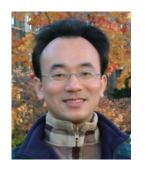
資訊管理專題



Hot Issues of Information Management Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7)

1051IM4B08 TLMXB4B (M0842) Tue 3,4 (10:10-12:00) B507



Min-Yuh Day <u>戴敏育</u> Assistant Professor

專任助理教授

Dept. of Information Management, Tamkang University

淡江大學 資訊管理學系

http://mail. tku.edu.tw/myday/



課程大綱 (Syllabus)

- 週次 (Week) 日期 (Date) 內容 (Subject/Topics)
- 1 2016/09/13 Introduction to Case Study for Information Management Hot Topics
- 2 2016/09/20 Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
- 3 2016/09/27 Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85) (Typhoon Day Off)
- 4 2016/10/04 Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
- 5 2016/10/11 Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)

課程大綱 (Syllabus)

週次 (Week) 日期 (Date) 內容 (Subject/Topics) 6 2016/10/18 Ethical and Social Issues in Information Systems: Facebook (Chap. 4) (pp.188-190) 2016/10/25 IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236) 2016/11/01 IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236) 2016/11/08 Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262) 10 2016/11/15 期中考試週 11 2016/11/22 Midterm Report (期中報告)

課程大綱 (Syllabus)

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週次 日期 內容(Subject/Topics)
12 2016/11/29 Telecommunications, the Internet, and Wireless
               Technology: Google, Apple, and Microsoft
               (Chap. 7) (pp.318-320)
13 2016/12/06 Enterprise Applications: Summit and SAP
               (Chap. 9) (pp.396-398)
14 2016/12/13 E-commerce: Zagat (Chap. 10) (pp.443-445)
15 2016/12/20 Enhancing Decision Making: Zynga
               (Chap. 12) (pp.512-514)
16 2016/12/27 Final Report I (期末報告 I)
17 2017/01/03 Final Report II (期末報告 II)
18 2017/01/10 期末考試週
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Management Information Systems:

Managing the Digital Firm

Organization, Management, and the Networked Enterprise

Information Technology Infrastructure

Key System Applications for the Digital Age

Building and Managing Systems

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

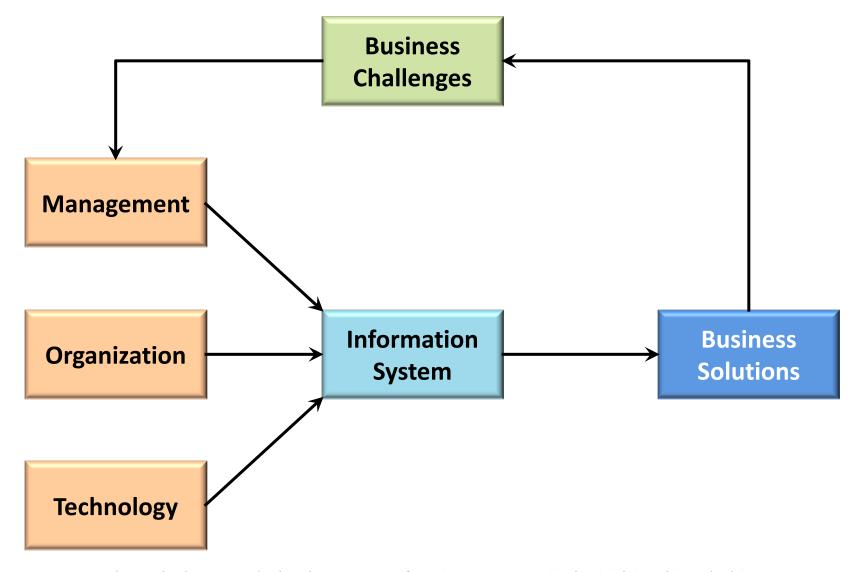
Case Study:

Google, Apple, and Microsoft (Chap. 7) (pp. 318-320)

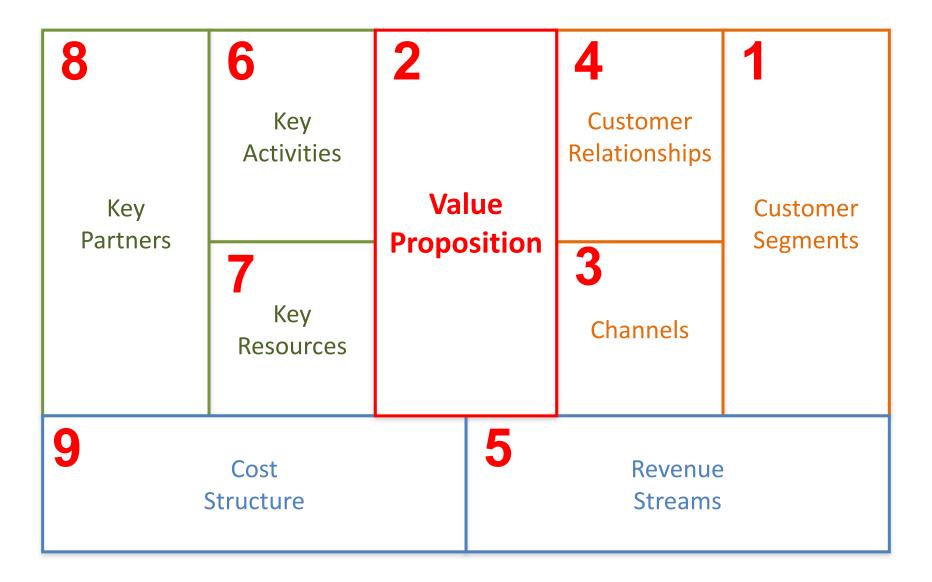
Apple, Google, and Microsoft Battle for Your Internet Experience

