COMP 3320
ELECTRONIC COMMERCE TECHNOLOGY

LECTURE 11: E-MARKETING

(Main Reference Chapter 4)

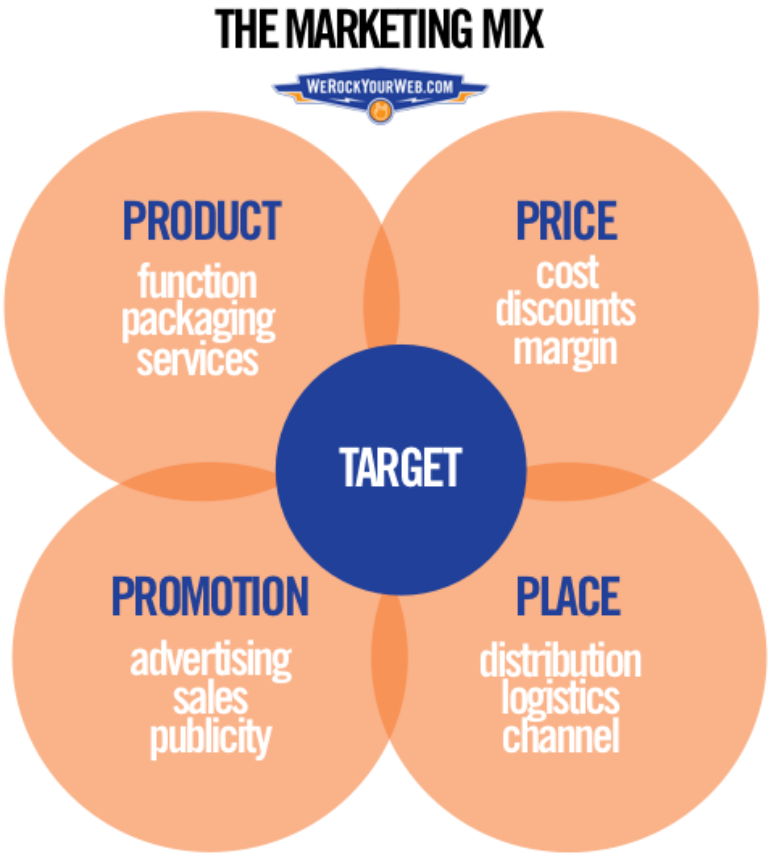
Dr John T. H. Yuen
CYC 306, thyuen@cs.hku.hk

OVERVIEW

- Basics (Web's role in marketing)
- Market Segmentation
- Acquisition, Conversion, and Retention of Customers
- Common Marketing and Ad Technology on Internet
- Search Engine Ranking
- Branding

BASICS

- Four Ps of marketing
  - Product: Physical item or service that company is selling
  - Price: Amount customer pays for product
  - Promotion: Any means of spreading the word about product
  - Place: Need to have products or services available in different locations



MARKETING STRATEGIES

- Product-Based Marketing Strategies
  - When creating a marketing strategy:
    - Managers must consider both the nature of their products and the nature of their potential customers
    - Believe customers organize their needs into product categories
  - Does not make full use of the power of Web
- Customer-Based Marketing Strategies
  - Based on customers (catering individual needs)
  - Good first step in building a customer-based marketing strategy:
    - Identify groups of customers who share common characteristics
  - Essentially using various "personalization" technology
    - Offer individual shopping paths

CHOICE OF MEDIA: PRESENTATION OF PRODUCT

- Media selection to carry message:
  - Physical world
    - building construction and floor space design
  - Online firm
    - No physical presence
    - Customer contact made through image projected through media and Web site
    - Less flexible than physical world (on screen)
    - More flexible than physical world (e.g., animation, personalization)
  - Online firm challenge
    - Obtain customer trust with no physical presence

CHOICE OF MEDIA: IDENTIFY & REACH CUSTOMERS ON WEB

- Before the Internet is popular, businesses use 2 major methods to reach customers
  - Personal contact
    - Firm's employee articulates with a customer (1-to-1)
    - Two-way information exchange
  - Mass media
    - Traditionally broadcast to public, e.g., TV, radio, newspaper (1-to-Many)
    - Customers as Passive recipients of information (One-way)

CHOICE OF MEDIA: IDENTIFY & REACH CUSTOMERS ON WEB

- The Web combines both elements through its interactivity and information gathering
  - Many information seekers contact one business site (Many-to-1)
  - Customers as active recipients of information

- People now resistant to mass media messages
  - Successful mass media campaigns depends on passive nature of media consumption
  - Web user likely to be in an active state

CHOICE OF MEDIA: RELATION WITH TRUST

Mass media advertising

- Lowest trust level
- Still used successfully because costs spread over many people

Personal contact selling

- Highest trust (if properly managed)
- Expensive

Potential customer web communication

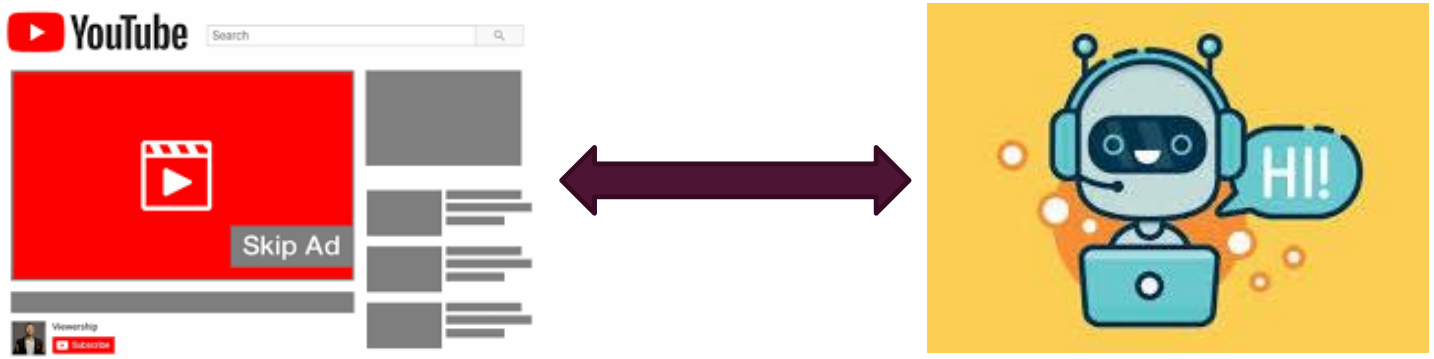
- Advantages of personal contact selling
- Cost savings like mass media

CHOICE OF MEDIA: RELATION WITH COMPLEXITY

- Complexity level inherent in product and service
  - Important factor in media choice
- Products with few characteristics and easy to understand
  - Promotes well with mass media
  - Mass media: expensive to produce
    - Used primarily for short messages
- Highly complex products and services
  - Promotes well with personal contact
    - Customers may ask questions
- Challenge: use Web to market complex products

CHOICE OF MEDIA:
RELATION WITH COMPLEXITY

- Web occupies a wide middle ground with various elements
  - Mass media messaging
  - Personal contact interaction
  - Anything in between



CHOICE OF MEDIA: SUMMARY: TRUST, COMPLEXITY, & COST

- A rough guideline

	Trust	Complexity of Message	Cost
Personal contact	High	High	High
Web	Medium	Low - High	Medium - Low
Mass media	Low	Low	Low

- Goal
  - Web (low cost like mass media, high trust like personal contact, suitable for low & high complexity goods)

NEW MARKETING APPROACHES FOR WEB

- People tend to resist the messages conveyed by mass media
- "Customer-centered" marketing strategies are excellent fits for the Web
  - For small groups
  - For individuals (again: personalization!)
- Market segmentation in various characteristics to identify specific portions of the markets
- The Web is ideal for low cost micromarketing as well as creating virtual markets online
- Can be assisted by human staff and automatic programs

Beware of sensitive issues (recall the Target example!)

