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# SEO – SEARCH ENGINE OPTIMIZATION

**Рэнцэндоржийн ЖАВХЛАН**

**МЭДЭЭЛЭЛ, КОМПЬЮТЕРИЙН УХААНЫ ТЭНХИМ**  
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2017 оны Намар



# LET'S TALK ABOUT THE SEO

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**They're Both Cakes, Right?**





# WHAT IS SEO?

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- SEO = Search Engine Optimization – Хайлтын системийн оновчлол
  - SEO is simply a matter of making sure your **site is structured** in a way that search engines understand. Search engines have two major functions: crawling and building an index, and providing search users with a ranked list of the websites they've determined are the most relevant.
  - Хайлтын системийн оновчлол гэдэг нь таны вэб сайт нь хайлтын систем ойлгохуйц байдлаар бүтэцлэгдсэн байхын хэлнэ.
  - Refers to the process of “optimizing” both the on-page and off-page ranking factors in order to achieve high search engine rankings for targeted search terms.

Хайлтын утганд зориулан хамгийн тохиромжтой үр дүнгийн эрэмбийг вэб сайтуудын on-page болон off-page утгуудад тулгуурлан гаргах процесс юм.
  - Refers to the “industry” that has been created regarding using keyword searching as a means of increasing relevant traffic to a website



# POPULAR SEARCH ENGINES

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77.4% - Google

8.1% - Baldu - China

7.3% - Bing

5.6% - Yahoo

1.6% - All the rest







# SEARCH ENGINE MARKET SHARE

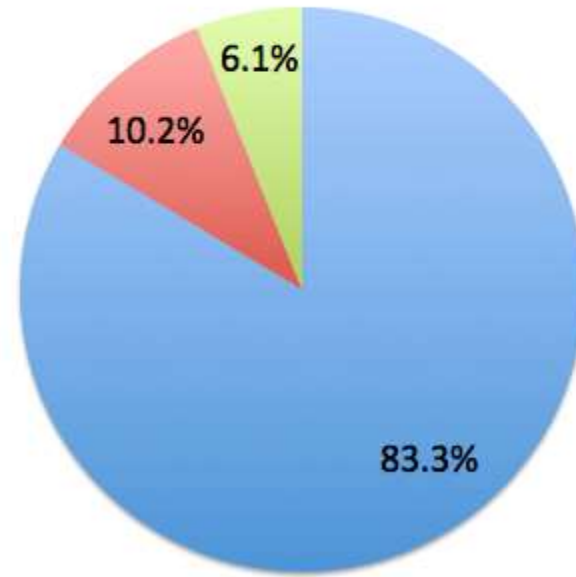
Search starts with the Web,  
made up of over

