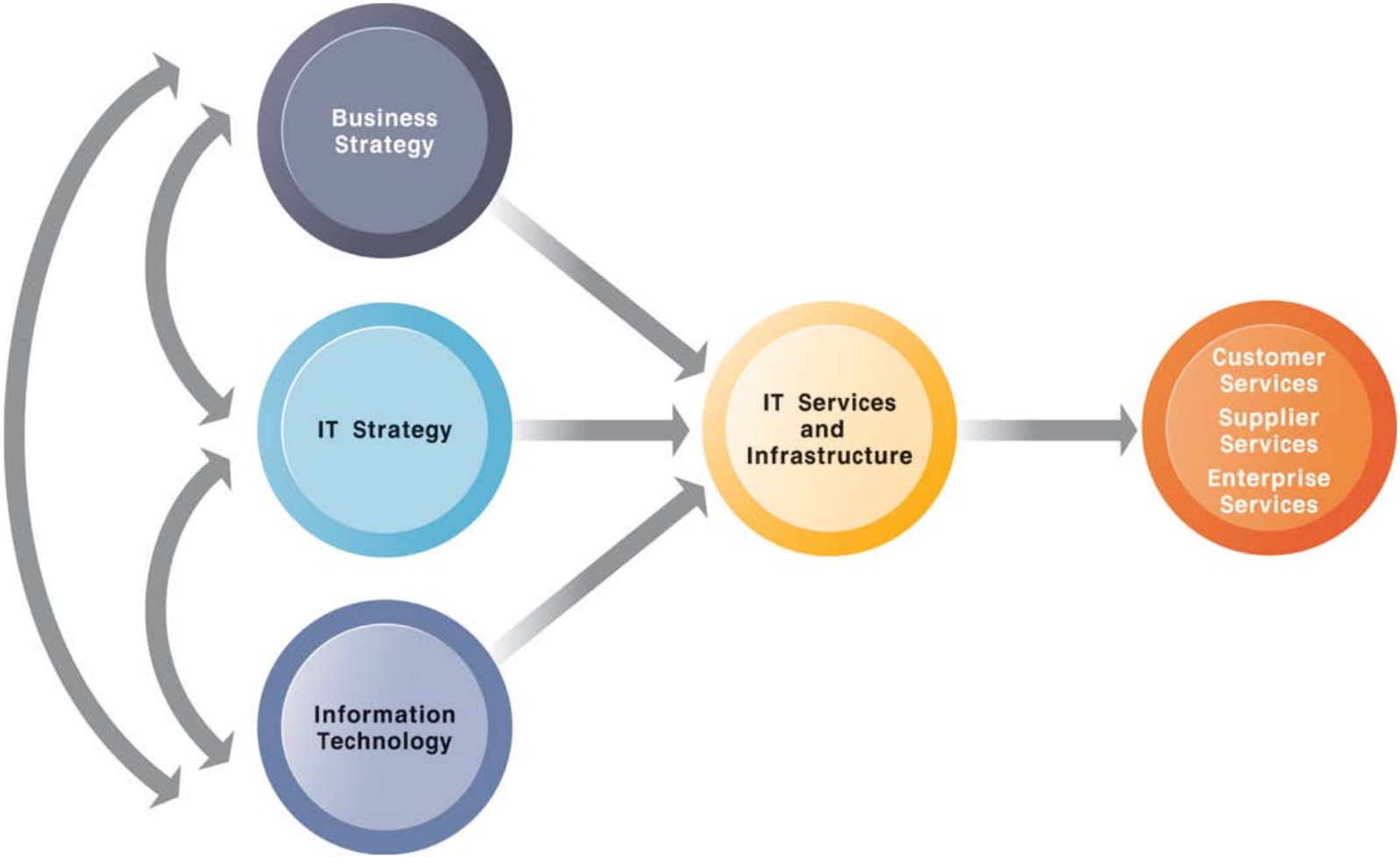
Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

IT infrastructure

- Set of physical devices and software required to operate enterprise
- Set of firmwide services including:
  - Computing platforms providing computing services
  - Telecommunications services
  - Data management services
  - Application software services
  - Physical facilities management services
  - IT management, standards, education, research and development services
- "Service platform" perspective more accurate view of value of investments

Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

CONNECTION BETWEEN THE FIRM, IT INFRASTRUCTURE, AND BUSINESS CAPABILITIES



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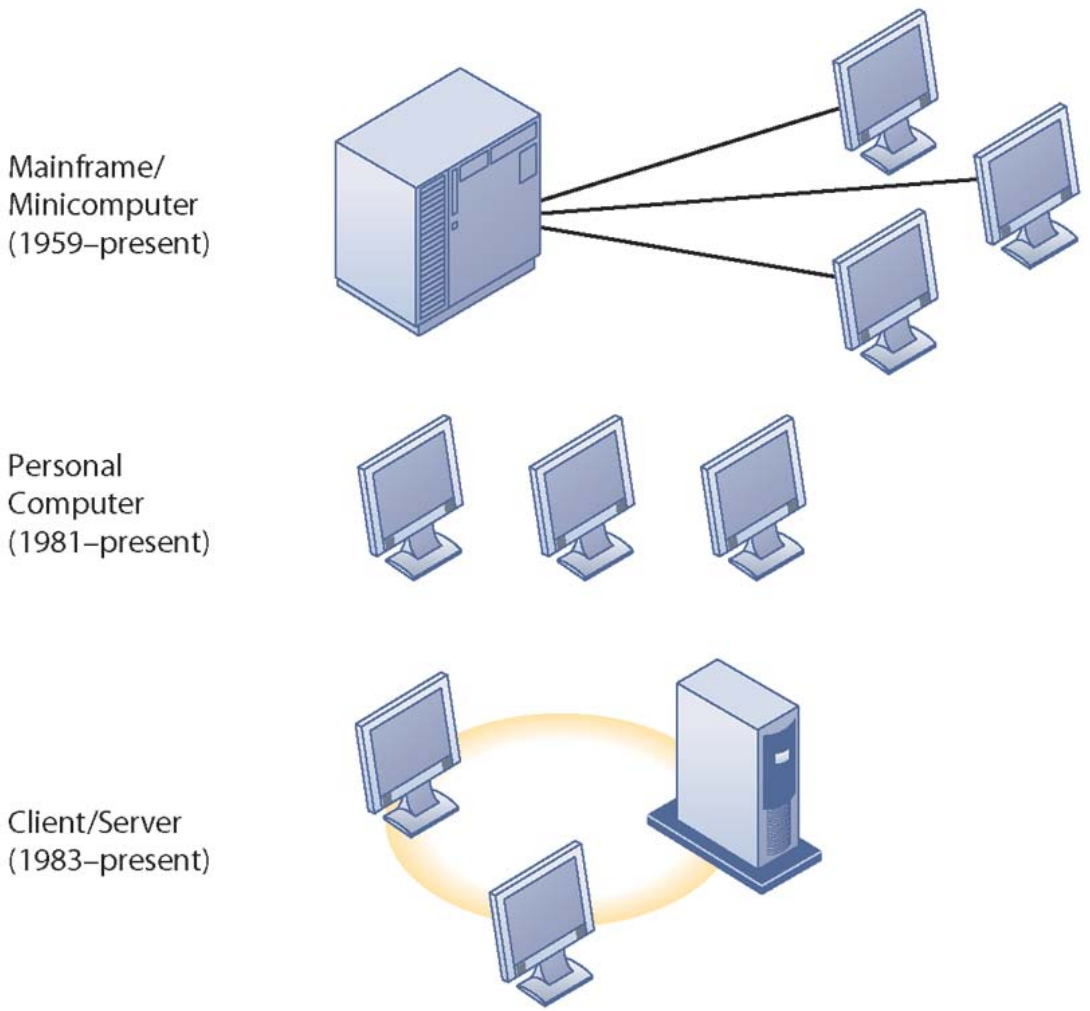
STAGES IN IT INFRASTRUCTURE EVOLUTION



