

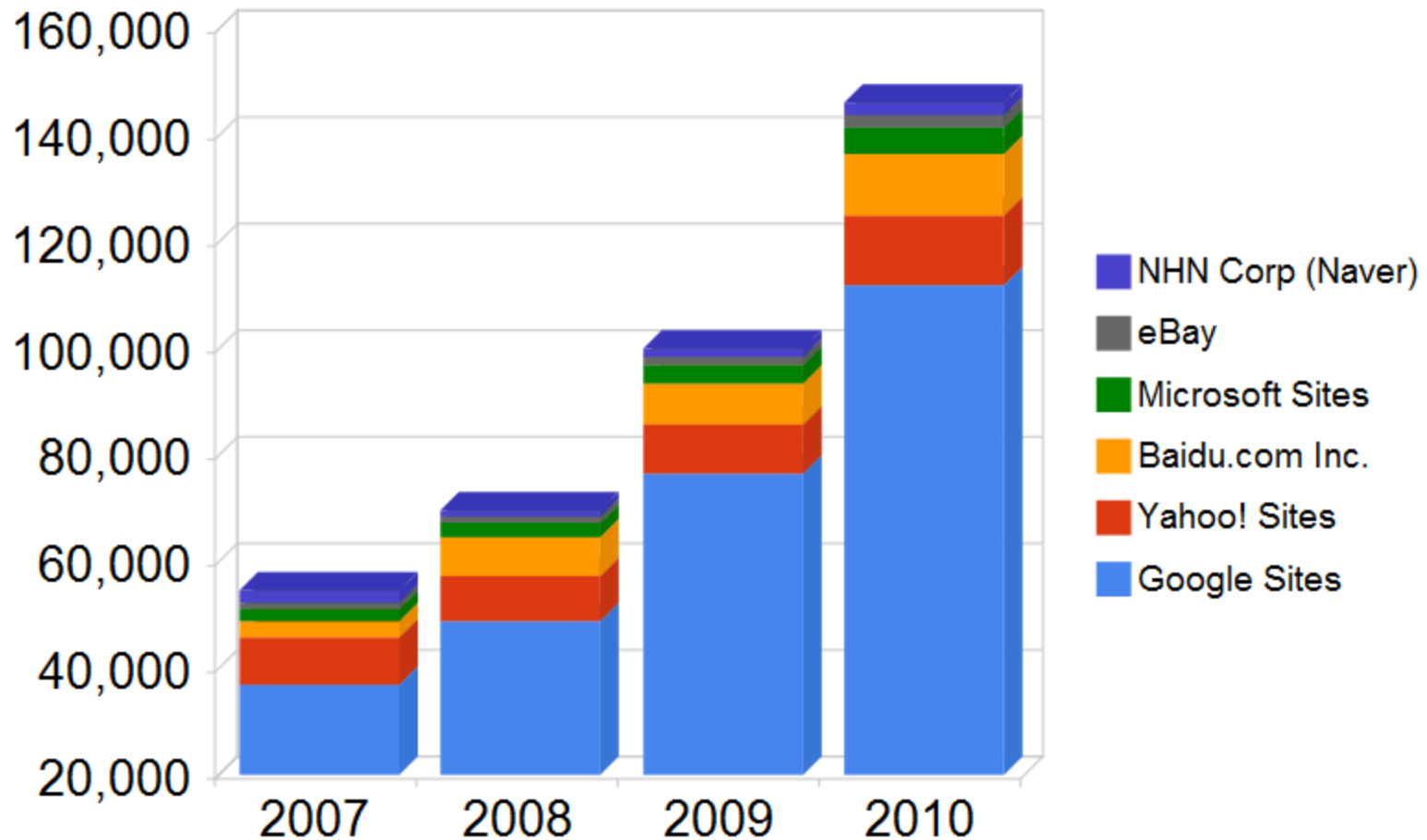
Search Engine Optimization (SEO)

Week 07

Dynamic Web TCNJ

Jean Chu

Search Volume Growth Over Time



What is SEO?

- **Search Engine Optimization** is the process of improving a websites' visibility and ranking in the search engines.