**600 TRILLION**

Pages & Growing

## US Mobile Search Market Share

Google Yahoo! Bing





# HOW DO SEARCH ENGINES WORK?

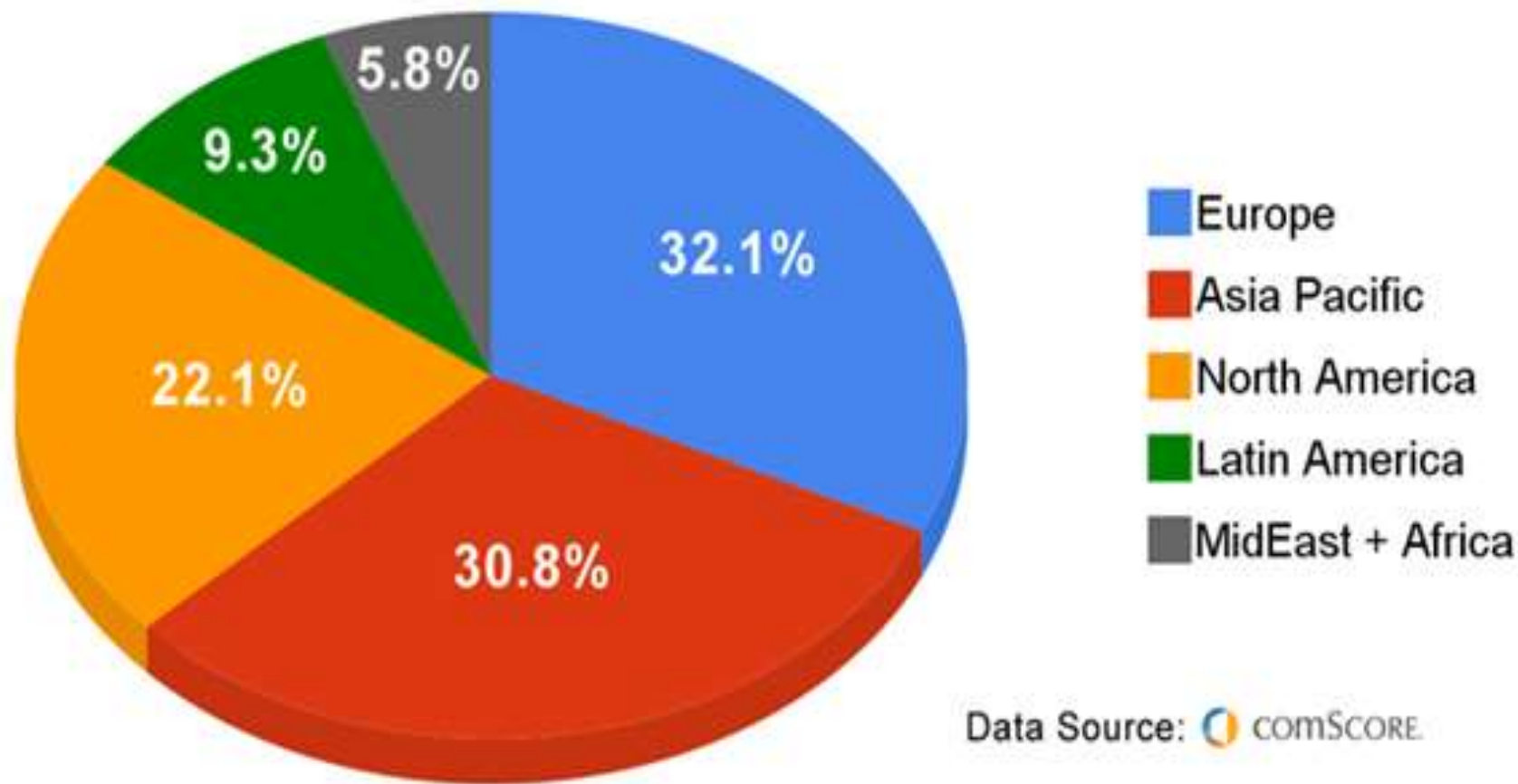
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- Spider “crawls” the web to find new documents (web pages, other documents) typically by following hyperlinks from websites already in their database
- Search engines indexes the content (text, code) in these documents by adding it to their databases and then periodically updates this content
- Search engines search their own databases when a user enters in a search to find related documents (not searching web pages in real-time)
- Search engines rank the resulting documents using an algorithm (mathematical formula) by assigning various weights and ranking factors



# 100+ BILLION SEARCHES / MONTH

## Global Share of Searches





# IMPORTANT?

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- 80% of consumers find your website by first writing a query into a box on a search engine (Google, Yahoo, Bing)
- 90% choose a site listed on the first page
- 85% of all traffic on the internet is referred to by search engines
- The top three organic positions receive 59% percent of user clicks.
- Cost-effective advertising
- Clear and measurable ROI
- Operates under this assumption:  
*More (relevant) traffic + Good Conversions Rate = More Sales/Leads*





# RANKING FACTORS

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- On-Page Factors (Code & Content)
  - #Title tags <title>
  - #Header tags <h1>
  - #ALT image tags
  - #Content, Content, Content (Body text) <body>
  - #Hyperlink text
  - #Keyword frequency & density
- Off-Page Factors
  - #Anchor text
  - #Link Popularity ("votes" for your site) – adds credibility

