Hot Issues of Information Management

Global E-Business and Collaboration: P&G (Chap. 2)
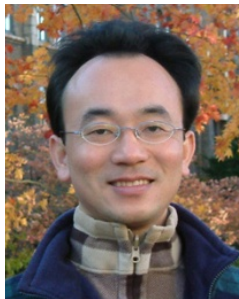
Min-Yuh Day
戴敏育
Assistant Professor
專任助理教授
Dept. of Information Management, Tamkang University
淡江大學 資訊管理學系

課程大綱 (Syllabus)

週次 (Week)　日期 (Date)　內容 (Subject/Topics)

1　2017/09/20　Introduction to Case Study for Hot Issues of Information Management

2　2017/09/27　Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)

3　2017/10/04　Mid-Autumn Festival (Day off) (中秋節) (放假一天)

4　2017/10/11　Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)

5　2017/10/18　Information Systems, Organization, and Strategy: Starbucks   (Chap. 3) (pp.129-130)

6　2017/10/25　Ethical and Social Issues in Information Systems: Facebook   (Chap. 4) (pp.188-190)

課程大綱 (Syllabus)

週次 (Week)　日期 (Date)　內容 (Subject/Topics)

7　2017/11/01　IT Infrastructure and Emerging Technologies:
　　　　　　　Amazon and Cloud Computing　(Chap. 5) (pp. 234-236)

8　2017/11/08　Foundations of Business Intelligence:
　　　　　　　IBM and Big Data　(Chap. 6) (pp.261-262)

9　2017/11/15　Midterm Report (期中報告)

10　2017/11/22　Midterm Exam Week (期中考試週)

11　2017/11/29　Telecommunications, the Internet, and Wireless
　　　　　　　Technology: Google, Apple, and Microsoft
　　　　　　　(Chap. 7) (pp.318-320)

12　2017/12/06　Enterprise Applications: Summit and SAP
　　　　　　　(Chap. 9) (pp.396-398)

課程大綱 (Syllabus)

週次　　日期　　　　內容（Subject/Topics）

13　2017/12/13　E-commerce: Zagat　(Chap. 10) (pp.443-445)

14　2017/12/20　Enhancing Decision Making: Zynga
　　　　　　　　　(Chap. 12) (pp.512-514)

15　2017/12/27　Building Information Systems: USAA
　　　　　　　　　(Chap. 13) (pp.547-548)

16　2018/01/03　Final Report I (期末報告 I)

17　2018/01/10　Final Report II (期末報告 II)

18　2018/01/17　Final Exam Week (期末考試週)

Management Information Systems:
Managing the Digital Firm

1 **Organization, Management, and the Networked Enterprise**

2 **Information Technology Infrastructure**

3 **Key System Applications for the Digital Age**

4 **Building and Managing Systems**

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.
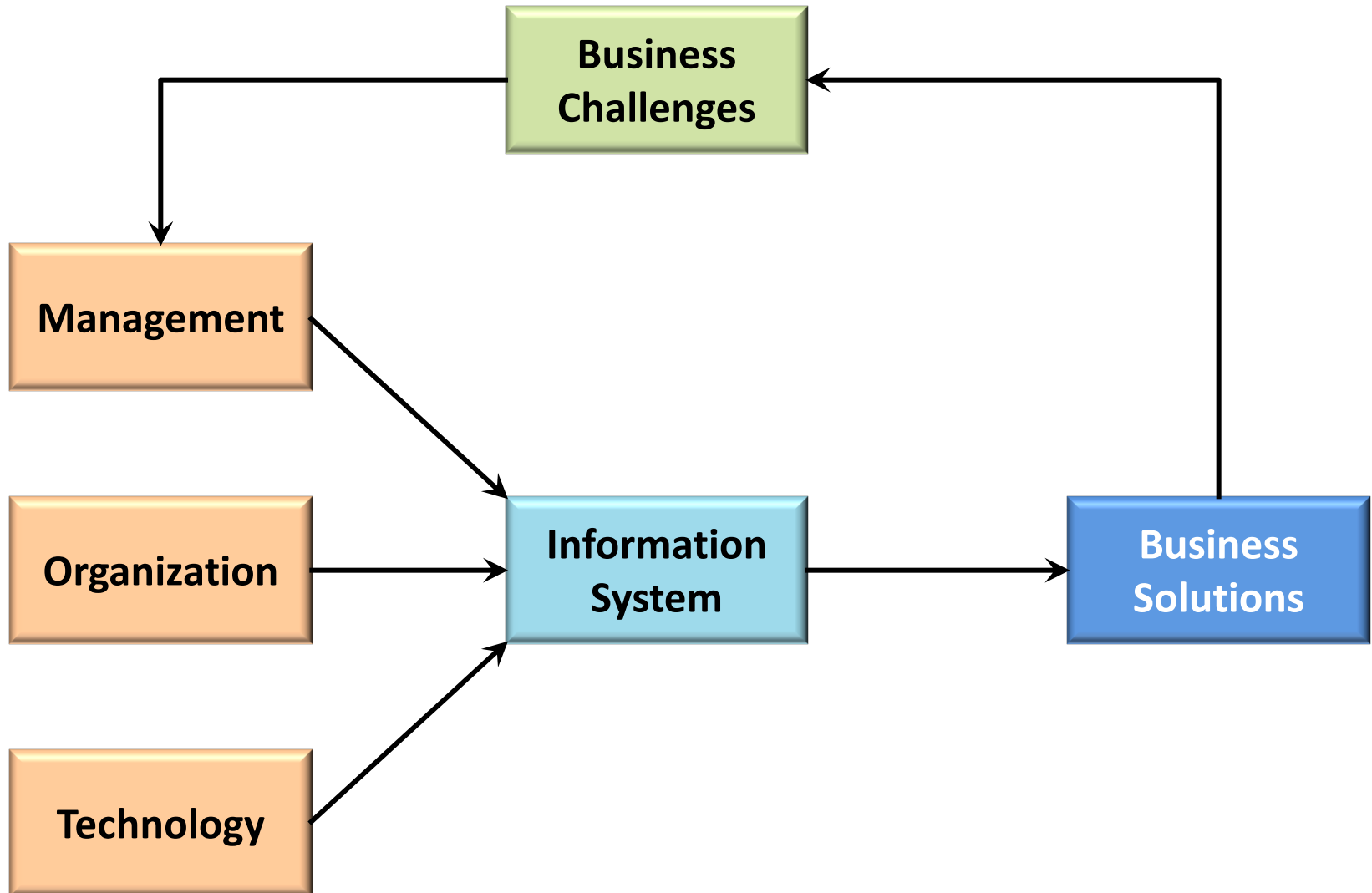
5