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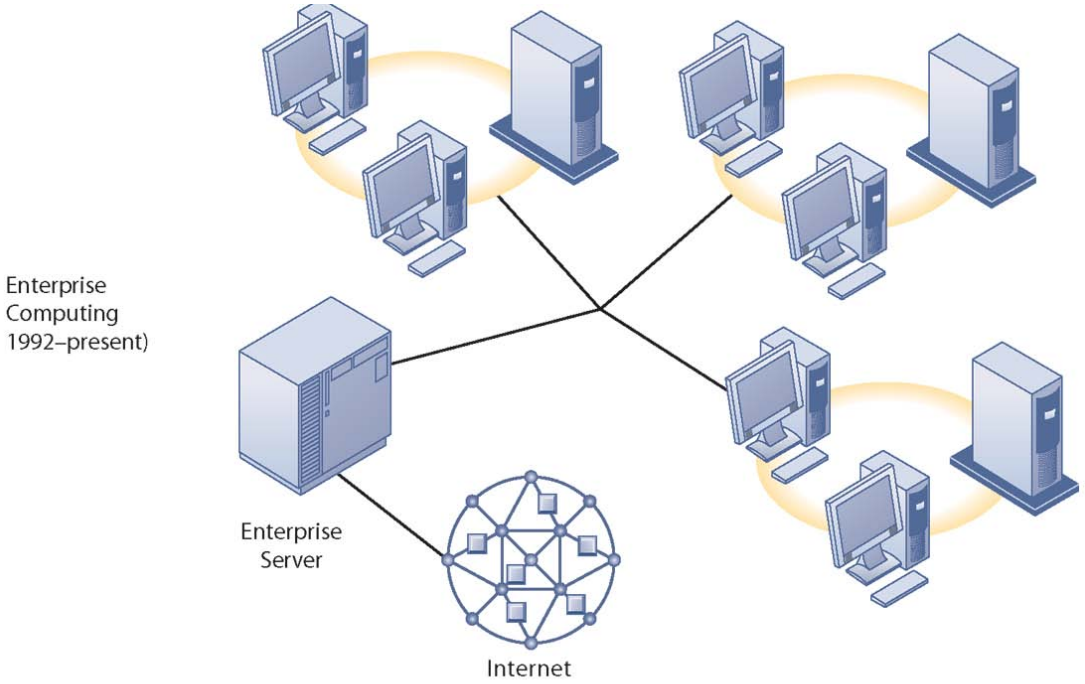
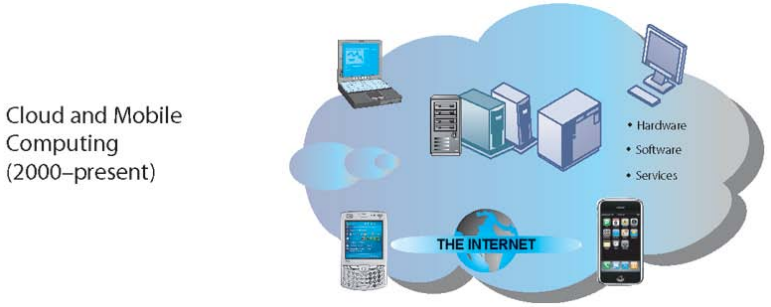
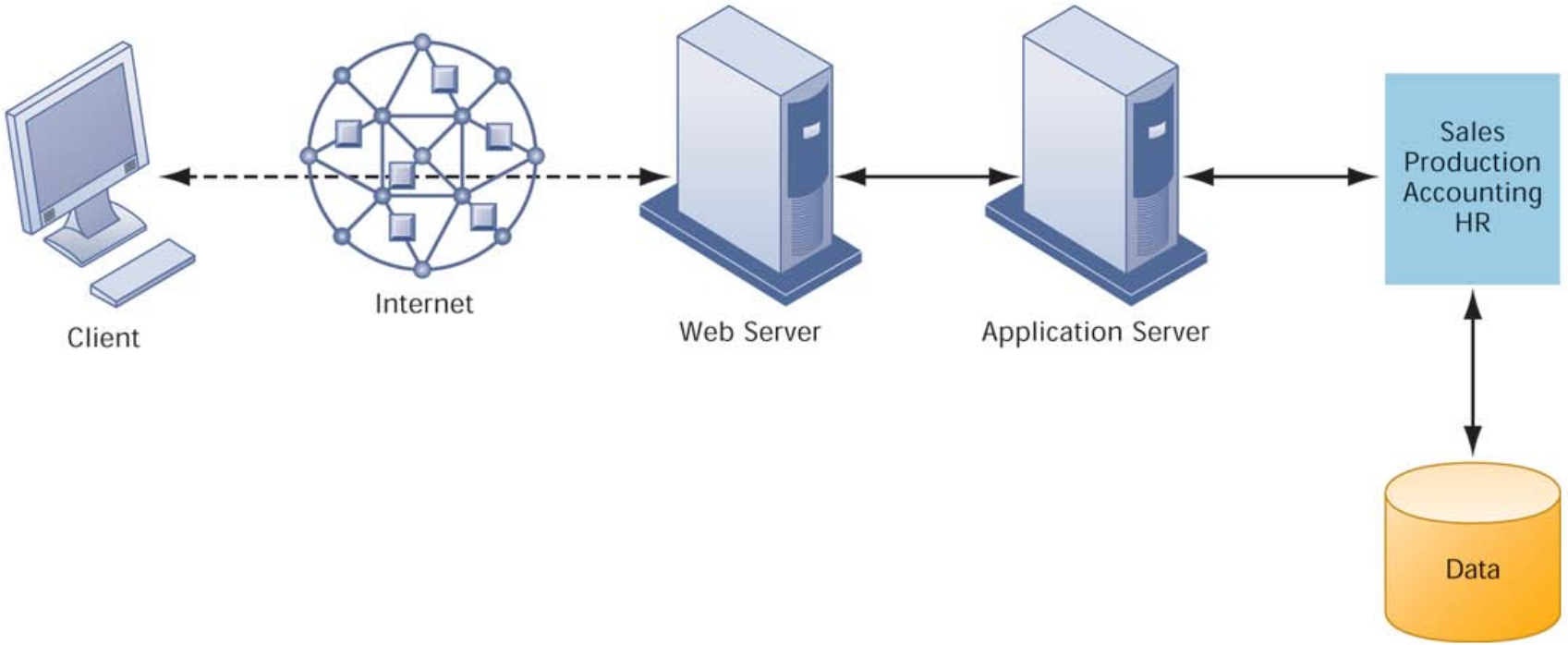




