Google

Google, Competition and Openness
Today's Headlines...

"One company [is] now the world's chief gateway to information"  
(Boston Globe, 6/22/08)

"Google, Apple, Intel: The Next Competition Targets?"  
(TechDaily, 1/11/08)

"So when do we get over with it and declare Google a monopoly?"  
(CNET News.com, 7/22/08)
...Have a Familiar Ring

Just a few years ago...

**Yahoo!**

“The most successful company ever spawned by the World Wide Web. Yahoo! has won the search-engine wars and is poised for much bigger things.” *(Fortune, 3/2/98)*

**Altavista**

“Altavista was the Google of its era. [...] By 1997, Altavista was truly king of search.” *(The Search, 2005)*

**Lycos**

“For a short period in 1999, Lycos became the most popular online destination in the world.” *(The Search, 2005)*

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The Lesson:

*Search has always been a highly competitive space — and companies can’t get too comfortable*
# Claims on DoubleClick deal not born out

**Google + double click**

<table>
<thead>
<tr>
<th>Claims made in 2007</th>
<th>Reality (2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display advertising prices will increase</td>
<td>Display advertising prices have dropped 53% since FTC approved Google-DoubleClick deal <em>(Source: PubMatic Ad Price Index, January 2009)</em></td>
</tr>
<tr>
<td>Consumer privacy will be harmed</td>
<td>Ads preference manager hailed as “giant leap for privacy,” offering “unprecedented level of choice and control” <em>(Berin Szoka, Progress &amp; Freedom Foundation; Rebecca Lieb, ClickZ)</em></td>
</tr>
<tr>
<td>Consolidation would reduce innovation and competition</td>
<td>New display formats released; AOL’s Platform-A leads in display ad reach; Yahoo #2, ValueClick #3, Google #4 <em>(Source: comScore Ad Focus, Feb. 2009)</em></td>
</tr>
</tbody>
</table>
## A Reality Check on Size

<table>
<thead>
<tr>
<th></th>
<th>Microsoft</th>
<th>AT&amp;T</th>
<th>Verizon</th>
<th>IBM</th>
<th>Google</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$60 billion</td>
<td>$118 billion</td>
<td>$93 billion</td>
<td>$98 billion</td>
<td>$21 billion</td>
</tr>
<tr>
<td>Gross Profits</td>
<td>$48 billion</td>
<td>$61 billion</td>
<td>$55 billion</td>
<td>$41 billion</td>
<td>$13 billion</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$38.3 billion</td>
<td>$98 billion</td>
<td>$77 billion</td>
<td>$85 billion</td>
<td>$16 billion</td>
</tr>
<tr>
<td>Market Cap</td>
<td>$184 billion</td>
<td>$148 billion</td>
<td>$90 billion</td>
<td>$113 billion</td>
<td>$99 billion</td>
</tr>
<tr>
<td>Employees</td>
<td>91,000</td>
<td>309,050</td>
<td>228,315</td>
<td>386,000</td>
<td>20,123</td>
</tr>
<tr>
<td>PAC Donations</td>
<td>$1.7 million</td>
<td>$4.9 million</td>
<td>$1.7 million</td>
<td>N/A</td>
<td>$287,000</td>
</tr>
<tr>
<td>Lobbying Budget</td>
<td>$6.8 million</td>
<td>$11.7 million</td>
<td>$13 million</td>
<td>$5.3 million</td>
<td>$2 million</td>
</tr>
</tbody>
</table>

Sources: Reuters, 2008 annual earnings reports, OpenSecrets.org
Openness and Competition Principles

1. Help other businesses be more competitive.
2. Make it easy for users to change.
3. Open is better than closed.
4. Competition is just one click away.
5. Advertisers pay what a click is worth to them.
6. Advertisers have many choices in a dynamic market.
1. Help other businesses compete

Your ads appear beside related search results...

Google

People click your ads...