Chap. 2
Global E-Business and Collaboration:
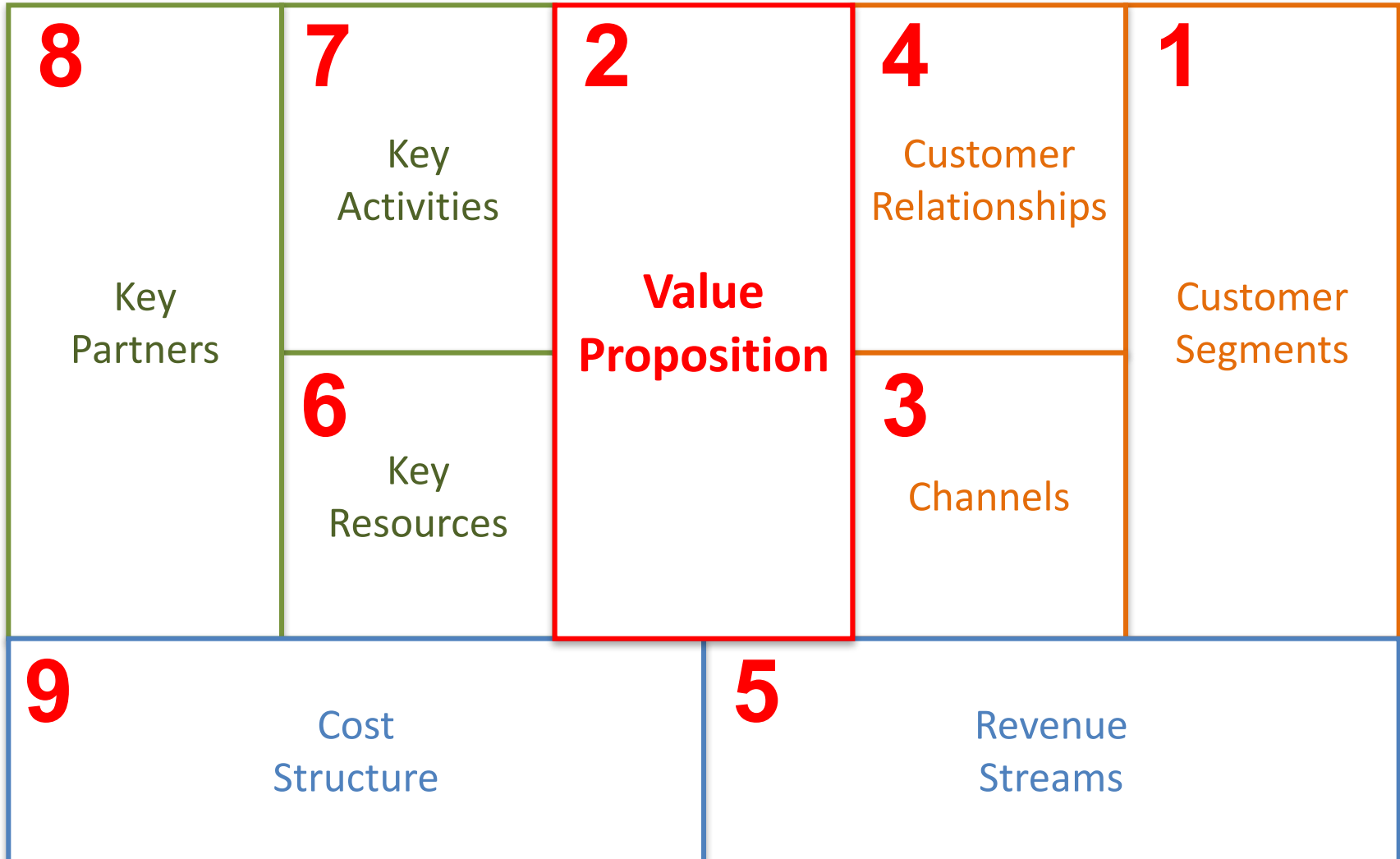# P&G

Case Study: P&G (Chap. 2) (pp.84-85)
Piloting Procter & Gamble from Decision Cockpits

1. What management, organization, and technology issues had to be addressed when implementing Business Sufficiency, Business Sphere, and Decision Cockpits?

2. How did these decision-making tools change the way the company ran its business? How effective are they? Why?

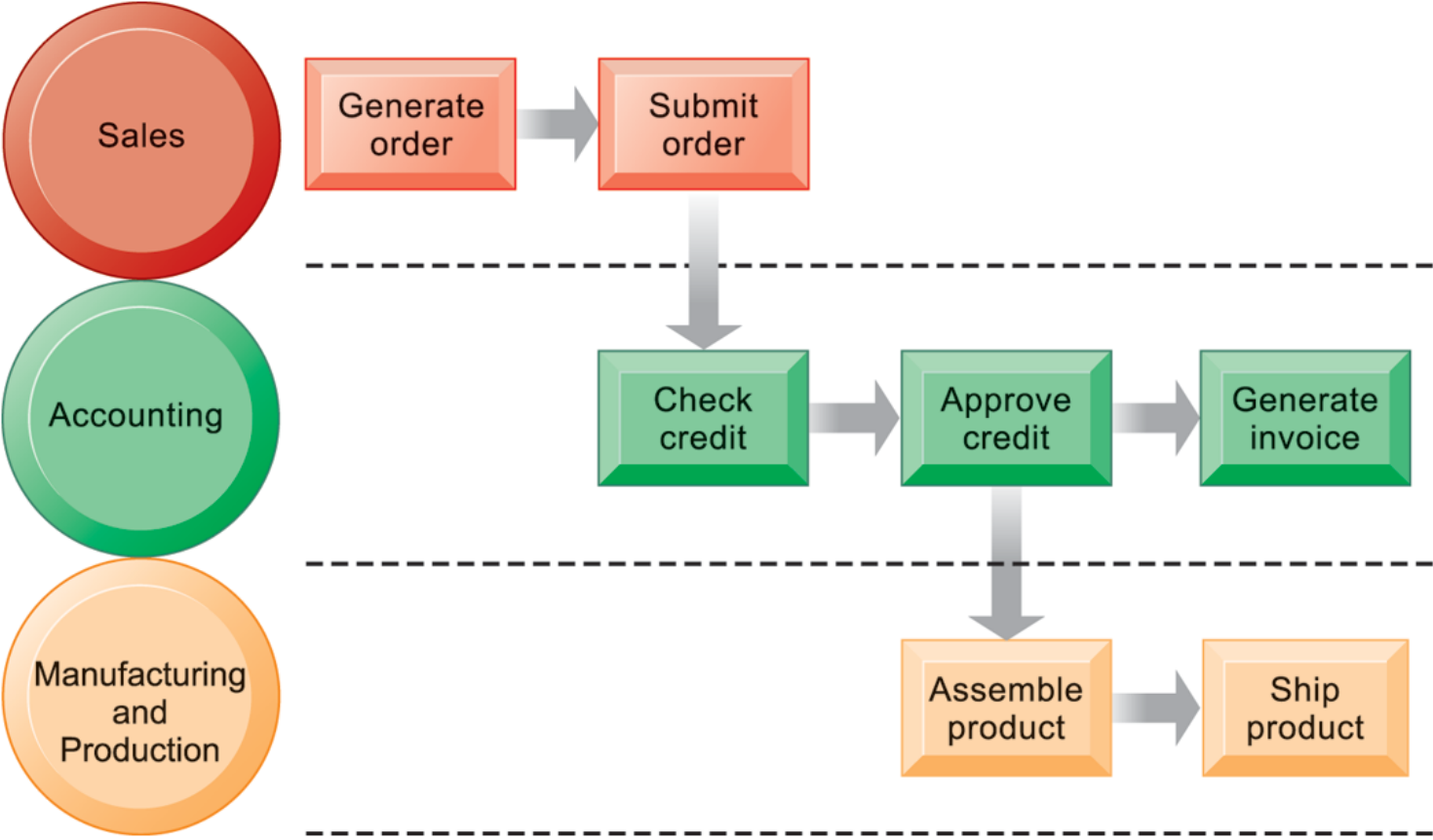3. How are these systems related to P&G's business strategy?

