CS155b: E-Commerce

Lecture 18: April 17, 2001
B2C E-Commerce (Continued)
(Acknowledgement: Helen Chiang)
Revenue Models for B2C

• Sell goods and services and take a cut (just like B&M retailers).
  (e.g., Amazon, E*Trade, Dell)

∗ Advertising
  – Ads only (original Yahoo)
  – Ads in combination with other sources

• Transaction fees

• Sell digital content through subscription.
  (e.g., WSJ online, Economist Intelligence Wire)
Revenue Models for Online Ads

- “Number of Impressions”
  (How many times does the user cause the advertiser’s content to be displayed?)
- “Click Through”
  (How many times does the user click on the ad to go to the advertiser’s site?)
- “Pay-per-sale”
  (How many times does the user click through and then buy something?)
Status as of 4th Quarter 2000

- 3% of all ads; radio twice as big
- 55% of online ads are by dot coms
- 79 companies place 1/2 of all online ads
- Most ads run on 1 site for <3 weeks
  * Portals and Search Engines host more ad impressions than any other type of site (44%).
  * 63% of ad impressions have a “branding focus”
Top Online Advertisers

Top 15 Advertisers by Impressions Jan. 2001

- Amazon.com: 3534 impressions
- Classmates.com: 1761 impressions
- Wal-Mart: 847 impressions
- NextCard.com: 622 impressions
- GetSmart.com: 646 impressions
- Microsoft.com: 543 impressions
- Lycos.com: 387 impressions
- 800.com: 410 impressions
- CBS.com: 488 impressions
- ClassSave.com: 493 impressions
- eBay: 543 impressions
- Best Buy: 348 impressions
- Barnesandnoble.com: 344 impressions
- GetSmart.com: 336 impressions
- JobsOnline.com: 316 impressions

Impressions (in millions)
WWW Growing Faster Than Ad Supply

- Immediate problem: Too many pages, too few advertisers
- Current Price: $1 per thousands of impressions
- Price ~3 Years Ago: $10 to $50 per thousands of impressions
Inherent Difficulty with Online Ads

- **Downward Spiral**
  - Banner ads easy to ignore
  - Average click through has fallen to less than 1 in 200
  - Leads to creation of more obnoxious ads, *e.g.*, “pop-ups”

- **Entertaining?**
  - Getting the “right” ads requires time, effort, and money.
  - Internet market not large enough to justify it.
  - 5 of the world’s top 10 advertisers each spent less than $1 million on online ads last year.
## Top 25 National Advertisers