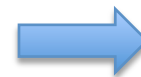
How Search Engine Works



Crawl



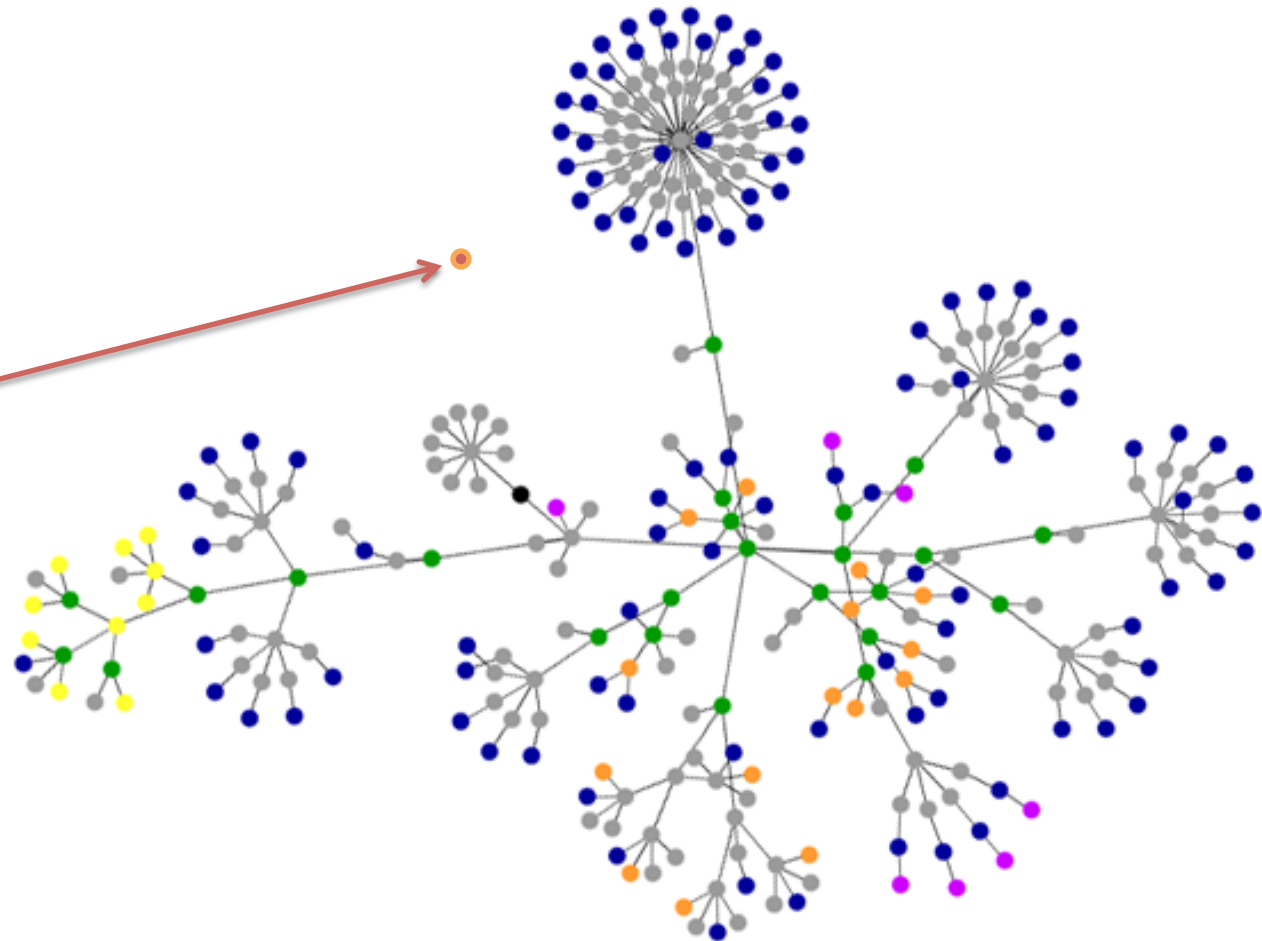
Index



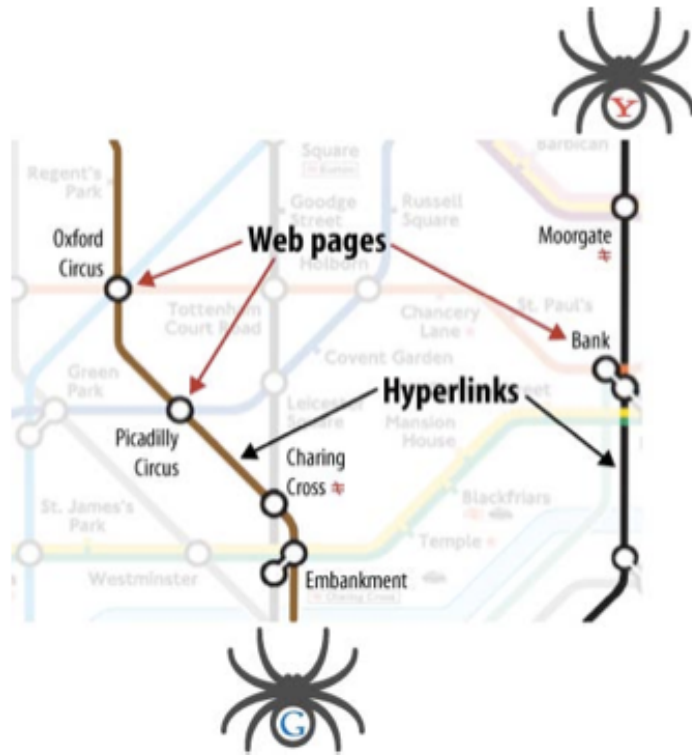
Rank

Crawling & Indexing

Without links, the engines might never find this page



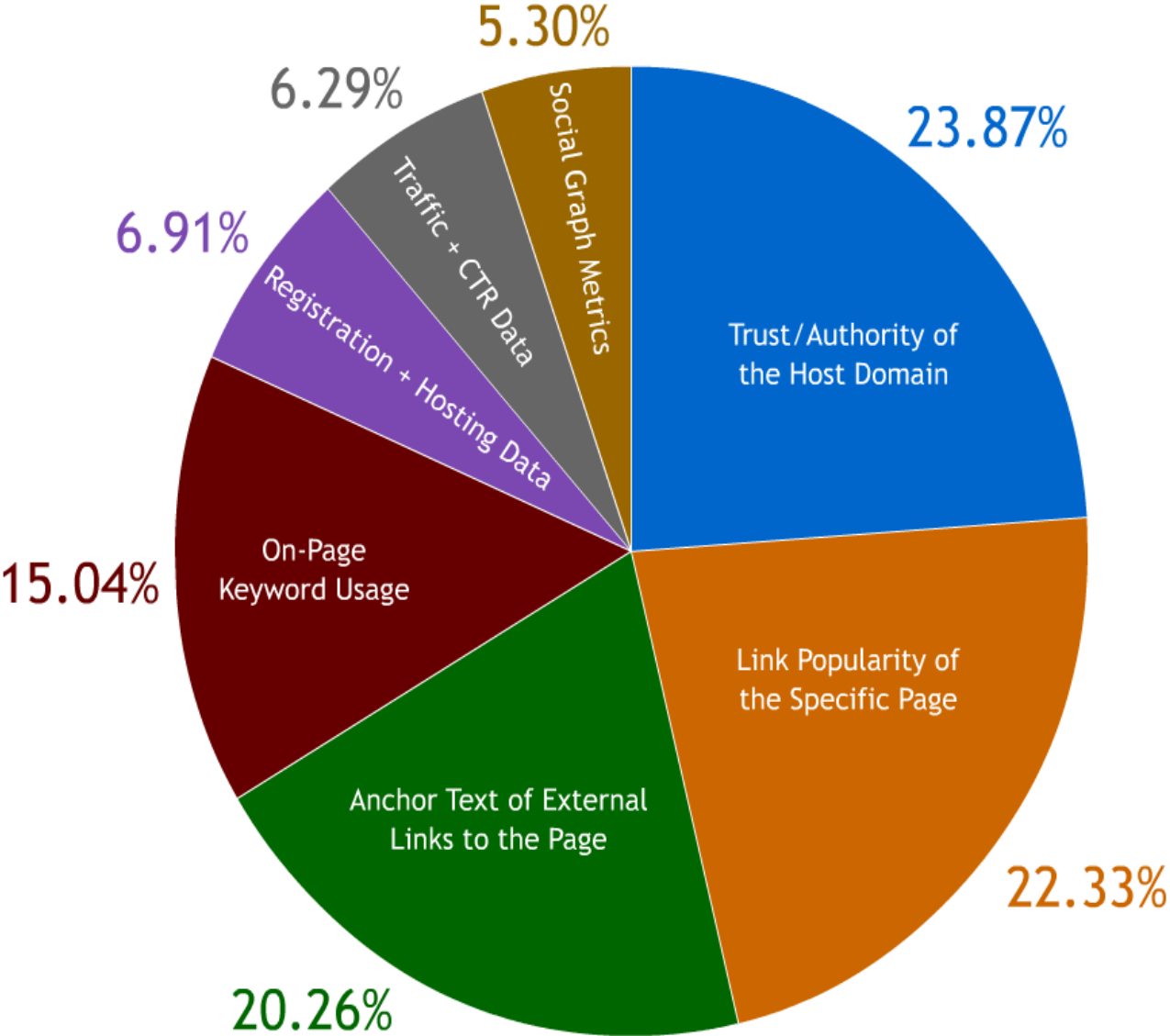
Crawl



Search engines crawl the Web to see what is there. This task is performed by a piece of software, called a crawler or a spider (or Googlebot, as is the case with Google)

Components of Google's Ranking Algorithm

(According to 72 SEOs Surveyed for SEOmoz's Biennial Search Ranking Factors)



What affects page rank ?

- Number of other websites that link to your website

*** Following Results in giving higher ranks

- Domain Authority
- Diversity of External link Sources

Page Rank

- The best way to increase your page rank is for other “popular” websites to link to your website.
- If many other “Rank 0” websites link to your website, that won’t amount to very much.
- If a few “Rank 5” websites link to your website, your own websites page rank might increase.

John Kuiphoff’s Class Design Fundamentals for the Web

<http://www.socialsyllabus.com/calendar.php?state=viewentry&course=1&entry=29>

Organic vs Paid search

The image shows a Google search interface for the query "seattle real estate". The search bar contains the text "seattle real estate" and a "Search" button. Below the search bar, the results are categorized into "Web" and "Sponsored Links".

Paid: A red box labeled "Paid" has arrows pointing to the "Sponsored Links" section. The sponsored links include:

- Seattle Real Estate -** www.TheMLSonline.com Find **Seattle Real Estate** Listings and Home Search for Western WA
- Seattle MLS Search** www.RealEstate-Seattle.com View photos and search for homes throughout the **Seattle** area!

