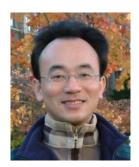
Case Study for Information Management 資訊管理個案 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7)

1041CSIM4C08 TLMXB4C (M1824) Tue 2 (9:10-10:00) B502 Thu 7,8 (14:10-16:00) B601



Min-Yuh Day

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http://mail.tku.edu.tw/myday/ 2015-11-03

課程大綱 (Syllabus)

週次(Week) 日期(Date) 內容(Subject/Topics)

- 1 2015/09/15, 17 Introduction to Case Study for Information Management
- 2 2015/09/22, 24 Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
- 3 2015/09/29, 10/01 Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
- 4 2015/10/06, 08 Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
- 5 2015/10/13, 15 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)

- 6 2015/10/20, 22 IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
- 7 2015/10/27, 29 Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
- 8 2015/11/03, 05 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
- 9 2015/11/10,12 Midterm Report (期中報告)
- 10 2015/11/17,19 期中考試週

課程大綱 (Syllabus)

- 週次 日期 内容(Subject/Topics)
- 11 2015/11/24, 26 Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)
- 12 2015/12/01, 03 E-commerce: Zagat (Chap. 10) (pp.443-445)
- 13 2015/12/08, 10 Enhancing Decision Making: Zynga (Chap. 12) (pp.512-514)
- 14 2015/12/15, 17 Building Information Systems: USAA (Chap. 13) (pp.547-548)
- 15 2015/12/22, 24 Managing Projects: NYCAPS and CityTime (Chap. 14) (pp.586-588)
- 16 2015/12/29,31 Final Report I (期末報告 I)
- 17 2016/01/05,07 Final Report II (期末報告 II)
- 18 2016/01/12,14 期末考試週

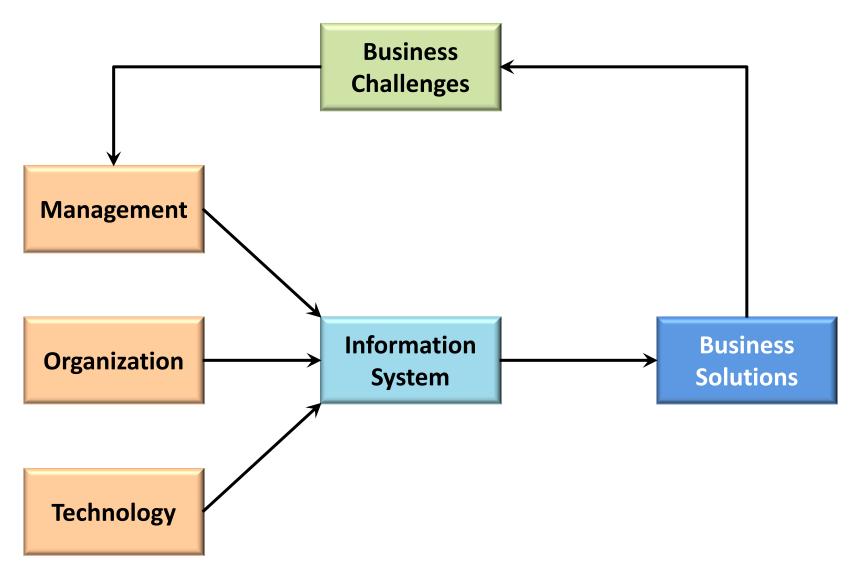
Chap. 7 Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft

Case Study:

Google, Apple, and Microsoft (Chap. 7) (pp. 318-320) Apple, Google, and Microsoft Battle for Your Internet Experience

- 1. Define and compare the business models and areas of strength of Apple, Google, and Microsoft.
- 2. Why is mobile computing so important to these three firms? Evaluate the mobile platform offerings of each firm.
- 3. What is the significance of applications and app stores, and closed vs. open app standards to the success or failure of mobile computing?
- 4. Which company and business model do you believe will prevail in this epic struggle? Explain your answer.
- 5. What difference would it make to a business or to an individual consumer if Apple, Google, or Microsoft dominated the Internet experience? Explain your answer.

Overview of Fundamental MIS Concepts



Understanding Business Model

- Business Model
- Revenue Model

- Business Strategy
- Business Strategy and Information System Alignment

Business Model

Value

Business Model

8	6	2		4	1				
	Key Activities	Value Proposition						Customer Relationships	
Key Partners					Customer Segments				
	7 Key Resources			3 Channels					
9		5 Revenue Streams							

Definition of Business Model

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

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

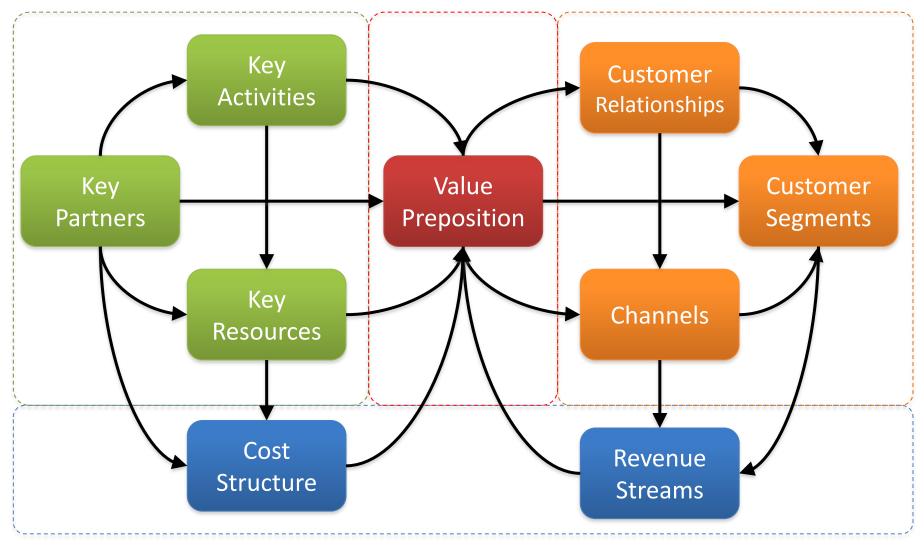
- 1. Advertising
- 2. Sales
- 3. Subscription
- 4. Free/Freemium
- 5. Transaction Fee
- 6. Affiliate

Types of E-commerce

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

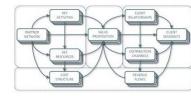
Business Model Canvas

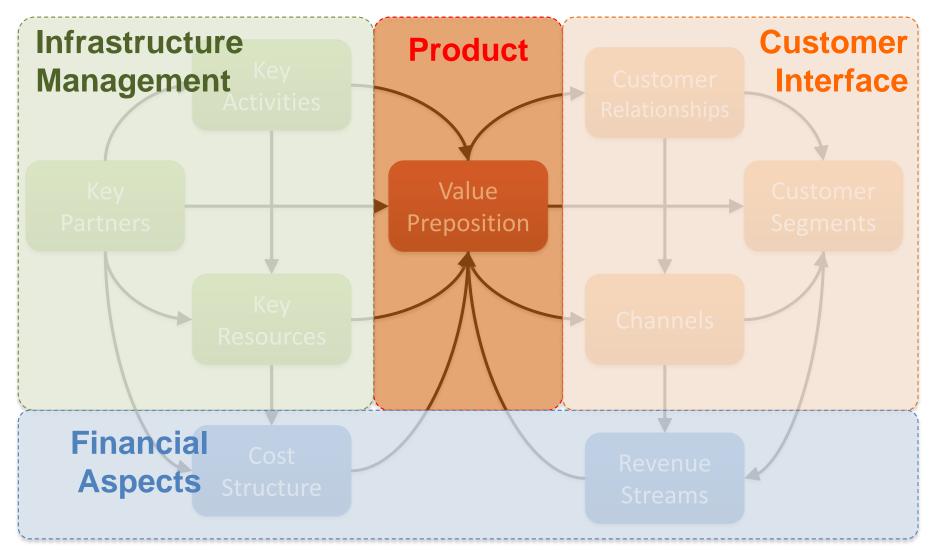




Source: http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html https://www.youtube.com/watch?v=QoAOzMTLP5s