Overview of Fundamental MIS Concepts

Business Challenges

Management

Organization

Technology

Information System

Business Solutions

Business Model

8	7	2	4	1
Key Partners	**Key Activities**	**Value Proposition**	**Customer Relationships**	**Customer Segments**
	6 **Key Resources**		3 **Channels**	

9	5
Cost Structure	**Revenue Streams**

The Order Fulfillment Process

A Payroll TPS

Employee Data

To General Ledger

Employee/File Database

Payroll System

Management reports

Employee Number
Name
Address
Pay rate
Gross pay
Federal tax
FICA
Medicare
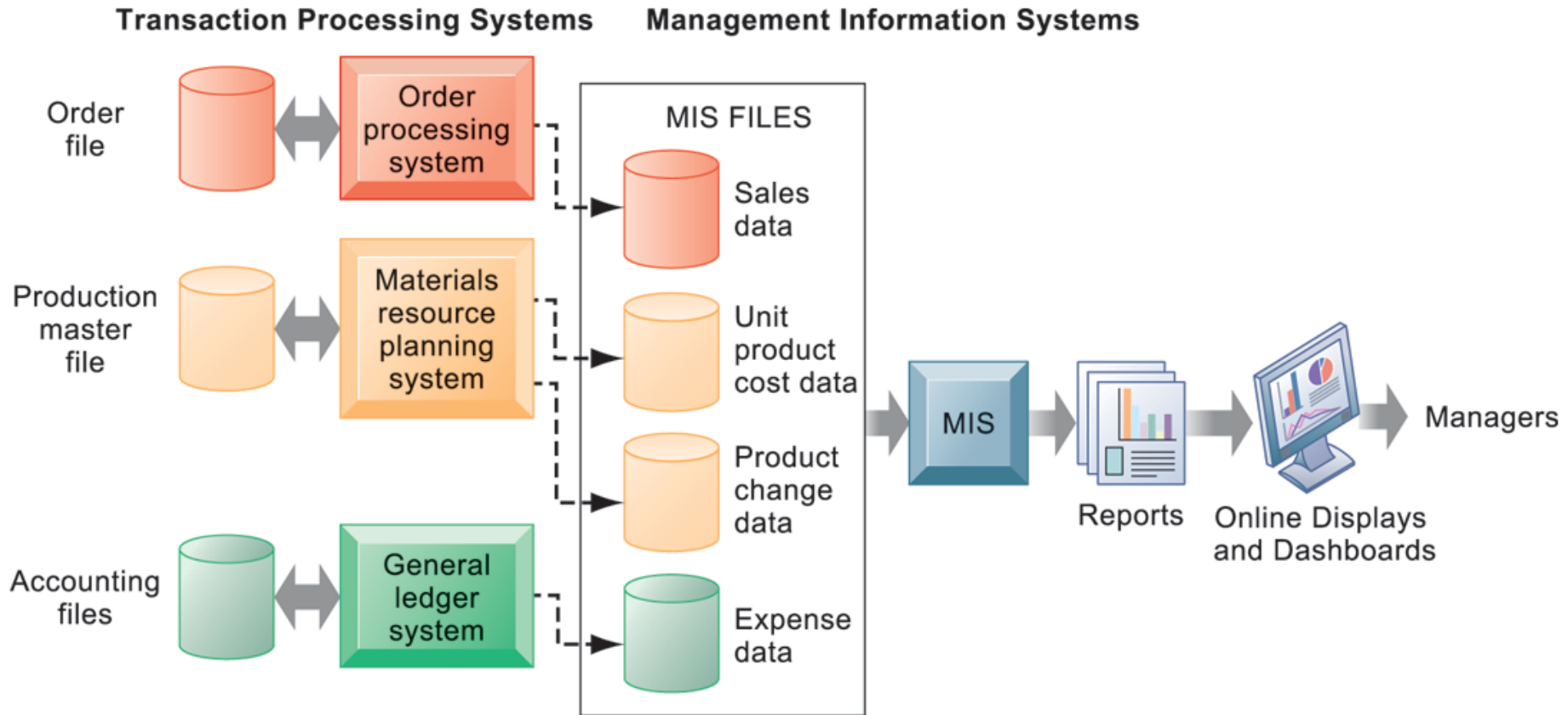State tax
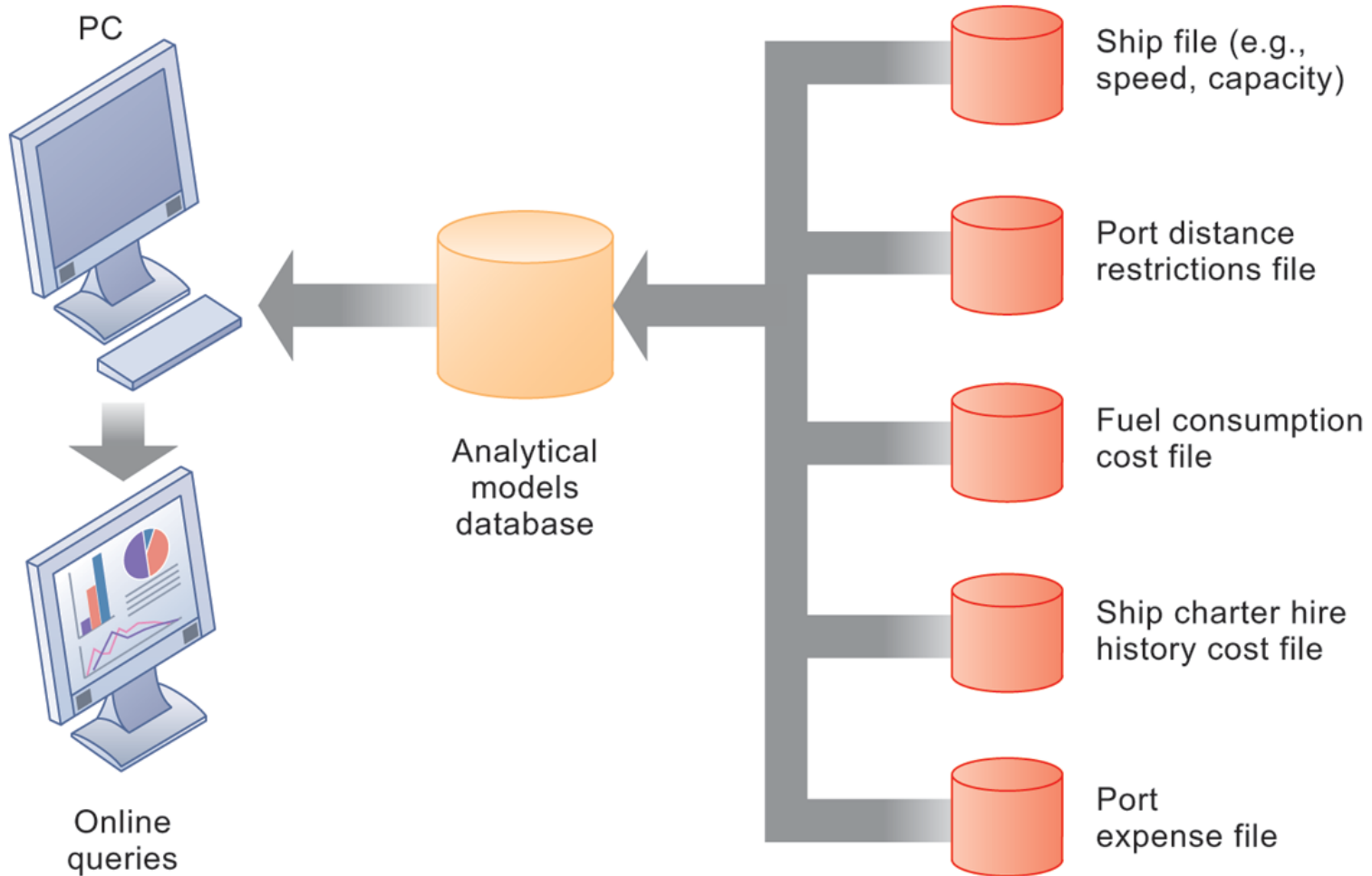Net pay
Earnings (YTD)

