Search Engine Optimization: Understanding Key Elements of High Page Ranking

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Marko Urh

University of Maribor, Faculty of Organizational Sciences, marko.urh@fov.uni-mb.si

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The paper deals with the importance of web page optimization. Internet and its characteristics are shown in the beginning of this paper, as the main source of obtaining information. Web pages should have all the necessary information that people are seeking and should also be ranged as high as possible in the search engines. The fact is that almost every search begins through a search engine. The basic tool that is used here are words that describe your search area and are called keywords. Examples are showing us the differences between optimized and not-optimized pages. Article deals with the basic examples of a page optimization (on-page optimization) and also web page optimization outside the page (off-page optimization). Further on we can know about the recommended techniques and possibility how to use them in online optimization to increase your competitiveness in search marketing which leads to more web page visitors. It also shows the advantages of optimized web pages and its trends that are shown in the area of search marketing.

1. Introduction

Most of the companies are aware of the potential that internet. To have a web page is now days no longer a technological miracle and most of the companies have their own web page. It is important that web page is well visited. People who are browsing and looking through a web page should be able to found the necessary information as fast and as easy as possible. Due to those factors it is really important that the company's web page is on the top of the search list. Products and services that are seen on the web page are easier to reach and seen to the potential buyers if the web page is adjusted to the search engines.

The usage of internet has extremely changed the company's processes. Those companies who did not seen the global impact of the internet could or have already did effect, critical changes. Web page that is made efficiently could bring a lot of advantages. Some of them are listed here [8]:

- allows a quick, efficient and rational world market entry,
- communication with consumers is efficient and directly oriented,
- the costs of promotion are much lower and by that also ROI,
- web page is seen all over the world,
- internet allows a specific measurement of success,
- customers information is easy to get,
- your products and services are visible 24 hours a day, 7 days a week and 365 days in a year,
- other.

Search engines are the aggregators and classifiers of all the information available on the web [7]. However,

the competition is made even more ferocious by the searching behavior of the user. Search engines may return many millions of documents for each user query, but the user only looks at a selected few [2]. IT fast progress is bringing and developing new search engines all the time. Engines that once were known and popular with users could quickly become old and not efficient. Today's best engines are: Ask.com, Baidu, Bing, Cuil, Duck Duck Go, Google, Kosmix, Sogou, Yodao, Yahoo, Yandex, Yebol and others (written in alphabetic order). Figure 1 shows us the most popular engines in USA and EU.

When internet users are unable or unwilling to guess your URL (Uniform Resource Locator), they will use a search engine to find you. Now, among all the web page visits that are conducted in the United States that were immediately preceded by a search engine search, Google is responsible for the majority [10].

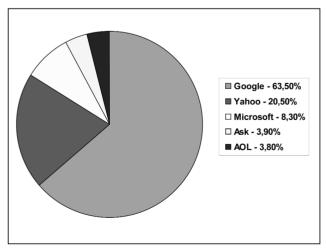


Figure 1: Search engine market share [2]

73 percent of search engine users never look beyond the first page of returned results. Accordingly, the competition for high ranking for popular user queries is now extremely intense [4]. Company could have a high search engine ranking either by web page optimization or by ad words that are payable. Both alternatives are the instruments of so called search marketing. Each of them is bringing different effects and advantages.

As fast as the internet development is, the higher is the number of its users. Now day's lifestyle of the society and individuals is hard to imagine without a usage of modern technology that is making our lives easier. Internet has changed the way of doing business as well, and brought a lot of new demands and challenges. Table 1 shows us a dynamic growth of internet users in the past years.

World Regions	Population (2009 Est.)	Internet Users (Dec. 31.2000)	Internet Users (Latest Data)	Penetration (% Population)	Growth 2000-2009
Africa	991.002.342	4.514.400	67.371.700	6,8 %	1.392,4 %
Asia	3.808.070.503	114.304.000	738.257.230	19,4 %	545,9 %
Europe	803.850.858	105.096.093	418.029.796	52,0 %	297,8 %
Middle East	202.687.005	3.284.800	57.425.046	28,3 %	1.648,2 %
North America	340.831.831	108.096.800	252.908.000	74,2 %	134,0 %
Latin America/Caribbean	586.662.468	18.068.919	179.031.479	30,5 %	890,8 %
Oceania/Australia	34.700.201	7.620.480	20.970.490	60,4 %	175,2 %
World Total	6.767.805.208	360.985.492	1.733.993.741	25,6 %	380,3 %

Table 1. World Internet Usage and Population Statistics [3]

We can expect a continuous growth of internet users. One of the important reasons is easier way of doing everyday's stuff, Time and money savings have the greatest impact on internet usage besides social factors.