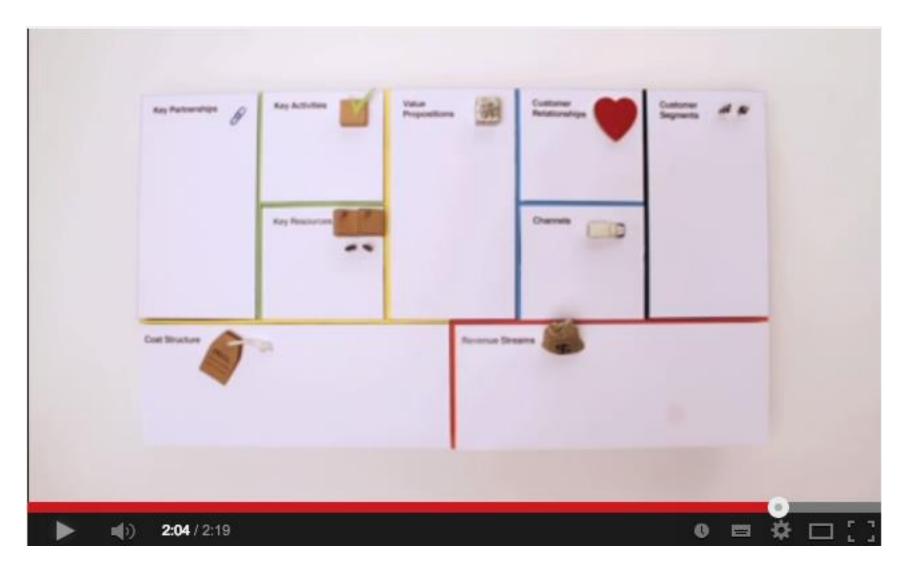
Business Model Canvas



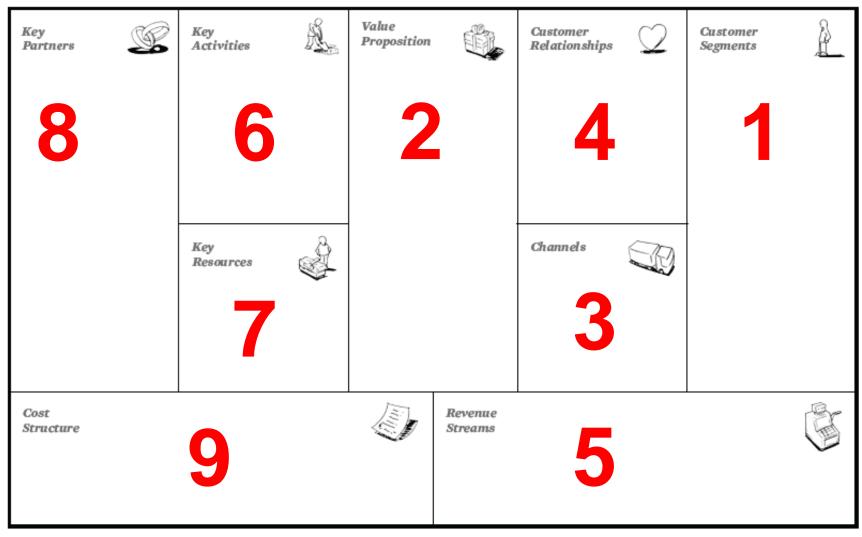


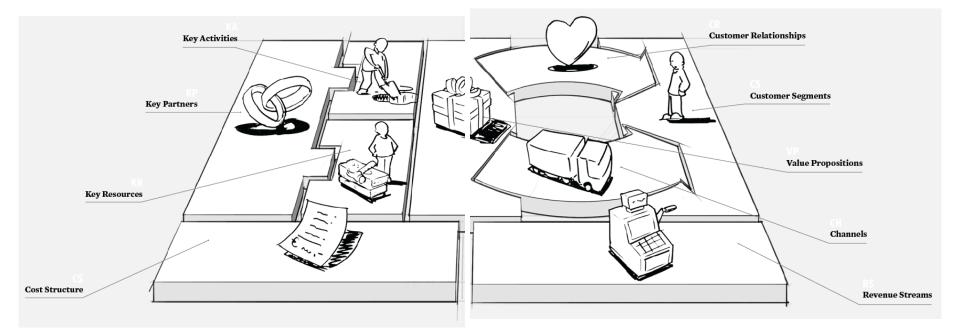
Source: <u>http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html</u> <u>https://www.youtube.com/watch?v=QoAOzMTLP5s</u>

Business Model Canvas Explained



Source: http://www.youtube.com/watch?v=QoAOzMTLP5s





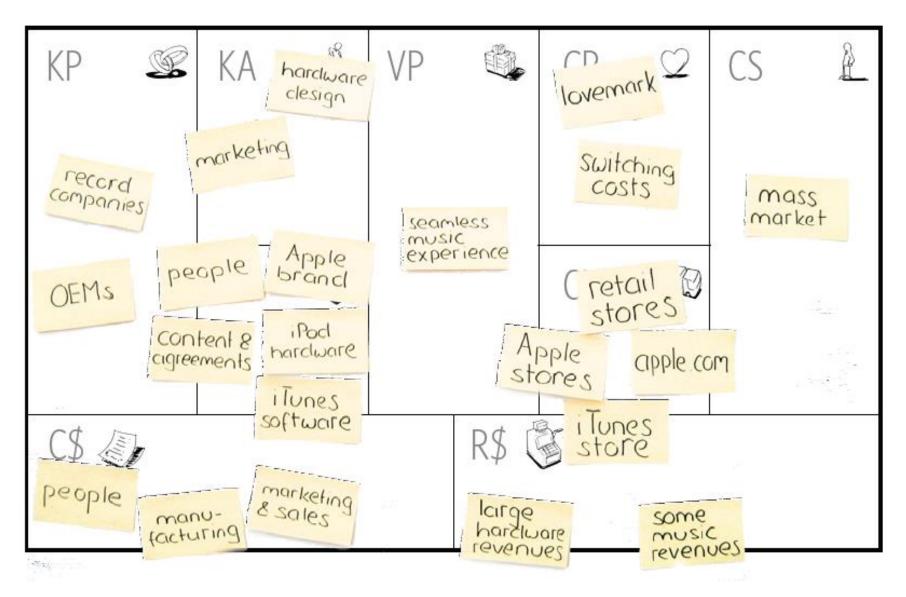
- 1. Customer Segments
 - An organization serves one or several Customer Segments.
- 2. Value Propositions
 - It seeks to solve customer problems and satisfy customer needs with value propositions.
- 3. Channels
 - Value propositions are delivered to customers through communication, distribution, and 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.