Organic: A blue box labeled "Organic" has arrows pointing to the organic search results. The organic results include:

- Seattle Real Estate & Homes For Sale | Seattle, Washington**
Seattle Washington's complete website for **Real Estate**, homes for sale and virtual tours. Search for **Seattle** Washington **Real Estate** on **Seattle** Power Search.
[Property Search](#) - [Queen Anne](#) - [West Seattle](#) - [Eastside](#)
www.seattlepowersearch.com/ - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)
- TheMLSonline.com - Seattle Real Estate, Top Seattle Real Estate ...**
Search for the best **Seattle real estate** deals and get your best value with TheMLSonline's
soned veteran **Seattle real estate** agents.
[King County](#) - [Pierce Real Estate](#) - [Snohomish Homes](#)
www.themlsonline.com/ - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)
- Seattle Real Estate Guide - Seattle Homes For Sale**
Seattle real estate - Complete online guide to Buying or Selling Property in **Seattle** area.
www.seattlehomes.com/ - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)

Sponsored Links (Right Side):

- Luxury Waterfront Home**
Magnolia Neighborhood **Seattle** WA
dock, guest house, sport court
www.waterfronton39th.com
Washington
- Homes For Sale Seattle**
See All Homes For Sale **Seattle**
Free Hot List of **Seattle** Homes
www.LovelySeattleHomes.com
Seattle-Tacoma, WA
- Seattle Homes for Sale**
Complete MLS Listings 15,800+ Homes
Large Photos, Virtual Tours & Maps!
KingCountyHomeViewer.com
Seattle-Tacoma, WA
- Find Real Estate Agent**
Read Client Testimonials

Organic vs Paid search

Google search for "seattle real estate".

Search results for "seattle real estate" (0.18 seconds).

10% of Clicks (highlighted in a red box) points to the top organic result: [Seattle Real Estate - www.TheMLSonline.com](#) Find Seattle Real Estate Listings and Home Search for Western WA.

