



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences

SEARCH ENGINE OPTIMIZATION AND ADVERTISING IN SOCIAL MEDIA

Case: Total Sec

LAHTI UNIVERSITY OF APPLIED
SCIENCES

Degree Programme in International
Business

Bachelor's thesis

Autumn 2012

Joonas Liimatainen

Lahti University of Applied Sciences
Degree Programme in International Business

LIIMATAINEN, JOONAS:

SEARCH ENGINE OPTIMIZATION
AND SOCIAL MEDIA ADVERTISING
Case: Total Sec

Bachelor's Thesis of Degree Programme in International Business 39 Pages

Autumn 2012

ABSTRACT

Competition in modern search engine rankings is ruthless. Page one visibility in search engines has become a challenging task which requires knowledge of the anatomy of search engines. The purpose of this study is to provide a company with better understanding of search engines, social media marketing and to provide them the tools for improvements. The study is done to enhance the company's own ranking in the search engines. The study concentrates on Google search engine which is the largest search engine provider at the moment and the most used by the case company.

The study has its main weight in the theory of the search engines. The theory of the study is based on multiple up to date literature publications and electronic sources. The study is carried out by a business student with the attempt to make the theory and practice understandable to business oriented people with less background in information technology. It is important to understand the modern search engine algorithms in order to compete in constantly changing market environment.

The study takes a look at the basic fundamentals and tools in order to gain better rankings in the Google search engine. Total Sec Oy will work as a case company for the thesis. The study aims to improve Total Sec website ranking compared to the competitor without sacrificing the user friendliness of the site.

As the main result, the study revealed deficiencies in the Web site's keyword meta tag references which have an impact on findability of a page. In addition it exposed incoherency in the linking structure of the site.

Keywords: Search Engine Optimization, Google, Internet Marketing, Social media,

Lahden ammattikorkeakoulu
Degree Programme in International Business

LIIMATAINEN, JOONAS:

SEARCH ENGINE OPTIMIZATION
AND SOCIAL MEDIA MARKETING
Case: Total Sec

Degree Programme in International Business, 39 sivua

Syksy 2012

TIIVISTELMÄ

Kilpailu modernien hakukoneiden hakemistosijoituksesta on armotonta. Näkyvyyden saaminen ensimmäiselle sivulle on tullut haastava tehtävä, joka vaatii ymmärrystä hakukoneiden toimintaperiaatteista. Tämän tutkimuksen tarkoitus on tarjota yritykselle parempi ymmärrys hakukoneiden toiminnasta, sosiaalisen median markkinoinnista sekä esitellä parannuksiin tarvittavia välineitä. Tutkimus pyrkii tehostamaan yrityksen omaa sijoitusta hakukoneessa. Tutkimus keskittyy Googlen hakukoneeseen, joka on tällä hetkellä markkinoiden johtava hakukone sekä toimeksiantoyrityksen markkinoinnin käytössä.

Tutkimuksen pääpaino on hakukoneiden toiminnan teorian tutkimisessa. Teoria osuus perustuu ajankohtaisiin kirjallisiin julkaisuihin sekä elektronisiin lähteisiin. Tutkimuksen on tehnyt liiketalouden opiskelija, joka on pyrkinyt esittämään teorian ja käytännön helposti ymmärrettävässä muodossa. Tutkimus on suunnattu talousalan ihmisille, joilla ei ole laajaa tietämystä informaatioteknologiasta. Kilpaillakseen jatkuvasti muuttuvassa markkinointiympäristössä on tärkeää ymmärtää modernien hakukoneiden algorytmejä.

Tutkimus perehtyy olennaiseen tietoon ja välineisin joilla Googlen hakukone sijoitusta voi parantaa. Tutkimuksen toimeksiantajana toimii Total Sec Oy. Tutkimuksen tavoitteena on parantaa Total Secin sivustojen näkyvyyttä ja sijoitusta verrattuna kilpailijoihin, kuitenkin tinkimättä sivustojen käyttäjäystävällisyydestä.

Tärkeimpänä tuloksena tutkimus paljasti puutteita sivustojen hakusanojen meta koodi merkinnöissä jotka vaikuttavat sivun löydettävyyteen. Tämän lisäksi tutkimus paljasti epä johdonmukaisuuksia sivujen linkkirakenteessa.