Online queries

To government agencies

Employee paychecks
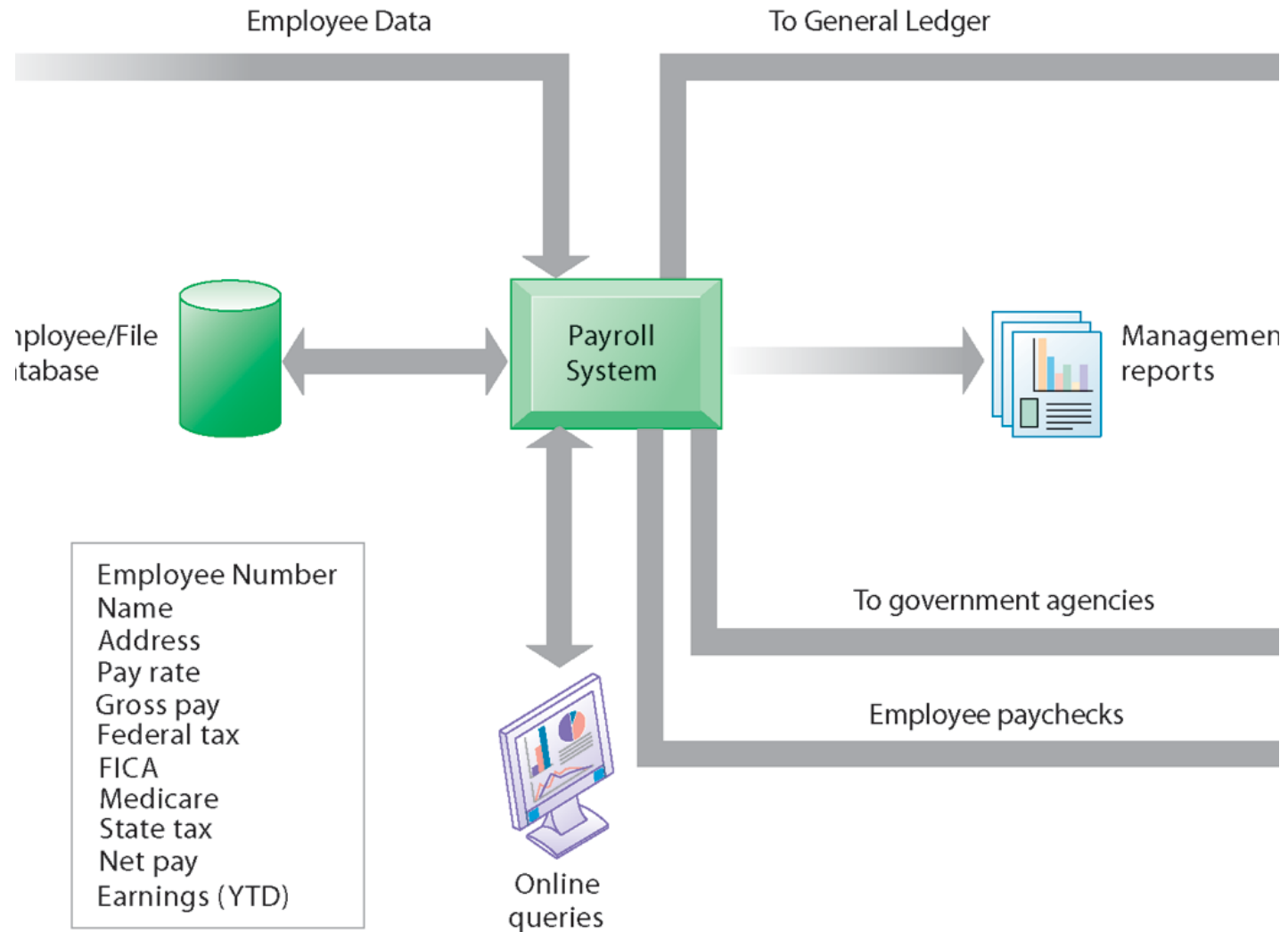
Payroll data on master file

How Management Information Systems Obtain Their Data from the Organization's TPS

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

12

Voyage-Estimating Decision Support System

PC

Analytical models database

Online queries

Ship file (e.g., speed, capacity)