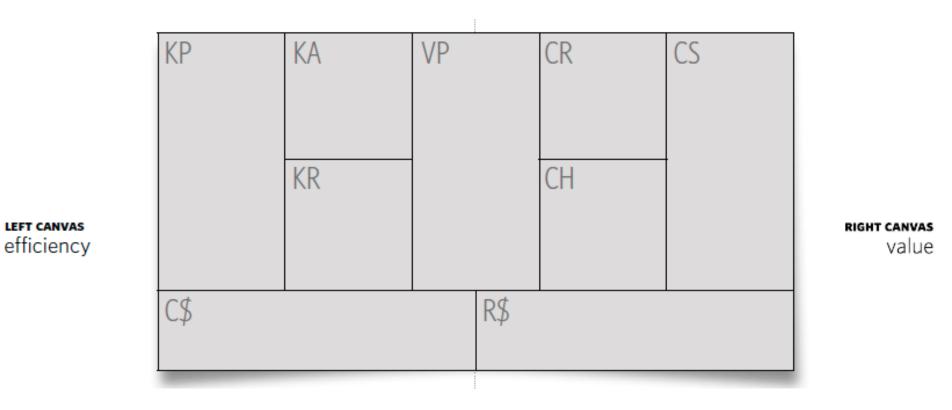
Business Model

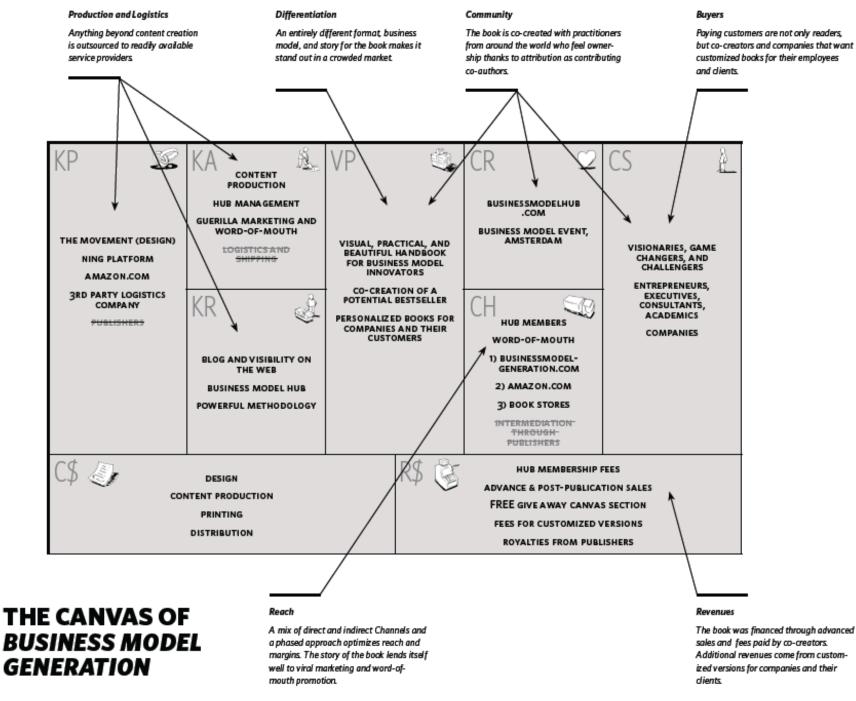
8	6	2		4	1				
	Key Activities	Value Proposition						Customer Relationships	
Key Partners					Customer Segments				
	7 Key Resources			3 Channels					
9		5 Revenue Streams							