- 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



Business Model



Understanding Business Model

- Business Model
- Revenue Model

- Business Strategy
- Business Strategy and Information System Alignment

Business Model

Value

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

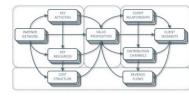
E-commerce Revenue Models

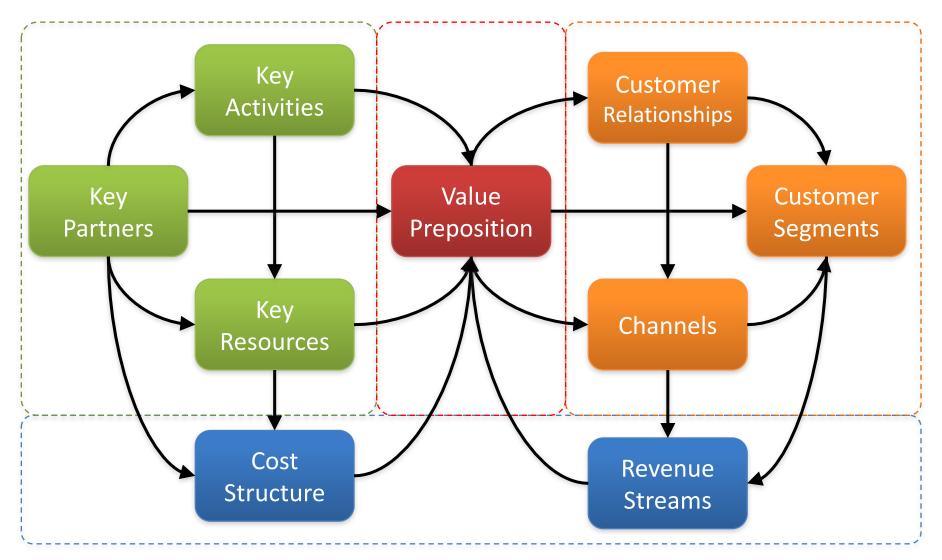
- 1. Advertising
- 2. Sales
- 3. Subscription
- 4. Free/Freemium
- 5. Transaction Fee
- 6. Affiliate

Types of E-commerce

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

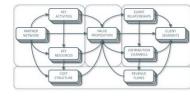
Business Model Canvas

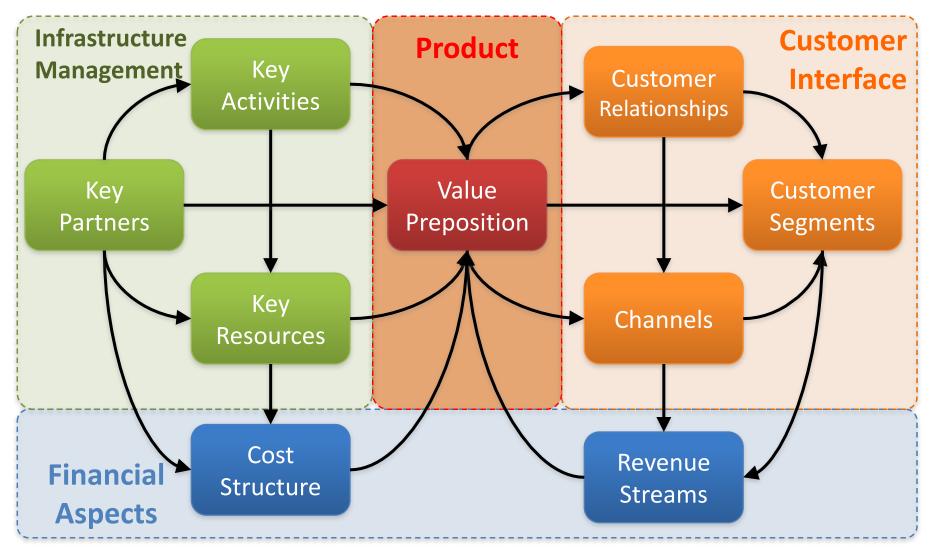




Source: http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html

Business Model Canvas



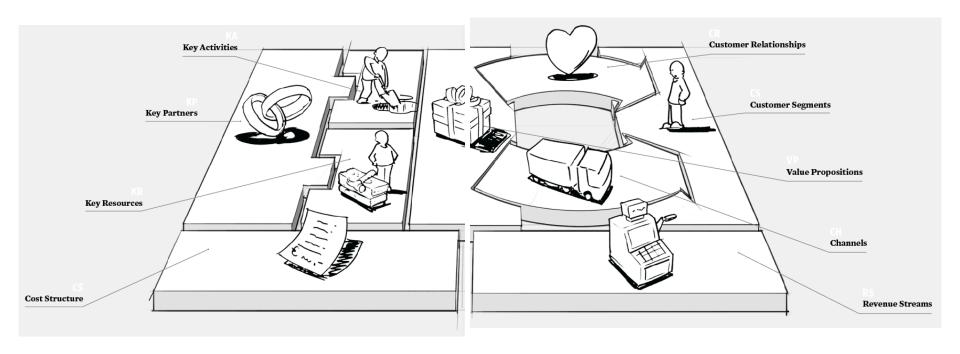


Source: http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html
https://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html
https://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html
https://www.youtube.com/watch?v=QoAOzMTLP5s

Business Model Canvas Explained



Key Partners	W.	Key Activities	N.	Value Proposition		Customer Relationships	\bigcirc	Customer Segments	8
8		6		2		1		4	
					•	_		•	
		Key Resources				Channels			
		7	•			3			
Cost Structure		9			Revenue Streams	5			
		3				J			



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.

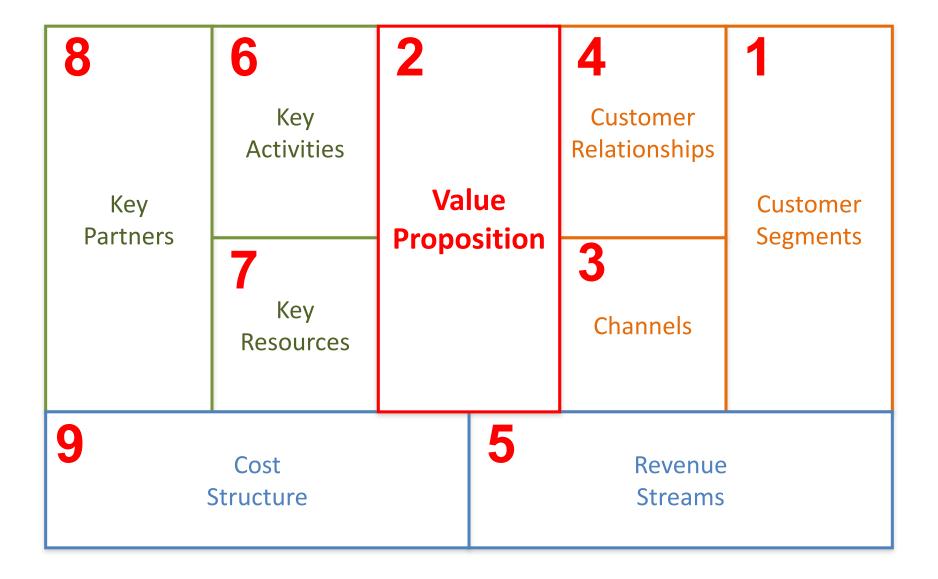
8. Key Partnerships

 Some activities are outsourced and some resources are acquired outside the enterprise.

9. Cost Structure

The business model elements result in the cost structure.