90% of Clicks (highlighted in a blue box) points to the sponsored results on the right side of the page.

Sponsored Links:

- [Luxury Waterfront Home](#) Magnolia Neighborhood Seattle WA dock, guest house, sport court [www.waterfronton39th.com](#) Washington
- [Homes For Sale Seattle](#) See All Homes For Sale Seattle Free Hot List of Seattle Homes [www.LovelySeattleHomes.com](#) Seattle-Tacoma, WA
- [Seattle Homes for Sale](#) Complete MLS Listings 15,800+ Homes Large Photos, Virtual Tours & Maps! [KingCountyHomeViewer.com](#) Seattle-Tacoma, WA
- [Find Real Estate Agent](#) Read Client Testimonials

Organic Results:

- [Seattle Real Estate & Homes For Sale | Seattle, Washington](#) Seattle Washington's complete website for Real Estate, homes for sale and virtual tours. Search for Seattle Washington Real Estate on Seattle Power Search. [Property Search](#) - [Queen Anne](#) - [West Seattle](#) - [Eastside](#) [www.seattlepowersearch.com/](#) - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)
- [TheMLSonline.com - Seattle Real Estate, Top Seattle Real Estate ...](#) [Best Seattle real estate deals and get your best value with TheMLSonline's Seattle real estate agents.](#) [Force Real Estate - Snohomish Homes](#) [www.snohomishhomes.com/](#) - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)
- [Seattle Real Estate Guide - Seattle Homes For Sale](#) Seattle real estate - Complete online guide to Buying or Selling Property in Seattle area. [www.seattleshomes.com/](#) - [Cached](#) - [Similar](#) - [🗨](#) [📄](#) [🗕](#)

WHAT DO THE ROBOTS SEE?

What do the robots see?

- Texts
 - Title
 - Meta Description Tag
 - Links
 - H1, H2, H3, H(x)
 - Body texts
 - Image alt

Clean, Crawlable **URLs** as Keywords

Better

www.adioso.com/seattle/british-airways-flights

www.adioso.com/cat61/british

www.adioso.com/cat61/174

www.adioso.com/f?ID=174

www.adioso.com/f?cat=61&?ID=174

Worse

cdn6.fly.adioso.com/f?cat=61&?ID=174&CustID=5afsd21

Title Tags

Better

Usability Testing Software | UserTesting.com

UserTesting.com | Usability Testing Software

Usability Testing Software

Usability Testing, Usability Test, User Testing, User Software

UserTesting.com

Worse

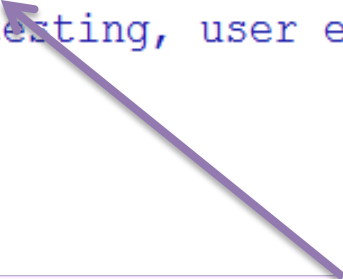
NA

Meta Description Tag

```
<head>  
<title>My title</title>  
<meta name="description" content="This is my description" />  
</head>
```

Meta Keywords?

```
<title>Low Cost Usability Testing - UserTesting.com</title>
<meta name="Description" content="Usability testing has never been
easier. UserTesting.com's online usability testing is the cheapest, fastest
way to find out why visitors leave your website.">
<meta name="Keywords" content="online usability testing, site usability,
web usability, website testing, user experience, web testing">
```



The google search engines don't use since the early 2000s. However Bing still uses meta keywords tag

Body Text Keyword Usage



african elephants

Search

About 1,280,000 results (0.07 seconds)

[Advanced search](#)

Everything

Images

Videos

[African Elephants, African Elephant Pictures, African Elephant ...](#) 🔍

Learn all you wanted to know about **African elephants** with pictures, videos, photos, facts, and news from National Geographic.

animals.nationalgeographic.com/animals/mammals/african-elephant/ - Cached

African elephants are the largest land animals on Earth. They are slightly larger than their Asian cousins and can be identified by their larger ears that look somewhat like the continent of Africa. (Asian **elephants** have smaller, rounded ears.)

Elephant ears radiate heat to help keep these large animals cool, but sometimes the **African** heat is too much. **Elephants** are fond of water and enjoy showering by sucking water into their trunks and spraying it all over themselves. Afterwards, they often spray their skin with a protective coating of dust.

An elephant's trunk is actually a long nose used for smelling, breathing, trumpeting, drinking, and also for grabbing things—especially a potential meal. The trunk alone contains about 100,000 different muscles. **African elephants** have two fingerlike features on the end of their trunk that they can use to grab small items. (Asian **elephants** have one.)

Both male and female **African elephants** have tusks they use to dig for food and water and strip bark from trees. Males use the tusks to battle one another, but the ivory has also attracted violence of a far more dangerous sort.

Because ivory is so valuable to some humans, many **elephants** have been killed for their tusks. This trade is illegal today, but it has not been completely eliminated, and some **African** elephant populations remain endangered.

Elephants eat roots, grasses, fruit, and bark, and they eat a lot of these things. An adult elephant can consume up to 300 pounds (136 kilograms) of food in a single day.

These hungry animals do not sleep much, and they roam over great distances while foraging for the large quantities of food that they require to sustain their massive bodies.