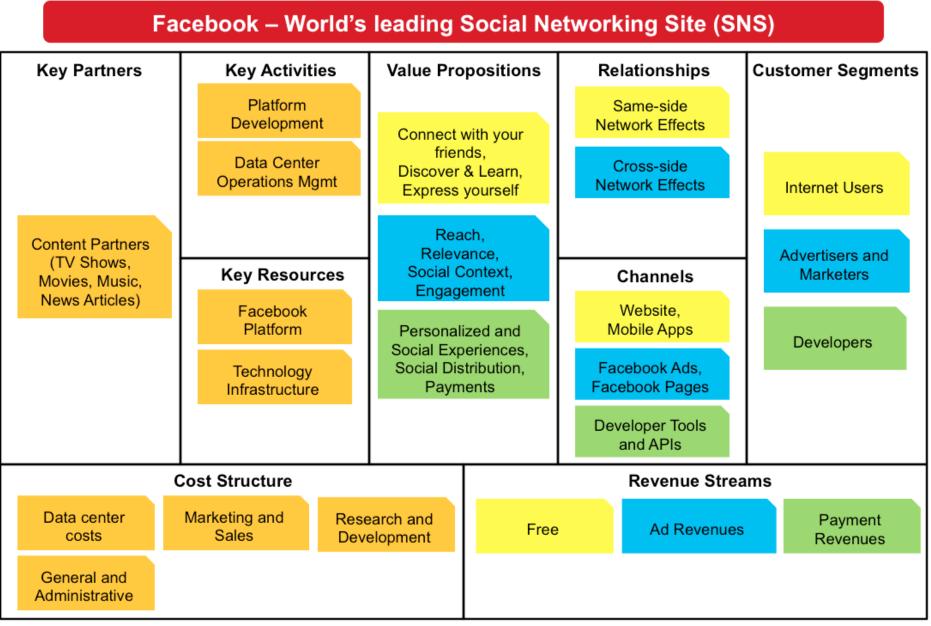
Business Model Generation

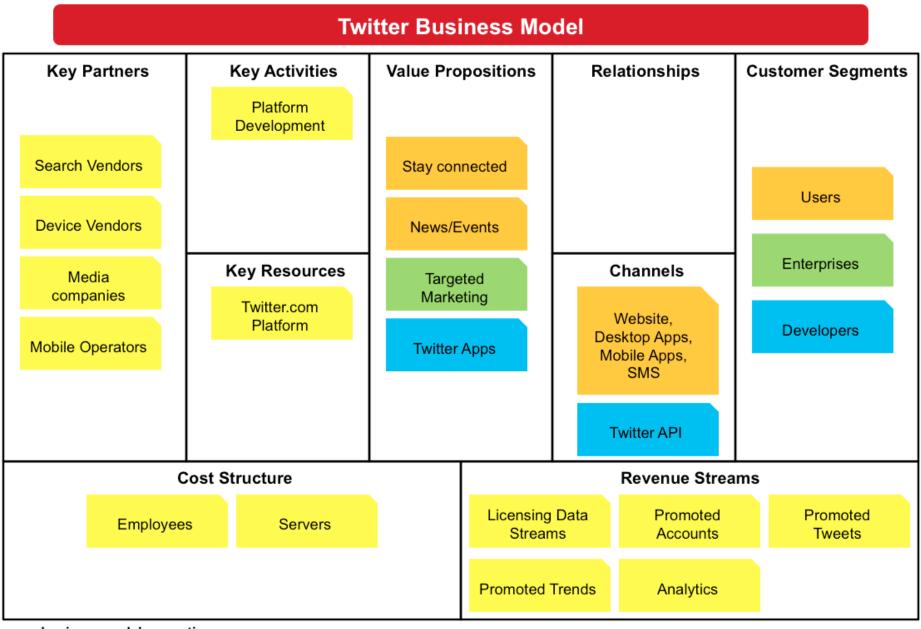


Business Model Generation





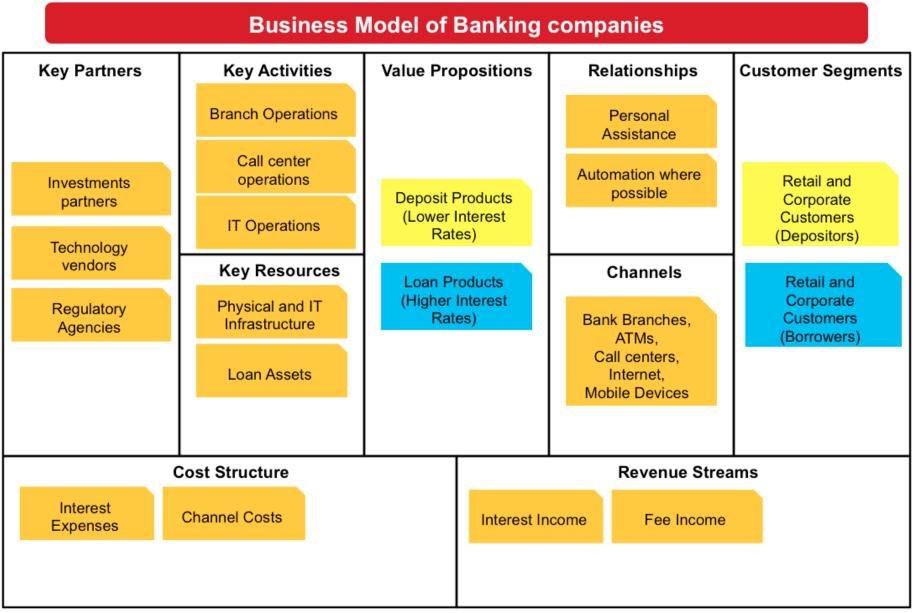


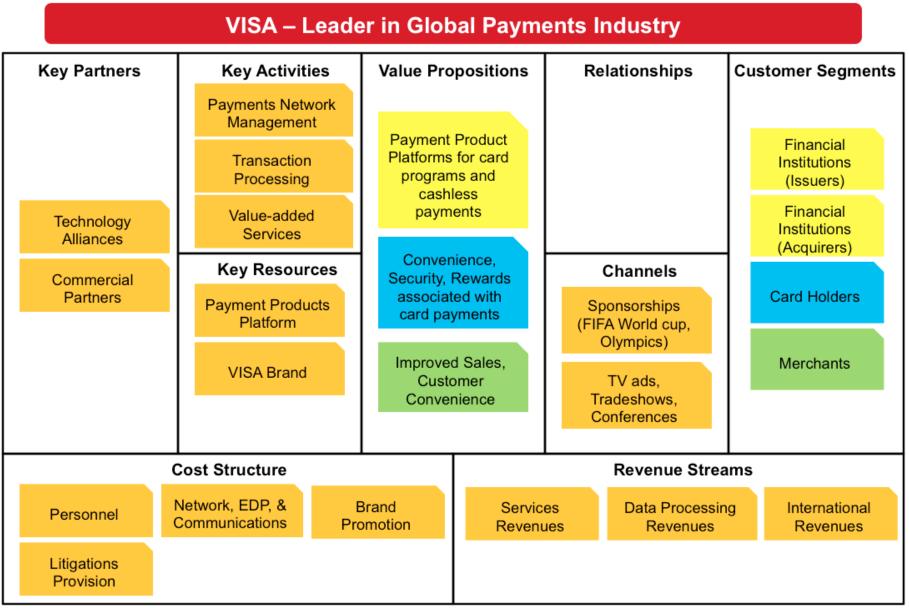


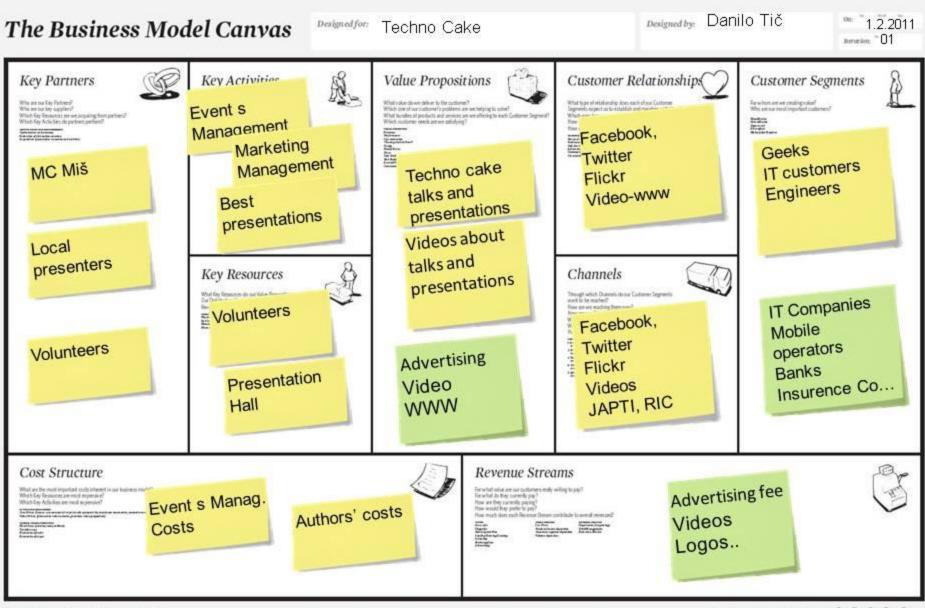
Google Business Model								
Key Partners	K	ey Activities	Value Pro	positions Relationships		ips	Customer Segments	
	Prod	0 – Build New lucts, Improve sting products	Web Sear Goo	DOSSIDIA)		here	Internet Users	
Distribution		age Massive IT frastructure		Ads using s (CPC)	Dedicated Sales for large accounts		Advertisers, Ad Agencies	
Partners			Extend Ad using A				Google Network Members	
Open Handset Alliance	Ke	y Resources			Channels			
OEMs (for Chrome OS devices)	Datacenters		Display Advertising Mgmt Services		Global Sales and Support Teams		Mobile device owners	
US devices)	IPs, Brand		OS and Platforms – Android, Chrome OS		Multi-product Sales force		Developers	
				eb-based e Apps			Enterprises	
Cost Structure				Revenue Streams				
Traffic Acquisition Costs Personnel		inly				d Revenues – gle n/w websites		
Data center S&M, G&A operations			Ent	erprise Product Sales		Free		

Source: http://bmimatters.com/tag/business-model-canvas-examples/

LinkedIn – World's Largest Professional Network								
Key Partners	Key Activities		Value Propositions		Relationships		Customer Segments	
	Platform					Same-side twork Effects		
	Development		Manage Pr Identity a Profession	nd Build		Cross-side twork Effects	Internet Users	
Equinix (for data center facilities)	Key Resources		Identify and Reach the Right Talent		Channels		Recruiters	
Content Providers	LinkedIn Platform	n	Reach th Audio	-	LinkedIn Website, Mobile Apps		Advertisers and Marketers	
			Access to LinkedIn Database Content via APIs and Widgets		Field Sales		Developers	
Cost Structure				Revenue Streams				
Web Hosting costs			roduct elopment	Free Offe and Pren Subscript	nium Hiring Solution		Marketing Solutions	
General and Administrative								







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Customer Value

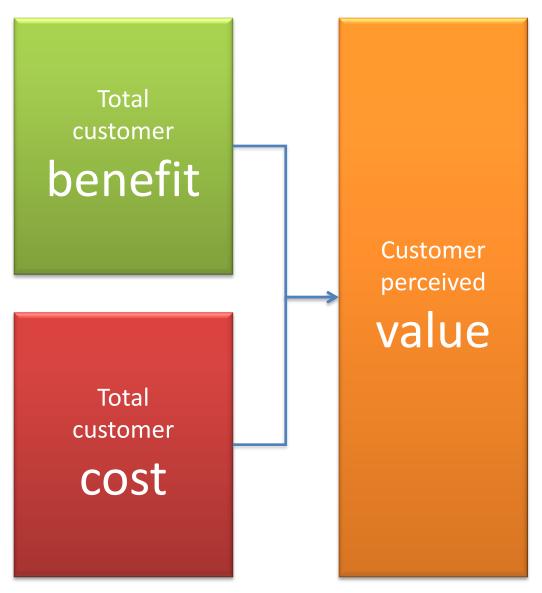
Marketing

"Meeting needs profitably"