Port distance restrictions file

Fuel consumption cost file
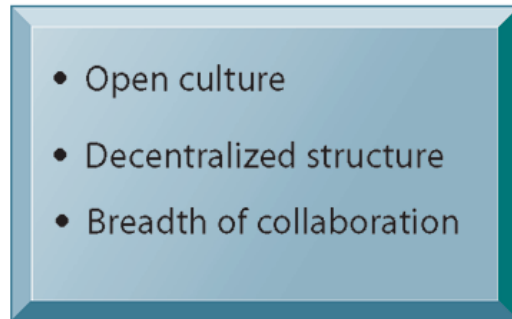
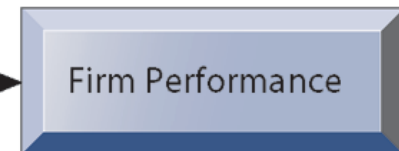Ship charter hire history cost file

Port expense file

Enterprise Application Architecture
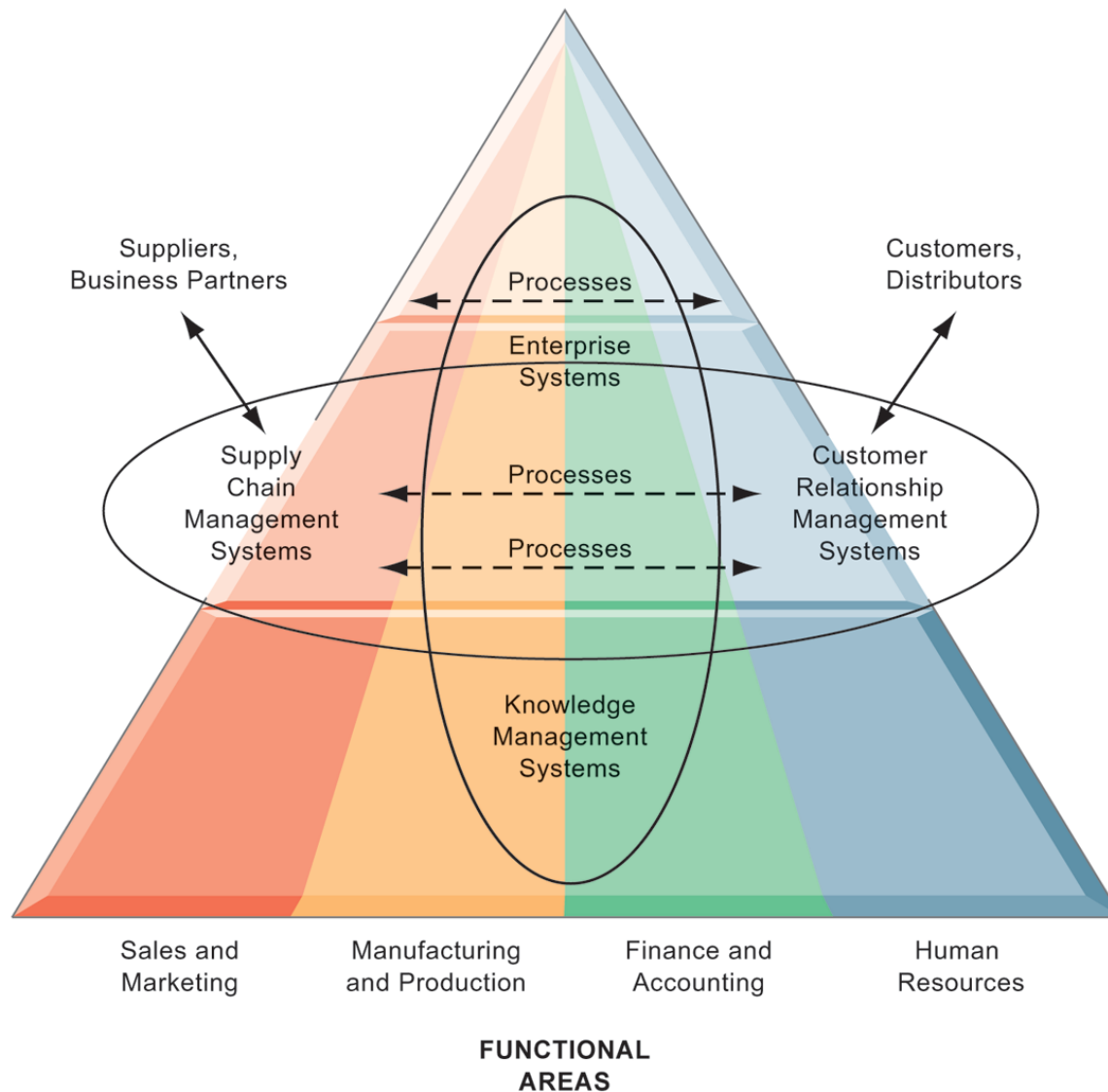
Requirements for Collaboration

Collaboration Capability

- Open culture
- Decentralized structure
- Breadth of collaboration

Collaboration Technology

- Use of collaboration technology for implementation and operations
- Use of collaborative technology for strategic planning