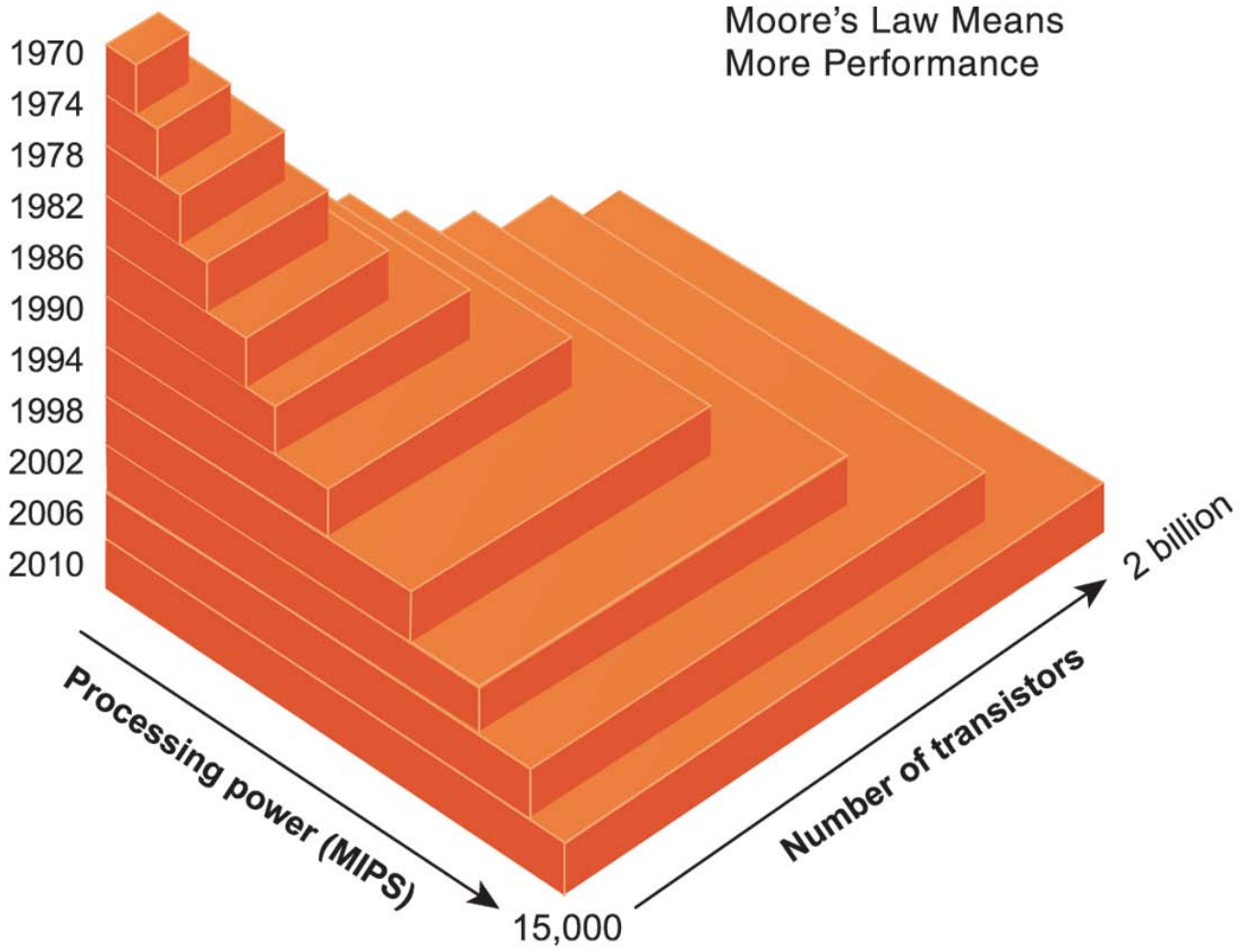
Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

A MULTITIERED CLIENT/SERVER NETWORK (N-TIER)