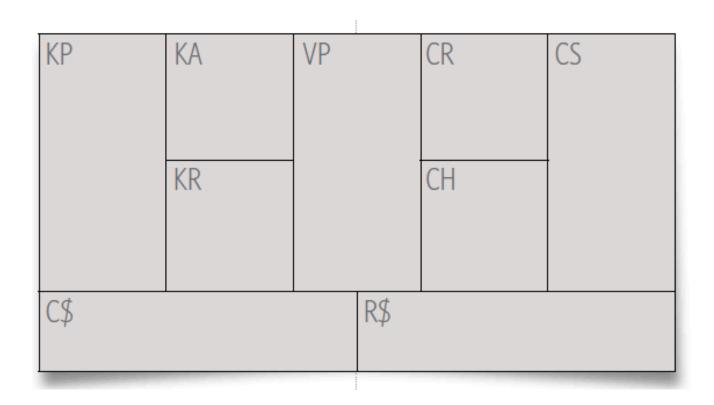
Business Model



Business Model Generation

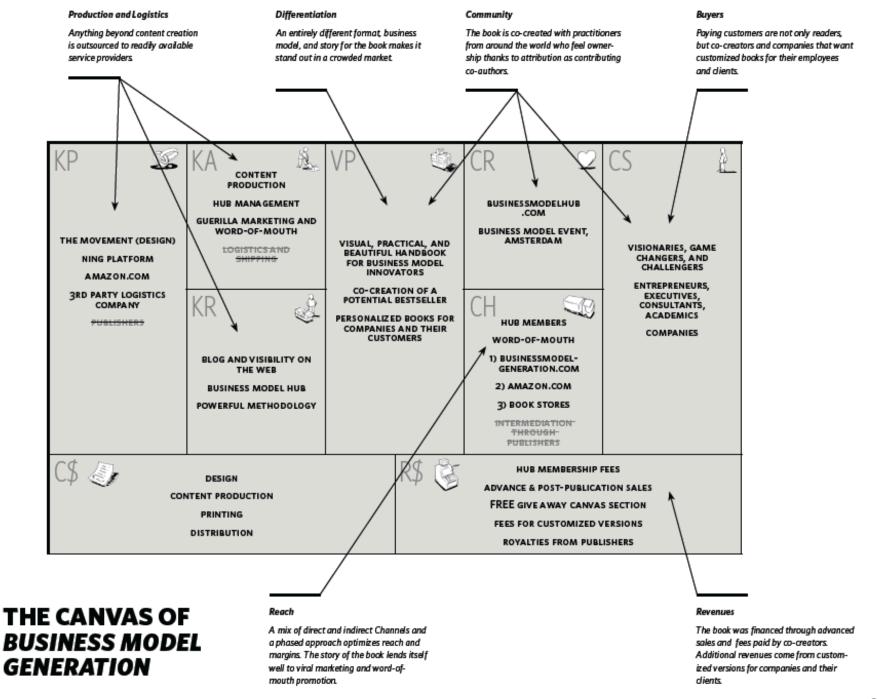


Business Model Generation



efficiency

value



Facebook – World's leading Social Networking Site (SNS)

Key Partners	Key Activit	Key Activities		positions	R	elationships	Cus	stomer Segments	
	Platform Development Data Center Operations Mgmt		Connect with your friends, Discover & Learn, Express yourself		Same-side Network Effects Cross-side Network Effects		Internet Users		
Content Partners (TV Shows, Movies, Music, News Articles)	Facebook Platform Technology			Reach, Relevance, Social Context, Engagement Personalized and Social Experiences, Social Distribution, Payments		Channels Website, Mobile Apps Facebook Ads, Facebook Pages Developer Tools and APIs		Advertisers and Marketers Developers	
	Cost Structure					Revenue Streams			
Data center costs	Marketing and Research and Sales Development			Free		Ad Revenues	3	Payment Revenues	
General and Administrative									

Twitter Business Model

Key Pa	rtners	Key Activities	Value Pro	positions	Rel	ationships	Customer Segments			
		Platform Development								
Search Ve	endors		Stay con	nected			Users			
Device Ve	endors		News/E	vents			Users			
Medi		Key Resources	Targeted		Channels		Enterprises			
compar	nies	Twitter.com	Marke	ting	,	Website,				
Mobile Ope	erators	Platform	Twitter	Apps	Desktop Apps, Mobile Apps, SMS		Developers			
					Т	witter API				
	Cost Structure					Revenue Streams				
	Employees	Servers		Licensing Data Streams		Promoted Accounts	Promoted Tweets			
				Promoted ⁻	Trends	Analytics				

Google Business Model

Key Partners	K	Key Activities		Proposition	ns	Relationshi	ps	Customer Segment		
	Pro	R&D – Build New Products, Improve Existing products Manage Massive IT Infrastructure		Search, Gma Google+	ail,	Automation (where possible) Dedicated Sales for large accounts		Internet Users	;	
Distribution				eted Ads usir words (CPC)				Advertisers, Ad Agencies		
Partners				d Ad campaig ing Adsense	ns			Google Network Members		
Open Handset Alliance	к	Key Resources		and and a second		Channels				
OEMs (for Chrome OS devices)		Datacenters		ay Advertisir mt Services	g	Global Sales and Support Teams		Mobile device owners		
O3 devices)	IPs, Brand			nd Platforms id, Chrome (Multi-product Sales force		Developers		
				Hosted web-based Google Apps			Enterprises			
	Cost St	ructure	•	Revenue Streams						
Traffic Acqui Costs	Traffic Acquisition Costs		inly			d Revenues – pogle websites		d Revenues – gle n/w websites		
	Data center operations		S&M, G&A		Enterprise Product Sales			Free		

LinkedIn – World's Largest Professional Network

Key Partners	Key Activit	ties	Value Pro	positions	Re	lationships	T	Customer Segments		
	Platform					Same-side twork Effects				
	Development		Manage Professional Identity and Build Professional Network			Cross-side twork Effects		Internet Users		
Equinix (for data center			Identify and Reach							
facilities)	Key Resou	Key Resources		the Right Talent		Channels		Recruiters		
Content Providers	LinkedIn Platfo	LinkedIn Platform		LinkedIn Platform		e Target ence	LinkedIn Website, Mobile Apps			Advertisers and Marketers
				LinkedIn Content via Widgets	Field Sales			Developers		
	Cost Structure	Revenue Str			Revenue Stre	am	าร			
Web Hosting costs			Product Free Cand For Subscience Cand Free Can		mium Hiring Solution		าร	Marketing Solutions		
General and Administrative				Cabballph						

Business Model of Banking companies

Key Partners	Key Activities	Value Pro	positions	Rela	ationships	Customer Segments		
	Branch Operations				ersonal esistance			
Investments	Call center operations				nation where	Retail and		
partners Technology	IT Operations	Deposit F (Lower I Rat	nterest	P	ossible	Corporate Customers (Depositors)		
vendors	Key Resources	Loan Products (Higher Interest Rates)		Channels		Retail and		
Regulatory Agencies	Physical and IT Infrastructure			Bank Branches, ATMs, Call centers, Internet, Mobile Devices		Corporate Customers (Borrowers)		
	Loan Assets							
C	Cost Structure		Revenue Streams					
Interest Expenses		Interest In	come	Fee Income				