Companies will be forced to see their web strategies once more and follow its competition. What will happen on the internet could be crucial to the companies. Further on we see the basics if web page optimization.

2. Search engine optimization

To get the most from your search engine optimization efforts, you should design and optimize your web page for your audience. Your target audience is the group of people that you are trying to reach through your online marketing efforts. Target audiences are often defined by demographic such as age groups, nationalities, or specific interests. Understanding who your target audience is and what they are searching for can greatly increase the effectiveness of a search engine optimization campaign [5].

Off-line optimization is usually carried out by a process of increasing the healthy links that are directed to the page, which we want to increase the number of visits. In addition to these techniques, there are others who add to the rise in popularity of each web page. Recently, the

growing importance of gaining social networks, which play the leading role of corporate blogs, Facebook, YouTube, Flickr and Twitter the others.

Choosing keywords is an important process that requires detailed analysis and understanding of the industry. Price and competition for certain keywords, is the largest in the area where they are most searches for individual words. The smaller the search, the less competition and prices, as shown in Figure 2 when choosing keywords is necessary to choose the correct keywords and taking into account the resources we have available and the frequency of the searches.

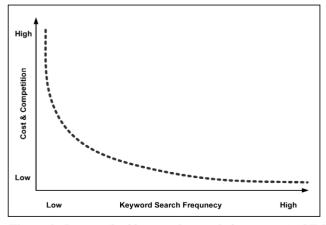


Figure 2: Long tail of keywords search frequency in SEO.

2.1 'On-page' Optimization

While making a properly designed web page is important and necessary to consider several factors that have and influence on the technical characteristics of web pages. It is important for proper understanding of the specific features of individual search engines, which are mutually different. There are some technical features and recommendations that it is important for the development page.

Page File Size

The first characteristic that can be mentioned is the size of individual web page. Most attention is dedicated to the basic page in this segment (Landing Page), which is the most important page in the entire collection of an online business presentation. Recommended basic page should not overtake more than 150 KB of space size of space. Going beyond that size can makes it less specific for search engines so it could not be included in their lists. This can result in to lower web page visit's frequency.

Amount of Links

Another important feature of the page is the number of bundles of links to other pages that are located on the web page itself. Technical characteristics have to be considered carefully so that's why it is necessary that all the specific features of other search engines are well studied before. Experience shows us that the optimal number of connections to the other web pages is around 100.

Title Tag

We can see similar restrictions in the number of characters that are used in the title, keywords and description. The most sensitive area at well optimized web page is a title. For a well designed and formed title it is necessary to know the conditions that we are working in. There are differences in terms of how to create a single Web page address and also taking into account the basic and advanced skills that can make a substantial difference, which are reflecting in the search results. Many companies are exceeding recommended technical demands while trying to describe its business. Main reasons for errors that appear on the web page happen due to lack of knowledge of a web page optimization. Properly designed and constructed web page requires an in-depth analysis and long-standing expertise in information technology, optimization and the industry in which the company performs. Most frequent mistakes that can be seen in a specific page are the technical characteristics and parameters of links that are located in the links themselves.

Interactive Web Page Features

Rapid development of information technology brings us better and better technical features of hardware. More powerful processors, larger drives, advanced graphics cards that can operate the software with features and graphics that were not previously known. It has also increased the fluidity and speed of networks that are now able to transfer large amounts of data.

All these enhancements that came with a fast IT development are making web page visual appearance better and more interactive. Technologies such as Flash and JavaScript are more and more present. Both have many useful properties but like any other things they have their week sides. The weakness is reflected in the inability to integrate search engines, searching, reading, and the ranking of the elements that are built using these technologies. Therefore, the use of Flash and JavaScript-this requires special attention.

URL (Uniform Resource Locators)

Optimizing web pages includes additional elements, which have their impact on web page ranking in search engines. The most famous search engines put great emphasis on properly selected address of the web page (URL). Web page's addresses also have other properties that are important for promotion and marketing which are necessary to consider.

Images and Alt Text

Most of the companies make common and critical mistakes while naming the pictures that are presented on the web page. In addition to pictures the most common mistake is also naming the remarks of the pictures (alt text). Due to the prevalence of internet it is necessary to follow the standards how to display pictures on it, which have established during the years.

Most common formats that can be traced are JPEG, GIF, PNG and BMP.

Anchor Text of Internal Links and Headings

A very important element is using keywords in internal links, followed by the use of styles (Heading) and contents of the web page itself, which plays a key role in the perception of usefulness in the eyes of users. In addition to these elements there are other factors that are equally important with professional optimization of a web page.