Images & Alt Attributes

Keywords in alt attributes are surprisingly well correlated with higher rankings



```
img [600x450] are the largest of Earth's land mammals. Their enormous ears help them to keep cool in  
ments Resources Network Scripts Timeline Profiles Audits Console  
▼<div id="content_mainA" style="min-height: 2914px; ">  
  ▼<div class="subsection">  
    ▼<div class="primary_photo" style="min-height: 517px; ">  
      
```

H1, H2, H3 Headlines

Each header tag indicates the relative importance of each section it is heading: <H1 ...> is for the major sections of your document, or as the one header to the entire document. <H2 ...> is for the secondary sections of your document, etc. It's best to start with the highest level header (<H1 ...>) and work your way down. So, for example, the headers in your page might look like this:

```
<H1>Starflower O'Sullivan</H1>

<H2>My Resume</H2>
<H3>Job Experience</H3>
<H4>Chef</H4>
<H4>Nutrionist</H4>

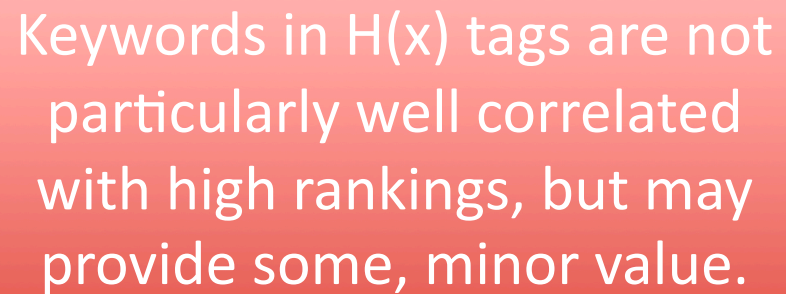
<H2>My Hobbies</H2>
<H3>Macrame</H3>
<H4>Poetry</H4>
<H5>Kung Fu</H5>
```

which gives us

Starflower O'Sullivan

My Resume

Job Experience



Keywords in H(x) tags are not particularly well correlated with high rankings, but may provide some, minor value.

Page Depth

- The number of required clicks to get to a page from the homepage. Pages that are available in one click are deemed more important than those that are nearly hidden and require more than 3 clicks to reach.

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<http://www.socialsyllabus.com/calendar.php?state=viewentry&course=1&entry=29>

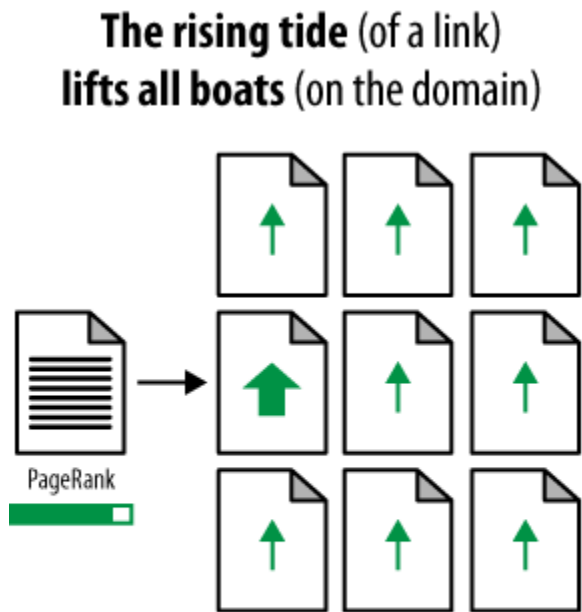
Internal Links

- The more internal links you have that point to a certain page, the more important search engines believe that page to be.
- A common page that ranks well on almost every site is the homepage, because every other page on your website usually has a link back to the homepage.

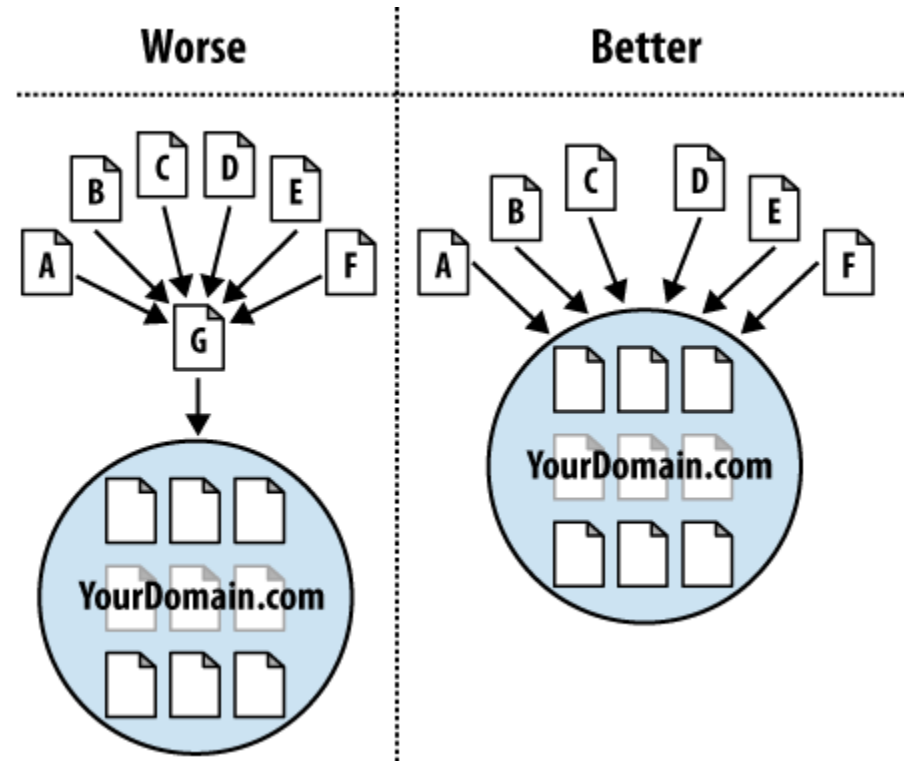
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<http://www.socialsyllabus.com/calendar.php?state=viewentry&course=1&entry=29>