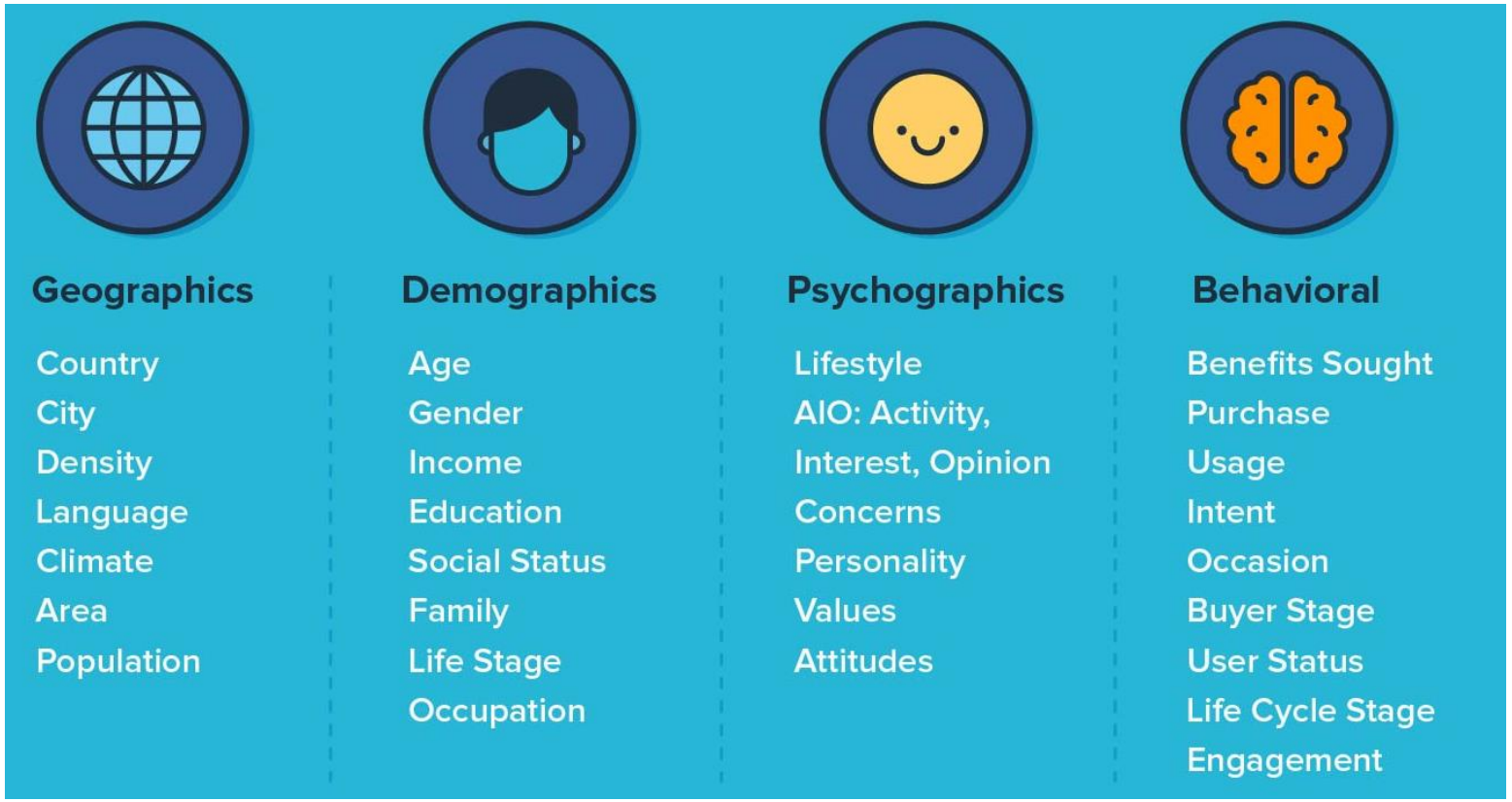
MARKET SEGMENTATION

SEPARATE CUSTOMERS INTO DIFFERENT GROUPS

MARKET SEGMENTATION

- A way for store owners to separate their visitors into different groups.
- Research found that marketers who used segmented campaigns saw a 760% boost in revenue.

4 Types of Market Segmentation:



https://www.oberlo.com/blog/market-segmentation

MARKETING SEGMENTATION

- Applying to Internet commerce: (A) to collect user profiles, and (B) perform automatic analysis (again: personalization and classification by big data/AI)
- Data Warehouse (a large database) containing multiple source of customer data:

Customer *Touchpoints* (contact)	Company operational records	External data
• Clickstream data, customer-input web forms • Letters, email, messages, phone logs • Salesperson reports	• Invoices • Sales records (previous transactions) • Warranty repair • Sales backlogs	• Industry trend reports • Economic forecasts • Market research • Customer credit reports

SEGMENTATION USING CUSTOMER BEHAVIOR

- Same person
  - Depending on the occasion, needs different combinations of products and services
  - *The same person may need different eMarketing strategy at different time*
- **Behavioral segmentation**
  - Creation of separate customer experiences based on their behavior
    - Analyzing the Web browsing log
  - 2 examples: Usage-based market segmentation, McKinsey & Company's Six behavior-based categories
- **Occasion segmentation**
  - A special kind of behavioral segmentation, based on things happening at a specific time or occasion (E.g., Christmas time)

USAGE-BASED MARKET SEGMENTATION

- Customizing visitor experiences to match the site usage behavior patterns of each visitor or type of visitor
- Categories of common patterns of online behavior
  - *Browsers*
  - *Buyers*
  - *Shoppers*

USAGE-BASED MARKET SEGMENTATION: BROWSERS

- Visitors just surfing or browsing
- Web site: must offer something to trigger visitors' interest
- **Trigger words**
  - Prompt visitor to stay and investigate products or services
- Have links to site explanations, instructions
- Include extra content related to product, service
  - Leads to favorable impression (bookmark)

USAGE-BASED MARKET SEGMENTATION: BUYERS

- Ready to make a purchase right away
- Offer direct route into purchase transaction
- **Shopping cart**
  - Part of the Web site
    - Keeps track of selected items for purchase
    - Automates purchasing process
  - Page offers link back into shopping area
- Primary goal: get buyer to shopping cart as quickly as possible

USAGE-BASED MARKET SEGMENTATION: SHOPPERS

- Motivated to buy
- Looking for more information before purchase
- Strategy:
  - Offer comparison tools, product reviews, and features lists
- People do not retain behavioral categories from one visit to the next
  - Even for the same Web site

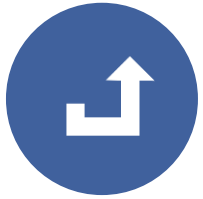
ALTERNATE MODEL: MCKINSEY & COMPANY'S **SIX BEHAVIOR-BASED CATEGORIES**

Simplifiers (Users who like convenience)

Surfers (Use the Web to find info and explore new ideas)