# WHAT SEARCH ENGINE SEES

- View > Source (HTML code)

```
www.ehagroup[1] - Notepad
File Edit Format View Help
<html>
<head>
<title>Public Health and Environmental Health Consultants, Expert Food Safety Consulting
<meta name="description" content="EHA Consulting Group provides public and environmental
<meta name="keywords" content="EHA, epidemiology, epidemiology consultant, food safety,
<link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body bgcolor="#ffffff" onload=""><html>
<head>
<script language="JavaScript1.2" src="mm_menu.js"></script>
<script language="JavaScript" src="mm_menu2.js"></script>
</head>
<body bgcolor="#ffffff" onload="">
<script language="JavaScript1.2">mmLoadMenus();</script>
<div align="center">
<table border="0" cellpadding="0" cellspacing="0" width="758" style="border-collapse: collapse">
<tr>
<td style="border-left: 1px solid #000080; border-right: 1px solid #000080; border-top: 1px solid #000080; border-bottom: 1px solid #000080;">
</td>
</tr>
<tr>
<td>
<table border="0" cellpadding="0" cellspacing="0" width="758">
<tr>
<td style="border-left: 1px solid #000080;">







</table>
</td>
</tr>
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</td>
</tr>
</table>
</div>
</body>
</html>
```

[\[eha-header.jpg\]](#)  
[\[orange-line.gif\]](#)

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## Environmental Health Consultants

EHA Consulting Group offers comprehensive expert services in environmental and public health, food, drug and related matters- from disease outbreak prevention and regulation to remediation, legal support and expert witness testimony. We provide on-call services for our clients, acting as a first line of risk/crisis management. There is no fee for our initial consultation.

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IAQ - Indoor Air Quality Services

Epidemiological Consulting Services





## Important SEO HTML tags

Title Tag	<code>&lt;head&gt;</code> <code>&lt;title&gt;Keyword&lt;/title&gt;</code> <code>&lt;/head&gt;</code>
H1,H2,H3	<code>&lt;h1&gt;Most Important&lt;/h1&gt;</code> <code>&lt;h2&gt;Second Most Important&lt;/h2&gt;</code> <code>&lt;h3&gt;Third Most Important&lt;/h3&gt;</code>
Bold, Strong (Same Worth)	<code>&lt;b&gt;Keyword&lt;/b&gt;</code> <code>&lt;strong&gt;Keyword&lt;/strong&gt;</code>
Image (XHTML)	<code>&lt;img src="keyword.jpg" alt="keyword" /&gt;</code>
Hyperlink	<code>&lt;a href="http://www.mysite.com/webpage.html" title="keyword"&gt;Keyword in Anchor Text&lt;/a&gt;</code>
Hyperlink (No Followed)	<code>&lt;a href="http://www.mysite.com/webpage.html" title="keyword" rel="nofollow"&gt;Keyword in Anchor Text&lt;/a&gt;</code>

## Search Engine Indexing Limits

\*Does not apply to websites with significant authority

Page File Size	No more than 150 kilobytes (Before Images, CSS and other Attachments)	
Amount of links	No more than 100 unique links per page	
Title Tag	No more than 70 characters	
Meta Description	No more than 155 characters	
Parameters in URL	No more than 2	Bad Example: <a href="http://www.mysite.com/brands.php?object=1&amp;type=2&amp;kind=3&amp;node=5&amp;arg=6">http://www.mysite.com/brands.php?object=1&amp;type=2&amp;kind=3&amp;node=5&amp;arg=6</a> Good Example: <a href="http://www.mysite.com/brands.php?nike">http://www.mysite.com/brands.php?nike</a>
Depth of URL	No more than 4	Bad Example: <a href="http://www.mysite.com/people/places/things/noun/danny/car">http://www.mysite.com/people/places/things/noun/danny/car</a> *Best Practice Good Example: <a href="http://www.mysite.com/people/danny/">http://www.mysite.com/people/danny/</a>

## Recommended Title Tag Syntax

Keyword < Category | Website Title

## Common Canonical Homepage Issue

Bad	<a href="http://www.mysite.com">http://www.mysite.com</a> <a href="http://mysite.com">http://mysite.com</a> <a href="http://www.mysite.com/index.html">http://www.mysite.com/index.html</a> <a href="http://mysite.com/index.html">http://mysite.com/index.html</a>
Good	<a href="http://www.mysite.com/">http://www.mysite.com/</a>

To condense the four default homepages into one homepage, use 301 redirects (See table on right) to correct for erroneous incoming links and make all internal links point to your domain using the syntax 'http://www.mysite.com/'. Always include trailing "/" on folders.