Asiasanat: Hakukoneoptimointi, Google, Internet markkinointi, sosiaalinen media

CONTENTS

1	INTRODUCTION	1
1.1	Background	1
1.2	Aim of the study & research questions	2
1.3	Limitations and theoretical framework	3
1.4	Terms	3
1.5	Structure of the thesis	5
2	INTERNET MARKETING	6
2.1	World Wide Web	6
2.2	Pay per click advertising	8
2.2.1	Keywords	10
2.2.2	Google keyword optimizing	11
2.3	Social media	13
2.3.1	Social media marketing	15
3	SEARCH ENGINES	17
3.1	Anatomy of search engine	17
3.2	SEO factors	18
3.3	Search engine optimization	20
4	COMPANY PRESENTATION	27
5	RECOMMENDATIONS & CONCLUSION	30
5.1	SEO recommendations	30
5.1.1	Keywords	30
5.1.2	Translation of the site	31
5.1.3	Themeing & linking structure	32
5.2	Social media	33
5.3	Conclusion	34
5.3.1	Research questions	34
6	SUMMARY	36
7	REFERENCES	37

ABBREVIATIONS

CPC	Cost per Click
HTML	HyperText Mark-up Language
HTTP	HyperText Transfer Protocol
KWA	Keyword Advertising
PDF	Portable Document Format
PPC	Pay-Per-Click
SEM	Search Engine Marketing
SEO	Search Engine Optimization
URL	Unified Resource Locator
XHTML	Extensible HyperText Mark-up Language
KEI	Keyword Effectiveness Index
EUWV	Estimated Unique Monthly Visitors

LIST OF FIGURES:

Figure 1: Research Questions	3
Figure 2: Google listings (E-rehab 2012)	9
Figure 3: Meta Tag Optimization (Metapilot 2012)	13
Figure 4: Internet Usage by Age (PEW Internet 2009)	16
Figure 5: Mike's Pet Shop Pre SEO (Lutz 2009)	22
Figure 6: Mike's Pet Shop Post SEO (Lutz 2009)	23
Figure 7: Link Hierarchy	27

LIST OF TABLES

Table 1: Internet Usage (Miniwatts Marketing Group 2012)	7
Table 2: Keyword Density Analysis (Lutz 2009)	25

1 INTRODUCTION

This study aims at finding ways to improve PageRank of a company by search engine optimization. In addition, it takes a look at the world of online marketing and social media. The subject for this study was given to the author by a company in a security field of business. As an employer of the company the author took notice that, compared to their competitors, they were not achieving the best possible rank in Google searches. This raised questions which the study attempts to answer.

1.1 Background

Internet has become a more significant channel for marketing in today's world. It provides excellent possibilities for growing companies to gain publicity and new customers. However the ruthless world of Internet does not only require the companies to have up-to-date websites and exposure in social media. It all comes down to findability and that is when SEO becomes important.

The knowledge base for the study has mostly been collected from recent literature publications of the subject. In addition there has been use of online releases and news articles for deeper knowledge of certain core concepts. The world of Internet as well as SEO changes rapidly and it creates a chase setting between search engine companies and the SEO professionals. When reading this paper it should be remembered that the algorithms the search engines uses, are a secret which only the providing companies know. However there are clues to determine how the algorithms work and the study aims to clarify them.

1.2 Aim of the study & research questions

The aim of the study is to provide the reader the knowledge base and tools to make an effect on their search engine results in an easily and understandable form. The study concentrates on search engine optimization and Google's algorithms. Google search engine is chosen to the study as a main search engine because its overwhelming status as number one search engine in the world at the moment. eBizMBA ranks Google number one with 900,000,000 Estimated Unique Monthly Visitor by comparison the second largest Bing only has 165,000,000 EUMV. (eBizMBA 2012.)

Second reason why Google is chosen to the main search engine to be concentrated on is that the case company is using Google as their number one findability channel. Notice that all the biggest search engines have the same features and services than Google and all the SEO methods introduced in the study can be modified to work in any other search engine.

This raises the research questions of the study provided in Figure 1. Is it possible to influence Total Sec's PageRank in Google's search engine? Is it possible to optimize the current site of the company without professional help? In addition to these questions, the study aims to achieve an answer to a question; can social media be used as an effective marketing channel?

