Case Study for Information Management

E-commerce: Digital Markets, Digital Goods
Amazon vs. Walmart
(Chap. 10)

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Tue 2, 3, 4 (9:10-12:00) B425

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Dept. of Information Management, Tamkang University

http://mail.tku.edu.tw/myday/
2014-12-02
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1 103/09/16 Introduction to Case Study for Information Management
2 103/09/23 Information Systems in Global Business: UPS (Chap. 1)
3 103/09/30 Global E-Business and Collaboration: NTUC Income (Chap. 2)
4 103/10/07 Information Systems, Organization, and Strategy: iPad and Apple (Chap. 3)
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6 103/10/21 Foundations of Business Intelligence: Lego (Chap. 6)
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課程大綱 (Syllabus)
Chap. 10
E-commerce:
Digital Markets,
Digital Goods –
Amazon vs. Walmart
Amazon vs. Walmart:
Which Giant Will Dominate E-commerce? (Chap. 10) (pp. 436-438)

1. What concepts in the chapter are illustrated in this case?
2. Analyze Amazon and Walmart.com using the value chain and competitive forces models.
3. What are the management, organization, and technology factors that have contributed to the success of both Wal-Mart and Amazon?
5. Where would you prefer to make your Internet purchases? Amazon or Walmart.com? Why?

Overview of Fundamental MIS Concepts

THE GROWTH OF E-COMMERCE

8 Unique Features of E-commerce

1. Ubiquity
2. Global reach
3. Universal standards
4. Richness
5. Interactivity
6. Information density
7. Personalization/Customization
8. Social technology

Key concepts in e-commerce

• Digital markets reduce
  – Information asymmetry
  – Search costs
  – Transaction costs
  – Menu costs

• Digital markets enable
  – Price discrimination
  – Dynamic pricing
  – Disintermediation

Key concepts in e-commerce

• Digital goods
  – Goods that can be delivered over a digital network
    • E.g. Music tracks, video, software, newspapers, books
  – Cost of producing first unit almost entire cost of product: marginal cost of 2nd unit is about zero
  – Costs of delivery over the Internet very low
  – Marketing costs remain the same; pricing highly variable
  – Industries with digital goods are undergoing revolutionary changes (publishers, record labels, etc.)

THE BENEFITS OF DISINTERMEDIATION TO THE CONSUMER

Types of E-commerce

1. Business-to-consumer (B2C)
2. Business-to-business (B2B)
3. Consumer-to-consumer (C2C)
4. Mobile commerce (m-commerce)

E-commerce

Business Models

1. Portal
2. E-tailer
3. Content Provider
4. Transaction Broker
5. Market Creator
6. Service Provider
7. Community Provider

E-commerce

Revenue Models

1. Advertising
2. Sales
3. Subscription
4. Free/Freemium
5. Transaction Fee
6. Affiliate

Understanding Business Model

• Business Model
• Revenue Model

• Business Strategy
• Business Strategy and Information System Alignment
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.*
Business Model

Key Partners

Key Activities

Key Resources

Value Proposition

Customer Relationships

Channels

Customer Segments

Cost Structure

Revenue Streams

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)
## Occurrences of the Term "Business Model" in Scholarly Reviewed Journals

<table>
<thead>
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Source: (Ostenwalder, Pigneur and Tucci, 2005)
Business Model Concept Hierarchy

Source: (Ostenwalder, Pigneur and Tucci, 2005)
EVOLUTION OF THE BUSINESS MODEL CONCEPT

Source: (Ostenwalder, Pigneur and Tucci, 2005)
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

Source: (Ostenwalder, Pigneur and Tucci, 2005)
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

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

Design Business Model
Management defines and designs a business concept that responds to market circumstances

Finance Business Model
Management works out a financial structure for the business model (e.g. internal funding, venture capital, stock

Implement Business Model
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

Source: (Ostenwalder, Pigneur and Tucci, 2005)