Value

the sum of the tangible and intangible benefits and costs





Source: Philip Kotler & Kevin Lane Keller, Marketing Management, 14th ed., Pearson, 2012

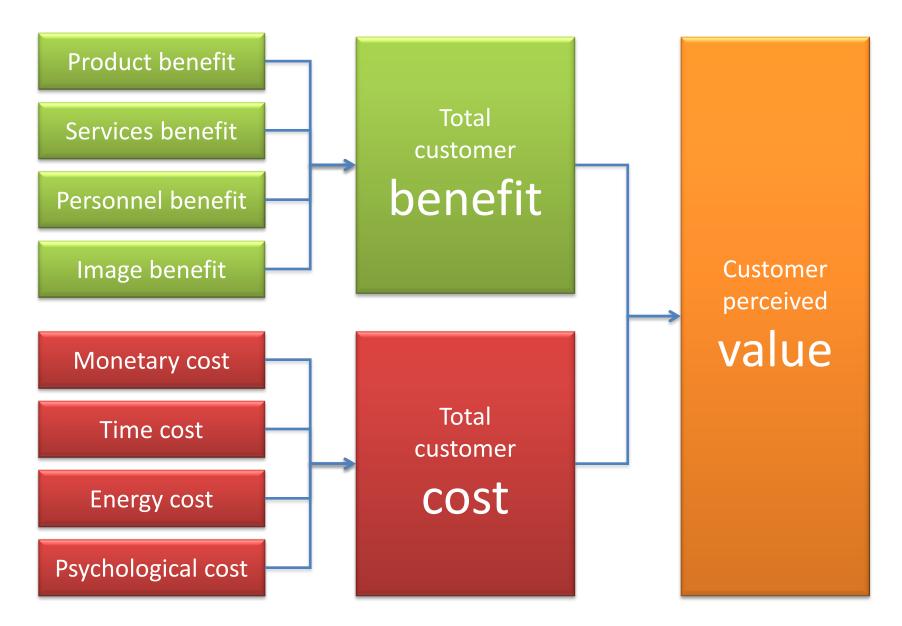


Value and Satisfaction

- Marketing
 - identification, creation, communication, delivery, and monitoring of customer value.
- Satisfaction
 - a person's judgment of a product's perceived performance in relationship to expectations

Building **Customer Value,** Satisfaction, and Loyalty

Customer Perceived Value



Source: Philip Kotler & Kevin Lane Keller, Marketing Management, 14th ed., Pearson, 2012

Satisfaction

"a person's feelings of pleasure or disappointment that result from comparing a product's perceived performance (or outcome) to expectations"

Loyalty

"a deeply held commitment to rebuy or repatronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behavior."

Customer Perceived Value, Customer Satisfaction, and Loyalty



CEO CIO CFO



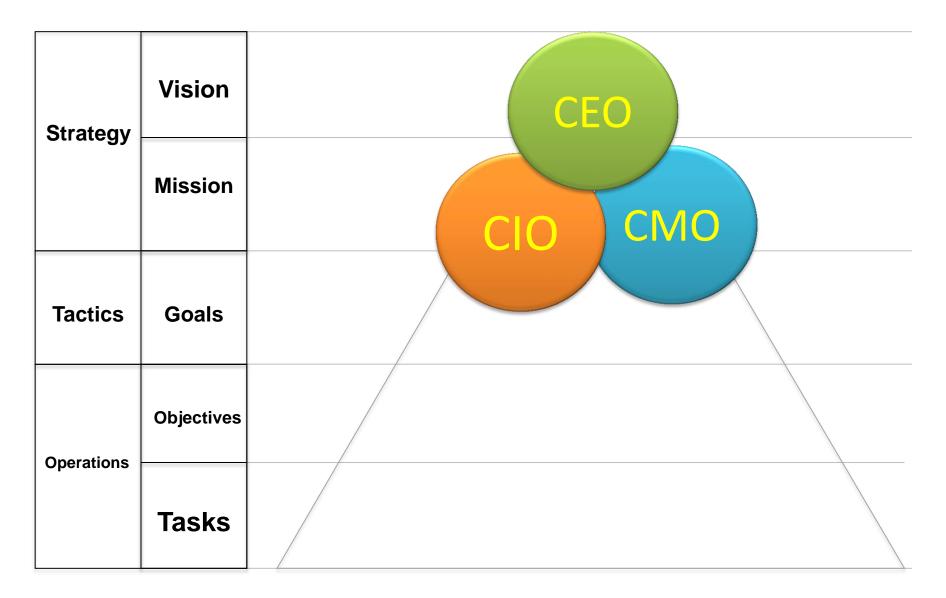
Source: http://www.r3now.com/what-is-the-proper-relationship-for-the-cio-ceo-and-cfo/

CEO CIO CMO



Adapted from: http://www.r3now.com/what-is-the-proper-relationship-for-the-cio-ceo-and-cfo/

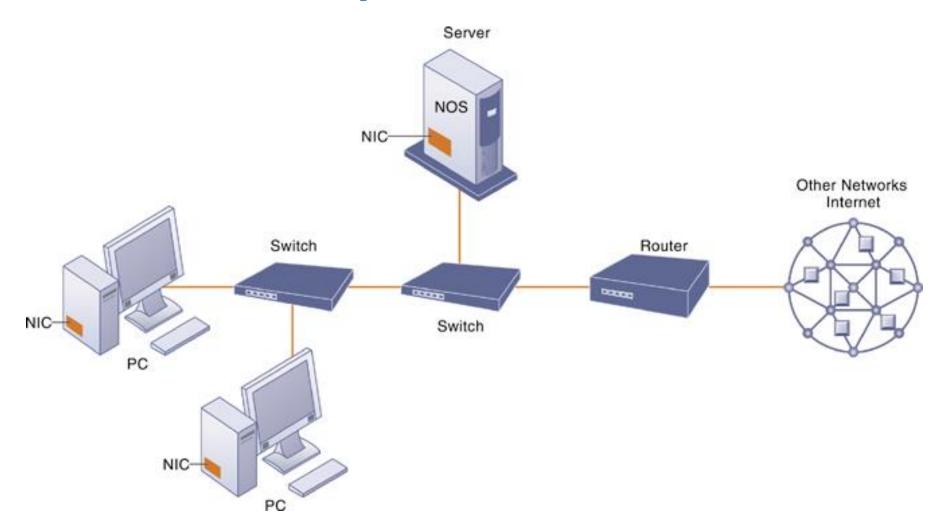
CEO CIO CMO



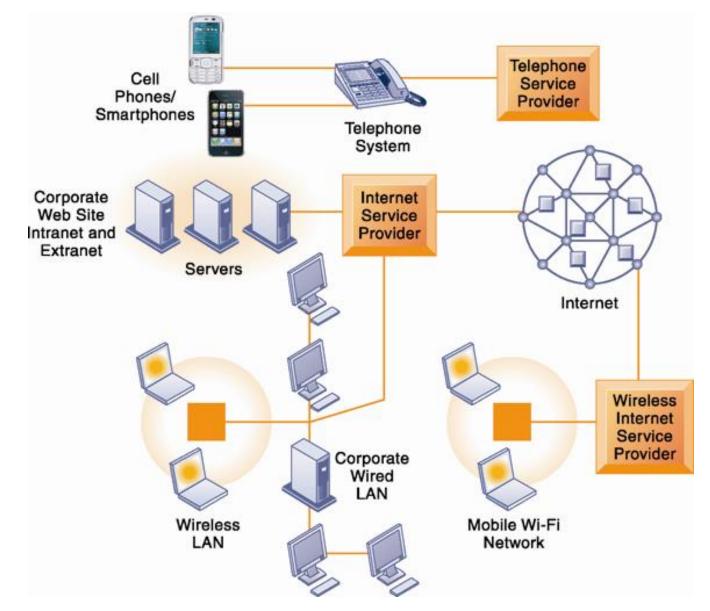
Nothing IS so practical as a good theory