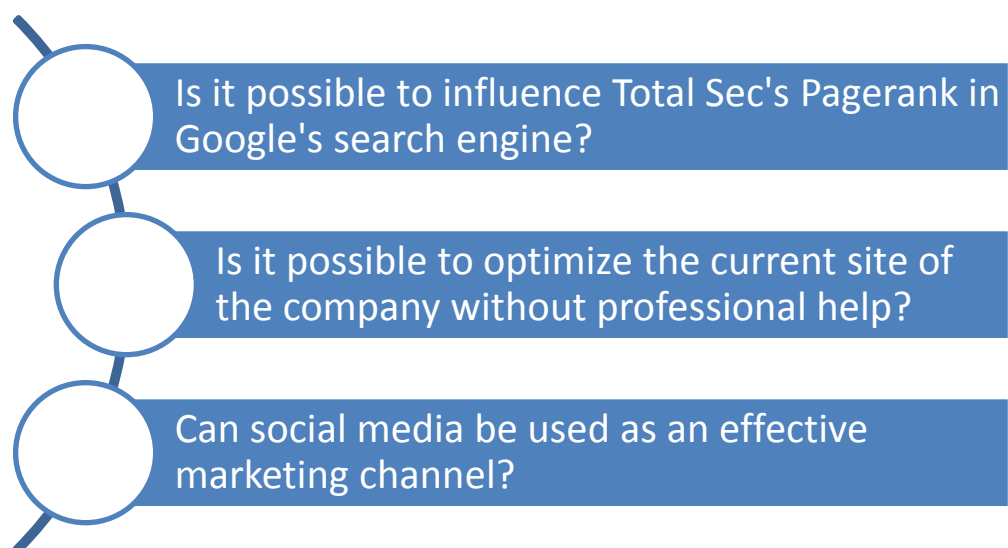


FIGURE 1. Research questions

1.3 Limitations and theoretical framework

As a business student the author is trying to make this study more focused on people with less understanding of the IT world by giving the tools and knowledge of SEO with narrowing out the unnecessary technical aspect of the subject.

Although the audience for this bachelor thesis is large, it is mostly aimed to business oriented people, who want to make small adjustments for their website's findability and learn the basics of search engine optimization without monetary investments. The study uses Google search engine as basis due to its current position as a market leader and Google's applicability for the case company.

The theoretical framework is based on literature sources of Search Engine Optimization, which is closely linked to Internet. This requires knowledge of the basic terms of Internet usage which are explained in section 1.5 Terms. The study is divided in theoretical and empirical part. The theoretical part involves in Internet marketing and Search engine marketing theories. The study is conducted as theory based study. This is done because the subject itself is solely based on assumptions and clues of written materials of the algorithms used by the search engine providers.

1.4 Terms

The study focuses on search engine optimization which is closely linked to Internet. This makes understanding the most common terms of the World Wide Web important. This sub-chapter deals with different terms and their definitions.

A site, also known as a Website, is a collection of related pages containing documents, images, videos or other digital resources. Page view is a request to load a single HTML file of an Internet site. Metadata is data about the containers of data. Anchor text is the text that appears on a Web page for a link. It is usually underlined, indicating a link, but not necessarily. (Wikipedia 2012 A.)

PageRank is a numeric value that represents how important a page is on the web. Google figures that when one page links to another page, it is effectively casting a vote for the other page. The more votes that are cast for a page, the more important the page must be. Also, the importance of the page that is casting the vote determines how important the vote itself is. Google calculates a page's importance from the votes cast for it. How important each vote is taken into account when a page's PageRank is calculated. PageRank is Google's way of deciding a page's importance. It matters because it is one of the factors that determine a page's ranking in the search results. It isn't the only factor that Google uses to rank pages, but it is an important one. (Webworkshop 2012.)

A page which is also called as a Web page, it is a document or information resource that is suitable for the World Wide Web and can be accessed through a Web browser and displayed on a monitor or mobile device. This information is usually in HTML or XHTML format, and may provide navigation to other Web pages via hypertext links. (Wikipedia 2012 B.)

Pay per click or cost per click, is an Internet marketing formula used to price online advertisements. In PPC programs the online advertisers will pay Internet Publishers the agreed upon PPC rate when an ad is clicked on, regardless if a sale is made or not with pay per click in search engine advertising, the advertiser would typically bid on a keyword so the PPC rate changes. On single website -- or network of content websites -- the site publisher would usually set a fixed pay per click rate. (Webodepia 2012.)