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

MOORE'S LAW AND MICROPROCESSOR PERFORMANCE



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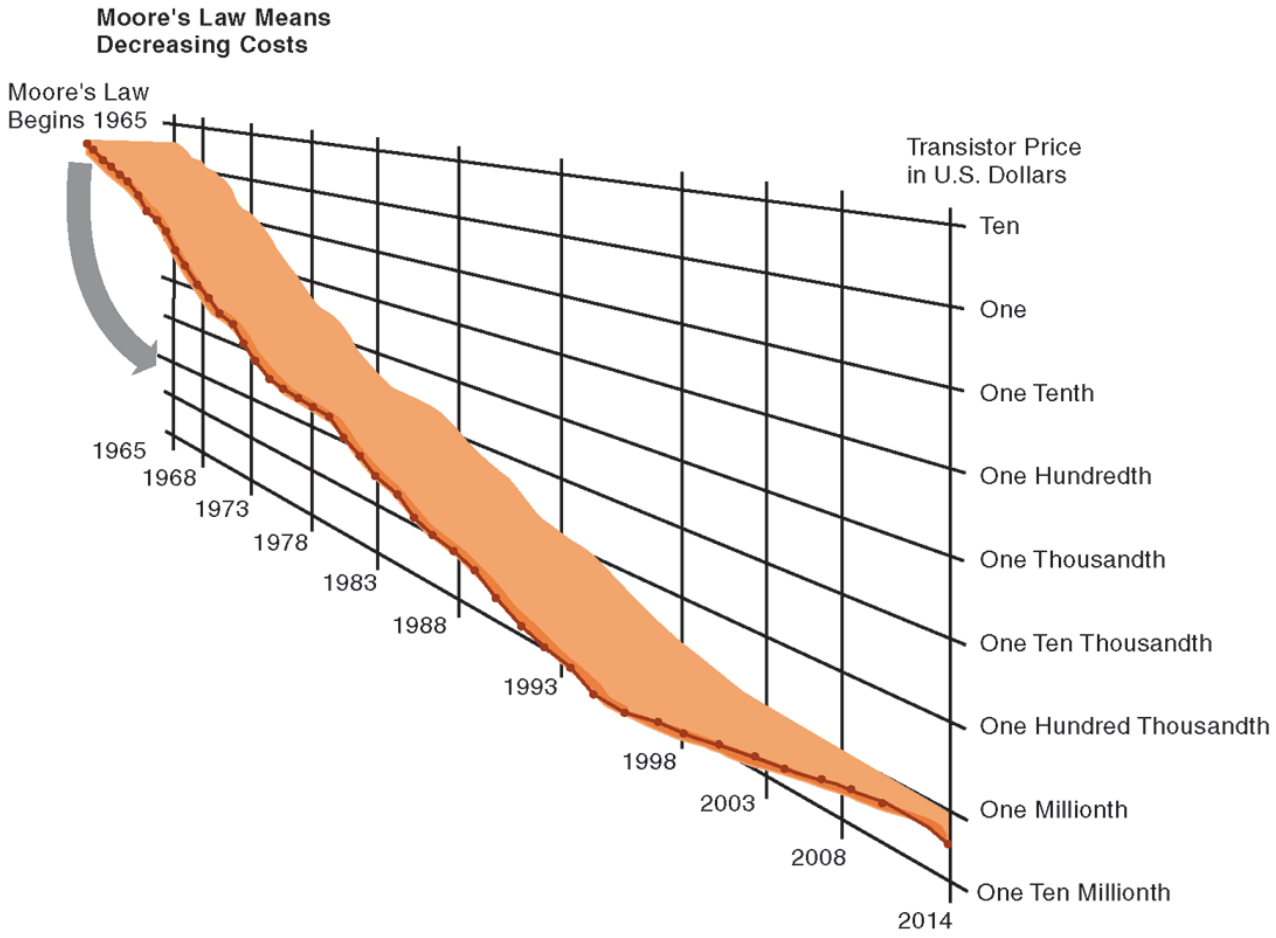
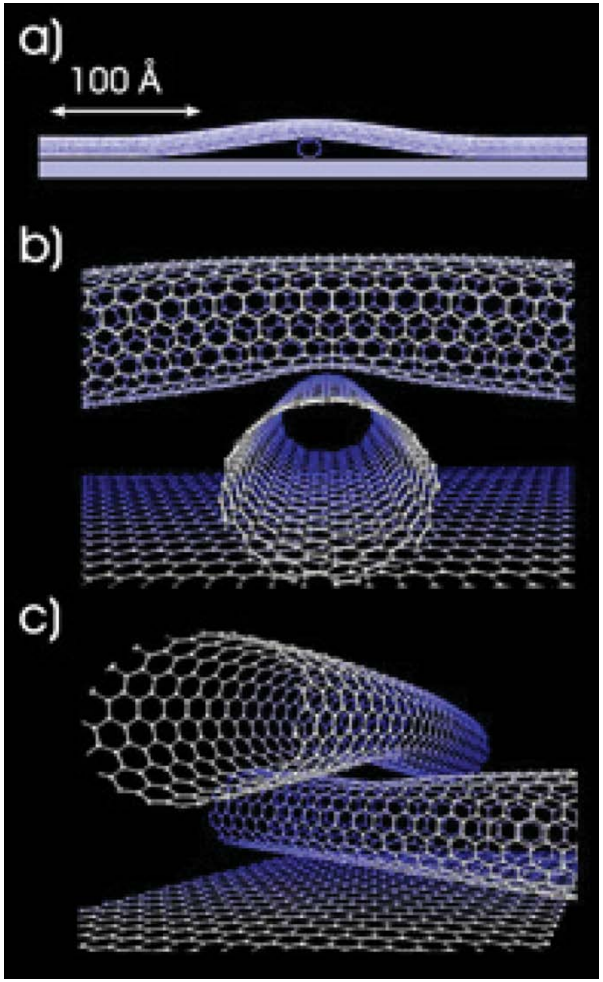
FALLING COST OF CHIPS