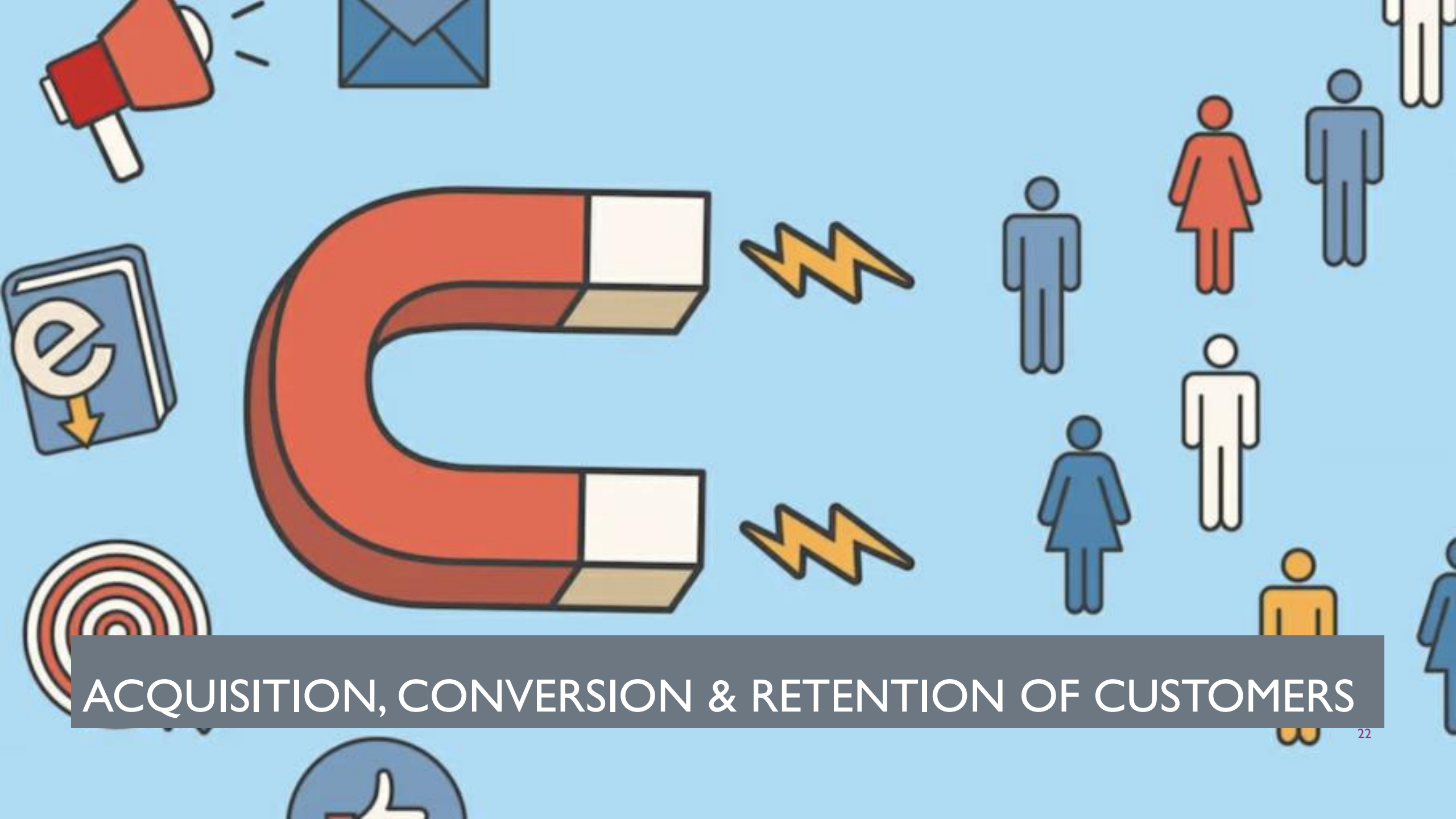
Bargainers (In search of a good deal)

Connectors (Use the Web to stay in touch with other people)



Routiners (Return to the same sites over and over again)

Sportsters (spend time on sports, entertainment sites)



ACQUISITION, CONVERSION & RETENTION OF CUSTOMERS

ACQUISITION, CONVERSION, AND RETENTION OF CUSTOMERS

- **Acquisition**:
  - Attract new visitors to a Web site
  - Acquisition cost: Total amount of money site spends drawing one visitor to site (average)
- **Conversion**
  - Convert first-time visitor into a customer
  - Conversion cost: Total amount of money site spends (average) to induce one visitor to make a purchase, sign up for a subscription, or register. Conversion cost may be greater than profit earned on the average sale
- **Retained customers:**
  - Return one or more times after making first purchases
  - Retention cost: Costs of inducing customers to return and buy again

The costs indicates if the advertising/promotion strategies is successful.

FUNNEL MODEL EXAMPLE

500,000 ads are shown on Web pages	Needs identification
10,000 ad viewers become Web site visitors	Search for and gather info about alternative products or services
900 Web site visitors become shoppers	Evaluate alternatives and make selections
500 Web site shoppers complete their purchases	Purchase
80 purchasers become loyal, repeat customers	Conversion of shoppers into loyal supporters of products / service / brand

COMMON MARKETING AND AD TECHNOLOGY ON INTERNET

ONLINE ADVERTISING COST AND EFFECTIVENESS

- How to measure Web site effectiveness?
- Cost per thousand (CPM) for mass media advertising
  - "M" from Roman numeral for "thousand"
  - Dollar amount paid for every thousand people in the estimated audience
- Cost per click (CPC)

Medium	Description	Audience Size	Cost per Thousand (CPM)
Network television	30-second commercial	10 million–50 million	$5–$50
Local television station	30-second commercial	50,000–2 million	$3–$25
Cable television	30-second commercial	100,000–500,000	$8–$20
Radio	60-second commercial	50,000–2 million	$1–$15
Major metro newspaper	Full-page ad	100,000–600,000	$5–$50
Regional edition of a national magazine	Full-page ad	50,000–900,000	$40–$100
Local magazine	Full-page ad	3000–80,000	$100–$140
Direct mail coupon pack	Mailed in letter-sized envelope	10,000–200,000	$15–$20
Billboard	Highway billboard	100,000–3 million	$1–$3
World Wide Web	Banner ad	10,000–50 million	$1–$15
World Wide Web	Rich media ad	10,000–50 million	$18–$50
World Wide Web	Text ad	10,000–50 million	$1–$500
World Wide Web	Site sponsorship (exclusive)	10,000–50 million	$60–$100
World Wide Web	Site sponsorship (shared)	10,000–50 million	$20–$50
Targeted e-mail	Single mailing	10,000–10 million	$5–$15
Mobile ads	App-embedded	10,000–5 million	$1–$5

FIGURE 4-8 CPM rates for advertising in various media © Cengage Learning 2015

MEASURES OF ONLINE ADVERTISING COST AND EFFECTIVENESS

Visit: when visitor requests a page from Web site

Trial visit: First time a visitor loads a Web site page

Repeat visits: Subsequent page loads

Page view: Each page loaded by a visitor

Ad view: Occurs if page contains an ad

Impression: Each time banner ad loads

Click (click-through): Visitor clicks banner ad to open advertiser's page

- Study about which measure is best is ongoing

BANNER STRATEGIES

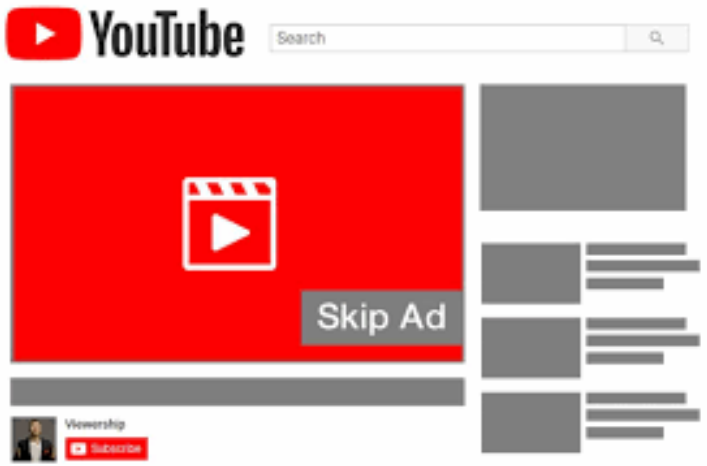
- Animated GIFs with moving elements
- Display rich media effects (movie clips)
- Ads appearing to be dialog boxes (disguised banner ad as security warning, etc.)
- Add interactive effects (Java programs)
- Respond to user's click with some action
- Ads acting like mini video game
- Variations
  - Text ads (e.g., text in paragraphs appeared as hyperlinks)
  - Pop-up