Cookie also known as HTTP cookie, web cookie, or browser cookie, is usually a small piece of data sent from a website and stored in a user's web browser while a user is browsing a website. When the user browses the same website in the future, the data stored in the cookie can be retrieved by the website to notify the website of the user's previous activity. (Wikipedia 2012 C.)

1.5 Structure of the thesis

The thesis is structured of five chapters beginning with the introduction chapter, which presents the aims and objectives of the thesis. The second and the third chapter include the theory of the necessary knowledge needed for gaining an understanding of search engines. The fourth chapter represents the case company and its vision. Fifth chapter consists of the recommendations and conclusions made of the study.

Chapter two concentrates on the theory of Internet marketing in context of SEO. This is done by selecting and explaining different models of marketing in the Internet which are still connect to search engine optimizing. The last part of the chapter focuses on social media and marketing in social media.

The third chapter focuses on the theory of search engines and their functionality. The theory of search engine optimizing is closely connected to the theory of Internet marketing. This chapter binds the two theories together and transforms it already into useful formation.

Chapter four focuses on the case company Total Sec and provides the reader information of the history and present situation of the company. The chapter explains the business field the company operates on.

The fifth chapter transforms the learned theory into recommendations to the case company. The previous chapters' already provide tools which should be used in order to gain the most useful results, however this chapter includes specific changes that should be done to affect the PageRank. The chapter ends with conclusion of the study.

2 INTERNET MARKETING

Internet marketing can be said to be the process of using the World Wide Web to market products and services. Simply, it can be described “Achieving marketing objectives through applying digital technologies” (Chaffey 2009, 9). This method of marketing includes Search engine marketing (SEM), e-mail marketing and social media marketing. SEM can be described to be a process of improving the visibility of a page by search engine optimization, pay per click advertising (PPC) and paid inclusions. In order to gain benefits from the SEO, the concept of findability must be understood first.

Findability, in the context of The World Wide Web, refers to the quality of being locatable or navigable. In other words, the ease in which the information can be found, both outside of the web page as well as users already in the website. This concept applies both pay per click and search engine optimizing. In order to be successful in SEO, the top-performing keywords for the company must be found. This is why we will first take a look of the pay per click advertising, because it provides us the best way to find out which keywords works. (Lutz 2009, 2)

2.1 World Wide Web

The World Wide Web (also referred as The Web) is one of the most significant creations of the 20th century. The concept must not be confused with the word Internet, as the two are not synonyms. The Web can be described to be a subset for Internet. The World Wide Web consists of pages which can be accessed by using a web browser. The word Internet accounts for the actual network of networks where the all the information resides. (Techterms 2012.)

The Internet has been growing rapidly during the last decade. According to Internet world stats, the amount of internet users has grown from the year 2000 to 2010 from 361 million Internet users up to almost two billion users. During that time the Web was in version 1.0 and Google had just started its operations four years earlier. (Internet World Stats 2012.)

The distribution of users in the Internet is not even. As Internet has grown during the years, it has also become more global. In 2000, top 10 countries accounted for 73% of all internet usage, but 2010 that number had decreased to 60%. If we look more at the numbers, there is only 2 countries in the world with more than 100 million Internet users where as there are 95 countries with more than 1 million users. (Internet World Stats 2012.)

When taking a look of the development of the usage of Internet in regional level in Table 1, we notice clear areal growth. In the year 2000, North America, Asia and Europe were all fairly close to each other with around 100 million Internet users. However, In 2010 Asia had grown to more than 800 million users, Europe to almost 500 million and North America doubled its score. Latin America grew from 18 million Internet users up to over 200 million Internet users. (PingDom 2012.)

TABLE 1. Internet usage (Miniwatts Marketing Group 2012)

Top 10 countries on the Internet in 2010			
#	Country	Internet users 2010	In 2000
1 (4)	China	420.0 million	22.5 million
2 (1)	United States	239.2 million	95.1 million
3 (2)	Japan	99.1 million	47.1 million
4 (13)	India	81.0 million	5.0 million
5 (14)	Brazil	75.9 million	5.0 million
6 (3)	Germany	65.1 million	24.0 million
7 (18)	Russia	59.7 million	3.1 million
8 (6)	United Kingdom	51.4 million	15.4 million
9 (9)	France	44.6 million	8.5 million
10 (61)	Nigeria	44.0 million	0.2 million

As the internet has grown, it has also become more important factor of business. The Web provides a channel for companies to advertise their products, services and increase their exposure. This requires a website that is easily findable and top ranked by search engines. Search engines and social media create an unparalleled tool for reaching out millions of customers.