## 301 Redirect for Apache

Write to file called '.htaccess'. The file is named only as an extension.  
Hidden files must be viewable in operating system. mod\_rewrite must be enabled

Command	Description
Redirect 301 /oldpage.html <a href="http://www.newdomain.com/newpage.html">http://www.newdomain.com/newpage.html</a>	Redirect single file or directory to a new file or directory on a different domain
RewriteEngine on RewriteCond %{HTTP_HOST} ^mysite\.com [NC] RewriteRule (.*?) <a href="http://www.mysite.com/\$1">http://www.mysite.com/\$1</a> [L,R=301]	Redirect <a href="http://mysite.com">http://mysite.com</a> to <a href="http://www.mysite.com">http://www.mysite.com</a> . Affects entire domain.
Entire site: Redirect 301 / <a href="http://www.newdomain.com/">http://www.newdomain.com/</a> Redirect permanent /old <a href="http://www.newdomain.com/new">http://www.newdomain.com/new</a>	Redirect entire domain to a new domain as either a 301 (recommended) or 302



# TITLE TAG

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- The title element of a page is meant to be an accurate, concise description of a page's content.
- Keyword phrase use in the title tag is the most important place to achieve high rankings
- Place important keywords close to the front
- Don't overdo SEO keywords (cloaking)
- Give every page a unique descriptive title



# DESCRIPTION META TAG

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Accurately summarize the page's content

Write a description that would both inform and interest users if they saw your description meta tag as a snippet in a search result. First words count more.

Avoid using generic descriptions like "Page about WWII"

Avoid Filling the description with only keywords

Avoid long descriptions – Two or three sentences is Good.

Use unique descriptions for each page.

Avoid using a single description meta tag across all of your site's pages or a large group of pages.





# KEYWORDS AND POPULARITY

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- The level of key word phrase query popularity is how they are ranked.
- How you build your website will effect how popular your site it.
  - We're talking about the 'key word' Meta Statement
  - Key word phrase is better than a simple 'key word'
  - Search engines measure how keywords are used on pages to help determine the relevance of a query.
  - Keyword Abuse – Stuffing & Cloaking



# THE USE OF THE KEYWORD PHRASE:

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- In the meta title tag at least once. Try to keep the keyword phrase as close to the beginning of the title tag as possible.
- In a <h1> html tag.
- Once prominently near the top of the page and body.
- At least two or three times, including variations, in the body of the page.
- At least once in the alt attribute of an image on the page.
- Once in the URL If possible.
- At least once in the meta description tag.
- Key word Meta Statement not important.



# CONTENT – BODY OF WEBSITE

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- Easy to use, navigate and understand.
- Avoid duplicate text from your site or others
- Design for user not SEO
- Use 'breadcrumb' lists on pages
- Provide direct, high quality, legitimate, credible content.
- Use the alt tag on images
- Avoid sloppy text with spelling and grammatical mistakes
- Avoid varying topics with out subheadings ( <h?> tags )
- Actionable information relevant to the query – blogs surveys
- HTML/CSS3 compliant and responsive
- YouTube embedded
- Have a useful 404 page.



# ANCHOR TEXT

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<a href=<http://www.b24.net/Mission-18March1944.htm> title=Mission Details of 18 march>Mission Details of 18 March 1944</a>

The Anchor Text should tell users and Google something about the page you're linking to

- Choose descriptive text

The anchor text you use for a link should provide at least a basic idea of what the page linked to is about.

Avoid writing generic anchor text like "page", "article", or "click here"

- Write concise text

Aim for short but descriptive text-usually a few words or a short phrase.