Collaboration Quality

Firm Performance

The Time/Space Collaboration Tool Matrix

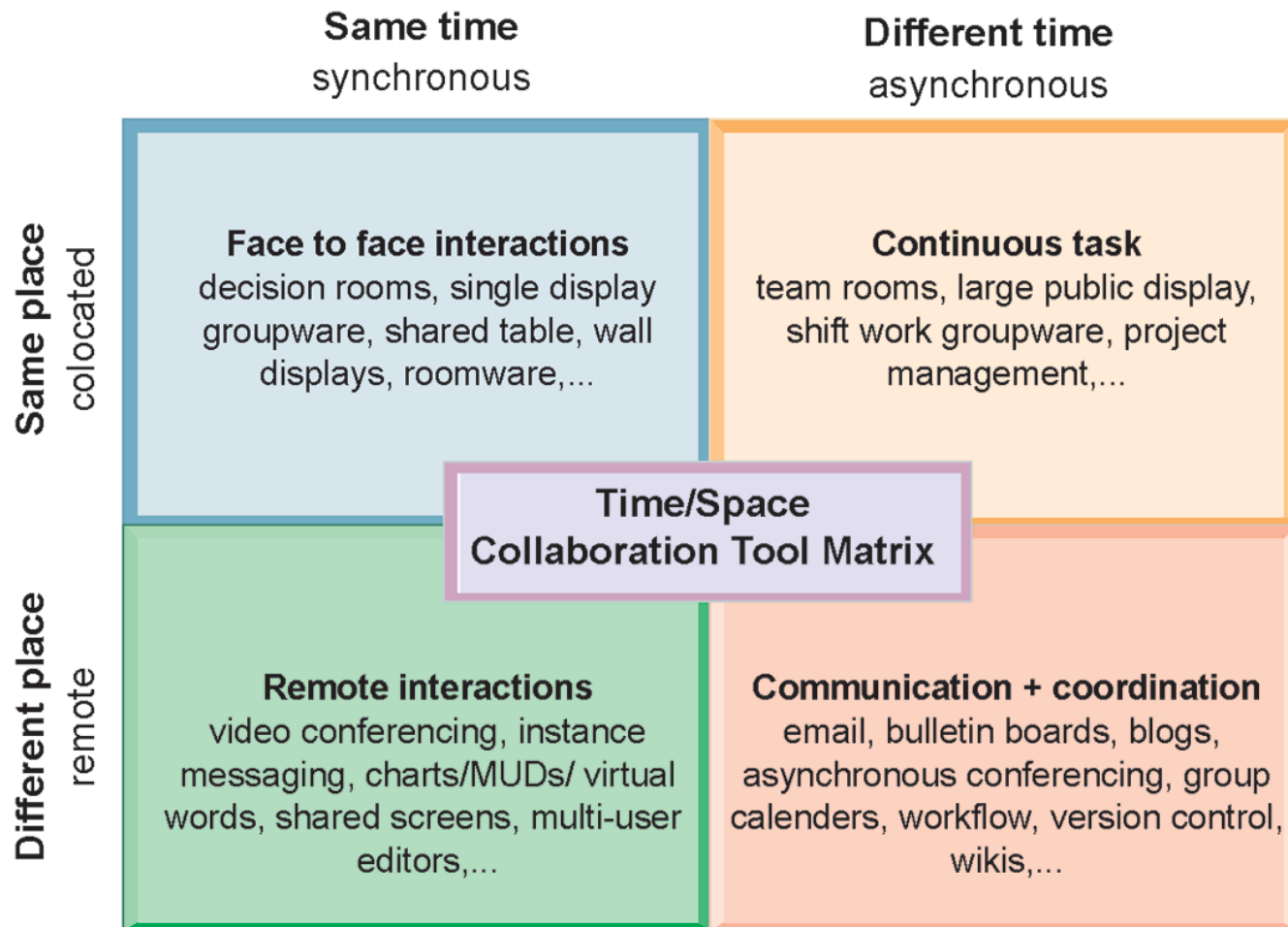|	**Same time** synchronous	**Different time** asynchronous
Same place colocated	**Face to face interactions** decision rooms, single display groupware, shared table, wall displays, roomware,...	**Continuous task** team rooms, large public display, shift work groupware, project management,...
Different place remote	**Remote interactions** video conferencing, instance messaging, charts/MUDs/ virtual words, shared screens, multi-user editors,...	**Communication + coordination** email, bulletin boards, blogs, asynchronous conferencing, group calenders, workflow, version control, wikis,...

Time/Space Collaboration Tool Matrix

The Information Systems Function in Business

- Information systems department:
  - Formal organizational unit responsible for information technology services
  - Often headed by chief information officer (CIO)
    - Other senior positions include chief security officer (CSO), chief knowledge officer (CKO), chief privacy officer (CPO)
  - Programmers
  - Systems analysts
  - Information systems managers

The Information Systems Function in Business

- End users
  - Representatives of other departments for whom applications are developed
  - Increasing role in system design, development
- IT Governance:
  - Strategies and policies for using IT in the organization
  - Decision rights
  - Accountability
  - Organization of information systems function
    - Centralized, decentralized, and so on

Definition of Business Model

A business model describes the rationale of how an organization creates, delivers, and captures value.

Definition of Business Strategy

A **business strategy**
is
a **long term plan of action**
designed to **achieve** **a particular** **goal**
or **set of goals** or **objectives**.

Source: (Ostenwalder, Pigneur and Tucci, 2005)

Business

- "the activity of providing goods and services involving financial, commercial and industrial aspects." (WordNet 2.0)
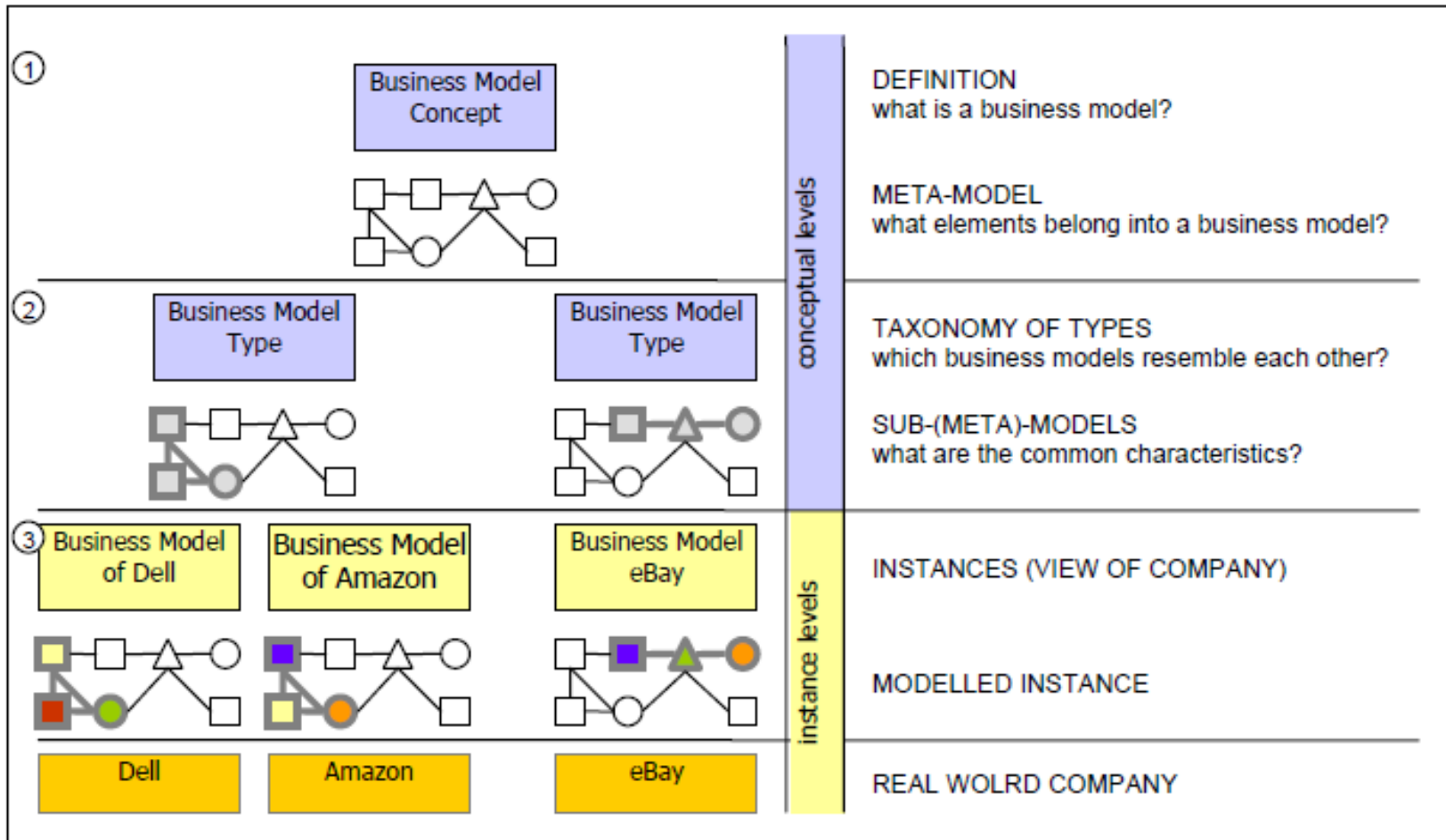
Model

- "a simplified description and representation of a complex entity or process." (WordNet 2.0)

Business Model

- A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm.