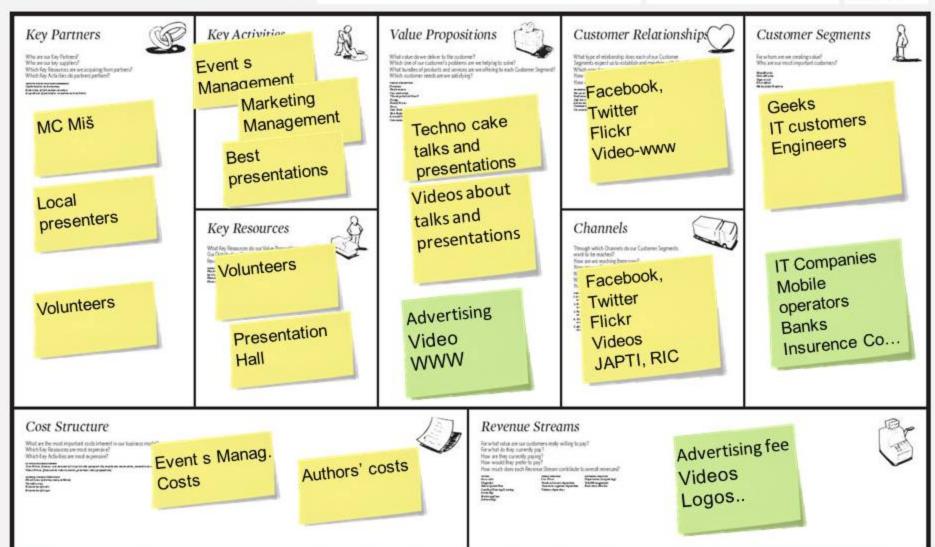
VISA – Leader in Global Payments Industry

Key Partners	T	Key Activiti	es	Value Pro	positions	Re	lationships	С	ustomer Segments
		Payments Netw Managemen		Daymant	Donadorat				
		Transaction Processing		Platforms progran	Payment Product Platforms for card programs and cashless				Financial Institutions (Issuers)
Technology Alliances		Value-added Services	i	paym	ents				Financial Institutions (Acquirers)
Commercial	١ſ	Key Resour	Ircae I		iience, Rewards	Channels]	
Partners		Payment Produ Platform	cts	associat card pay		(FIF	ponsorships FA World cup, Olympics)		Card Holders
			VISA Brand		Improved Custo	omer			TV ads,
				Convenience		Tradeshows, Conferences			
	Cost Structure						Revenue Strea	ams	s
Personnel	The state of the s		Brand omotion	Servic Revent		Data Processing Revenues		International Revenues	
Litigations Provision									

The Business Model Canvas

Designed for: Techno Cake Designed by: Danilo Tič





www.businessmodelgeneration.com



Customer Value

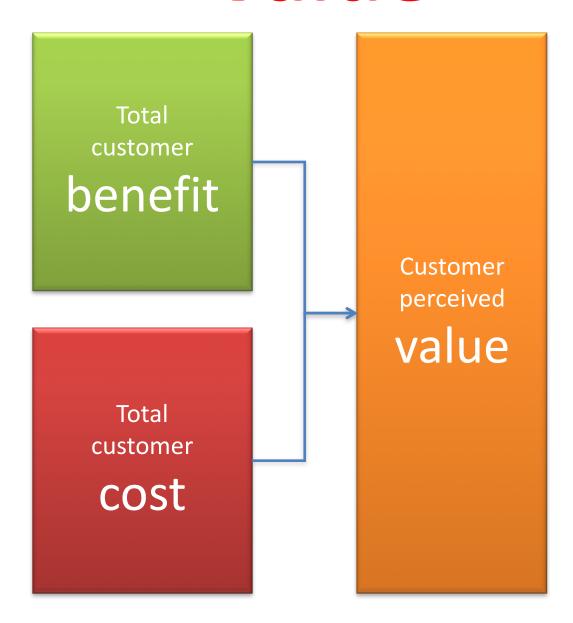
Marketing

"Meeting needs profitably"

Value

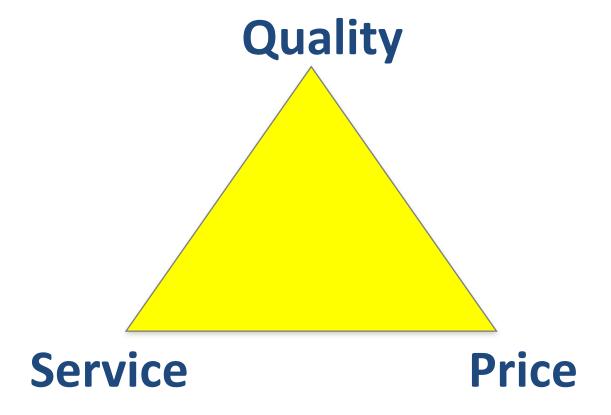
the sum of the tangible and intangible benefits and costs

Value



Customer Value Triad

Quality, Service, and Price (qsp)