E-MAIL MARKETING

- Unsolicited Commercial E-mail aka junk mail
  - (UCE, Spam, bulk mail)
- Opt-in e-mail
  - Practice of sending e-mail messages to people who request information
  - Part of marketing strategy: permission marketing
  - Example companies: ConstantContact, Yesmail, Return Path
  - Conversion rate (Percentage of recipients responding to an ad or promotion)
    - Ranges from 10% to more than 30% on requested e-mail messages

VIDEO

- Short video needs to attract the attention of the customers before they press “Skip Ad”



SITE SPONSORSHIPS

- Web sites offer advertisers opportunity to sponsor all (or parts) of their sites
- Goals similar to sporting event sponsors, television program sponsors
  - Tie company (product) name to an event (set of information)
- Ethical concerns raised
  - If sponsor is allowed to create content or weave advertising message into site's content
  - Very sensitive if the site contains information from competitors

COMBINING CONTENT AND ADVERTISING

The Latest

The 7 Most Powerful Women to Watch in 2014

January 3, 2014

These seven innovators are having a major influence on technology, healthcare and the government. We've got our eye on these powerful women. You should, too.

No Apologies: On Hack, Snapchat Founder Says 'We Thought We Had Done Enough'

January 3, 2014 by Geoff Weiss

On the 'Today' show, the 23-year-old discussed the inevitabilities of hacking while reassuring users.

Sponsor Provided Content

What do community health centers mean to Americans and how they manage...

If 75% of your income was spent on funding a medical condition that could have been prevented in the first place, that would get your attention,...

The Esquire Guy's Guide to Asking for Advice

January 3, 2014 by Ross McCammon

Best practices for picking your mentor's brain.

Forget PJs, Dress Your Brand Even at Your

Most Shared Stories

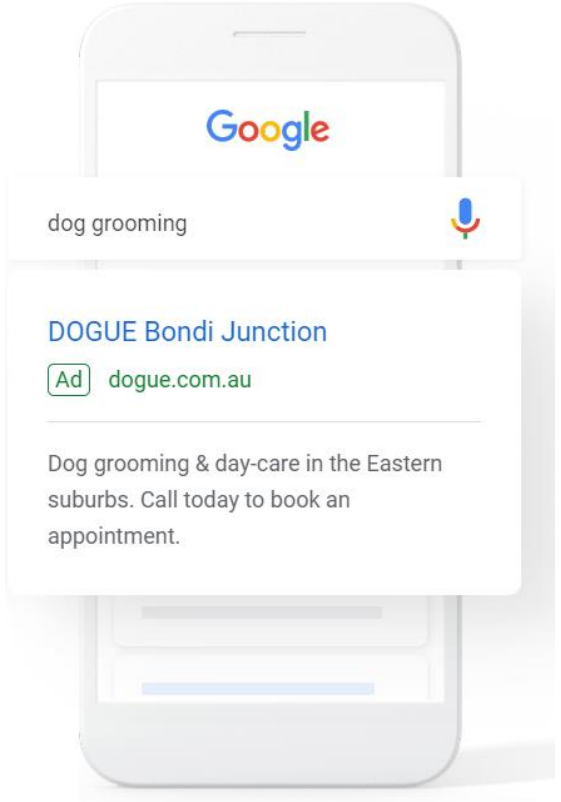
1. Forget Setting Goals. Focus on This Instead.
2. Why Faith Belongs in Your Workplace
3. Zappos Gives Job Titles the Boot
4. Get it Done: 35 Habits of the Most Productive People (Infographic)

COMBINING CONTENT AND ADVERTISING

- Using articles, news stories of interest to specific market segments
  - The article is better to appear as neutral
    - (i.e.) No hard selling of product
- Advertisers send content by:
  - Using hyperlinks inserted into article/e-mail messages
    - Takes customers to advertiser's Web site content
    - Easier to induce customer to stay on the site and consider making purchases
- Coordination across media outlets
  - Important element in any marketing strategy

GOOGLE ADS

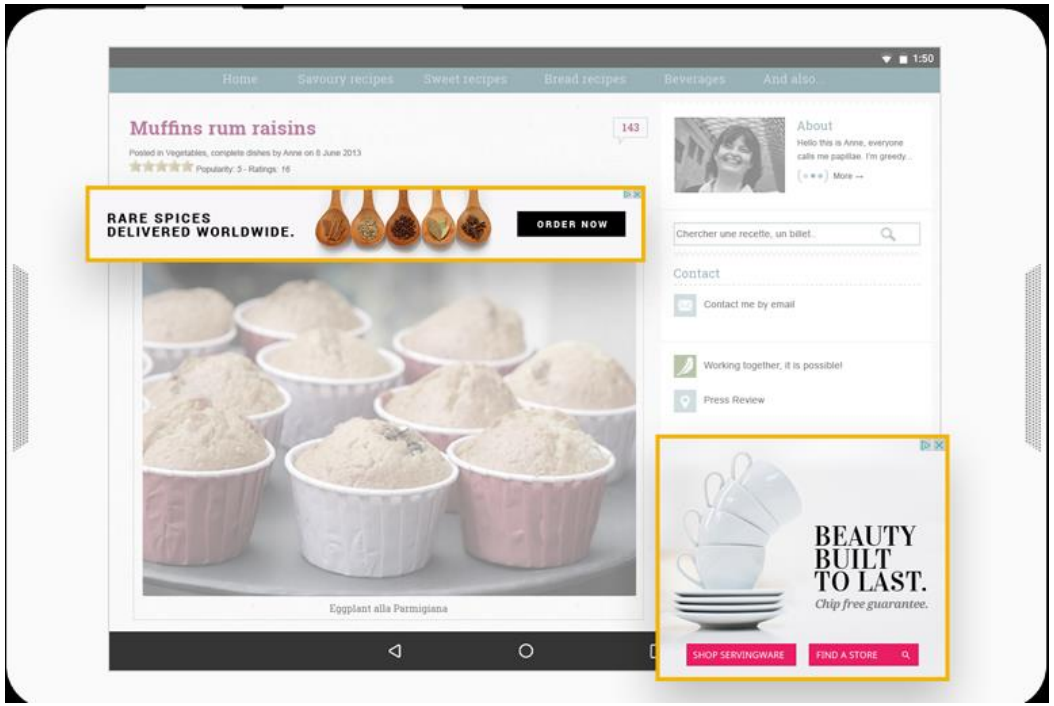
- Google Ads (previously Google AdWords): online advertising platform, where advertisers pay to display brief advertisements, service offerings, product listings, video content and generate mobile application installs within the Google ad network to web users
- partly based on cookies and partly on keywords determined by advertisers
- advertisers pay when users divert their browsing to click on the advertising copy (pay-per-click)
- Google's total advertising revenues of US$95.4 billion in 2017



