Targeted Advertising

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History

- Advertising on the Internet quickly followed the introduction of the WWW.
- By 2001, top companies like Microsoft, Yahoo, and Amazon managed to reach between 125 to 442 million viewers. It soon became clear that online advertising was no joke.
- It is extremely rare in today's economy for a large firm not to include e-Advertising within their marketing department.
- Cheaper for companies to advertise online
- Cookies were originally invented by Netscape to give 'memory' to web servers and browsers
There are two kinds of targeted advertising:

Contextual Advertising

Behavioral Targeting
Contextual Advertising

Advertisements are selected based on the content displayed on the webpage page.

**Ex:** A Sporting apparel pop-up appears on a football website

**Google AdSense** was the first major network. It works by providing webmasters with **JavaScript** code that, when inserted into webpages, displays relevant advertisements from the Google inventory of advertisers.

Algorithms trace pages and look for keywords to decide which advertisements to display.
Current Advertising Breakdown

- AdSense: 24%
- No adverts: 21%
- BlogAds: 15%
- Federated Media: 4%
- DoubleClick: 15%
- Other: 21%
Behavior Targeting

- Behavioral Targeting is a method of targeted advertising in which a user's browsing history is used as a means for efficient advertising.

- Information from a user's web-browsing behavior (i.e. cookies) are used to find out what websites the user has been to or what searches he/she has performed.

- This information allows advertisers to display ads based on the user's interests.

**EX:** After visiting a few music websites and ticket selling sites, a website you visit may advertise local concerts.
Cookies

- Cookies allows a site to store **state information** on your machine.
- This information lets a Web site remember what **state** your browser is in.
- An **ID** is one simple piece of state information.
- If an **ID** exists on your machine, the site knows that you have visited before.
- The state is, "**Your browser has visited the site at least one time,**" and the site knows your **ID** from that visit.
- With cookies, sites can determine how many visitors arrive, how many are new vs repeat visitors.
How to Make/Read a Cookie

Set-Cookie: Count=1; expires=Wednesday, 01-Aug-2040 08:00:00 GMT; path=/; domain=webdesign.about.com

- **Set-Cookie:**
  - This is the call that sets the cookie in the browser's cookie store.
- **Count=1:**
  - This is the name of your cookie.
- **expires=Wednesday, 01-Aug-2040 08:00:00 GMT:**
  - This details when the cookie will expire.
- **path=/:**
  - This is the minimum path that needs to exist for the cookie to be returned.
- **domain=webdesign.about.com**
  - The domain that set the cookie, and is the only domain that can retrieve the cookie.

- Sample Cookie Code: [http://webdesign.about.com/od/cookies/a/aa083198.htm](http://webdesign.about.com/od/cookies/a/aa083198.htm)
Example Cookie Function

```javascript
function writeCookie(cname,cvalue,cexpire){
  document.cookie = cname + '=' + escape(cvalue) +
  (typeof cexpire == 'date' ? 'expires=' + cexpire.toGMTString() :
    '') + ',path=/;domain=about.com';
}
```
Are cookie dangerous?

-HTTP cookies are not inherently dangerous.
-They only store the information you provide them while using their site.
-Helpful steps to ensure cookie safety and not invading one’s privacy:
  1) Ignore third party cookies
  2) Frequently clear your system of existing cookies
  3) Think twice about what information you provide
Privacy Overhaul leads to Commercial Privacy Bill of Rights

These Privacy Rights include:
- The right to security and accountability
- The right to notice, consent, access, and correction of information
- The right to data minimization, constraints on distribution, and data integrity
- Enforcement of data sharing
How can you block Cookies?

Targeting Advertising Cookie Opt Out (plugin)

- Plugins are available online (for all browsers) which blocks cookies from being saved on your computer.

- Google Chrome also has an 'incognito window' which prevents cookies from being saved.
Resources


Privacy Law:
http://kerry.senate.gov/work/issues/issue/?id=74638d00-002c-4f5e-9709-1cb51c6759e6&CFID=49477163&CFTOKEN=56912567


Cookie Info:  http://computer.howstuffworks.com/cookie.htm
http://www.thiefware.com/cookies.spyware.shtml

Contextual Advertising:
http://en.wikipedia.org/wiki/Contextual_advertisin

History:
http://www.ocf.berkeley.edu/~gbiyani/overview.html