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

EXAMPLES OF NANOTUBES



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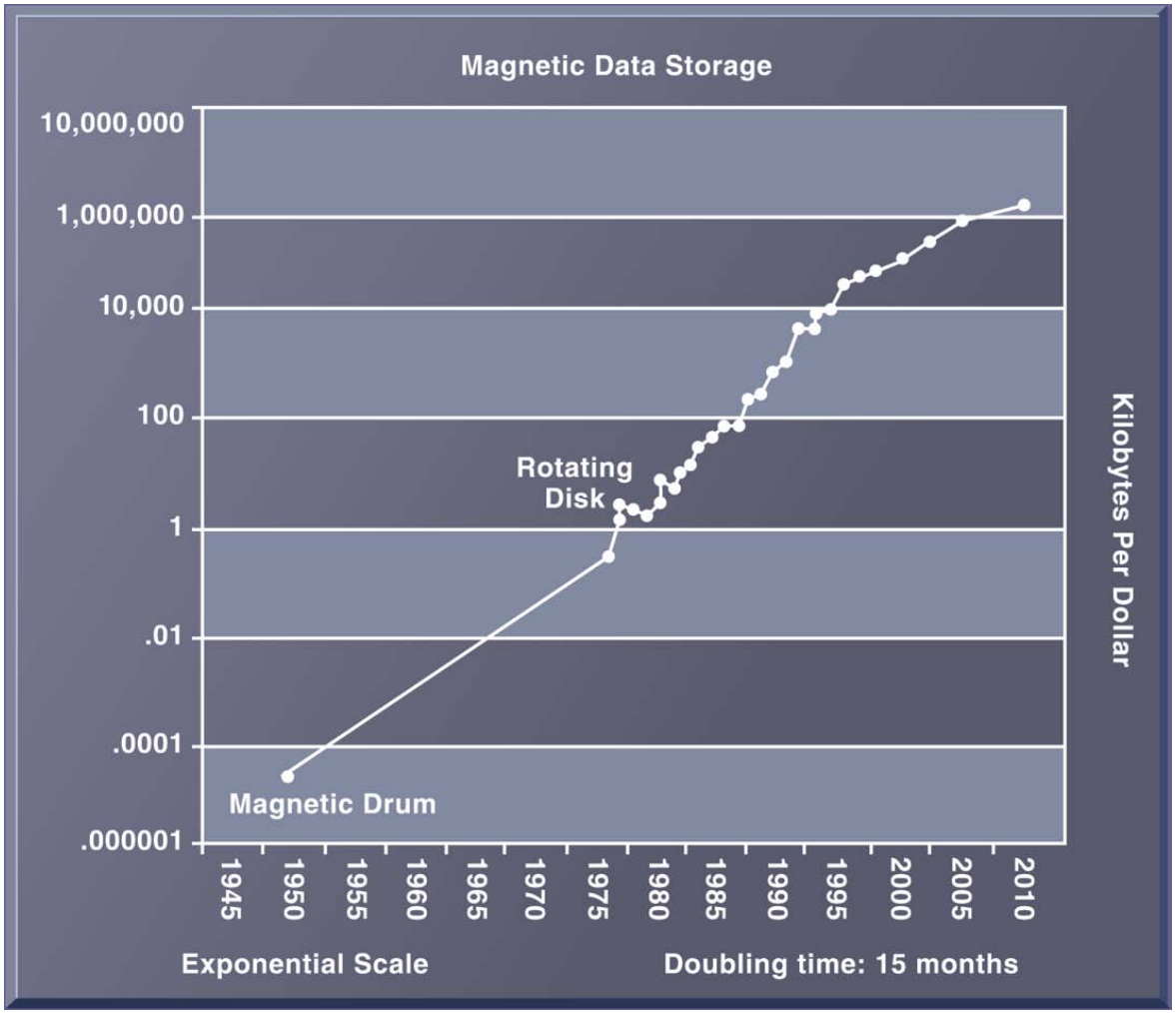
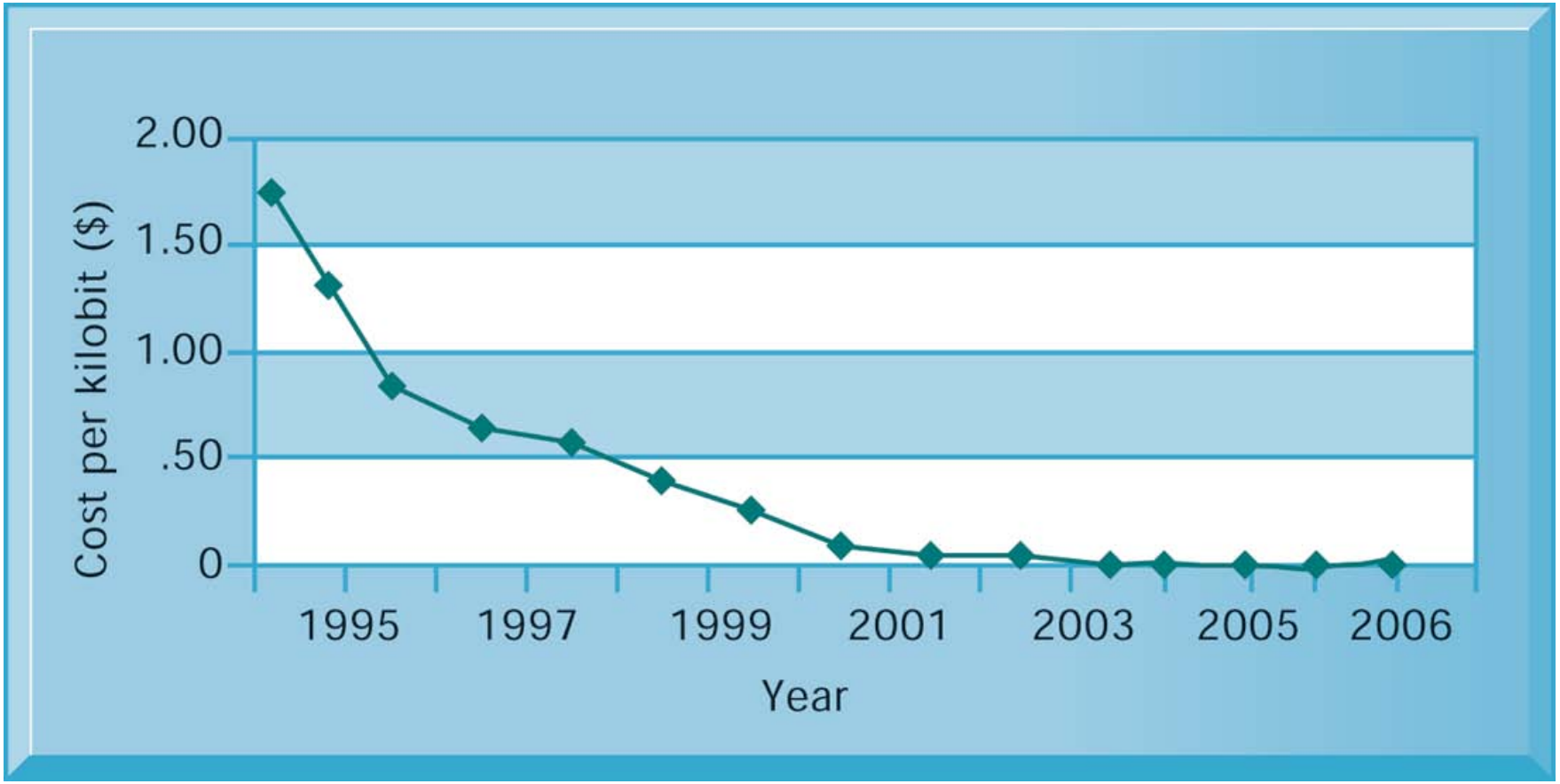
THE COST OF STORING DATA DECLINES EXPONENTIALLY 1950–2010