2.2 Pay per click advertising

Pay per click or paid search marketing is similar to conventional advertising. A relevant text ad with a link to a particular site is displayed when a user enters a particular keyword or -phrase into the search engine. Search results are usually displayed above the natural listings, many times labeled as “sponsored links”. Many users tend to click on the natural listings but significant number still clicks the sponsored listings. Figure 2 shows different listings in a Google search engine. These campaigns are highly profitable for companies like Google but they also help companies to attract certain type of customers to their site. (Google 2012.)

The image is a screenshot of a Google search results page for the query "physical therapy encinitas ca". The search bar at the top shows the query, and a red arrow points to it with the label "Search Phrase". The results are categorized into "Local results for physical therapy near Encinitas, CA" and "Sponsored Links".

Local results for physical therapy near Encinitas, CA:

- A Rehab Services** scrippshealth.org
354 Santa Fe Dr, Encinitas, 92024 - (760) 942-6433
[Get directions](#) - [More information](#)
- B Encinitas Physical Therapy** www.encinitaspt.com
345 Santa Fe Dr, Encinitas, 92024 - (760) 753-0703
[Get directions](#) - [More information](#)
- C Simmons Physical Therapy Center** maps.google.com
285 N El Camino Real #202, Encinitas, 92024 - (760) 633-1345
[Get directions](#) - [More information](#)

A red box labeled "Local Listings" encompasses these three results.

Natural/Organic Listings:

- Healing Hands Physical Therapy**
1830 Blue Bonnet Pl. Encinitas, CA 92024 Tel/Fax: (760) 632 2495 Email: enin@healinghandspt.biz http://healinghandspt.biz
[healinghandspt.biz/ - 7k](#) - [Cached](#) - [Similar pages](#) - [Note this](#)
- Gaspar, Paul - Gaspar Physical Therapy - Encinitas, CA**
Come to Citysearch to get information, directions, and reviews on Gaspar, Paul - Gaspar Physical Therapy and other Physical Therapy & Rehabilitations, ...
[sandiego.citysearch.com/profile/413554/encinitas_ca/gaspar_paul_gaspar_physical_therapy.html - 42k](#) - [Cached](#) - [Similar pages](#) - [Note this](#)
- occupational therapy, physical therapy, carpal tunnel syndrome**
CORE Orthopaedic Physical Therapy services are available on-site for your ... Center 332 Santa Fe Drive Suite 110, Encinitas CA 92024 877-777-2673 760-943-6700.
[www.coreorthopaedic.com/twt~page~itemid.42/Physical-Therapy.html - 30k](#) - [Cached](#) - [Similar pages](#) - [Note this](#)
- W. ANDREW HARRAH, M.S., P.T. Physical Therapist Curriculum Vitae**
File Format: PDF/Adobe Acrobat - [View as HTML](#)
Director of Physical Therapy. CORE Orthopaedic Medical Center. Encinitas, CA. 2004 to present. Owner / President. Andrew Harrah Physical Therapy ...
[www.coreorthopaedic.com/forms/Harrah.pdf - Similar pages](#) - [Note this](#)
[[More results from www.coreorthopaedic.com](#)]
- Gaspar Physical Therapy, Inc.**
La Costa Clinic Location - Encinitas - Club One Clinic Location - Encinitas ... At Gaspar Doctors of Physical Therapy, we specialize in the evaluation and ...
[www.gasparpt.com/ - 14k](#) - [Cached](#) - [Similar pages](#) - [Note this](#)

A red box labeled "Natural/Organic Listings" encompasses these five results.

Sponsored Links:

- Physical Therapy**
Got Aches & Pains? Get Low Cost Treatment. Consistent & Effective.
[LocalBusinessReview.com](#)
San Diego, CA
- Vegas Physical Therapy**
Find, Rate & Review a List of Local Physical Therapy.
[Kudzu.com/Physical_Medicine](#)
- Physical Therapy**
Chiropractic Care & Physiotherapy. 8 Years Experience. San Diego, CA
[DelSolChiropractic.com](#)
San Diego, CA
- Physical Therapy**
Professional Chiropractic Services at Reasonable Prices. San Diego, CA
[KStevensChiro.com](#)
San Diego, CA
- Physical Therapists in CA**
Browse a Vast Directory of Leading California Physical Therapists
[www.PsychologyToday.com](#)
- Need a Chiropractor?**
We Treat Back Problems With A Variety of Services. Call Today!
[www.VistaChiro.com](#)
Encinitas, CA

A pink box labeled "Pay-per-click Ads" encompasses these six results.