- Therefore we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is done and with which financial consequences.

Source: (Ostenwalder, Pigneur and Tucci, 2005)

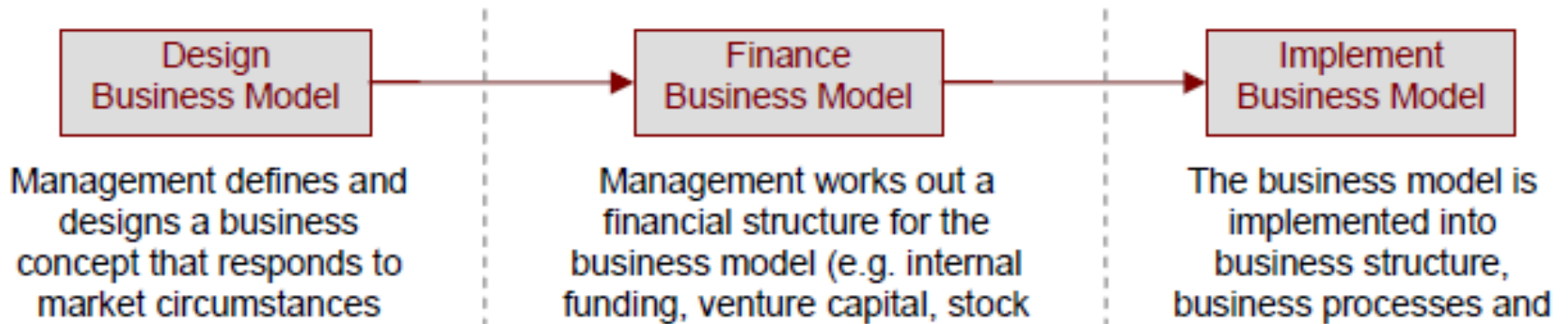23

Business Model Concept Hierarchy

Business Model vs. Business Process Model

- Business Model
  - a view of the firm's logic for creating and commercializing value
- Business process model
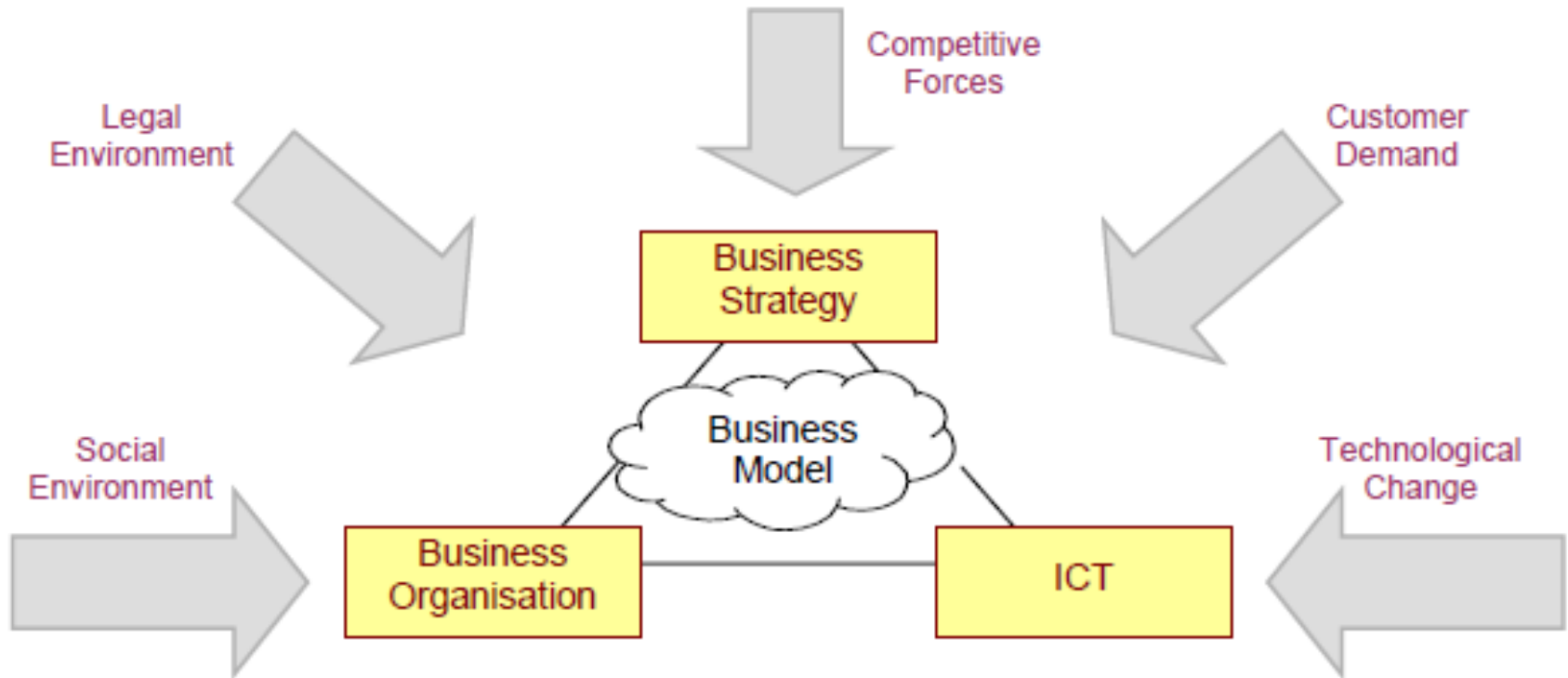 - how a business case is implemented in processes

Business Model vs. Strategy

- Business Models
  - a system that shows how the pieces of a business fit together.
  - an abstraction of a firm's strategy
- Strategy
  - includes competition

26

Implementing Business Models

Design Business Model	Finance Business Model	Implement Business Model
Management defines and designs a business concept that responds to market circumstances	Management works out a financial structure for the business model (e.g. internal funding, venture capital, stock	The business model is implemented into business structure, business processes and

Source: (Ostenwalder, Pigneur and Tucci, 2005)

The Business Model's Place in the Firm

Source: (Ostenwalder, Pigneur and Tucci, 2005)

Nine Business Model Building Blocks

Pillar	Business Model Building Block	Description
Product	Value Proposition	Gives an overall view of a company's bundle of products and services.
Customer Interface	Target Customer	Describes the segments of customers a company wants to offer value to.
	Distribution Channel	Describes the various means of the company to get in touch with its customers.
	Relationship	Explains the kind of links a company establishes between itself and its different customer segments.
Infrastructure Management	Value Configuration	Describes the arrangement of activities and resources.
	Core Competency	Outlines the competencies necessary to execute the company's business model.
	Partner Network	Portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value.
Financial Aspects	Cost Structure	Sums up the monetary consequences of the means employed in the business model.
	Revenue Model	Describes the way a company makes money through a variety of revenue flows.