Avoid using excessively keyword-filled or lengthy anchor text just for search engines



# INTERNAL LINKS & LINKS TO YOUR SITE.

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- Internal Navigational Links
  - Try to have navigational links higher up in the body HTML coding
  - Every page should be reachable from at least one static text link.
  - External links have more influential that internal links
  - Links to pages that have spam may devalue your website
  - Make anchor text meaningful and accurate description of link
  - Sitemap.htm      Sitemap.xml      Robot.txt





# INTERNAL LINKS & LINKS TO YOUR SITE.

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- External links pointed to your website
  - Links from unique domains matter – more is better.
  - Links from sites close to your content are helpful
  - Links from more important, popular, trusted sites pass more value
  - Links to/from YouTube, Facebook and other social media have value.



# POPULARITY

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- Sites are ranked by Google by a page popularity index from 1 -10 - <http://pr.eyedomain.com>
  - CNN.com 9
  - wikipedia.org 9
  - Foxnews.com 8
  - Ebay.com 8
  - B24.net 5
  - 8thAFHS.org 4
  - 492<sup>nd</sup> bomb group 3
  - Heritage League 3
- The number of sites linked to you and their popularity index have significance.
- The Number of clicks on google for your site based on keywords.



# PPC VS. "ORGANIC" SEO

Pay-Per-Click	"Organic" SEO
<ul style="list-style-type: none"><li>• results in 1-2 days</li><li>• easier for a novice or one little knowledge of SEO</li><li>• ability to turn on and off at any moment</li><li>• generally more costly per visitor and per conversion</li><li>• fewer impressions and exposure</li><li>• easier to compete in highly competitive market space (but it will cost you)</li><li>• Ability to generate exposure on related sites (AdSense)</li><li>• ability to target "local" markets</li><li>• better for short-term and high-margin campaigns</li></ul>	<ul style="list-style-type: none"><li>• results take 2 weeks to 4 months</li><li>• requires ongoing learning and experience to achieve results</li><li>• very difficult to control flow of traffic</li><li>• generally more cost-effective, does not penalize for more traffic</li><li>• SERPs are more popular than sponsored ads</li><li>• very difficult to compete in highly competitive market space</li><li>• ability to generate exposure on related websites and directories</li><li>• more difficult to target local markets</li><li>• better for long-term and lower margin campaigns</li></ul>

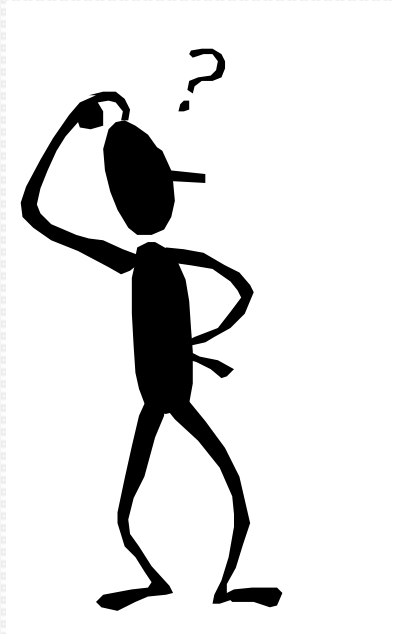
We will learn this more on "E-Business" lesson.



# REFERENCES

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- Beginners Guide to SEO: <https://moz.com/beginners-guide-to-seo>
- Google Guide: <http://www.google.com/webmasters/docs/search-engine-optimization-starter-guide.pdf>
- Webmaster tools: <https://www.google.com/webmasters/tools> Need gmail account
- Test for Mobile Friendly: <https://search.google.com/test/mobile-friendly/>
- Validate website: <https://validator.w3.org/>
- Sitemap Generator <https://www.xml-sitemaps.com/>
- SEO tools <https://www.xml-sitemaps.com/seo-tools.html>
- Google Tips: [https://support.google.com/webmasters/answer/40349?hl=en&ref\\_to\\_pic=3309300](https://support.google.com/webmasters/answer/40349?hl=en&ref_to_pic=3309300)
- Page Ranking: <http://pr.eyedomain.com>



Questions?