2.2 'Off-page' Optimization

Next to the on-page optimization it is really important that off-page optimization is done as well. In the past few years we can see a huge growth of so called social communities. User's exchange textual information, pictures, video content and other information

Social Networks

It is becoming more and more important that you are present on these social networks because they are also a

part of search engines ranking list. With the help of social networks we can further increase the awareness and promotion of our products, events... Now days, Facebook, YouTube, Flicker and Twitter, and especially corporate blogs, have a big and leading role in a social networks world.

Fast development of information technology and its new products and services are the main features of to-day's IT world. Until recently, most of the social networks were unknown and undeveloped. But now they are on the level where they are changing business and individual's time. Therefore it is extremely important to follow these trends because they are the main things that you should be focus on in the future.

Link Popularity of Specific Page

Raising popularity on the web page can also be achieved by building other links which are pointing to the web page. If you have a »healthy« link you have better chance to be ranked higher in the search engines list. Web pages that are globally known have a much more difficult job to do as unknown pages. Links show that well-known and established web pages, can contribute significantly to the popularity of the page that affects in the search engine ranking. Page rank which was developed by Google is a well known standard of page popularity. Ranking rate of a page is moving from 1 to 10. The higher the level, the better and more popular is the page.

2.3. Other aspect of optimization

The purpose of most web pages is to be visible to visitors online. We can increase the visits on the page with several methods and techniques. Optimization has two methods; optimization that brings rankings in the search engines also so called organic hits. Another way is to pay for so called sponsored links.

So far we have mentioned some of the most important elements that are important for good positioning on search engines. One of the most important elements is certainly the choice of appropriate keywords. It is important to have good knowledge of the characteristics of industries in which firm performance and as well market competition. When determining keywords it is necessary to see which keywords are used by our competitors.

While making technically flawless web page it is important to have a good knowledge about positioning web page in the search engines. File description is the next element to be taken into account when drawing up web pages. Properly named files on the web page could have a significant meaning at search ranking lists.

Despite of all the technical features it is also important what kind of content is present on our web page.

Nowadays users are becoming more and more demanding about the content on the web page which has to be interesting and transparent. There are some standard ways how to write internet content and they are different to the print media text. Users usually »fly through« the content; they are not actually reading it. That's why it is important that we adjust the text in that matter.

Text on the web page is usually connected. Links between the pages are made with a help of connections that use »anchor text« for connecting words. Pictures on the web page have a great impact on psychology. It is important that the pictures are small so they are now overtaking the disc space. The next important thing is the web page structure which can be compared to a web page map.

For easier identification and searching it is important to choose appropriate name of the web page. How we name the web page is also important in terms of marketing. Hosting is just as important as selecting the name of the web page. Search engines put a lot of attention to the environment in which the web pages is located. Web pages come from environments that are trustworthy and are ranked better than others. While making the page it is important to consider search engines diversity. Today's most popular search engines are Internet Explorer, Firefox, Chrome, Opera, Safari and others.

Visits and usability of the web page is becoming more and more complex task. To achieve an appropriate level of usefulness in the eyes of visitors it is important to use different knowledge. Two main areas are definitely marketing and usability. In the future, we can expect more web pages and users, which will increase the requirements of providers and companies that are online.

3. Conclusion

Internet is now a part of our everyday's life. There are more and more users that use the internet for much different kind of everyday tasks. Time and money savings are two of the main advantages of this. We can also see that companies and individuals have changed their behavior. Most of online searches is done through search engines.

Different search engines have their own individual crawlers, and as you might expect, they don't all behave exactly the same way. Some spiders fetch entire pages; other are easily bored and look at only some of the content [6].

Research and experience in this field shows us that most of the users are attracted to the web pages that are located at the top of the first page. On the first pages are the most visited web pages, which occupy the first seven places. The top ten listed pages reach to 80 percent of all clicks, which represents the majority of searches. Web pages that are listed between eleventh and twentieth place only remains left with about 15 percent of all clicks. The rest of the clicks fail to other web pages that are placed lower than twenties place.

Many companies are still not aware of the importance of optimizing web pages. Companies that are aware of the importance and power of the Internet, pay more and more energy and money just for optimizing web pages. Optimizing web pages can bring a lot of significant positive changes that can be reflected in several areas of business.

- A main feature of a well and good designs web page which also includes off-page optimization has the following advantages [9]:
- better brand promotion,
- online sales increase,
- increase of ROI,
- better competitive advantage,
- better ranking in the search engines list,
- long-term effects,
- increase of web page visits,
- other.

In the future we can expect that the number of internet users will increase. The vast majority of companies will be forced to maintain a market share and think of additional activities that are connected to the internet. Internet communities could present a big opportunity for companies. Most searches will certainly be carried out via a web search engine. Search engine optimization represents a critical point, which may represent the dividing line between success and failure of the company.

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