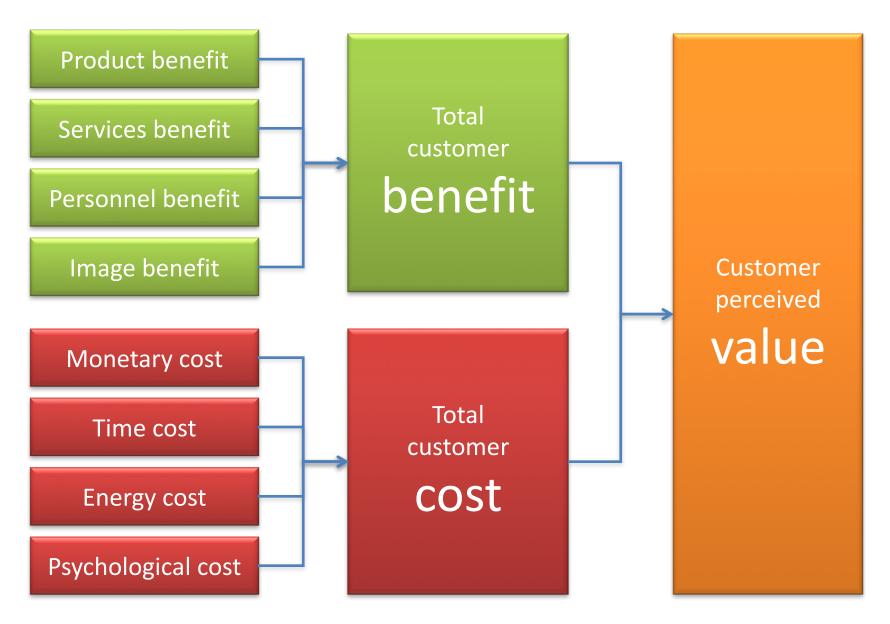


Value and Satisfaction

- 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



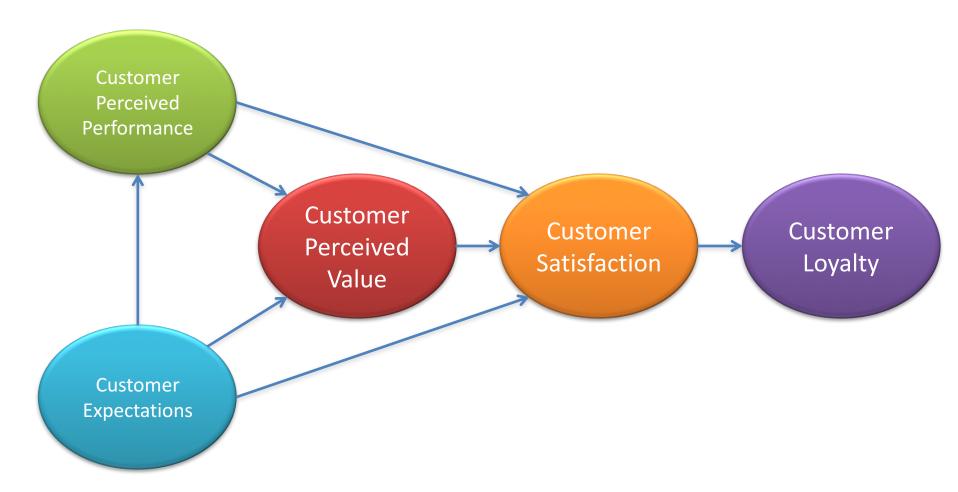
Satisfaction

"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



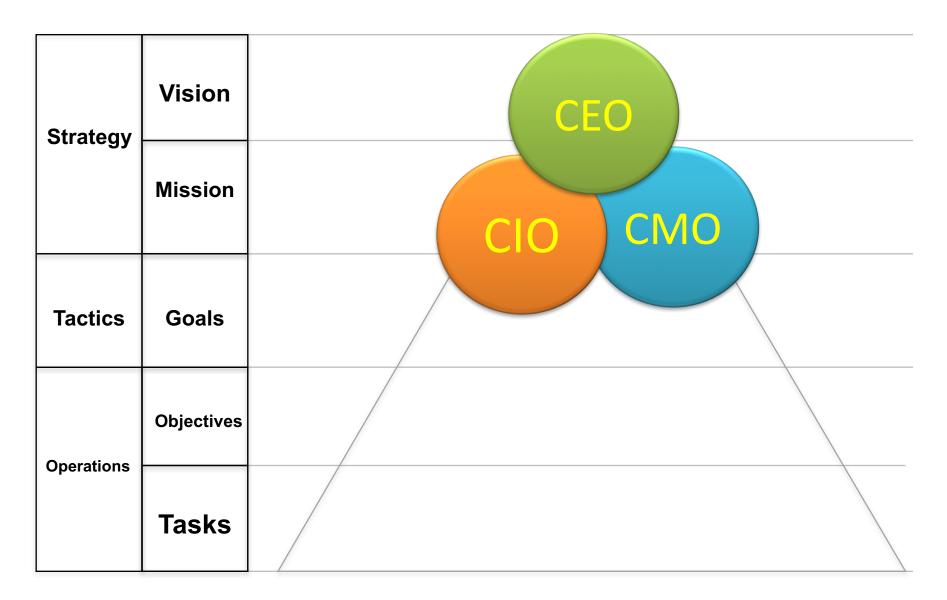
CEO CIO CFO



CEO CIO CMO

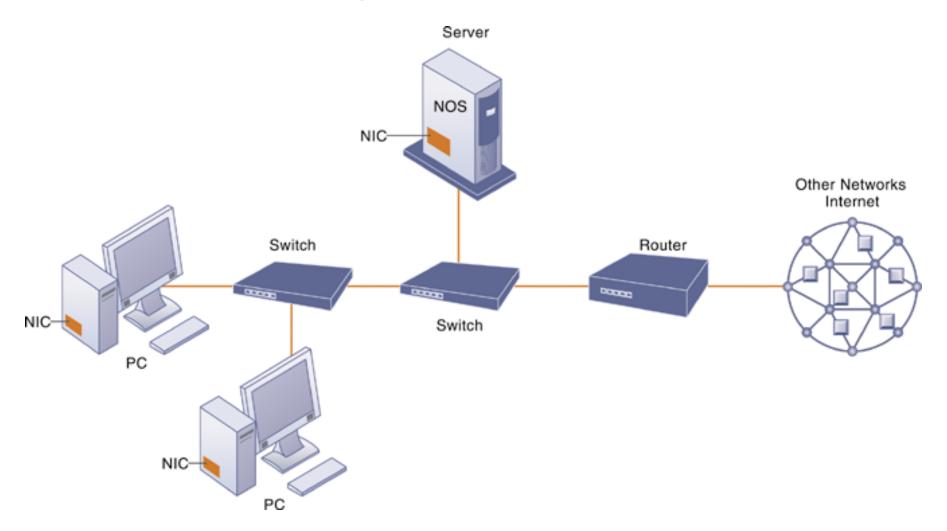


CEO CIO CMO

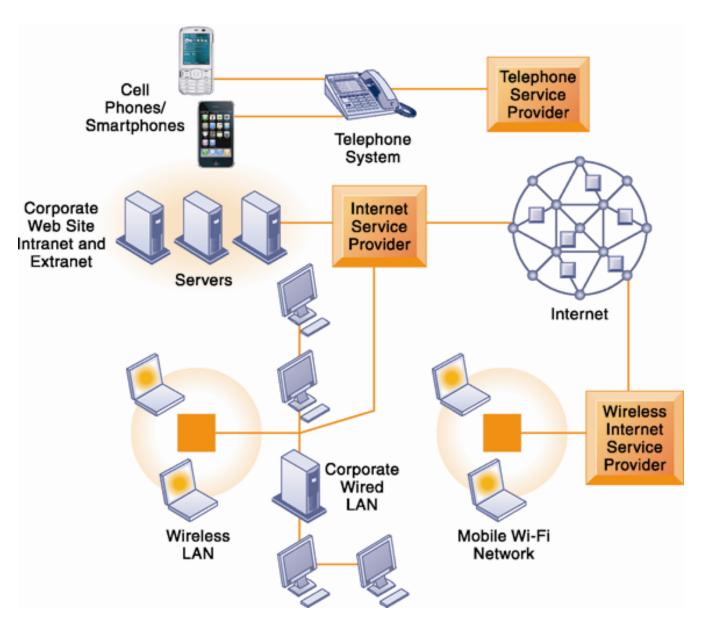