FIGURE 2. Google listings (E-rehab 2012)

Google Adwords is a way to enhance your visibility in the Google search engine. The main idea of the program is that the customer is able to create the advertisements themselves by choosing the keywords or phrases related to the business. When people are using the Google search engine with the customers keywords, when a keyword hits are found the ad is displayed. The benefit is that the advertisement is now focused on an audience which already has an interest on the business. (Ibid.)

The benefits of the Google Adwords are that it targets your research. Although you already appear in the search list, the Google Adwords helps to target new audience. There is a possibility to edit your advertisement and budget it to achieve the wanted results. The advertisements can be targeted to a specific language or geographical location. The system uses cost-per-click option which has no minimum spending requirement or time commitment. (Ibid.)

As mentioned before the costs are tied to the click of your advertisement. One can choose how much money they are willing to invest into the Adwords. There is a possibility to set a daily budget or a maximum costs for each click. Google provides keyword traffic and cost estimations to help choosing the best alternative keywords. (Ibid.)

There are two downsides to this kind of marketing; the coverage and cost. Firstly, the Google Adwords only covers Google's own search engine. This means that if a customer is using, for example Bing or Yahoo, the Google Adwords has no impact on those engines. However, as mentioned before Google is without a question the biggest information provider at the moment and the most used one; eBizMBA ranks Google number one with 900,000,000 Estimated Unique Monthly Visitor (EUMV) by comparison the second largest Bing only has 165,000,000 EUMV. (eBizMBA 2012.)

Secondly, the use of the program might end up costing more to a small company than the benefits gained from it. It is not a forgone conclusion that visitors in the webpage results in sales. Moreover, if you really want to stand out from the competition, you will have to invest more money to the advertisement which increases the cost per click. (Google 2012.)

In addition to this there are ways to cause distress to companies using PPC marketing. Although the PPC networks detect multiple clicks from the same IP address and filter them out, there are techniques to mimic multiple clicks from different locations by using software tools or even physical people. It is estimated that 1 in 5 of the clicks may be fake. (Ibid.)

2.2.1 Keywords

Keywords are the basis for the pay per click advertising. Choosing the right keywords is the most important part of the successful search engine marketing campaign. Highly targeted and specific keywords provide the best results and are more effective than broad non-specific terms. Heather Lutz states in the Findability formula “It is too general a term for effective paid search result if the advertiser is hoping for sales” (Lutz 2009, 32). Many advertisers fail to empathize with the customers mind set which results in less effective keywords. Searchers show their desires and intent through their choice of keywords. Successful search marketing lies in understanding what customers want via use of keywords and delivering a keyword-relevant user experience.

Single keywords are not that useful in the eyes of advertisers. Most customers use keyword trail technique to gain the desired results. In a nutshell, this means adding keywords onto the search query until a desirable result is found. Searchers want to achieve the most valuable search results with the least amount of work. This basic principle is the one the advertiser must attempt to deliver. Search engines understand longer keyword phrases as a request for more specific information. The longer keyword phrases results in a lower search volume but at the same time it provides you with higher conversion rate. (Lutz 2009, 36)

2.2.2 Google keyword optimizing

There are techniques and tools to create a list of keyword phrases for a page and a site. First step is to brainstorm a rough list of keyword and phrases related to the business. These should be added to an excel spreadsheet.

One tool provided by Google Labs is Google Sets (<http://labs.google.com/sets>). The tool creates set of keyword sets based on a few examples. The program provides the user the opportunity to create large or smaller sets. In a nutshell the program provides you with related keywords to the keywords given to the program. After using Google Sets, add appropriate phrases to the list. (Whittaker 2008, 48)

Another useful tool is <http://KwMap.net>. The tool is designed to help find new keywords phrases by using a database of keyword inter-relations. In practice, you enter a keyword phrase to the search bar and program displays a keyword chart which contains two lists. One which contains your fundamental keyword phrase, the other contains synonymic keyword phrases. Potential keywords should be added to spreadsheet. (Whittaker 2008, 49)