<table>
<thead>
<tr>
<th>Rank 1999</th>
<th>Advertiser</th>
<th>Total U.S. ad spending in 1999</th>
<th>Network TV</th>
<th>Spot TV</th>
<th>Network radio</th>
<th>National spot radio</th>
<th>Internet</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Motors Corp.</td>
<td>4,040,374.00</td>
<td>887,893.20</td>
<td>503,807.40</td>
<td>5,963.20</td>
<td>28,189.50</td>
<td>25,074.10</td>
<td>0.62%</td>
</tr>
<tr>
<td>2</td>
<td>Procter &amp; Gamble Co.</td>
<td>2,611,766.60</td>
<td>621,527.30</td>
<td>113,294.70</td>
<td>10,265.90</td>
<td>10,838.70</td>
<td>8,039.30</td>
<td>0.31%</td>
</tr>
<tr>
<td>3</td>
<td>Philip Morris Cos.</td>
<td>2,201,600.90</td>
<td>383,215.50</td>
<td>200,873.10</td>
<td>2,995.30</td>
<td>10,613.00</td>
<td>873</td>
<td>0.04%</td>
</tr>
<tr>
<td>4</td>
<td>Pfizer</td>
<td>2,142,433.70</td>
<td>364,704.20</td>
<td>59,059.30</td>
<td>11,805.30</td>
<td>1,425.90</td>
<td>1,254.20</td>
<td>0.06%</td>
</tr>
<tr>
<td>5</td>
<td>AT&amp;T Corp.</td>
<td>1,950,871.20</td>
<td>258,716.10</td>
<td>100,987.90</td>
<td>8,249.80</td>
<td>32,705.00</td>
<td>13,644.80</td>
<td>0.70%</td>
</tr>
<tr>
<td>6</td>
<td>DaimlerChrysler</td>
<td>1,804,055.50</td>
<td>286,520.60</td>
<td>664,880.60</td>
<td>2,068.30</td>
<td>23,610.50</td>
<td>9,958.30</td>
<td>0.55%</td>
</tr>
<tr>
<td>7</td>
<td>Ford Motor Co.</td>
<td>1,639,761.50</td>
<td>364,989.10</td>
<td>229,678.40</td>
<td>4,959.40</td>
<td>16,981.00</td>
<td>13,638.50</td>
<td>0.83%</td>
</tr>
<tr>
<td>8</td>
<td>Sears, Roebuck &amp; Co.</td>
<td>1,505,205.50</td>
<td>186,855.70</td>
<td>48,573.40</td>
<td>12,343.00</td>
<td>7,859.90</td>
<td>1,444.40</td>
<td>0.10%</td>
</tr>
<tr>
<td>9</td>
<td>PepsiCo</td>
<td>1,315,712.50</td>
<td>189,049.90</td>
<td>62,371.00</td>
<td>0</td>
<td>5,454.30</td>
<td>581.3</td>
<td>0.04%</td>
</tr>
<tr>
<td>10</td>
<td>Verizon Communications</td>
<td>1,312,749.00</td>
<td>1,690.50</td>
<td>135,634.90</td>
<td>0</td>
<td>74,497.40</td>
<td>1,876.20</td>
<td>0.14%</td>
</tr>
<tr>
<td>11</td>
<td>Walt Disney Co.</td>
<td>1,304,002.20</td>
<td>242,015.30</td>
<td>128,353.70</td>
<td>1,578.80</td>
<td>23,867.90</td>
<td>16,360.50</td>
<td>1.25%</td>
</tr>
<tr>
<td>12</td>
<td>Time Warner</td>
<td>1,202,905.90</td>
<td>189,959.60</td>
<td>97,659.40</td>
<td>1,999.20</td>
<td>35,172.00</td>
<td>7,487.40</td>
<td>0.62%</td>
</tr>
<tr>
<td>13</td>
<td>Diageo</td>
<td>1,198,445.20</td>
<td>269,970.40</td>
<td>78,186.80</td>
<td>0</td>
<td>34,430.10</td>
<td>80.7</td>
<td>0.01%</td>
</tr>
<tr>
<td>14</td>
<td>McDonald's Corp.</td>
<td>1,134,802.30</td>
<td>296,766.10</td>
<td>179,444.60</td>
<td>36.9</td>
<td>3,238.90</td>
<td>599.6</td>
<td>0.05%</td>
</tr>
<tr>
<td>15</td>
<td>IBM Corp.</td>
<td>1,128,462.30</td>
<td>105,545.30</td>
<td>10,526.60</td>
<td>0</td>
<td>11,748.40</td>
<td>32,158.80</td>
<td>2.85%</td>
</tr>
<tr>
<td>16</td>
<td>Intel Corp.</td>
<td>1,119,330.40</td>
<td>77,448.20</td>
<td>2,575.00</td>
<td>0</td>
<td>7,391.20</td>
<td>13,464.10</td>
<td>1.20%</td>
</tr>
<tr>
<td>17</td>
<td>WorldCom</td>
<td>1,108,381.50</td>
<td>274,400.00</td>
<td>21,760.20</td>
<td>0</td>
<td>5,030.10</td>
<td>5,581.50</td>
<td>0.50%</td>
</tr>
<tr>
<td>18</td>
<td>Viacom</td>
<td>1,064,529.80</td>
<td>115,080.10</td>
<td>192,982.50</td>
<td>10,332.20</td>
<td>32,321.90</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Toyota Motor Corp.</td>
<td>1,025,231.70</td>
<td>227,478.10</td>
<td>201,210.70</td>
<td>0</td>
<td>4,009.20</td>
<td>9,769.90</td>
<td>0.95%</td>
</tr>
<tr>
<td>20</td>
<td>Johnson &amp; Johnson</td>
<td>1,004,497.00</td>
<td>466,870.70</td>
<td>33,974.10</td>
<td>32.1</td>
<td>3,036.90</td>
<td>3,484.80</td>
<td>0.35%</td>
</tr>
<tr>
<td>21</td>
<td>U.S. Government</td>
<td>998,050.90</td>
<td>239,004.60</td>
<td>37,917.30</td>
<td>12,703.90</td>
<td>21,972.30</td>
<td>4,533.10</td>
<td>0.45%</td>
</tr>
<tr>
<td>22</td>
<td>J.C. Penney Co.</td>
<td>995,868.40</td>
<td>114,657.30</td>
<td>15,517.90</td>
<td>5,526.30</td>
<td>10,489.80</td>
<td>1,652.00</td>
<td>0.17%</td>
</tr>
<tr>
<td>23</td>
<td>SBC Communications</td>
<td>926,103.60</td>
<td>7,472.60</td>
<td>127,474.60</td>
<td>0</td>
<td>43,552.30</td>
<td>2,851.20</td>
<td>0.31%</td>
</tr>
<tr>
<td>24</td>
<td>Sony Corp.</td>
<td>922,678.80</td>
<td>149,800.30</td>
<td>65,719.20</td>
<td>292.7</td>
<td>12,763.80</td>
<td>9,719.90</td>
<td>1.05%</td>
</tr>
<tr>
<td>25</td>
<td>L’Oreal</td>
<td>899,815.10</td>
<td>209,916.90</td>
<td>19,719.80</td>
<td>0</td>
<td>3,126.00</td>
<td>402.7</td>
<td>0.04%</td>
</tr>
</tbody>
</table>
Inherent Difficulty (continued)