...And connect to your business

AdWords:
Making small biz ad budgets go further

Google Apps:
Free apps reduce biz costs; 1M businesses

AdSense:
$5.2 billion paid to entrepreneurs in 2008

YouTube Partner Program:
Hundreds making $1000+/month

Secret Behind The Secret
"How Does The Secret Really Work?" The Answer Inside May Shock You!

theSecretofNewEarth.com/TheSecret
2. Make it Easy for Users to Change

- “Data Liberation Front” — team of engineers building data export functionality into Google products

<table>
<thead>
<tr>
<th>Product</th>
<th>Export Formats</th>
<th>Product</th>
<th>Export Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Analytics</td>
<td>PDF, CSV, XML, TSV</td>
<td>Google</td>
<td>CSV</td>
</tr>
<tr>
<td>Blogger</td>
<td>RSS, Atom</td>
<td>iGoogle</td>
<td>GadgetTabML</td>
</tr>
<tr>
<td>Google Calendar</td>
<td>XML, iCal</td>
<td>Google Notebook</td>
<td>HTML</td>
</tr>
<tr>
<td>Google Checkout</td>
<td>CSV</td>
<td>Google Reader</td>
<td>OPML</td>
</tr>
<tr>
<td>Google Docs</td>
<td>HTML, Word, PDF, RTF, OpenOffice, Text, CSV, Excel,</td>
<td>Google Reader</td>
<td>XMPP</td>
</tr>
<tr>
<td>Google Finance BETA</td>
<td>OFX</td>
<td>YouTube</td>
<td>MP4</td>
</tr>
<tr>
<td>Gmail BETA</td>
<td>POP, IMAP</td>
<td>Web History</td>
<td>RSS</td>
</tr>
</tbody>
</table>

Currently limited basis
# Open is Better than Closed

<table>
<thead>
<tr>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhances competition</td>
<td>• Reduces competition</td>
</tr>
<tr>
<td>• Encourages innovation</td>
<td>• Discourages innovation</td>
</tr>
<tr>
<td>• Interoperable</td>
<td>• Not interoperable</td>
</tr>
<tr>
<td>• Source code available to outside developers</td>
<td>• Source code locked down</td>
</tr>
<tr>
<td>• User data can be moved</td>
<td>• User data trapped</td>
</tr>
</tbody>
</table>

- Mozilla Firefox
- Windows Internet Explorer 7
Open source and open standards

- Google has opened up more than one million lines of code and more than 100 software projects

- Hosting more than 150,000 open source projects developed by non-Googlers

- **Chrome**: Open source browser

- **Android**: Open source mobile OS (T-Mobile); 800 apps
4. Competition is One Click Away

- Jan 31 Malware incident: Yahoo! queries doubled over normal levels during Google search error

Google coding error, affecting all search results

Most consumers willing to switch

**FORRESTER**

Most consumers use multiple search engines

<table>
<thead>
<tr>
<th>Engine</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple search engines</td>
<td>55%</td>
</tr>
<tr>
<td>Only Google</td>
<td>20%</td>
</tr>
<tr>
<td>Only Yahoo</td>
<td>8%</td>
</tr>
<tr>
<td>Only AOL</td>
<td>3%</td>
</tr>
<tr>
<td>Only ISP</td>
<td>2%</td>
</tr>
<tr>
<td>Only MSN</td>
<td>1%</td>
</tr>
<tr>
<td>Only Ask.com</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Note: Numbers do not total 100% because not all consumers use a search engine weekly.*

Source: North American Technographics® Retail Online Survey, Q3 2008

Would you consider switching search engines?