One of the most fundamental tools is Google Adwords. The tool requires an account but it is still free of charges. Open an account to start advertising campaigns which can be put on hold and navigate to keyword tool. The tool has two different options for generating keyword phrases. The first one lets you enter multiple keyword phrases, the keyword from the rough list can be used here. The second lets you enter a URL for a Web site. On selecting 'use synonyms' and pressing 'get keyword ideas' button, the program creates a list of keywords and keyword phrases. The tool also provides the user with a bar chart which indicates the actual approximate number of searches. Once the new list is generated, copy them in the spreadsheet. In addition, Initial searches can be made to the top ten phrases from the spreadsheet. (Ibid., 49)

Competitive search to analyze the competitive Web sites should be done to optimize the keyword list and to see what keywords they are using in their meta tags and title tags. These tags can be found by entering to competitors Web site in a browser and clicking View-Page-Source. Meta tags are found top of the page as Figure 3 shows.

```
<html>
<head>
<meta http-equiv="Content-type" content="text/html; charset=utf-8" />
<title>METAPILOT - Meta Tag Optimization Service</title>
<META name="description" content="Our professional Meta tag optimization
service makes your web page a star in the search engines. Using highly
targeted keywords we optimize your Meta tags and copy for superior
visibility ranking and search traffic">
<META name="keywords" content="SEO Service, search engine optimization
service, seo copy writing, keyword analysis, organic optimization,
search positioning ">
<link rel="stylesheet" href="css/styles.css" type="text/css" media=
"screen, projection" charset="utf-8" />
<link rel="Shortcut Icon" href="favicon.ico">
<script src="js/global.js" type="text/javascript"></script>
<script type="text/javascript" src="js/dropdowntabs.js"></script>
<script type="text/javascript" src="js/tabs.js"></script>
<script type="text/javascript" src="js/showhide.js"></script>
<meta name='robots' content='all' />
</head>
```

FIGURE 3. Meta Tag Optimization (Metapilot 2012)

Wordtracker is a keyword service. The tool is available by subscription and it provides a glance to what people are searching. According to the Wordtracker Web site, they compile a database from meta engines which contains more than 330 million search terms, updated on weekly basis. The tool can be used to research additional keywords and import the lists to find out how much people are searching the specific phrases. Wordtracker offers the data not only in number of searches; it also provides the data on number of searches divided by the number of sites that appear in search results for the term. A free version of this can be found <http://freekeywords.wordtracker.com>, which provides the user with top 100 keyword phrases on the keyword you enter. (Wordtracker 2012.)

However, this tool only estimates the number of searches done on Google based on meta engine data. A similar tool can be found <http://keyworddiscovery.com>. This tool is provided by Trellian and it claims to collect data from over 200 search engines from around the world.

When a satisfying list of keywords has been established, copy the list back to Google Adwords tool, this time using the ‘descriptive words or phrases’ option. Press the ‘Get keyword ideas’ button and select exact match. Export the new list in a spreadsheet by using the CSV option.

Now there is an adequately comprehensive list of keywords and comparative number of searches made. There is a further step in confirming the value of the keywords by using The Keyword Effectiveness Index (KEI). This tool helps users to find a keyword that has large number of searches but only small number of pages containing the phrase. This tool can be found in <http://1stsearchranking.net/keywords.htm>. (Whittaker 2008, 52)

The creation of a valid keyword list is essential to the page optimization. Appropriate keywords and keyword phrases could be said to be the basis for the further search engine optimization. Page themeing and keyword density analysis are based on the keywords of the page. Taking enough time and focusing energy on defining the best possible keywords for the page will help to define the site later on.

2.3 Social media

Social media has unquestionably become one of the most important phenomena of the modern Web. It provides a whole new channel for companies to reach their customers, partners and even potential workforce. Social media offers a possibility to enhance the image of a company and bring the business into people’s everyday life.

Social media is a very wide concept. Some people comprehend social media of being just Facebook, which has become somewhat of an icon for social media. However, social media is much more than just Facebook. There are dozens of definitions for social media. Some define it as a synonym for user-generated content; others describe it as people communicating online. The author found the definition, provided by OneZeroOne, to describe it the best: “Social media, by definition, is the collection of strategies, practices and tools for communicating, creating, sharing and discussing news, information and other media online” (Social Media Guide 2012).