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

EXPONENTIAL DECLINES IN INTERNET COMMUNICATIONS COSTS



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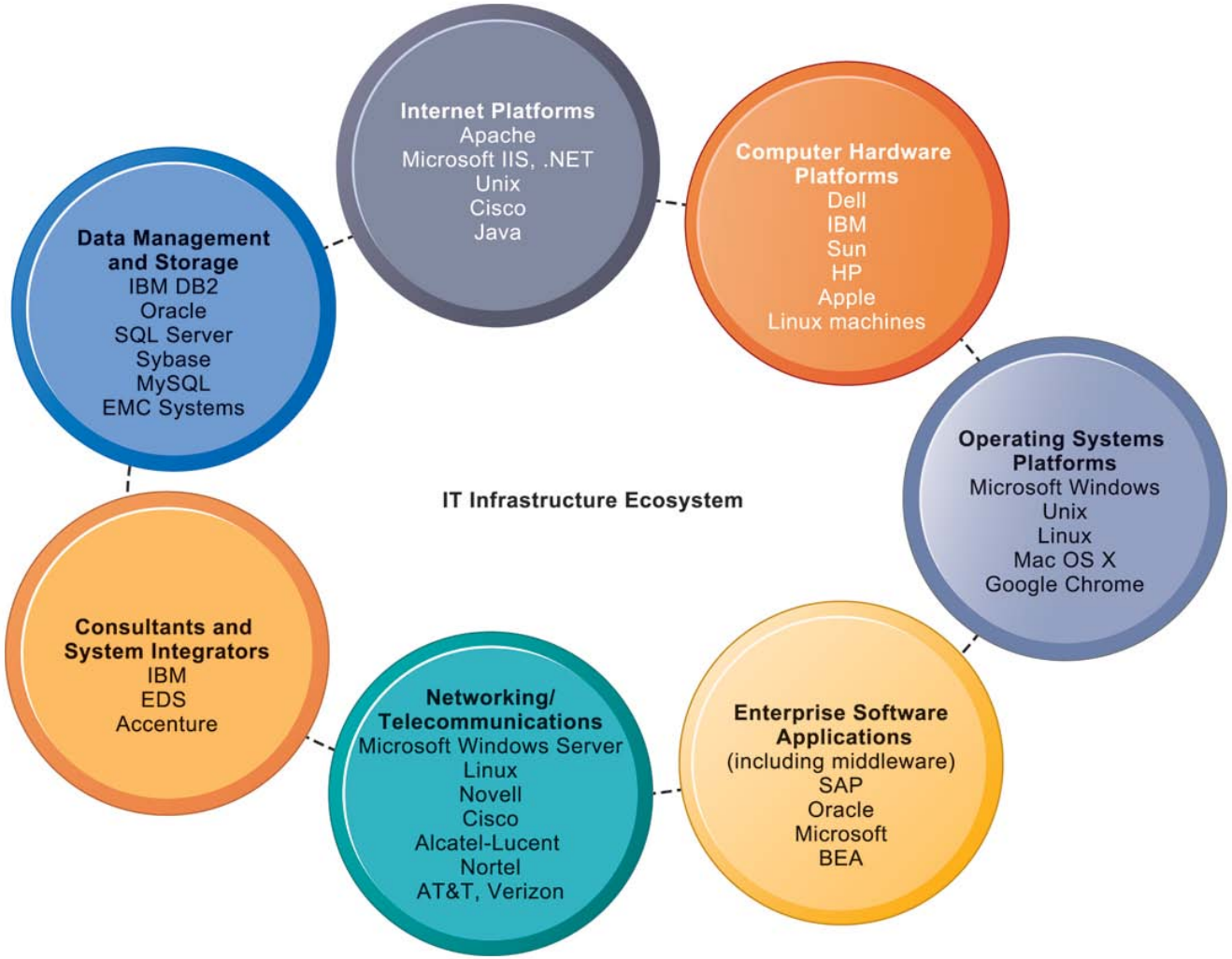
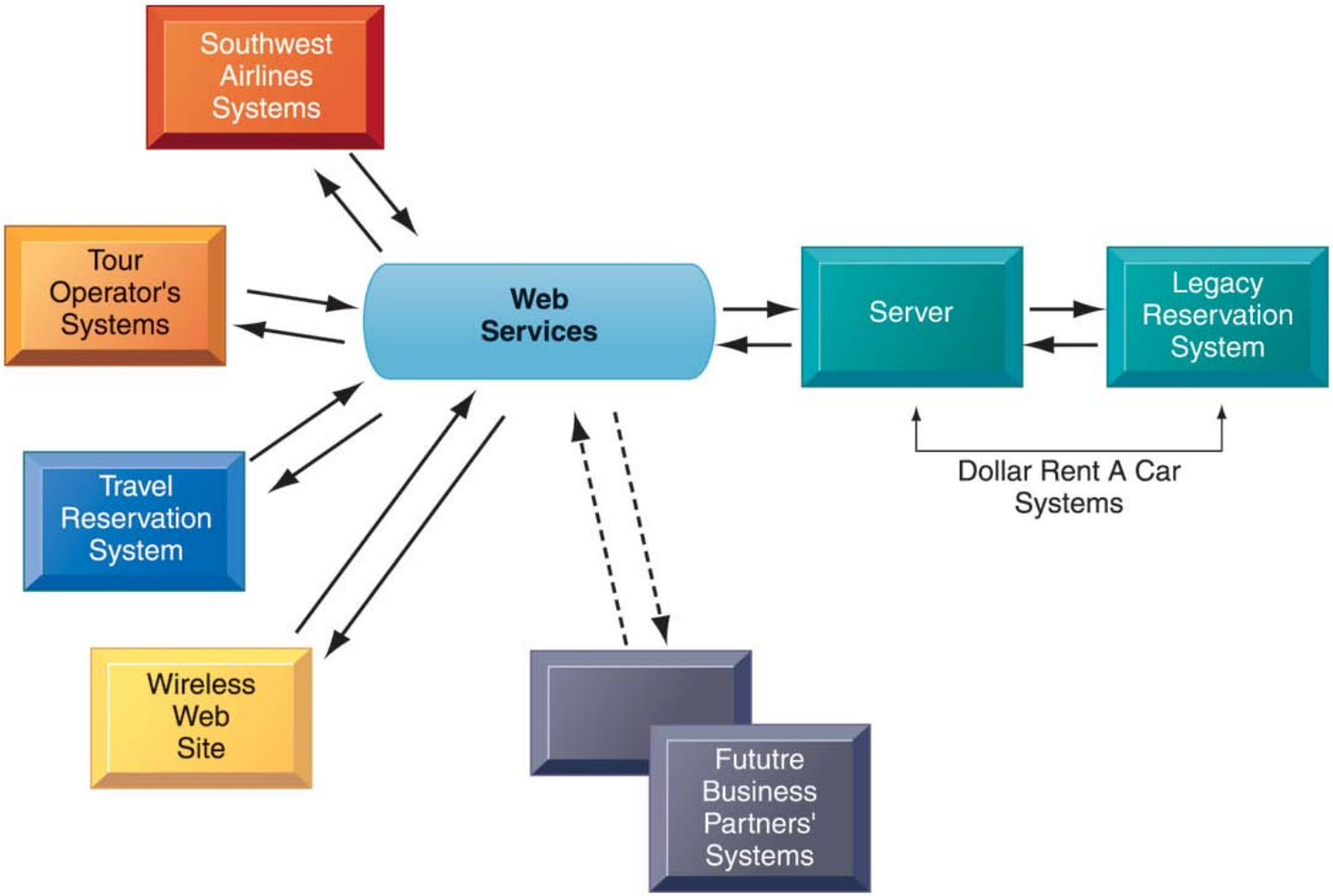
THE IT INFRASTRUCTURE ECOSYSTEM