• Accountability: Advertisers can tell immediately whether their ads “work.”

• High Expectations: “Well-targeted” ads cost up to 100 times as much as generic ads. But how precisely can one target?

Discussion Point: Will online advertising survive the dot com crash and the unrealistic expectations? Will it stabilize as just one more “branding medium”?
Amazon.com

- Full Name: Amazon.com, Inc.
- Employees: 9,000
- Stock Price:
  - $14.67 (at close April 12, 2001)
  - 52 Wk Range: $8.10 to $68.44
- 2000 Sales $2,762 M
  1-Year Sales Growth: 68.4%
- Internet’s largest retailer. Best known for books, CDs, DVDs, and Videos.
# Brand Strength

Source: U.S. Bancorp Piper Jaffray (July 24, 2000)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Mind Share (1)</th>
<th>Company Online Purchaser Share (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amazon.com</td>
<td>24.1%</td>
<td>Amazon.com</td>
</tr>
<tr>
<td>2</td>
<td>eBay.com</td>
<td>16.1%</td>
<td>eBay.com</td>
</tr>
<tr>
<td>3</td>
<td>Yahoo.com</td>
<td>4.9%</td>
<td>BarnesandNoble.com</td>
</tr>
<tr>
<td>4</td>
<td>priceline.com</td>
<td>2.7%</td>
<td>BMG.com</td>
</tr>
<tr>
<td>5</td>
<td>buy.com</td>
<td>1.9%</td>
<td>CDNow.com</td>
</tr>
<tr>
<td>6</td>
<td>BarnesandNoble.com</td>
<td>1.8%</td>
<td>ColumbiaHouse.com</td>
</tr>
<tr>
<td>7</td>
<td>CDNow.com</td>
<td>1.3%</td>
<td>JCPenney.com</td>
</tr>
<tr>
<td>8</td>
<td>AOL.com</td>
<td>1.1%</td>
<td>priceline.com</td>
</tr>
<tr>
<td>9</td>
<td>Egghead.com</td>
<td>1.0%</td>
<td>buy.com</td>
</tr>
<tr>
<td>10</td>
<td>Iwon.com</td>
<td>0.9%</td>
<td>Yahoo.com</td>
</tr>
<tr>
<td></td>
<td>JCPenney.com</td>
<td>0.9%</td>
<td>1800flowers.com</td>
</tr>
</tbody>
</table>

(1) Mind Share = the percent of Internet users for whom the site first came to mind when asked to think of Web sites that sell products or services over the Internet

(2) Purchaser Share = the percent of online buyers that bought from the site
Main Lines of Business

• Retail
  – Broad product range, from textbooks to household tools

• Shopping Mall
  – Individuals and companies pay Amazon.com to offer
    their products on its site.