Source: Backer & Saren (2009), Marketing Theory: A Student Text, 2nd Edition, Sage

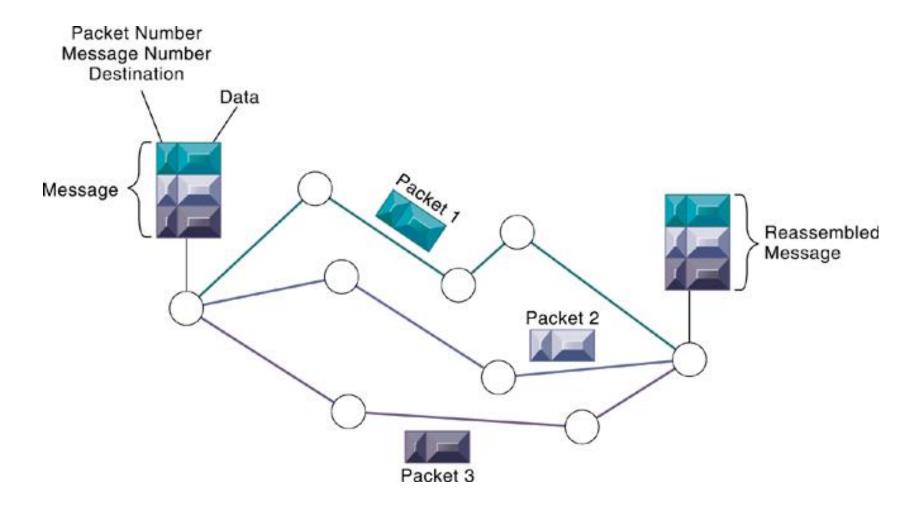
Components of a Simple Computer Network



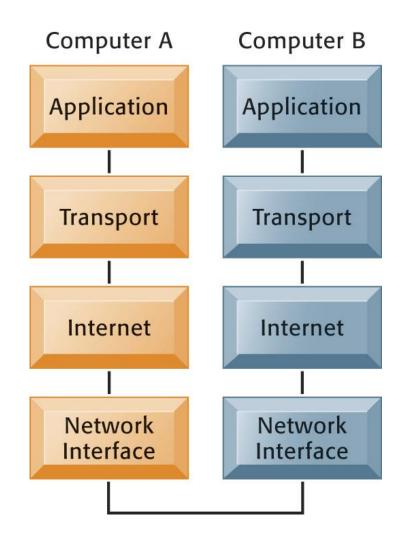
Corporate Network Infrastructure



Packet-Switched Networks and Packet Communications

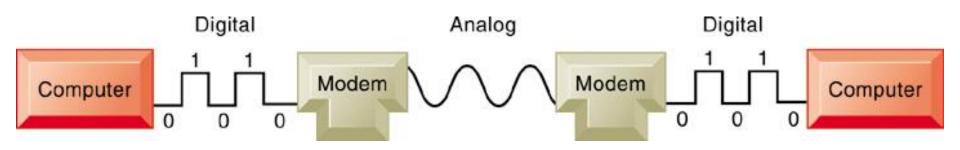


The Transmission Control Protocol/Internet Protocol (TCP/IP) Reference Model



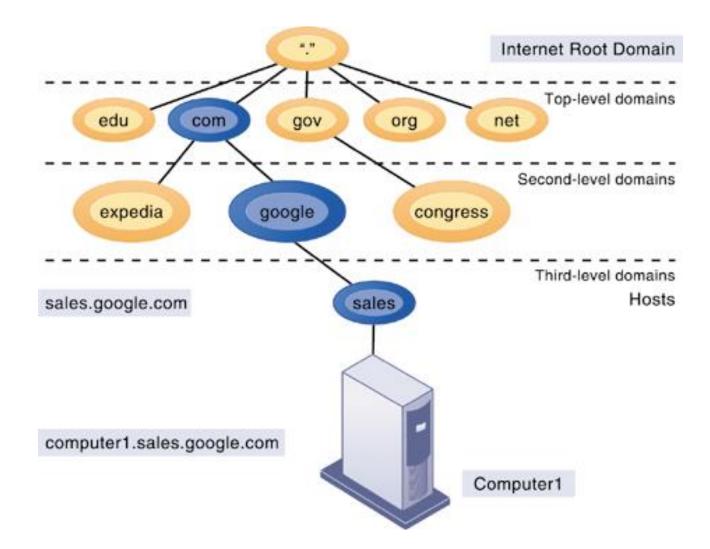
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Functions of the Modem