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

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<td>Architecture</td>
<td>Production Mode</td>
<td>e3-value configuration</td>
<td>connected activities, value configuration</td>
<td>b-webs</td>
<td>commerce process model</td>
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<td>Core competencies, CSF</td>
<td>Resource Model</td>
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<td>Partnership</td>
<td>Architecture</td>
<td>e-business schematics</td>
<td>Actors</td>
<td>sustainability (team-up strategy)</td>
<td>b-webs</td>
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<td>Cost Structure</td>
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<td>Value exchange</td>
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<td>Revenue Model</td>
<td>Revenue Model</td>
<td>Source of revenue</td>
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<td>value exchange</td>
<td>pricing, revenue source</td>
<td>pricing model, revenue model</td>
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Source: (Ostenwalder, Pigneur and Tucci, 2005)
## Domains Addressed in Business Models (cont.)

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<td><strong>Value Proposition</strong></td>
<td>Product/market scope</td>
<td>Value stream</td>
<td>Value proposition</td>
<td>What does the customer value?</td>
<td>Transaction component</td>
<td>Product and Services offered</td>
<td>Value proposition, assumed value</td>
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<td><strong>Target Customer</strong></td>
<td>Market scope</td>
<td>Market segment</td>
<td>Who is the customer?</td>
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<td>Market opportunity</td>
<td>Market segment</td>
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<td><strong>Distribution Channel</strong></td>
<td>Fulfillment &amp; support, info &amp; insight</td>
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<td>How can we deliver value at an appropriate cost?</td>
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<td>Marketing/sales model</td>
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<td><strong>Customer Relationship</strong></td>
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<td>Brand and reputation</td>
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<td><strong>Value Configuration</strong></td>
<td>Core processes</td>
<td>Logistical stream</td>
<td>Structure of the value chain</td>
<td>Architectural configuration</td>
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<td><strong>Partnership</strong></td>
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<td>Position in the value chain</td>
<td>Transaction component</td>
<td>Partners</td>
<td>Companies involved in creating value</td>
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<td>Benefits to firm and stakeholders</td>
<td>Revenue Model</td>
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</table>

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

The management analyzes the current business model's adequacy to environmental pressures and designs a new business model. The new business model becomes a goal to achieve and guides planning, change and implementation.

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.

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

Source: (Ostenwalder, Pigneur and Tucci, 2005)
Definition of Business Model

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

Business Model Canvas

Key Activities
Key Partners
Key Resources
Customer Segments
Value Proposition
Channels
Customer Relationships
Revenue Streams
Cost Structure

https://www.youtube.com/watch?v=QoAOzMTLP5s
The 9 Building Blocks of Business Model

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Proposition</th>
<th>Customer Relationships</th>
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<th>Channels</th>
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<td>6</td>
<td>3</td>
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The 9 Building Blocks of Business Model

1. Customer Segments

Defines the different groups of people or organizations an enterprise aims to reach and serve

2. Value Propositions

Describes the bundle of products and services that create value for a specific Customer Segment

3. Channels

Describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition

4. Customer Relationships

Describes the types of relationships a company establishes with specific Customer Segments

5. Revenue Streams

Represents the cash a company generates from each Customer Segment (costs must be subtracted from revenues to create earnings)

6. Key Resources

Describes the most important assets required to make a business model work

7. Key Activities

Describes the most important things a company must do to make its business model work

8. Key Partnerships

Describes the network of suppliers and partners that make the business model work

9. Cost Structure

Describes all costs incurred to operate a business model

The 9 Building Blocks of Business Model

1. Customer Segments
   - An organization serves one or several Customer Segments.

2. Value Propositions
   - It seeks to solve customer problems and satisfy customer needs with value propositions.

3. Channels
   - Value propositions are delivered to customers through communication, distribution, and sales Channels.

4. Customer Relationships
   - Customer relationships are established and maintained with each Customer Segment.

5. Revenue Streams
   – Revenue streams result from value propositions successfully offered to customers.

6. Key Resources
   – Key resources are the assets required to offer and deliver the previously described elements...

7. Key Activities
   – ...by performing a number of Key Activities.

8. Key Partnerships
   – Some activities are outsourced and some resources are acquired outside the enterprise.

9. Cost Structure
   – The business model elements result in the cost structure.

Business Model Generation

Web 2.0: Social Networking and the Wisdom of Crowds

• Most popular Web 2.0 service: social networking
  – Social networking sites sell banner ads, user preference information, and music, videos and e-books