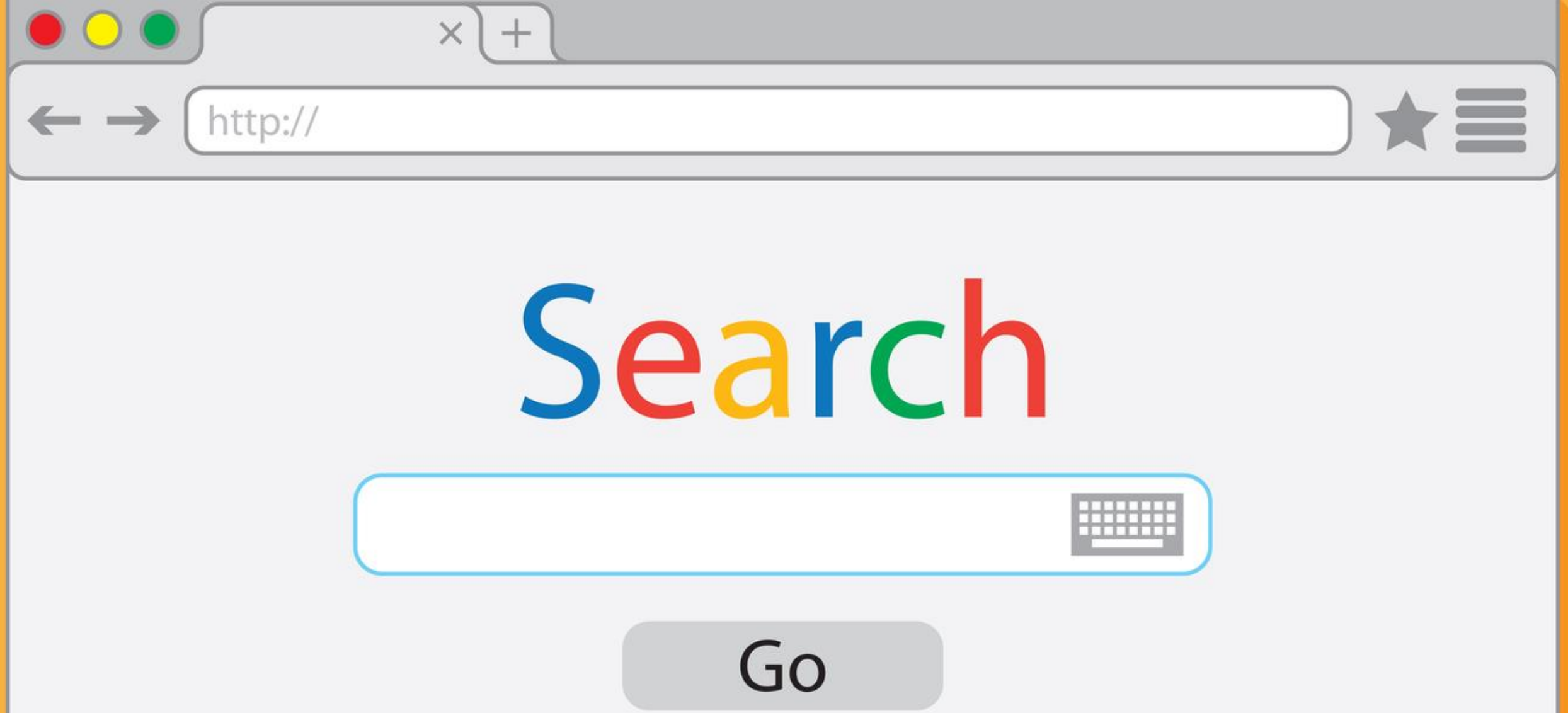
GOOGLE ADSENSE

- You make your website ad spaces available by pasting ad code on your site, and choose where you want the ads to appear.
  - In Q1 2014, Google earned 22% of total revenue through Google AdSense
  - Over 11.1 million websites use AdSense
- Business Model: generate revenue on either a per-click or per-impression basis (pay each time an ad is displayed)
  - important for delivering advertising revenue to small websites that do not have the resources for developing advertising sales programs and salespeople to seek out advertisers.

GOOGLE ADSENSE TECHNOLOGY



- Insert the AdSense JavaScript code into a webpage
- Each time this page is visited by an end user, the JavaScript code uses inlined JSON to display content fetched from Google's servers.
- Different types of Ad:
  - Contextual advertisements: Use a web cache of the page to determine a set of high-value keywords. Advertisements are served for those keywords based on the AdWords bidding system.
  - Website-targeted advertisements: the advertiser chooses the page on which to display advertisements



SEARCH ENGINES RANKING

SEARCH ENGINES

- A special kind of Web page software that finds other Web pages that match a word or phrase you entered.
- Different from a Web directory which is a listing of hyperlinks to Web pages that is organized into hierarchical categories.
- Has three major parts
  - Spider, crawler, or bot – searches the Web
  - Index – catalogs what is found
  - Utility – provides search results
- Q1: How to make use of existing search engines to help a firm's E-com site?
- Q2: How to handle new search methods, e.g., Bilingual search (e.g. Chinese & English)

HOW IT WORKS?

- How can search engine find results in a second?
- It already built up an index of web sites

Steps happen in the background:

1. Gather Information
2. Keep copies
3. Build an index

When you make a query, steps in the foreground:

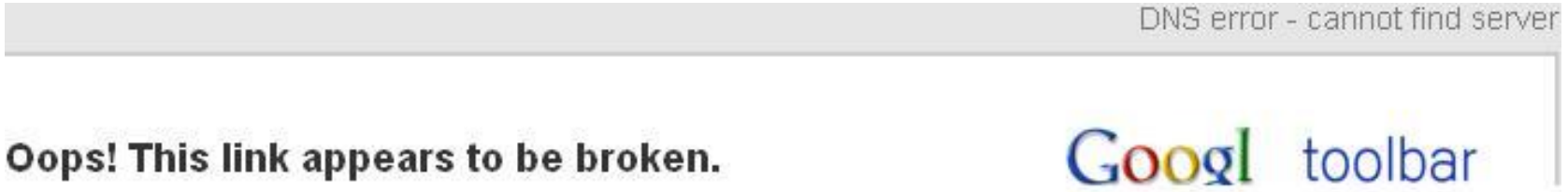
4. Understand the query
5. Determine the relevance of each possible result to the query
6. Determine the ranking of the relevant results
7. Present the results

SEARCH ENGINES: 1. GATHER INFORMATION

- Search engine don't index everything, someone decides what is worth remembering
- Some are domain-specific – e.g., LawCrawler searches only legal web sites
- Search engine explores the Web, visiting many sites on a regular basis to learn what they contain
- Revisits old pages to look for changes and links to new pages
  - News site probably pays daily visits
- Software called "Spider" crawls around the web

SEARCH ENGINES:
1. GATHER INFORMATION

- If web page is taken down, it will find out only spider next visit, then it will remove from the index



- Web is unstructured, no "correct" order in which to visit the pages
- Search engines schedule web crawling that won't overload the servers, as web sites need to respond to spider request

SEARCH ENGINES: 1. GATHER INFORMATION

- A web site may choose not wanting spiders to visit it too frequently or to index certain information
- Just put information into file named robots.txt

```
User-agent: googlebot          # all Google services
Disallow: /private/            # disallow this directory

User-agent: googlebot-news     # only the news service
Disallow: /                    # disallow everything

User-agent: *                  # any robot
Disallow: /something/          # disallow this directory
```