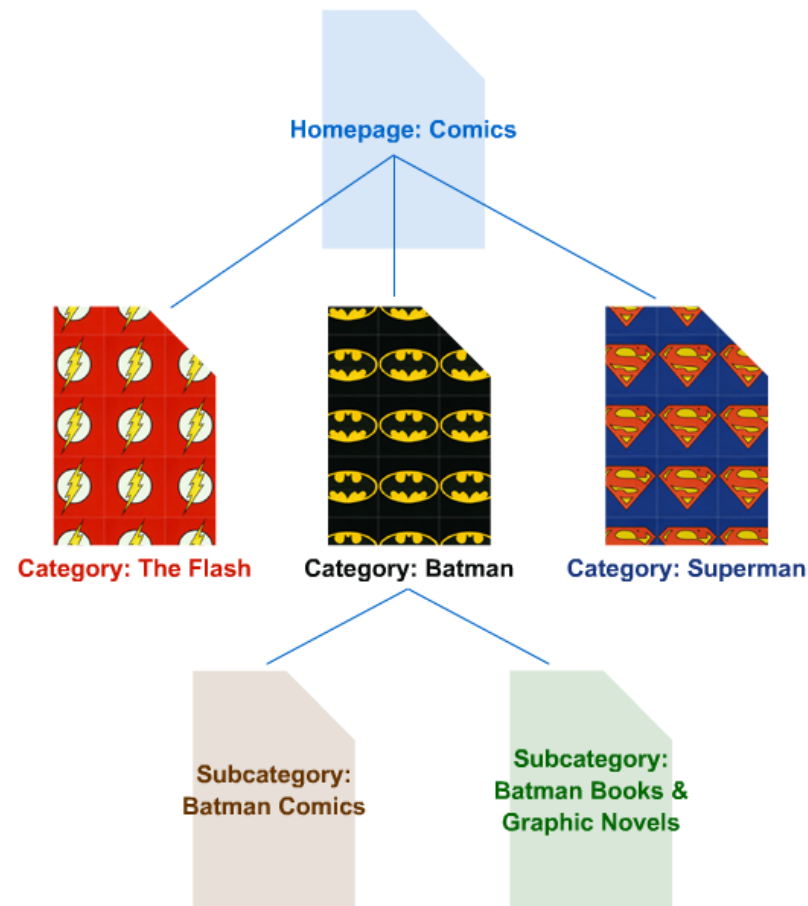
Preferably All on a Single Sub/Root Domain



Not only does the individual page gain rankings, the entire domain (and every page on it) receives some ranking benefit



Logical, Shallow Information Architecture



<http://www.seomoz.org/blog/diagrams-for-solving-crawl-priority-indexation-issues>

MAKE YOUR SITE SEARCHABLE

Keywords

- Think like a regular person, not an industry expert
- Analyze your competition
- Think local
- Use the free tools (Google Analytics, Google Adwords)

Keywords

- **Broad keywords:** Short, not specific.
Example: music, electronics
- **Specific keywords:** many adjectives or words that make the search very targeted.
Example: using a jQuery photogallery
- **Branded keywords:** words that are specific to your company or brand
Example: radiohead

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<http://www.socialsyllabus.com/calendar.php?state=viewentry&course=1&entry=29>