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

HOW DOLLAR RENT A CAR USES WEB SERVICES



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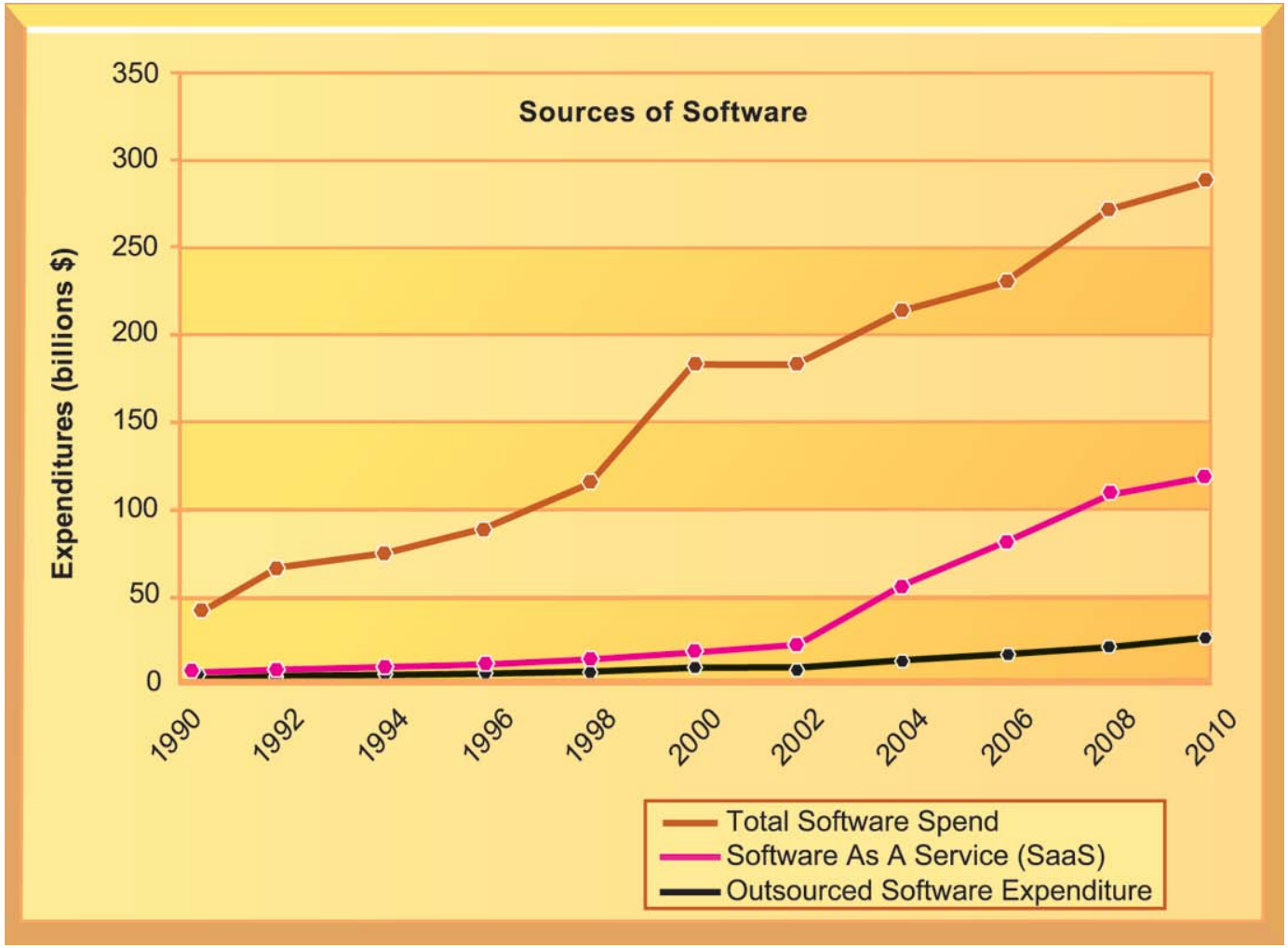
CHANGING SOURCES OF FIRM SOFTWARE



Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

Software outsourcing and cloud services

- Three external sources for software:
  1. Software packages and enterprise software
  2. Software outsourcing (domestic or offshore)
  3. Cloud-based software services

Cloud-based software services

- Software as a service (SaaS)
- Accessed with Web browser over Internet
- Ranges from free or low-cost services for individuals to business and enterprise software
- Users pay on subscription or per-transaction
- E.g. Salesforce.com
- Service Level Agreements (SLAs):
  - formal agreement with service providers

Source: Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.