- Pages that are inaccessible without a login cannot be crawled

SEARCH ENGINES: 2. KEEP COPIES

- Search engine downloads a copy of web page spider visits – index it
- Can retain the copy on own disks after indexing pages – cached (hidden)
- Cached page retained what used to be on the page, even if they are removed
- Search engine offered access to cached copy


This is G o o g l s cache of http://www.president.har .edu/speeches/2005/womeninscience.html as retrieved on Jan 18, 2005 05:39:19 GMT.
G o o g l 's cache is the snapshot that we took of the page as we crawled the web.
The page may have changed since that time. Click here for the current page without highlighting.
This cached page may reference images which are no longer available. Click here for the cached text only.
To link to or bookmark this page, use the following url: http://www.goo .com/search?q=cache:q3g3FE25z0J:www.president.harvard.edu/speeches/2005/womeninscience.html+/speeches/2005/womeninscience.html&hl=en

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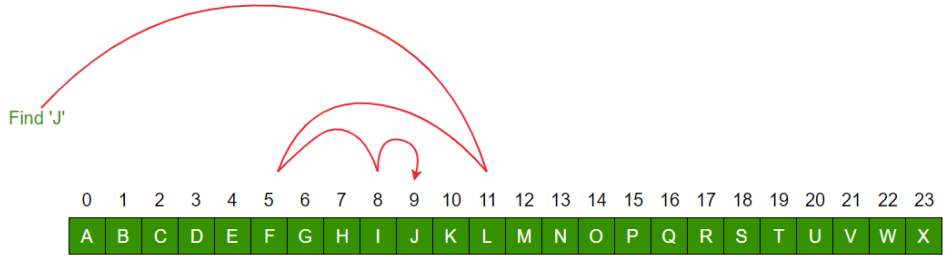
SEARCH ENGINES: 3. BUILD AN INDEX

- Search engine constructs a huge index that shows which words appear on which web pages
- When we search something, it consulted the index: a list of terms followed by places
- Index may record other info – e.g., where on the page the term appears
- Index in alphabetical order makes search faster
- Binary search is faster than linear search



- Terms and URLs are mainly stored on disk
- Speed up query response by keeping URLs in main memory

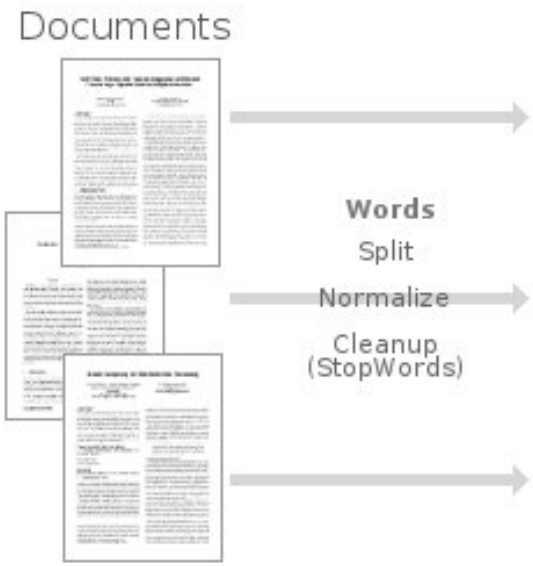
INDEXER

- Google ignores (doesn't index) common words called *stop words* (such as *the*, *is*, *on*, *or*, *of*, *how*, *why*, as well as certain single digits and single letters). They are so common that they do little to narrow a search, and therefore they can safely be discarded.
- Google also ignores some punctuation and multiple spaces, as well as converting all letters to lowercase, to improve the performance.

INVERTED INDEX

- Also known as postings file or inverted file
- The most popular data structure used in document retrieval systems

- Inverted index: an index data structure storing a mapping from content, such as words or numbers, to its locations in a database file, or in a document or a set of documents, in this case allowing full text search.



Inverted Index

Term	Document:Locations
voided	{'doc1': [221]}
coach	{'doc3': [12]}
house	{'doc2': [248]}
singletary	{'doc1': [23, 206, 342]}
mandate	{'doc3': [143]}
innovations	{'doc2': [78]}
edition	{'doc2': [10]}
niners	{'doc1': [0]}
week	{'doc2': [148],'doc1': [178, 186]}
buildings	{'doc3': [384]}
energy	{'doc2': [410]}
football	{'doc1': [326]}
coast	{'doc2': [26]}
job	{'doc1': [256]}
one	{'doc3': [234], 'doc1': [366]}
green	{'doc2': [32, 65]}
team	{'doc1': [335]}
singletary	{'doc1': [23, 206, 342]}
topics	{'doc2': [307]}
smith	{'doc3': [48, 153, 401]}

INVERTED INDEX

- Example 1:
  - Given the texts T_0 = "it is what it is", T_1 = "what is it" and T_2 = "it is a banana", we have the following inverted file index (where the integers in the set notation brackets refer to the subscripts of the text symbols, T_0, T_1 etc.):
  - "a": {2}

    "banana": {2}

    "is": {0, 1, 2}

    "it": {0, 1, 2}

    "what": {0, 1}
  - A term search for the terms "what", "is" and "it" would give the set: {0, 1} ∩ {0, 1, 2} ∩ {0, 1, 2} = {0, 1}.

INVERTED INDEX

- Example 2:
  - With the same texts, we get the following full inverted index, where the pairs are document numbers and local word numbers. Like the document numbers, local word numbers also begin with zero. So, "banana": {(2, 3)} means the word "banana" is in the third document (T_2), and it is the fourth word in that document (position 3).
  - "a": {(2, 2)}

    "banana": {(2, 3)}

    "is": {(0, 1), (0, 4), **(1, 1)**, (2, 1)}

    "it": {(0, 0), (0, 3), **(1, 2)**, (2, 0)}

    "what": {(0, 2), **(1, 0)**}
  - If we run a phrase search for "what is it" we get hits for all the words in both document 0 and 1. But the terms occur consecutively only in document 1.

SEARCH ENGINES: 4. UNDERSTAND THE QUERY

- Simplest form of query analysis ignores syntax, query is just a list of keywords
- You may not find all results useful
- To reduce ambiguity of queries, search engines support "advanced queries"

Punctuation	**Meaning**
Quotations " "	Putting keywords in phrase
"~"	Find synonyms
"—"	To exclude certain terms

SEARCH ENGINES: 5. DETERMINE RELEVANCE

- Search engine provide results that match the query
- But only person posed the query can judge the result's relevance
- World wide web is too vast, difficult to determine if everything is relevant
- Relevance calculation – The more frequently words from the query appear in a document, the larger the results will be
- The words in the title of page may get greater weight

SEARCH ENGINES: 6. DETERMINE RANKING

- Once relevant documents selected, they are ranked
- Simplest ranking is by relevance – putting page with highest relevance score first
- But many results will have almost same relevance
- Google's innovations – "PageRank" – world wide web popularity contest
- If more web pages link to page A, A must be more important, if more important page link to B, B is more important than A
- Search engines rank pages automatically, using secret recipe

RANKING A PAGE (SIMPLIFIED VERSION)

High-level idea:

A page is more popular if it is more likely to be accessed by users.

Two scenarios:

1) The page will be accessed directly by user.
2) The page is accessed from the links of other pages.

Let the probability that a page to be accessed from the links of other pages to be d.
Then, the probability that a page to be accessed directly from user is (1 – d).