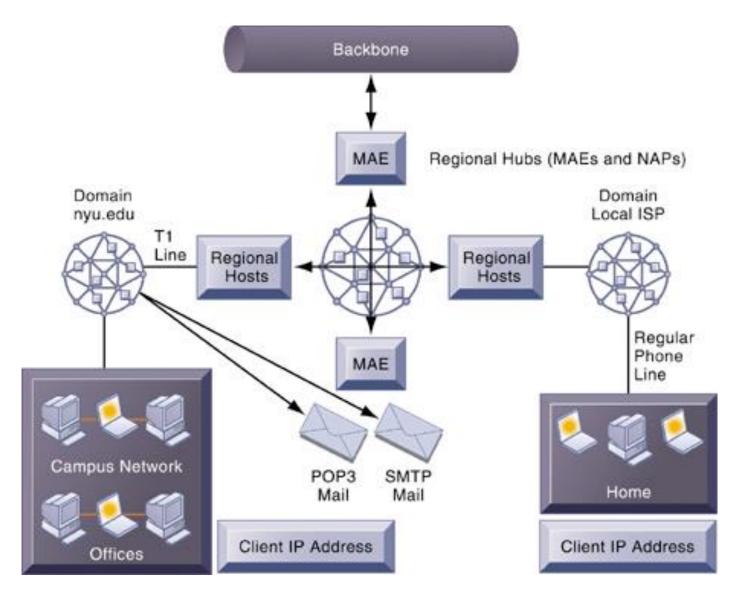
53

The Domain Name System

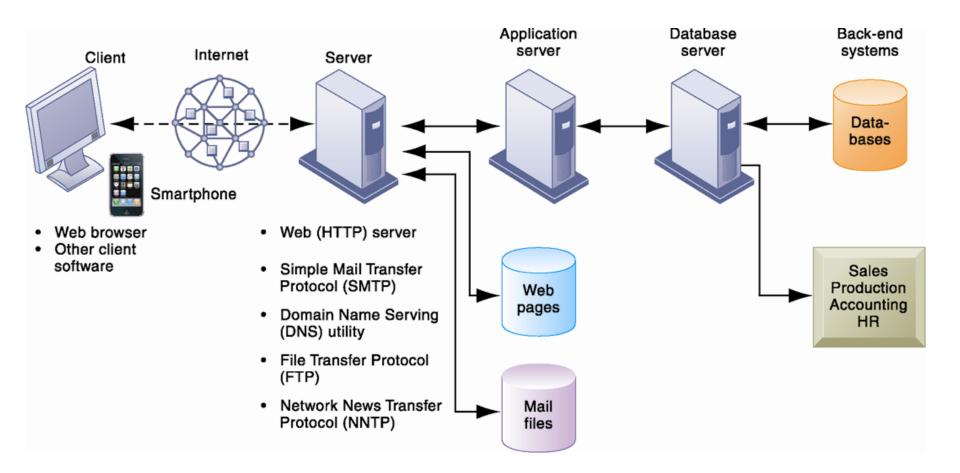


Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

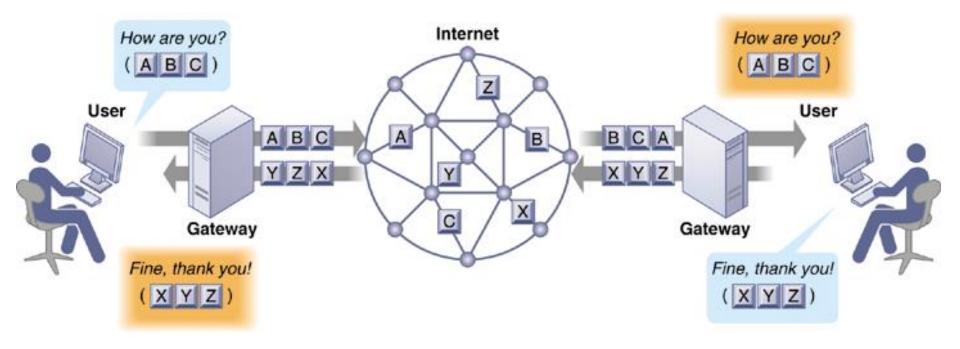
Internet Network Architecture



Client/Server Computing on the Internet

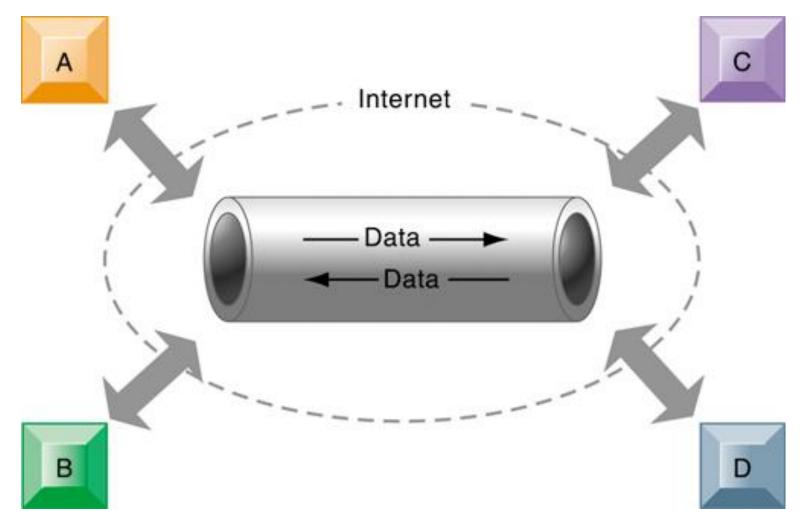


How Voice over IP Works



57

A Virtual Private Network Using the Internet



The Global Internet

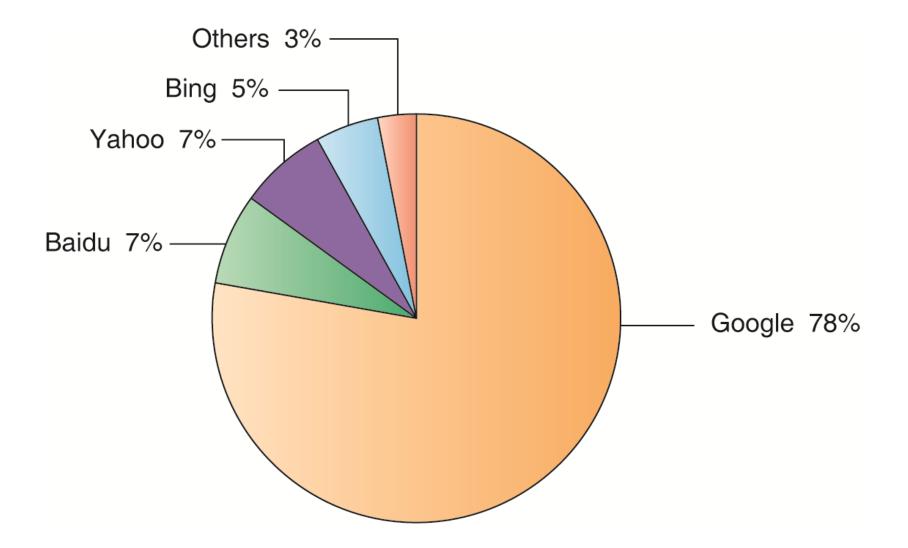
- Search engines
 - Started as simpler programs using keyword indexes
 - Google improved indexing and created page ranking system
- Mobile search: 20% of all searches in 2012
- Search engine marketing
 - Major source of Internet advertising revenue
- Search engine optimization (SEO)
 - Adjusting Web site and traffic to improve rankings in search engine results

The Global Internet

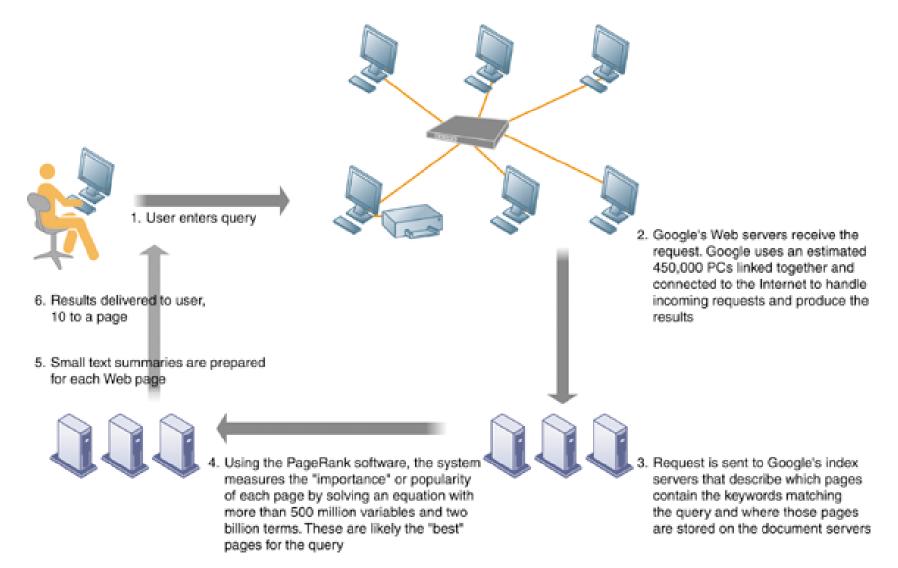
- Social search
 - Google +1, Facebook Like
- Semantic search
 - Anticipating what users are looking for rather than simply returning millions of links
- Intelligent agent shopping bots
 - Use intelligent agent software for searching
 Internet for shopping information

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Top U.S. Web Search Engines



How Google Works



Web 2.0

- Second-generation services
- Enabling collaboration, sharing information, and creating new services online
- Features
 - –Interactivity
 - Real-time user control
 - -Social participation (sharing)
 - User-generated content