Source: (Ostenwalder, Pigneur and Tucci, 2005)

Planning, Changing and Implementing Business Models
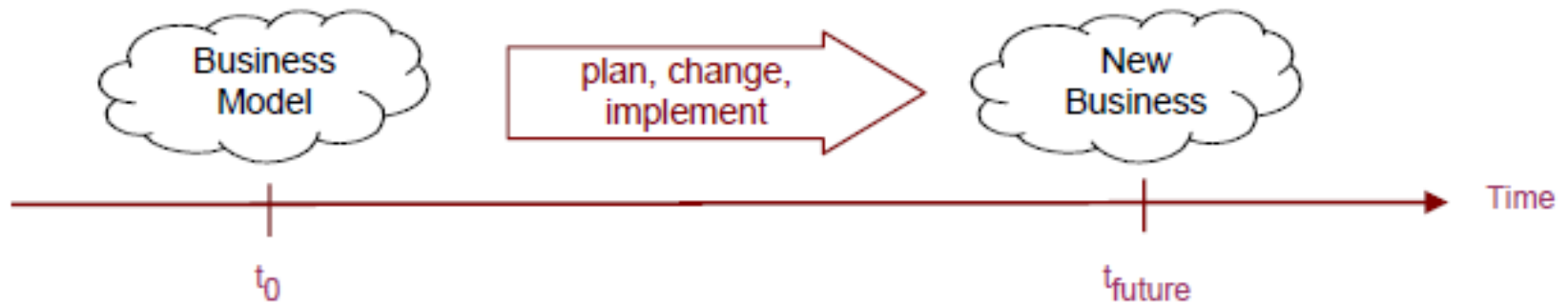
Source: (Ostenwalder, Pigneur and Tucci, 2005)

Business Strategy and Information Systems Alignment

Managers are aware of the use of Information Systems to realize goals, exploit opportunities and obtain competitive advantage

Business ⟶ **Business Model** ⟵ Information Systems
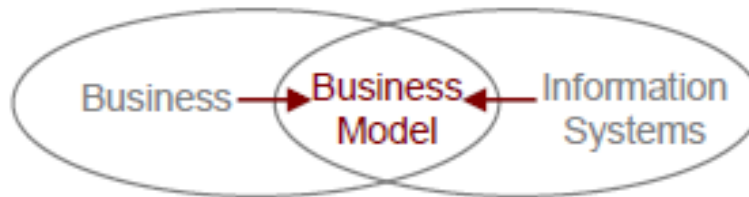
Information Systems support the company's business model and are targeted on areas that are critical to successful business performance

Source: (Ostenwalder, Pigneur and Tucci, 2005)

Business and IT/IS Alignment
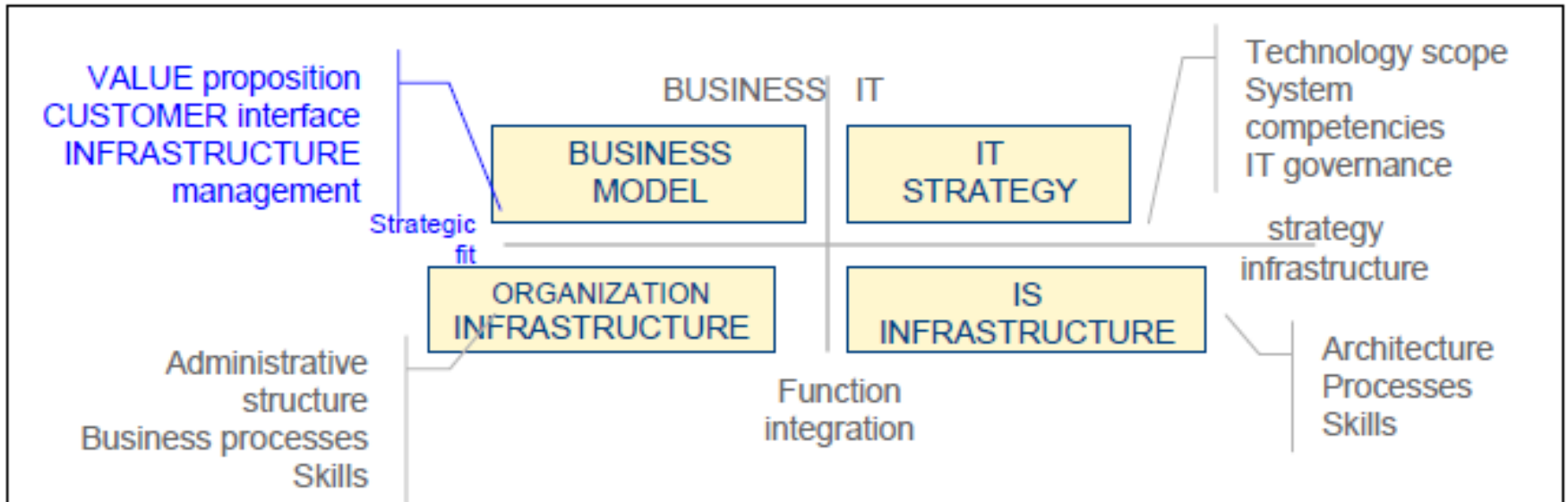
Adapted from [Henderson and Venkatraman 1999]

Infrastructure Alignment

9 INFRASTRUCTURE SERVICES 9 BUSINESS MODEL BUILDING BLOCKS	Application Infrastructure	Communications Management	Data Management	IT Management	Security	Architecture and Standards	Channel Management	IT Research and Development	Training and Education in IT
Value Proposition									
Target Customer									
Distribution Channel									
Relationship									
Value Configuration									
Capability									
Partnersh									
Cost Model									
Revenue Model									

Adapted from Weill and Vitale [2002]

Case Study: Starbucks (Chap. 3) (pp.129-130)

Technology Helps Starbucks Find New Ways to Compete

1. Analyze Starbucks using the competitive forces and value chain models.

2. What is Starbucks' business strategy? Assess the role played by technology in this business strategy.

3. How much has technology helped Starbucks compete? Explain your answer.

資訊管理專題
(Hot Issues of Information Management)

1. 請同學於資訊管理專題個案討論前
   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
   先繳交資訊管理專題個案研究問題書面報告。

4. 上課時間地點：
   週三 8,9 (15:10-17:00) B702

References

- Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

- Kenneth C. Laudon & Jane P. Laudon原著，游張松 主編，陳文生 翻譯 (2014)，資訊管理系統，第13版，滄海