Nothing IS so practical as a good theory

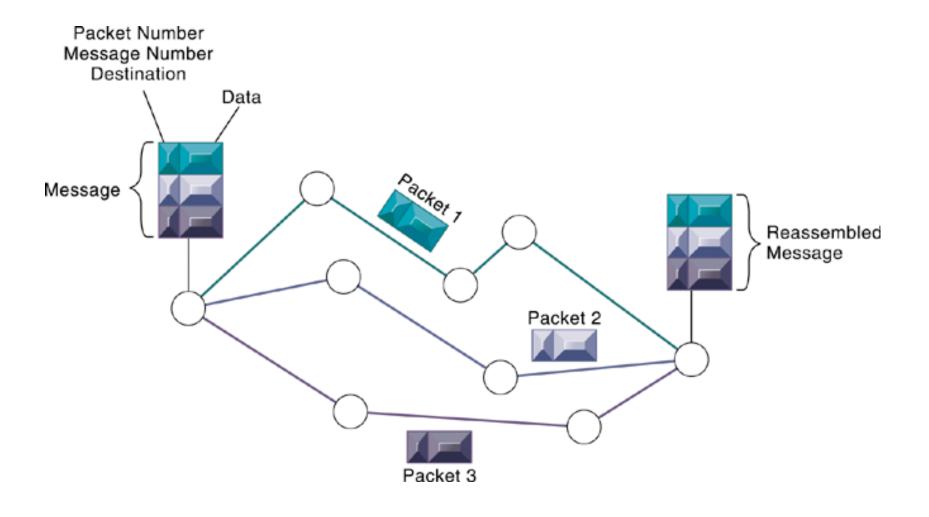
Components of a Simple Computer Network



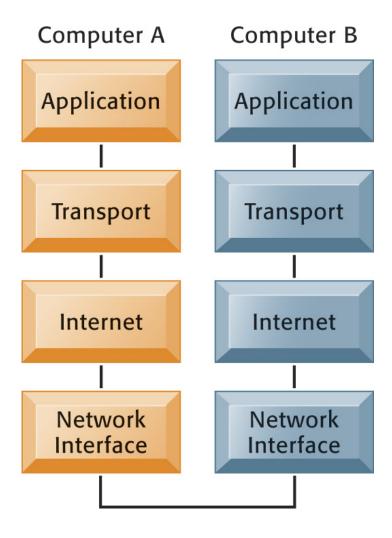
Corporate Network Infrastructure



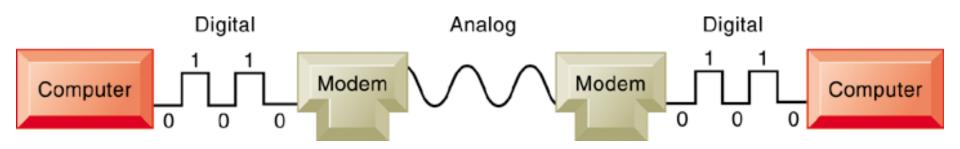
Packet-Switched Networks and Packet Communications



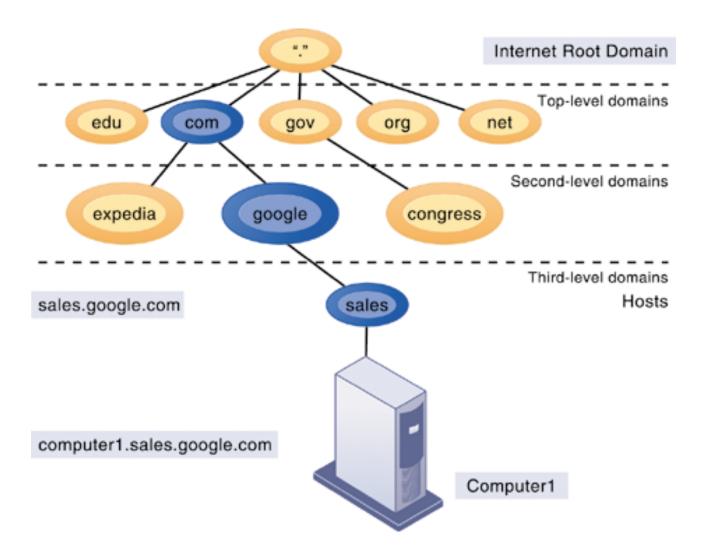
The Transmission Control Protocol/Internet Protocol (TCP/IP) Reference Model