<table>
<thead>
<tr>
<th>Engine</th>
<th>All Users</th>
<th>Google Users</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38.2% No</td>
<td>37.5% No</td>
</tr>
<tr>
<td></td>
<td>61.8% Yes</td>
<td>62.5% Yes</td>
</tr>
</tbody>
</table>

Source: JP Morgan survey, January 2009
Search: Innovations and Investments

**Yahoo! Search**
- SearchMonkey (open developer platform)
- BOSS (Build Your Own Search Service)

**Live Search**
- Planning $100M ad campaign to promote search engine
- Jan. 2009 syndication deals with Dell, Verizon Wireless
- Cash back service to increase traffic
- Acquired Powerset, startup in semantic search

**Ask.com**
- 3-D search, other innovations in search results
- TV advertising campaign

"[Yahoo and Microsoft] have invested heavily to catch up in search and online ad auctions."
- New York Times (10/23/07)
How to explain Google’s success in search

Economies of scale?
• Increased competition in data centers
• Search improvements based on 1% of queries

Network effects?
• Value of a search engine doesn’t depend on # of people using it (like fax machines)

“Learning by Doing”
• Economic theory developed by economist Kenneth Arrow in 1962
• The longer a company has been doing something, the better it gets at doing it
• Google has been doing search for 10 years, constant experimentation and improvement
Many competitors in search and navigation Google

"Many industry experts say Google's present service may ultimately be seen as a primitive precursor to more-advanced services that better handle video or render results in three-dimensions. Microsoft, Yahoo and Google are all investing in such areas."

- Wall Street Journal (11/6/09)
Technology models evolve quickly

- Dial-up
- Friendster
- Directory model
- Broadband
- Facebook
- Search / PageRank

?  ?  ?
5. Advertisers pay what a click is worth to them

Anatomy of a Google search result page

Ad Rank = Cost-per-click bid × Quality Score

"Natural" Search Results
(ranked by algorithm)
How the Ad Auction Works

- Google's ad prices are set by competitive auction, ensuring that prices are market-driven

1. Create an ad
   - Nike Shoes
     - Shop Nike Shoes at Foot Locker
     - Nike Shoes, Casual, Retro, & More!
     - www.FootLocker.com

2. Choose keywords
   - Nike shoes
   - Nike sneakers
   - Sports equipment
   - Running shoes

3. What is the most you would like to spend, on average, per day?
   - The daily budget controls your costs. When the daily limit is reached, on average, your ad will stop showing for that day. (The budget controls the frequency of your ad, not its position.) Raise or lower your budget as often as you like.
   - Enter your daily budget: $50
   - How will my budget affect my ad performance?

4. What is the maximum you are willing to pay each time someone clicks on your ad?
   - You influence your ad's position by setting its maximum cost per click (CPC). The max CPC is the highest price you're willing to pay each time a user clicks on your ad. Your max CPC can be changed as often as you like.
   - CPC bid: $1

- No exclusivity
- No fixed duration
- No minimum budgets
- Can export campaigns to other platforms
- Pay the price of next highest bidder

[Video]
Quality Scores and “First Page” Bids

Quality Scores

Keyword Analysis: pr jobs washington dc

Ad showing? Yes

For details on specific criteria for this test, click the following link:
Details and recommendations

Quality Score: OK (7/10)
Details and recommendations »

- Reflects predicted click through rate
- Ensure that users see most relevant ads -- not just the highest bidder
- Google, Yahoo! and Microsoft all use quality scores
- Algorithmic score reflects consumers’ preferences
- Allows smaller companies to compete

Click through rate
- Historical CTR of ad and keyword
- CTR for entire account

Relevance
- Relevance of keyword to ads
- Relevance of ad and keyword to search query
- Ad’s performance in geographic region

Landing page quality
- Relevant and original content
- Transparent about nature of business
- Easy navigation
Quality Scores and “First Page” Bids

Quality Scores

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“First Page” Bids

Keyword Analysis: pr jobs washington dc

Your ad is showing for this keyword, and the keyword’s Quality Score is
See the ‘Quality Score’ tab for details.