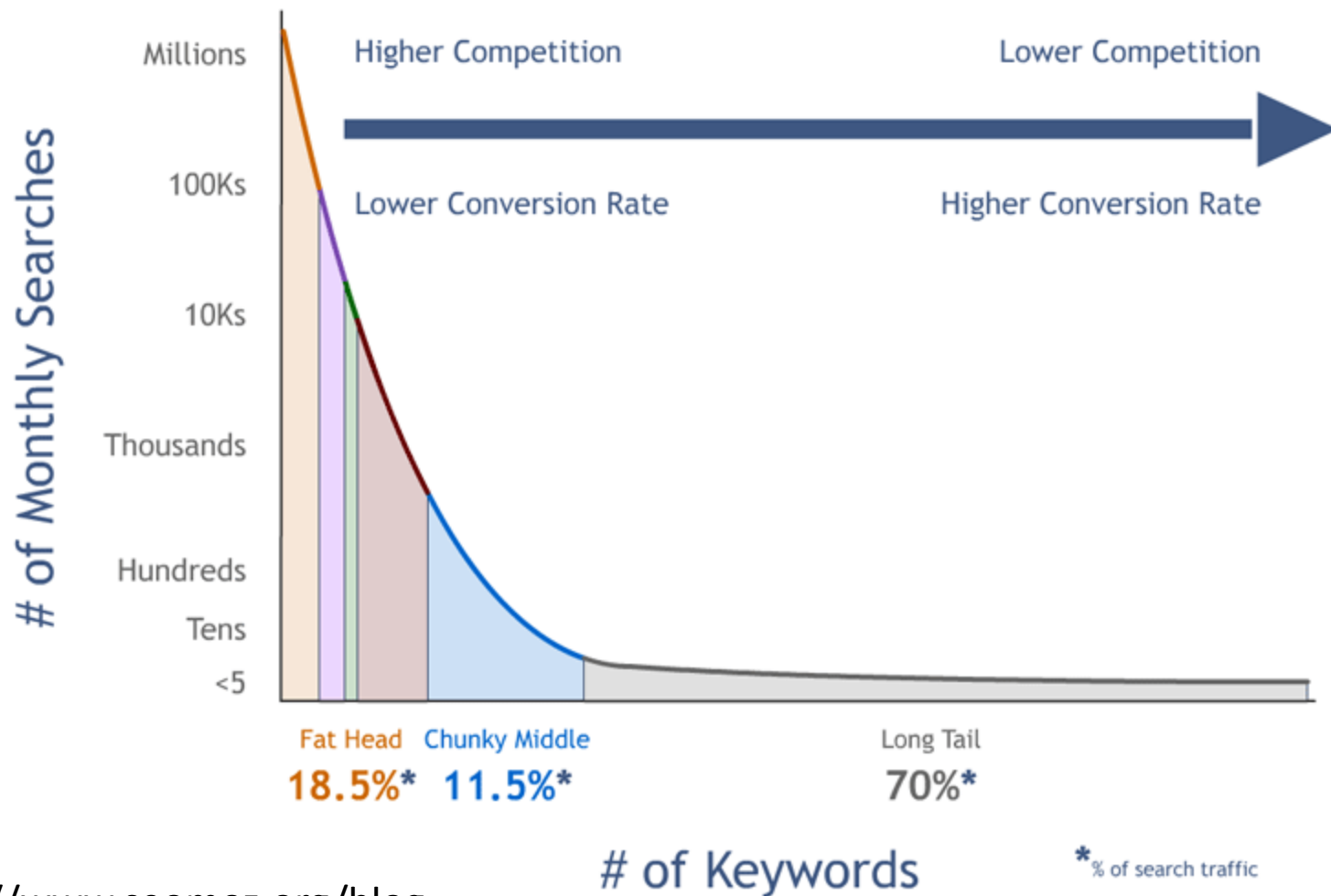
Keyword usage

- **Keywords Density:** the number of times your keywords are mentioned in your site. If it's too much, you'll look like a spammer; if it's too little, you won't look like a relevant match and the search engines won't consider your site.
- **Keyword Variation:** Altering versions of your keywords will help you capture hidden search engine traffic.
- **Similar Keywords:** closely related topics to your keywords that will aide the search engines in correctly categorizing your traffic.

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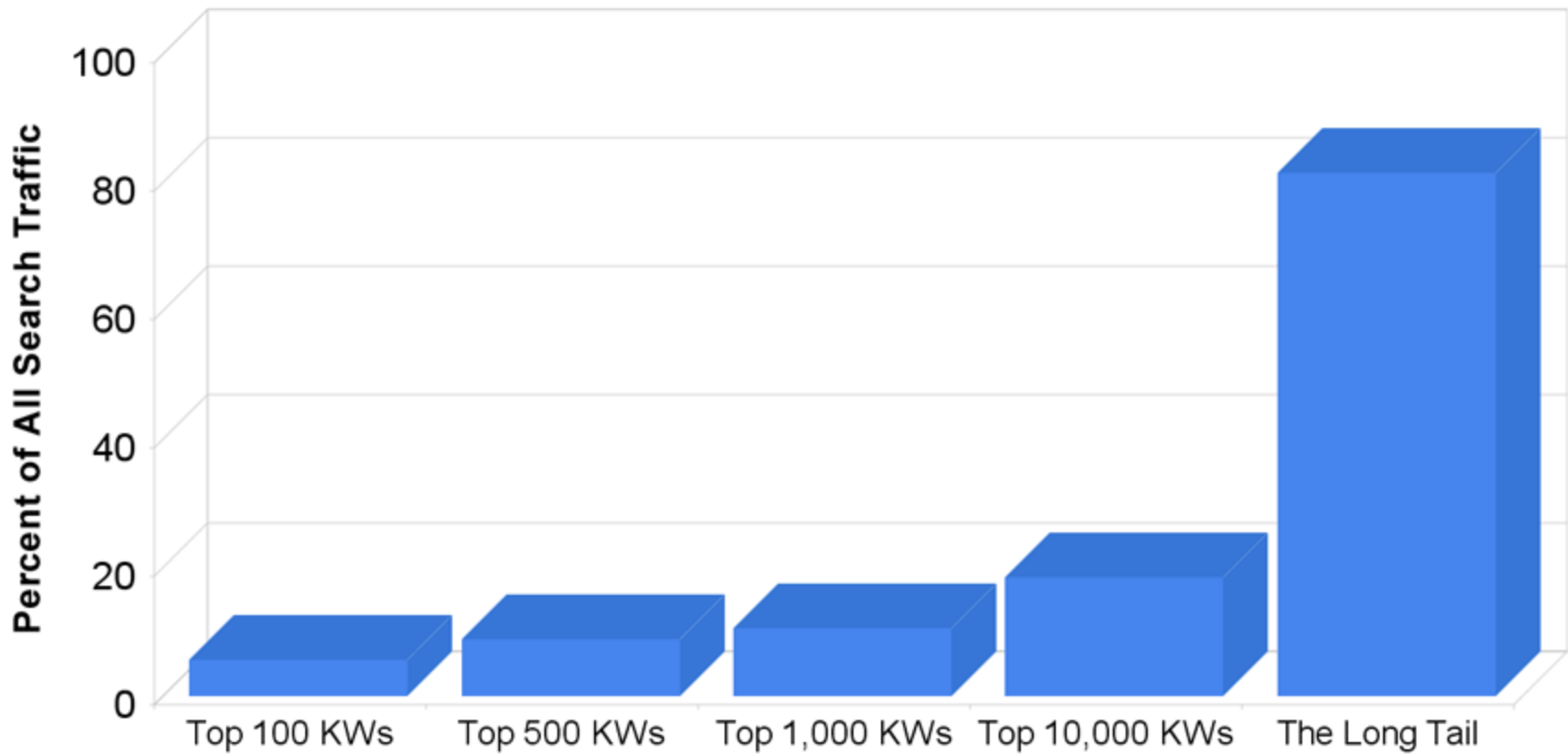
<http://www.socialsyllabus.com/calendar.php?state=viewentry&course=1&entry=29>

The Search Demand Curve



<http://www.seomoz.org/blog>

Popular Keywords vs. Long Tail Search Traffic




Data Source:



<http://www.seomoz.org/blog>


Submit to google

 Submit your content

[I am a...](#) [Related services](#)


[Submit your content](#) > Overview

Discover content programs




Website Owner

Increase your visibility by submitting and optimizing your website for Google search, and distributing your content across the web.