Let PR(X) be the page rank of page X.

$$PR(A) = (1 - d) + d(PR(T_1)/C(T_1) + PR(T_2)/C(T_2) + \ldots + PR(T_n)/C(T_n))$$

T_i are pages that have a direct hyperlink to A
$C(T_i)$: number of hyperlinks pointing to other pages from T_i

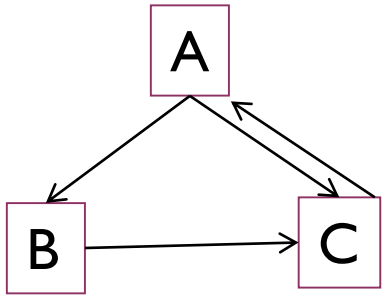
$$PR(A) = (1 - d) + d(PR(T_1)/C(T_1) + PR(T_2)/C(T_2) + \ldots + PR(T_n)/C(T_n))$$

If the page rank of T_i is higher (more popular), page rank of A will be made higher (more popular).

If T_i has more hyperlinks pointing to other pages, the chance of going to A is smaller. On the other hand, if Ti has fewer hyperlinks pointing outside, there is a higher chance to go to A.

The magic number d is usually set to 0.85 (probably based on statistics in real cases)

Example



A has links pointing to B and C.
B has a link pointing to C.
C has a link pointing to A.

Let d = 0.85, then we have the following set of equations:

PR(A) = 0.15 + 0.85(PR(C))
PR(B) = 0.15 + 0.85(PR(A)/2)
PR(C) = 0.15 + 0.85(PR(B) + PR(A)/2)

After some simple calculation, we have

PR(A) = 1.1634
PR(B) = 0.6444
PR(C) = 1.1922

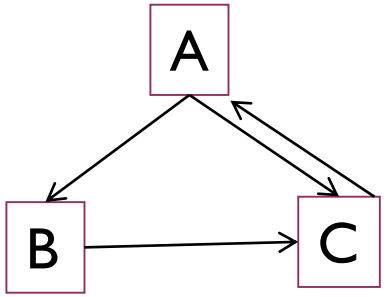
Note: C has more pages pointing to it, so has a higher rank

In reality, there are billions of webpages.

It is no way to solve a system of equations with billions of equations and billions of variables.

Google uses an approximate iterative procedure to compute an estimated page rank value for the pages.

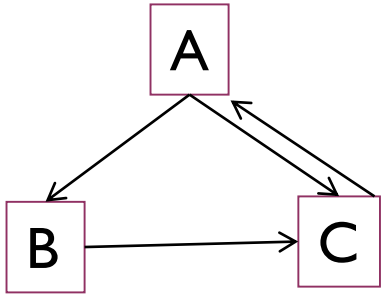
1) The pagerank of all pages are initially set to 1.
2) In each iteration, we compute the new value of pagerank according to the pagerank formula.



PR(A) = 0.15 + 0.85(PR(C))
PR(B) = 0.15 + 0.85(PR(A)/2)
PR(C) = 0.15 + 0.85(PR(B) + PR(A)/2)

Round	A	B	C
0	1	1	1
1	1	0.575	1.06375

PR(A) = 0.15+0.85(1)
PR(B) = 0.15+0.85(1/2)
PR(C) = 0.15+0.85(0.575+1/2)



PR(A) = 0.15 + 0.85(PR(C))
PR(B) = 0.15 + 0.85(PR(A)/2)
PR(C) = 0.15 + 0.85(PR(B) + PR(A)/2)

PR(A) = 1.1634
PR(B) = 0.6444
PR(C) = 1.1922

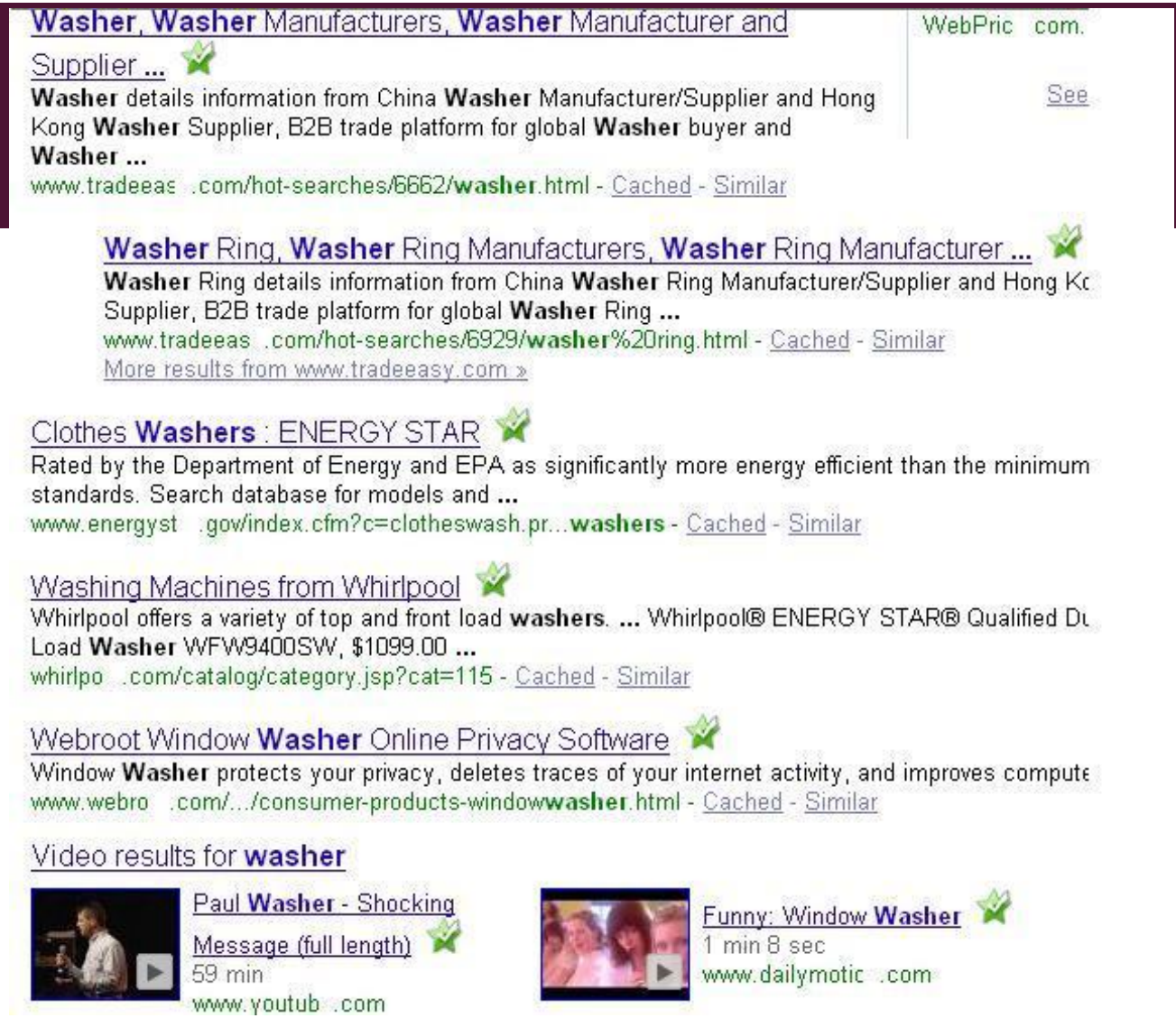
Round	A	B	C
0	1	1	1
1	1	0.575	1.06375
2	1.0542	0.598	1.10634
3	1.0904	0.6134	1.1348
4	1.11458	0.6237	1.1538
5	1.13073	0.6306	1.1666
6	1.14161	0.6352	1.1751
7	1.14884	0.6383	1.1808
8	1.15368	0.6403	1.1846
9	1.15688	0.6417	1.1871
10	1.15903	0.6426	1.1888

After 10 iterations, the values are getting close to the exact answers.