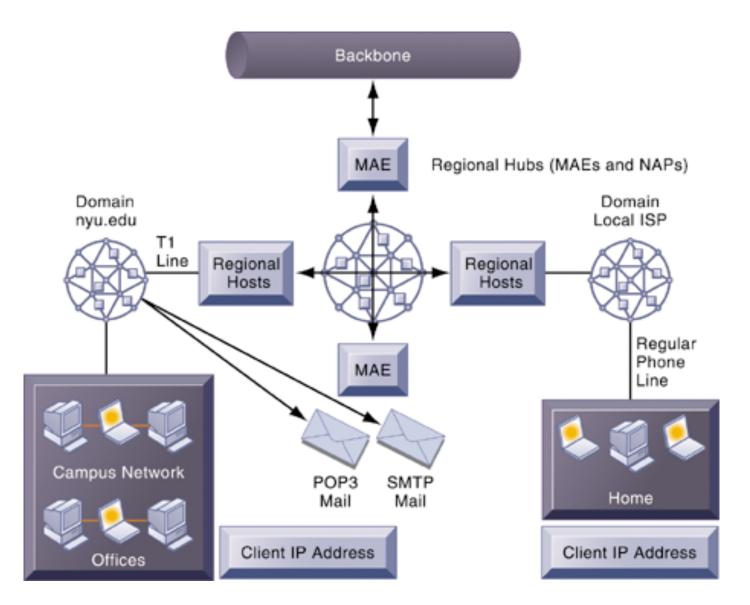
Functions of the Modem



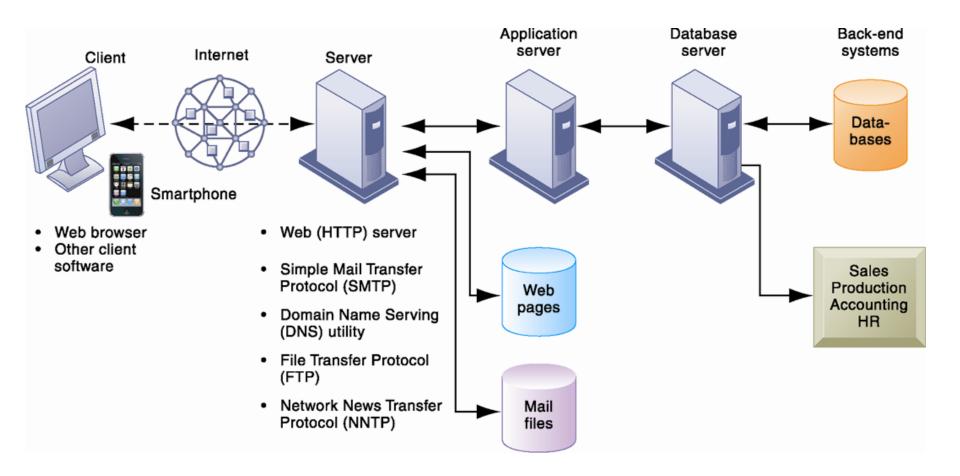
The Domain Name System



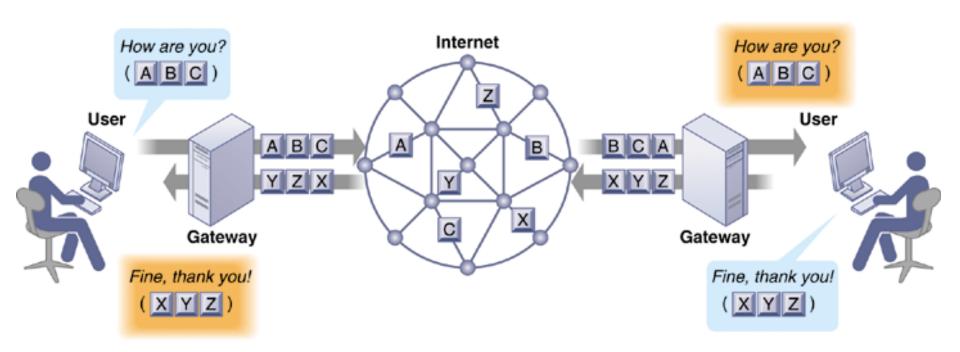
Internet Network Architecture



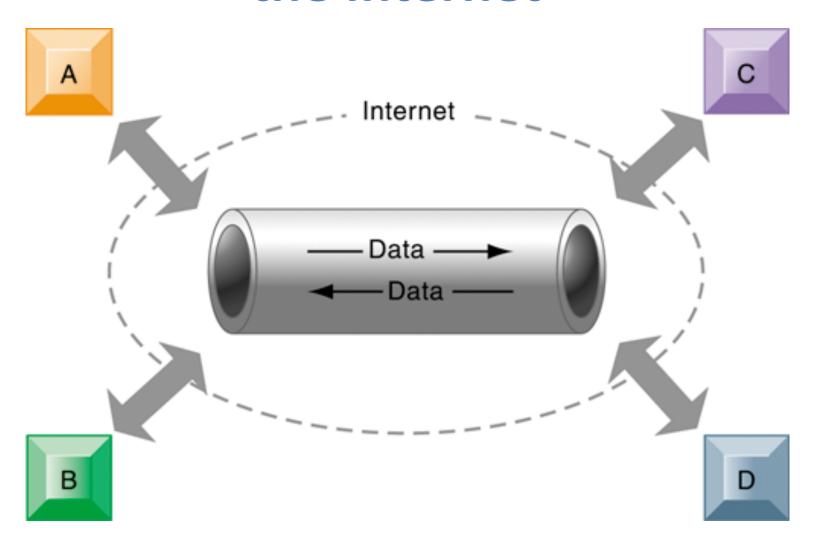
Client/Server Computing on the Internet



How Voice over IP Works



A Virtual Private Network Using the Internet



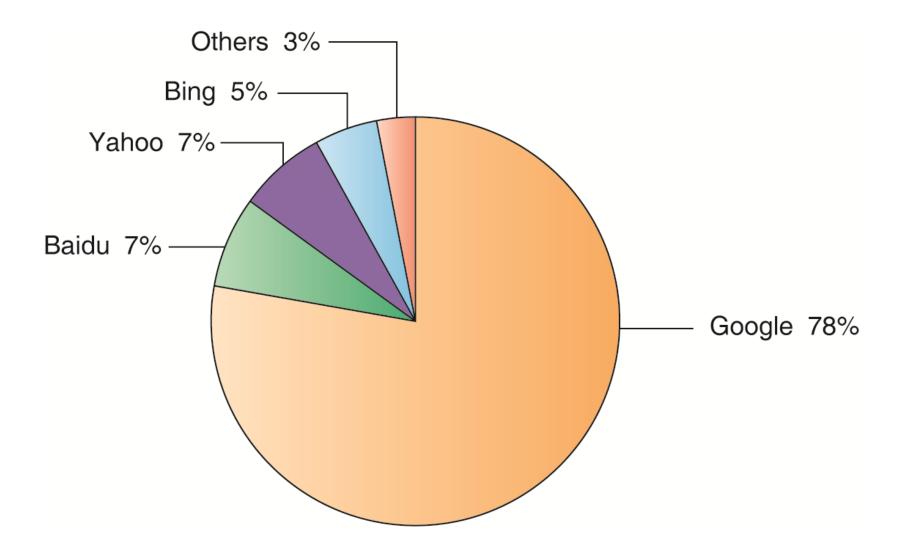
The Global Internet

- 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

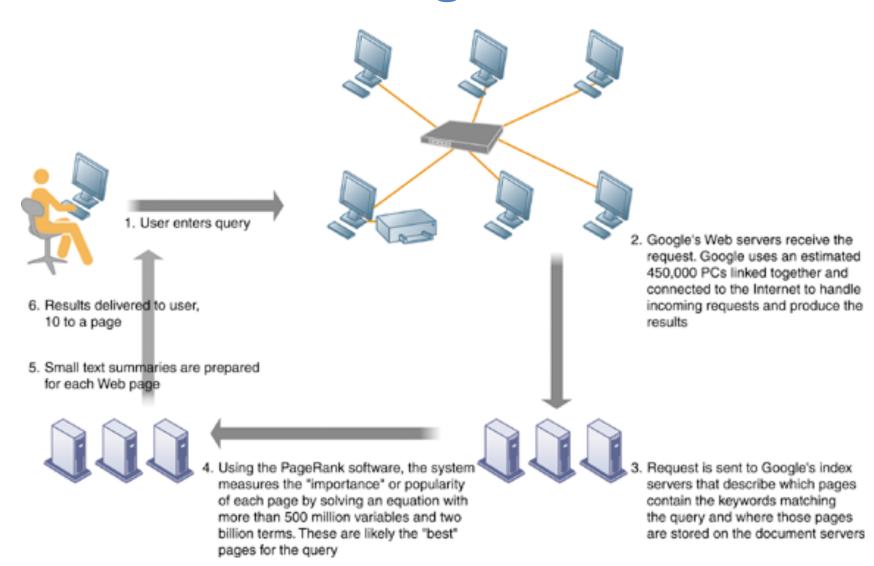
The Global Internet

- 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

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

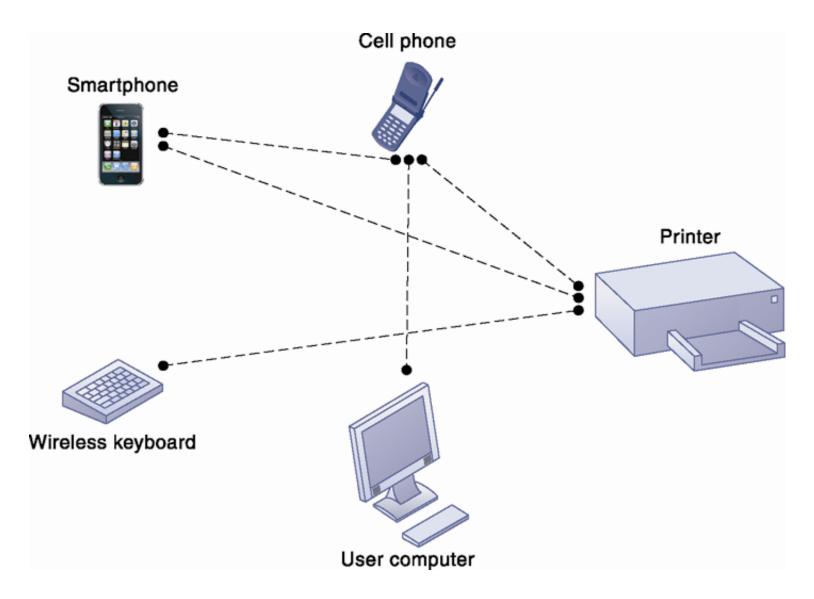
Web 2.0 services and tools

- 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

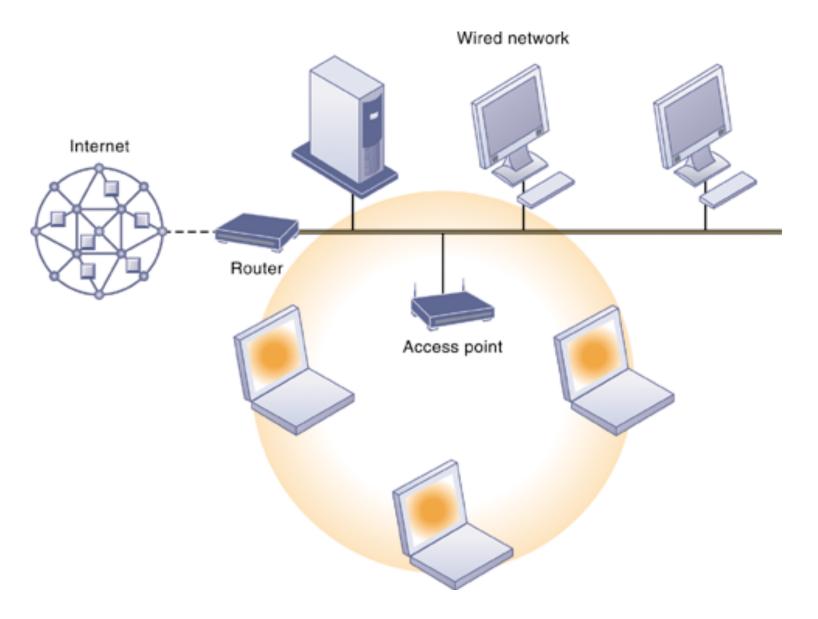
Web 3.0: The "Semantic Web"