Estimated bid to show on the first page: $0.05
Your bid: $1.00 Max CPC

• Replaced minimum bids in November 2008
• Based on quality score and competition for keywords
• Estimates necessary bid for ad to show on first page
• Helps deter low quality spam ads
Cost per acquisition, not cost per click

- Cost per click less important to advertisers than the cost of acquiring a new customer
- Example: EvesAddiction.com (Raymond Galeotti)

<table>
<thead>
<tr>
<th>Last Year</th>
<th>This Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bid</strong></td>
<td><strong>Increase</strong></td>
</tr>
<tr>
<td>$.50/click</td>
<td>$.80/click</td>
</tr>
<tr>
<td><strong>Sales conversion</strong></td>
<td></td>
</tr>
<tr>
<td>2 new customers per every 100 clicks</td>
<td>4 new customers per every 100 clicks</td>
</tr>
<tr>
<td>$.50 x 100 2</td>
<td>$.80 x 100 4</td>
</tr>
<tr>
<td><strong>Cost of acquiring new customer</strong></td>
<td></td>
</tr>
<tr>
<td>$25</td>
<td>$20</td>
</tr>
</tbody>
</table>

Source: New York Times Bits Blog, 12/24/08
Advertisers have many choices

U.S. advertising spending by medium, eMarketer
Google share of all ads and online ads

Google Has <3% of Total Ad Revenue
Share of All U.S. Ad Revenue, 2008
- Google 2.66%
- Other Online 6.24%
- Offline 91.10%
- Newspapers
- Magazines
- Radio
- Outdoor
- Direct Mail

Google Has ~30% of Online Ad Revenue
Share of Online Ad Revenue (Owned and Operated Properties), 2008
- Other Sites 23%
- Newspapers 13%
- Small Media 6%
- Social Networks 4%
- Microsoft 5%
- AOL 5%
- Yahoo 12%

Source: Cowen & Co. report, 1/09
Smart ad campaigns have many components

The "Marketing Funnel"

Eyeballs → Awareness → Consideration → Preference → Action → Loyalty → Buyers

"Brand" Advertising
- TV
- Magazines
- Newspapers
- Radio
- Outdoor
- Online banner (display) ads

"Direct Response" Advertising
- Telemarketing
- Direct Mail
- Online search

"Are [text and display ads] in the same market? If the price of one goes up, will publishers switch to the other? We think the answer's yes."
- Brad Smith, General Counsel, Microsoft (DoubleClick Senate Testimony, 9/27/07)

- Most ads influence consumers as early as 60 days prior to a sale (Source: Microsoft Engagement Mapping, March 2009 study)
- Search clickers exposed to display advertising 22% more likely to produce a sale (Source: Microsoft Engagement Mapping, Sept. 2008 study)
Online advertising is dynamic

Major Media Firms Acquiring and Launching Ad Networks

### Acquisitions

- AOL
  - Advertising.com
  - Tacoda
  - quigo
  - MindShareMedia
  - buyby

- Google
  - doubleclick
  - FeedBurner

- Microsoft
  - aQuantive
  - ASEON

- WPP
  - Lagardere
  - the24:7
  - JUMPSTART
  - eNetwork

### Launches

- Yahoo!
  - rm
  - bluelithium

- Microsoft
  - Project Canoe
  - Food and lifestyle Ad Network
  - Aigle

- Viacom
  - Parent Content and Music Ad Network
  - Parent's Connect

- Condé Nast
  - Wired Style.com

- Forbes
  - Business and Financial Blog Ad Network

- The Washington Post
  - Business, Tech, Money, Travel & Environment Blog Ad Network

Source: IAB / GCA Savvian, June 2008
Conclusion

• Google welcomes competition because it stimulates innovation, makes us all work harder, and provides users with more choice.

“I think Google’s competition will come from the same place Google did. It will sneak out of nowhere… It will come from someone small enough, visionary enough, obsessive enough and ballsy enough to still do great things, without those great things being picked to death at the boardroom table.”

-Gord Hotchkiss, Search Engine Analyst
(Enquiro Blog, 5/15/09)