# Driving Traffic to Websites

Search Engines and Search Directories

## Search Engine vs. Directory

Note: Engines "won" ...they became more popular than directories

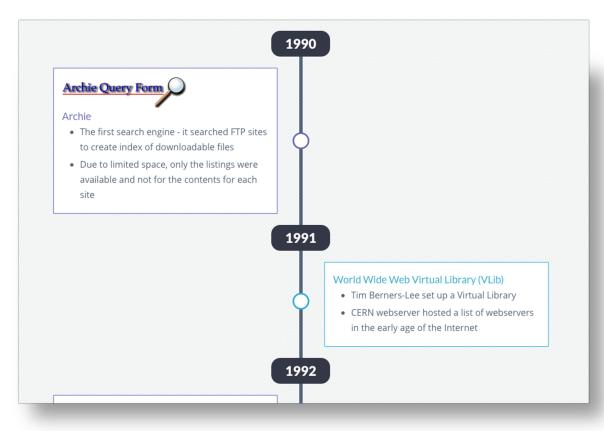
- Search engine
  - An online database
  - Most search engines use automated programs (spiders, robots) to look for relevant information
  - Examples: <u>www.google.com</u>, <u>www.yahoo.com</u>, <u>www.bing.com</u>
- Search directory
  - A catalog of websites organized by category
  - Organized by people discover new sites and relevant information
  - Example: <u>www.dmoz.org</u>; previously <u>www.yahoo.com</u> (pre-2014)
    - Historically, DMOZ provided database access to search engines like Google, Yahoo, others, to enhance their results (not so much anymore)

- 1. Google (87%)
- 2. Bing
- Yahoo
- 4. Baidu
- 5. Yandex.ru
- 6. DuckDuckGo
- 7. Ask.com
- 8. AOL.com
- 9. WolframAlpha
- 10. Internet Archive

https://www.reliablesoft.net/to p-10-search-engines-in-theworld/

#### **Evolution**

- Yahoo! founded: January 1994
  - Started as a directory (manual)
- AltaVista founded: December 1995
  - The first search engine (automated)
- Google founded: September 1998
  - Started as a search engine
- Bing, formally Live Search, formally MSN Search founded: 1998
  - Originally used AltaVista data under their own brand



### **Definitions**

#### Search robots

- A.k.a. bots, wanderers, spiders, and crawlers,
- Tools many web search engines use to build their databases.
- Most robots work like web browsers, going to webpages and following their links, except they
  don't require user interaction
- Search Engine Results Pages (SERP)
  - The page you see *after* you perform a search
  - A ranked listing of results (web pages) based on the keywords you provided as part of your search
  - Ranking is performed by an algorithm (usually proprietary); the higher the ranking (the position in the list) the higher the relevance to your search term(s)
- "Organic" results vs. Paid Placements
  - In addition to ranked listings from the algorithm ("organic" results), paid placements may appear on a SERP
  - The ranking of the paid placements is also determined by an algorithm which primarily counts payment as a ranking factor

### More Definitions (Paid)

- Impression
  - Every time a user views a SERP that displays your ad, it is counted as an impression
- Page view
  - Every time a user clicks your ad, it is counted as an page view
- Pay per click (PPC) and Cost per (thousand) Impressions (CPM)
  - A.k.a. Cost per click (CPC) and Cost per impression (CPI)
  - An advertising model used to direct traffic to websites, in which advertisers (website owners) pay a publisher (typically a search engine company) when the ad is viewed (an impression) or the ad is clicked (a page view)
  - Impressions → Clicks → Page Views → Conversions (sales)
- Clickthrough rate (CTR)
  - The number of ad clicks divided by the number of impressions, in a percentage
  - CTR = (Clicks / Impressions) \* 100% For example, if you received 7 clicks out of 1000 impressions, your page CTR would be 0.7%

### Web Development Activities for Search

- SEO Search Engine Optimization
  - Getting the website to appear well in the "organic" SERPs
- SEM Search Engine Marketing
  - Paying to get placement (advertise) on SERPs
  - Using media (any) to get people to visit a website (e.g. QR codes)
- SMO Social Media Optimization
  - The use of social media outlets to generate publicity with the intent of driving website traffic