• “Overseeing” other websites
  – Has invested in some of them
  – Broad range of offerings, from prescription drugs to
    wedding planning

• 2000 Sales
  – 71% books, CDs, DVDs, Videos
  – 78% US
Amazon.com History

• Founded: 1994
• Website launched: July, 1995
• 1997
  – IPO: 3 million shares, $54.0 million
  – Moves to “cement the Amazon.com brand.”
  – Becomes the sole book retailer on America Online’s public website and on Netscape’s commercial channel.
History (continued)

• 1998: Expansion
  – Launched online CD and video stores.
  – Began selling toys and electronics.
  – Bought online booksellers in the UK and Germany.
  – Bought Internet Movie Database.
  – Expanded online services, buying Junglee (comparison shopping) and PlanetAll (address book, calendar, reminders).
  – Attracted so much attention that its market capitalization equaled the combined values of profitable bricks-and-mortar rivals Barnes & Noble and Borders Group, even though their combined sales were far greater than Amazon’s.
History (continued)

• 1999: More Expansion
  – Raised $1.25 billion in a bond offering.
  – Spending spree with deals to buy all or part of several dot-coms
    • Some have since been sold (HomeGrocer.com), and others have gone out of business or bankrupt -- Pets.com, living.com
    • It also bought the catalog businesses of Back to Basics and Tool Crib of the North.
  – Began conducting online auctions and partnered with Sotheby’s.
  – Added distribution facilities, including one each in England and Germany.
History (continued)

• 2000: Yet More Expansion
  – Placed a link to drugstore.com on its homepage; drugstore.com paid more than $100 million for that access.
  – 10-year deal with toysrus.com to set up a co-branded toy and video game store.
  – Added foreign-language sites for France and Japan.
2001: End of the Beginning

- Investors demand profits
- Amazon announces plans to restructure and layoff of 15% of its workforce.
- Takes a $150 million charge.
- Announces a deal with Borders to provide inventory, fulfillment, content, and customer service for borders.com
Amazon.com, Inc. - Stock Quotes

source: Red Herring
Amazon.com, Inc. Financials

Historical Financials

- Revenue ($mil.)
- Net Income ($mil.)


Revenue ($mil.): $0.0, $1,000.0, $2,000.0, $3,000.0

Net Income ($mil.): $-2,000.0, $-1,000.0, $0.0
Clicks and mortar

market capitalisation $bn

1998 1999 2000

net loss, $m

1998 1999

net profit/loss $m

1998 1999 2000

Sources: Company reports; Primark Datastream

Non-comparable scales
## Financials and Employees

Source: Hoovers

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue ($mil.)</th>
<th>Net Income ($mil.)</th>
<th>Net Profit Margin</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2,762.0</td>
<td>-1,411.3</td>
<td></td>
<td>9000</td>
</tr>
<tr>
<td>1999</td>
<td>1,639.8</td>
<td>-720.0</td>
<td></td>
<td>7600</td>
</tr>
<tr>
<td>1998</td>
<td>610.0</td>
<td>-124.5</td>
<td></td>
<td>2100</td>
</tr>
<tr>
<td>1997</td>
<td>147.8</td>
<td>-27.6</td>
<td></td>
<td>614</td>
</tr>
<tr>
<td>1996</td>
<td>15.7</td>
<td>-5.8</td>
<td></td>
<td>151</td>
</tr>
<tr>
<td>1995</td>
<td>0.5</td>
<td>-0.3</td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>1994</td>
<td>0.0</td>
<td>-0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>