Business Owner

Online and local merchants: sell your products, provide details about your physical store locations, and attract customers to your website.

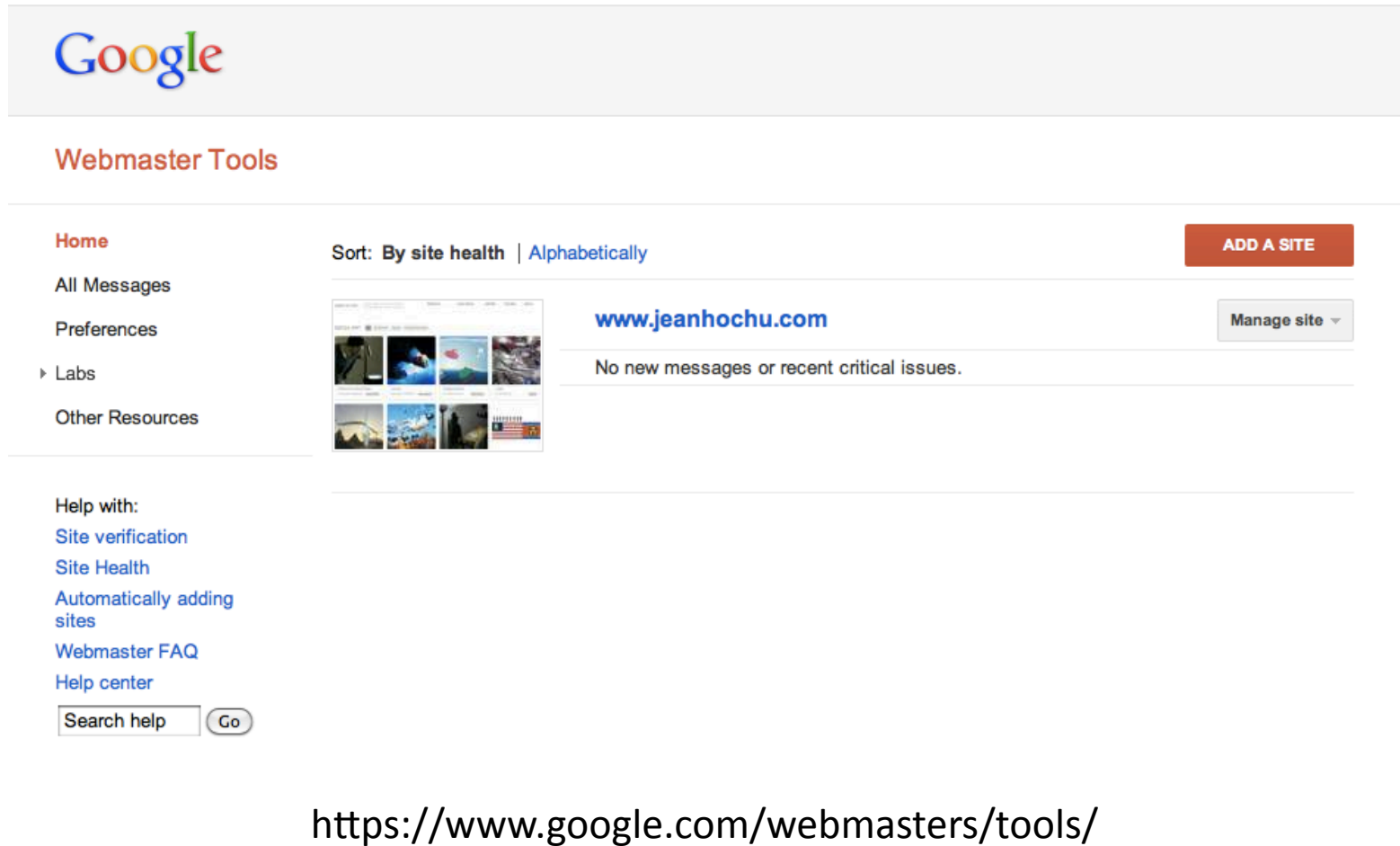


Publishing and Media

Make your books searchable, and sell titles through our eBook store. Distribute, monetize, and control access to news & video content through Google.

<http://www.google.com/submityourcontent/>

Google Webmaster Tools



The screenshot shows the Google Webmaster Tools interface. At the top left is the Google logo. Below it, the text "Webmaster Tools" is displayed in a reddish-brown font. A navigation menu on the left includes "Home", "All Messages", "Preferences", "Labs", and "Other Resources". The main content area shows a site listing for "www.jeanhochu.com" with a "Manage site" button. The site status is "No new messages or recent critical issues." Below the site listing, there is a "Help with:" section with links for "Site verification", "Site Health", "Automatically adding sites", "Webmaster FAQ", and "Help center". A search bar with the text "Search help" and a "Go" button is located at the bottom left of the help section. At the bottom of the page, the URL "https://www.google.com/webmasters/tools/" is displayed.

Google

Webmaster Tools

Home

All Messages

Preferences

▶ Labs

Other Resources

Sort: **By site health** | Alphabetically

ADD A SITE

www.jeanhochu.com

Manage site ▾

No new messages or recent critical issues.

Help with:

- [Site verification](#)
- [Site Health](#)
- [Automatically adding sites](#)
- [Webmaster FAQ](#)
- [Help center](#)

Search help

<https://www.google.com/webmasters/tools/>

Tools

- Google Webmaster Tools

<https://www.google.com/webmasters/tools>

References

- <http://www.tizag.com/SEOTutorial/>
- <http://www.webconfs.com/seo-tutorial/>