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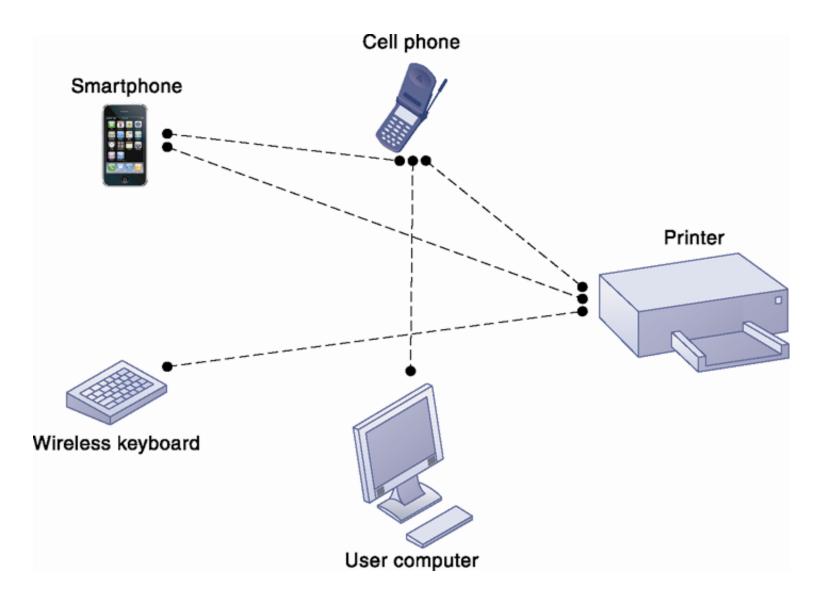
Web 2.0 services and tools

- **Blogs**: chronological, informal Web sites created by individuals
 - RSS (Really Simple Syndication): syndicates Web content so aggregator software can pull content for use in another setting or viewing later
 - Blogosphere
 - Microblogging
- Wikis: collaborative Web sites where visitors can add, delete, or modify content on the site
- Social networking sites: enable users to build communities of friends and share information

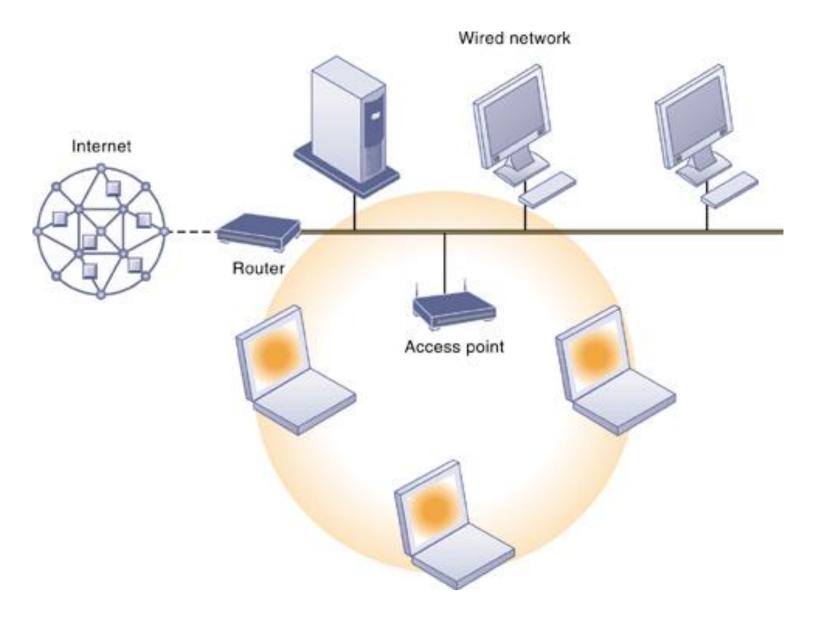
Web 3.0: The "Semantic Web"

- A collaborative effort led by W3C to add layer of meaning to the existing Web
- Goal is to reduce human effort in searching for and processing information
- Making Web more "intelligent" and intuitive
- Increased communication and synchronization with computing devices, communities
- "Web of things"
- Increased cloud computing, mobile computing

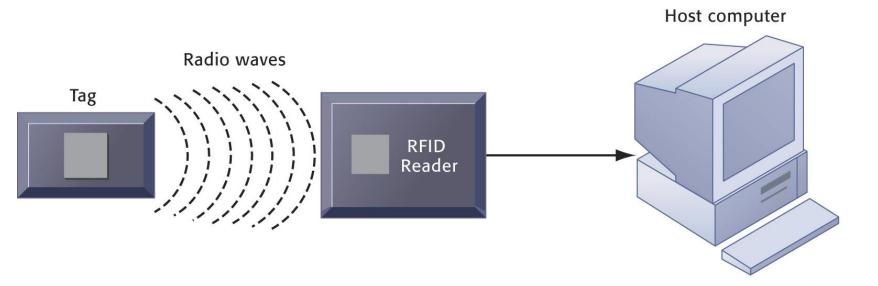
A Bluetooth Network (PAN)



An 802.11 Wireless LAN



How RFID Works

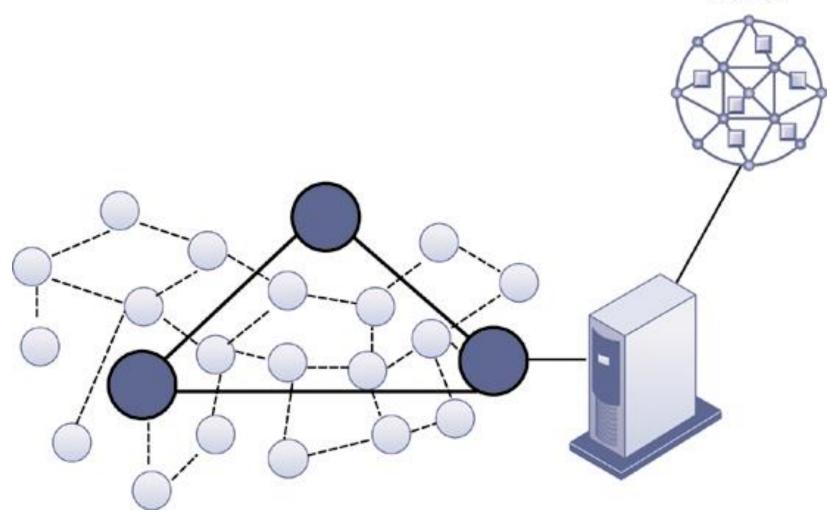


A microchip holds data including an identification number. The rest of the tag is an antenna that transmits data to a reader. Has an antenna that constantly transmits. When it senses a tag, it wakes it up, interrogates it, and decodes the data. Then it transmits the data to a host system over wired or wireless connections. Processes the data from the tag that have been transmitted by the reader.

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A Wireless Sensor Network

Internet



Case Study:

Summit and SAP (Chap. 9) (pp. 396-398) Summit Electric Lights Up with a New ERP System

- 1. Which business processes are the most important at Summit Electric Supply? Why?
- 2. What problems did Summit have with its old systems? What was the business impact of those problems?
- 3. How did Summit's ERP system improve operational efficiency and decision making? Give several examples.
- 4. Describe two ways in which Summit's customers benefit from the new ERP system.
- 5. Diagram Summit's old and new process for handling chargebacks.

2015/11/10 Midterm Report (期中報告)

- 請各組組長整理期中報告資料檔案,
 於2015/11/10(週二)上午9:00前,
 完成Email 寄出以下兩個壓縮檔的下載連結,
 給所有組員和老師(正本to:老師,副本cc:所有組員)。
 - -1. 整組各次簡報的 ppt (含整組期中報告目錄 ppt) 壓縮檔
 - (例如: MI4C_資訊管理個案_第1組_期中各次簡報.zip)。
 - 2. 整組各組員的
 [(1) 個人期中報告.ppt
 (2) 個人期中書面報告.pdf]
 之壓縮檔
 - (例如: MI4C_資訊管理個案_第1組_組員個人期中報告.zip)。



(Case Study for Information Management)

- 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。
- 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 (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