• Social shopping sites
  – Swap shopping ideas with friends (Kaboodle, ThisNext)

• Wisdom of crowds/crowdsourcing
  – Large numbers of people can make better decisions about topics and products than a single person

• Prediction markets:
  – Peer-to-peer betting markets on specific outcomes (elections, sales figures, designs for new products)

E-commerce marketing

• Internet provides marketers with new ways of identifying and communicating with customers

• Long tail marketing: Ability to reach a large audience inexpensively

• Behavioral targeting: Tracking online behavior of individuals on thousands of Web sites

• Advertising formats include search engine marketing, display ads, rich media, and e-mail

WEB SITE VISITOR TRACKING

The shopper clicks on the home page. The store can tell that the shopper arrived from the Yahoo! portal at 2:30 PM (which might help determine staffing for customer service centers) and how long she lingered on the home page (which might indicate trouble navigating the site).

The shopper clicks on blouses, clicks to select a woman’s white blouse, then clicks to view the same item in pink. The shopper clicks to select this item in a size 10 in pink and clicks to place it in her shopping cart. This information can help the store determine which sizes and colors are most popular.

From the shopping cart page, the shopper clicks to close the browser to leave the Web site without purchasing the blouse. This action could indicate the shopper changed her mind or that she had a problem with the Web site’s checkout and payment process. Such behavior might signal that the Web site was not well designed.

WEB SITE PERSONALIZATION

Based on your portfolio and recent market trends, here are some recommendations.

Welcome back, Steve P. Munson. Check out these recommended titles:
- One Minute Manager
- Leading Change
- Results-Based Leadership

Sarah,
Here are the items you want to bid on:
- Halogen reading lamp
- Portable reading lamp
- LED book reading lamp
HOW AN ADVERTISING NETWORK SUCH AS DOUBLECLICK WORKS

- Merchant server connects to DoubleClick ad server
- Ad server reads cookie; checks database for profile
- Ad server selects and serves an appropriate banner ad based on profile
- DoubleClick follows consumer from site to site through use of Web bugs
- Consumer requests Web page from ad network member site

ELECTRONIC DATA INTERCHANGE (EDI)

A PRIVATE INDUSTRIAL NETWORK

CONSOLIDATED MOBILE COMMERCE REVENUES

CHOICES IN BUILDING AND HOSTING WEB SITES

BUILDING THE SITE

In-house

- COMPLETELY IN-HOUSE
  - Build: In
  - Host: In

Outsource

- MIXED RESPONSIBILITY
  - Build: Out
  - Host: In

- COMPLETELY OUTSOURCED
  - Build: Out
  - Host: Out

HOSTING THE SITE

In-house

- COMPLETELY IN-HOUSE
  - Build: In
  - Host: In

Outsource

- MIXED RESPONSIBILITY
  - Build: Out
  - Host: In

- COMPLETELY OUTSOURCED
  - Build: Out
  - Host: Out

COMPONENTS OF A WEB SITE BUDGET

- System maintenance: 35%
- System development: 22%
- Content design and development: 15%
- Hardware: 10%
- Software: 8%
- Telecommunications: 10%

Case Study: Tata Consulting Services
Knowledge Management and Collaboration at Tata Consulting Services (Chap. 11)

1. Analyze the knowledge management efforts at Tata Consulting Services (TCS) using the knowledge management value chain model. Which tools or activities were used for managing tacit knowledge and which ones are used for explicit knowledge?

2. Describe the growth of knowledge management systems at TCS? How have these systems helped TCS in its business?

3. Describe the collaboration tools used at TCS? What benefits did TCS reap from these tools?

4. How did Web 2.0 tools help TCS manage knowledge and collaboration among its employees?

5. How do you think KM tools have changed some key operational processes at TCS, such as bidding for new projects, project development and implementation, customer service, and so on?

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


– 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