Software outsourcing and cloud services

- Mashups
  - Combinations of two or more online applications, such as combining mapping software (Google Maps) with local content
- Apps
  - Small pieces of software that run on the Internet, on your computer, or on your cell phone
    - iPhone, BlackBerry, Android
  - Generally delivered over the Internet

Management Issues

- Dealing with platform and infrastructure change
  - As firms shrink or grow, IT needs to be flexible and scalable
  - Scalability:
    - Ability to expand to serve larger numbers of users
  - For mobile computing and cloud computing
    - New policies and procedures for managing these new platforms
    - Contractual agreements with firms running clouds and distributing software required

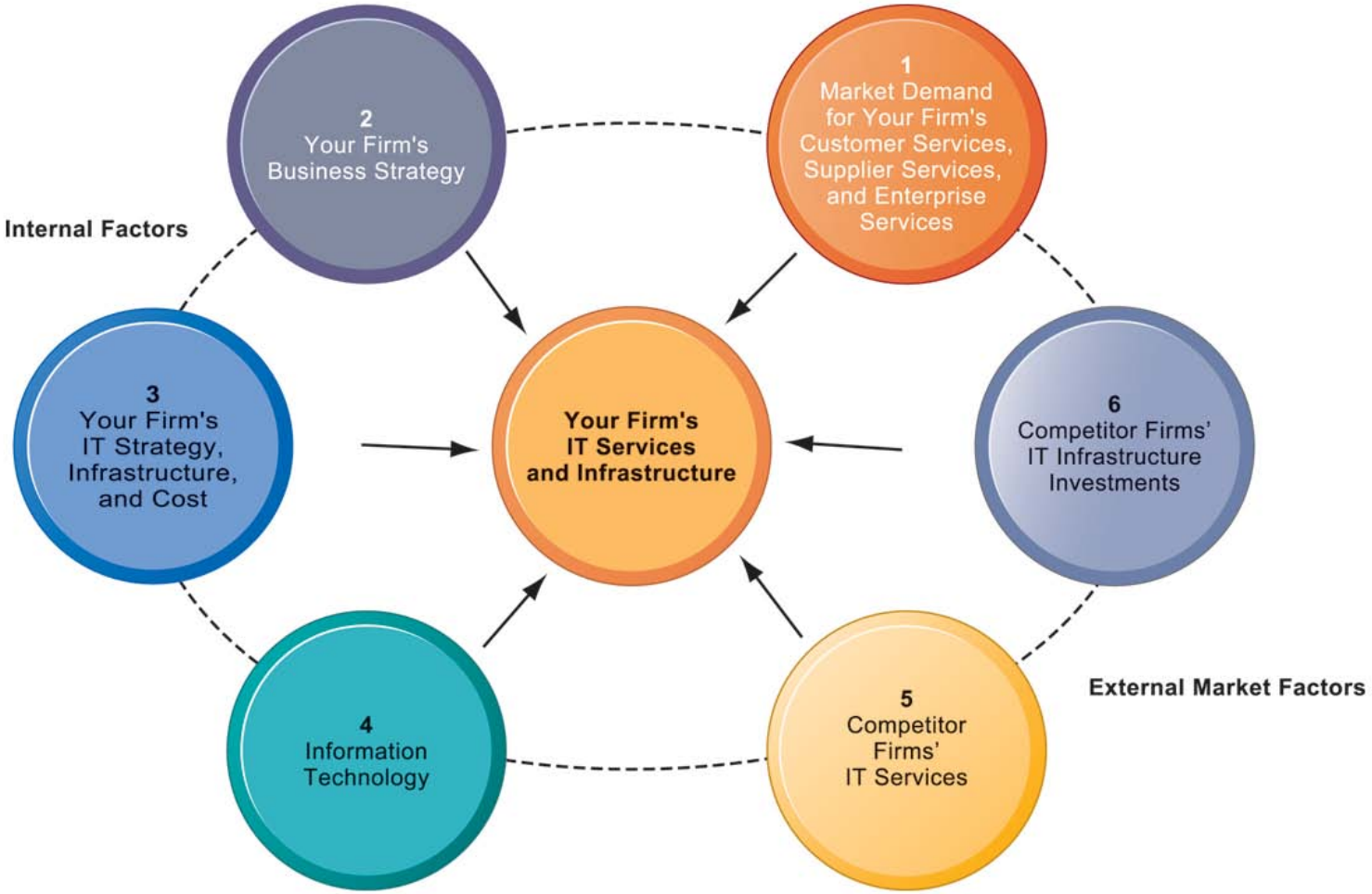
Management Issues

- Management and governance
  - Who controls IT infrastructure?
  - How should IT department be organized?
    - Centralized
      - Central IT department makes decisions
    - Decentralized
      - Business unit IT departments make own decisions
  - How are costs allocated between divisions, departments?

Management Issues

- Making wise infrastructure investments
  - Amount to spend on IT is complex question
    - Rent vs. buy, outsourcing
  - Total cost of ownership (TCO) model
    - Analyzes direct and indirect costs
    - Hardware, software account for only about 20% of TCO
    - Other costs: Installation, training, support, maintenance, infrastructure, downtime, space and energy
    - TCO can be reduced through use of cloud services, greater centralization and standardization of hardware and software resources

COMPETITIVE FORCES MODEL FOR IT INFRASTRUCTURE



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Case Study: Lego (Chap. 6) (pp.270-271)

Lego: Embracing Change by Combining BI with a Flexible Information System

1. Explain the role of the database in SAP's three-tier system.
2. Explain why distributed architectures are flexible.
3. Identify some of the business intelligence features included in SAP's business software suite.
4. What are the main advantages and disadvantages of having multiple databases in a distributed architecture? Explain.

資訊管理個案
(Case Study for Information Management)

1. 請同學於資訊管理個案討論前
   應詳細研讀個案，並思考個案研究問題。
2. 請同學於上課前複習相關資訊管理相關
   理論，以作為個案分析及擬定管理對策的
   依據。
3. 請同學於上課前
   先繳交個案研究問題書面報告。

References

- Kenneth C. Laudon & Jane P. Laudon (2012), Management Information Systems: Managing the Digital Firm, Twelfth Edition, Pearson.
- 周宣光　譯 (2011)，
  資訊管理系統—管理數位化公司，
  第12版，東華書局