- 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

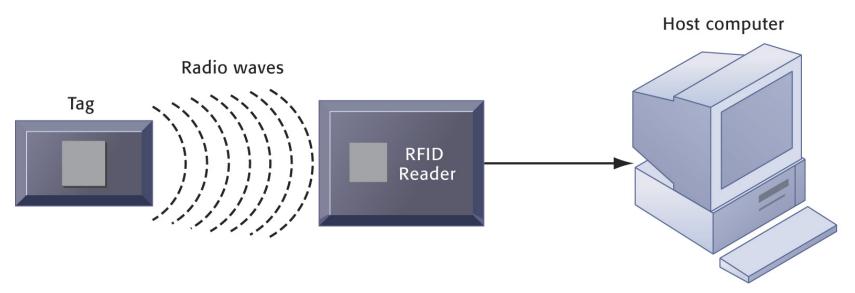
A Bluetooth Network (PAN)



An 802.11 Wireless LAN



How RFID Works

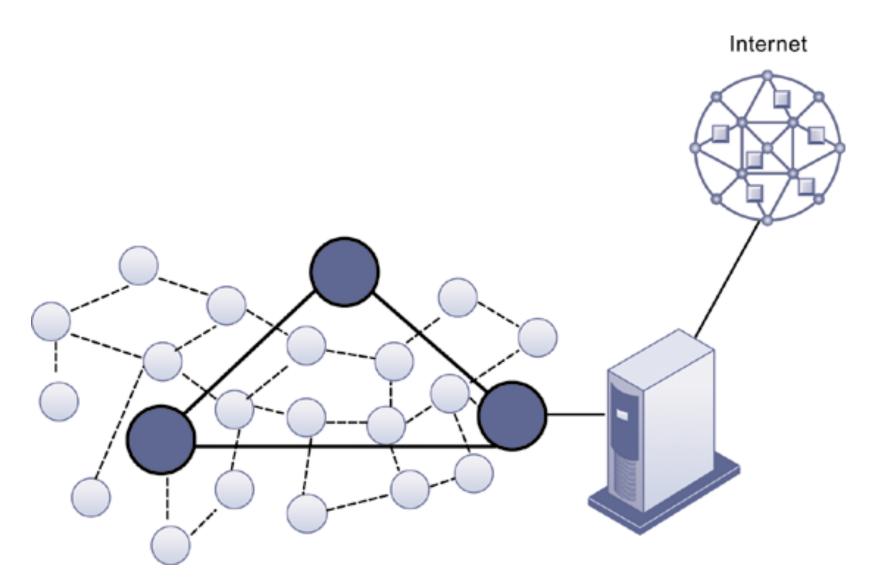


A microchip holds data including an identification number. The rest of the tag is an antenna that transmits data to a reader.

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.

A Wireless Sensor Network



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.

2016/11/08 Midterm Report (期中報告)

- 請各組組長整理期中報告資料檔案, 於2016/11/08 (週二) 上午10:00 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: MI4B_資訊管理專題_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: MI4B_資訊管理專題_第1組_組員個人期中報告.zip)。

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: 週二 3,4 (10:10-12:00) B507

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