About 100 iterations, the values should be good enough.

SEARCH ENGINES: 7. PRESENTING RESULTS

- Search engines provide results from top to bottom
- If you search something ambiguous, millions results will be presented, some may not be useful
- E.g., if you search "washer"



Reference for Search Engine:

Blown to Bits, by Abelson, Ledeen, and Lewis. Addison-Wesley, 2008

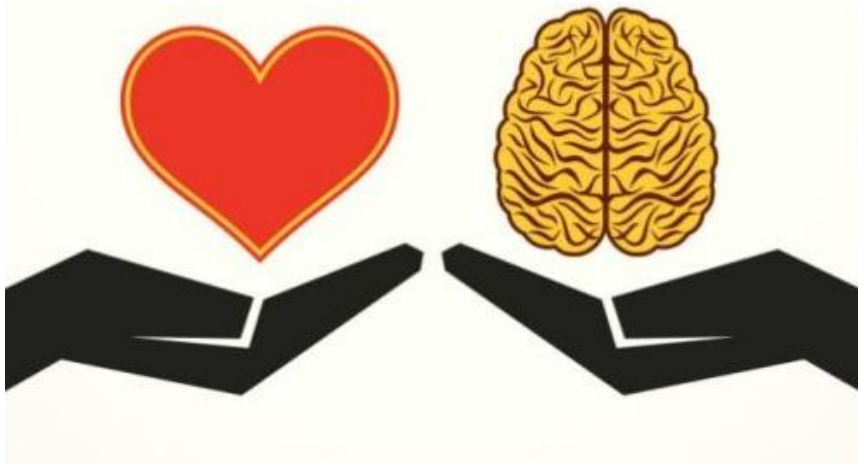
BRANDING

BRANDING

- Create & maintain brands on the Web
- Probably the most important function in marketing
- Branded products are easier to advertise and promote, as each product carries the reputation of the brand name (e.g., Walt Disney, Coca-cola, Apple)
- Elements of Branding
  - Product differentiation: distinguish clearly its products from all others in the market (e.g., Burger in MacDonald/Burger King)
  - Relevance: the degree to which the product offers utility to customers - how to fit into the customer's life?
  - Perceived value: create a brand with "value" such as quality, longevity or convenience

EMOTIONAL BRANDING VS. RATIONAL BRANDING

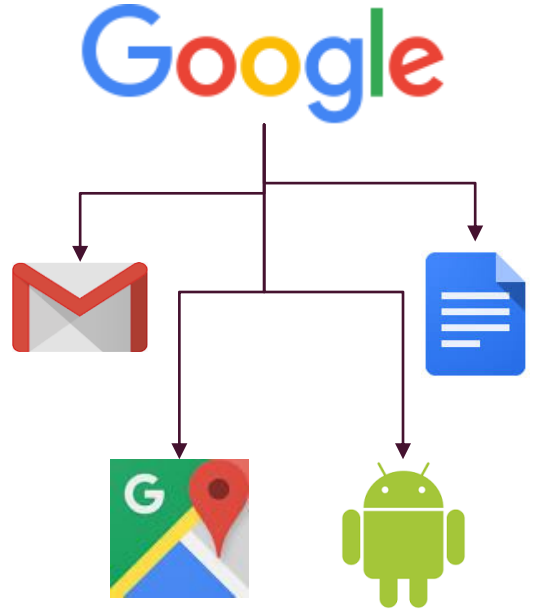
- Traditionally, use emotional appeals via TV, radio, billboards
  - passive mode of information acceptance
- Difficult to convey on Web due to the interactive nature
  - active medium controlled by customers



- Rational branding help Web users in some way in exchange for their viewing an ad., is a popular approach
- In other words, the Web technology favors rational branding

E-MARKETING BRANDING STRATEGIES I

- *Brand-Leveraging* Strategies
  - Well-established Web sites extend their name recognition to other products and services to create branding. (e.g., Yahoo, Google)
  - E.g., Cross-linking of web sites in related business
  - [*A large company expands its brand to a nearby area*]



E-MARKETING BRANDING STRATEGIES II

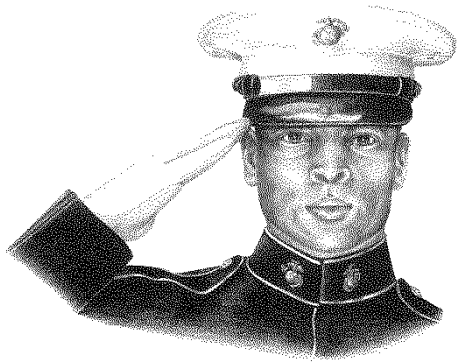
- *Brand Consolidation* Strategies
  - Market intermediary
  - Devised by an online bridal registry, Della & James
  - It offers a single registry that connects to several local and national department and gift stores
  - Also provides valuable consolidating activity for registering couples, guests, etc.
  - Many merchants are marketing together
  - Individual shop's logo and brand associated with the intermediary
  - [*Small Companies collectively create a Big brand name*]

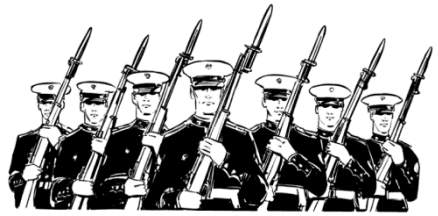
TECHNICAL PROBLEMS OF BRAND CONSOLIDATION STRATEGIES

- Have to manage data source from different shops
- Easier if data is presented in standard form (e.g., specified XML formats)
  - Easier update
  - Easier to search on more than one products

E-MARKETING BRANDING STRATEGIES III

- *Affiliate Marketing* Strategies
  - Low budget trend for Web branding
  - Affiliate marketer provides info & promotional services about another firm's product in exchange for a commission if the product is sold through an affiliate link to the selling firm.
  - The affiliate site obtains the benefit of the selling site's brand in exchange for the referral
  - Affiliate site also obtain commission
  - One site selling products of other sites!
  - e.g. CDNow, Amazon.com
  - [*Small companies (Affiliate marketers) using a big company's brand*]





AFFILIATE MARKETING STRATEGIES (2)

- Affiliate commissions collection model
  - **Pay-per-click model**
    - Affiliate earns commission each time site visitor clicks link, loads the seller's page
  - **Pay-per-conversion model**
    - Affiliate earns a commission each time site visitor converted from visitor into qualified prospect or customer

E-MARKETING BRANDING STRATEGIES IV

- *Viral Marketing* Strategies
  - Relies on existing customers to tell others (the prospective customers) about the products or services they have enjoyed using.
  - (e.g., Blue Mountain Arts)
    - Electronic greeting cards
    - Email that include link to greeting card site
    - One user (the card sender) refers to another (the card receiver)
  - Like building a "Virtual Community" of users and potential users
  - [*build brand from referrals*]

To be continued in "Virtual community" lecture…

SUMMARY

- Marketing and Ad via Internet is more important
- Logging of Web site surfing, e-commerce transactions, and customer behavior form the raw data for analysis
  - Data can be generated by the system, or can be purchased/recorded (Note that customer data may have privacy concern)
- Analysis of the data involve traditional marketing knowledge
  - Intelligent programs are needed to process the data
- Different market segmentation methods work well on Web
- Use rational branding instead of emotional branding techniques on the Web
- Companies must integrate Web marketing tools into a cohesive and customer-sensitive overall marketing strategy