People tend to think of social media being a new phenomenon. The truth is that social media has been around longer than the Web. Cave paintings and letters in a newspaper are a form of ‘sharing information in a social group’ similarly as posting a comment on Twitter. Difference between the recent rapid growth of social media is that new social media is fast, efficient and available. It is constructed the way that users of any specific service can quickly acquire as understanding of what is available and how to interact with other users and services. Today, young children are growing up with forms of media, which have been specifically designed and created for them. (Whittaker 2008, 111)

As mentioned social media has rapidly grown its significance over the past few years. In 2010 already 73 per cent of American teens who had access to the Internet, used social networking websites. Concerning adults the same number was 47 per cent. Both figures have had significant rise from previous years. However, there is hardly any variation between young adults (18-29 year-old users) than teenagers concerning the use of social networking websites. (Lenhart, Purcell, Smith, Zickuhr 2010, 2-3)

Before we mentioned that many people perceive social media of meaning just Facebook. Although this is not the case, Facebook is currently the most used social networking concept. 73 per cent of adult profile owners have a profile in Facebook, 48 per cent have a profile in MySpace and 14 per cent have an account in LinkedIn. These figures suggest what scale of a marketing channel Social media actually is. Figure 4 indicates the spread of internet usage by age groups and provides deeper understanding of the meaning of Internet. (Lenhart et al., 2-3)

Who's online? The internet by age groups

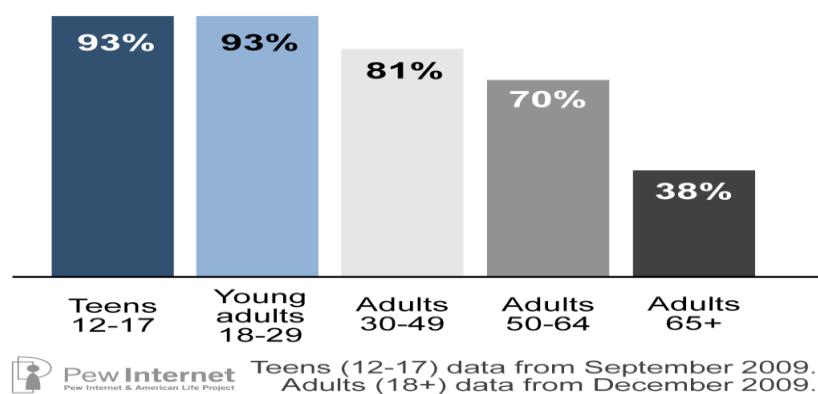


FIGURE 4. Internet Usage by Age (PEW Internet 2009)

2.3.1 Social media marketing

One way of Internet marketing is to advertise a business in social networks. Social networks like Facebook gathers up users from all around the world and information is changed efficiently. Networks like, for example Facebook, are huge communities gathering up millions of people. According to a research by DoubleClick Corporation in 2011, Facebook was the most visited site in the world with 880 million EUMV in a month. (DoubleClick 2012.)

Facebook has a feature of creating a group or a page which can be used to promote a company. Creating a site is free and is easy to do. A page can be created with an existing user account. The page can be promoted to friends to like which increases the visibility, as the more friends like a page, the more Facebook suggest people to like it (to friends of friends). There is an unspoken possibility available in the internet to buy “Likes” from certain sites such as www.buyilikes.com. This increases exposure and sale, however can be seen unethical and there is no guarantee of the service to actually work. A group or a page is free and most used way of advertising small companies in Facebook. (Facebook 2012.)

However there is a way of getting a real advertisement to Facebook and onto the screens of selected potential customers. The costs of these Facebook ads can be as small as 0.01 USD per day, but most of them are between 20-5000 USD per day. The easiest way to keep the advertisement costs low is to start advertising with a simple advertisement that takes the customer to your Facebook business page. The daily budget can be set to a few dollars and targeted toward ideal customers. (Facebook 2012.)

You can choose from paying cost per click (CPC) or cost per thousand impressions (CPM). Difference is that in CPC advertiser pays every time someone clicks the ad. Cost per thousand impressions the payment is calculated for every 1000 clicks which the advertisement is displayed. This kind of advertisement campaign should be tested, tracked and optimized regularly to guarantee the efficiency of the campaign. (Facebook 2012.)

Internet provides some other forms of advertising as well. The possibility to create blogs and participate in forums opens up one channel of advertisements. We will not concentrate more on these channels as there are thousands of sites providing opportunities to create a blog or forums to participate into the conversation. These can be found through common search engines. However, it should be taken into account that blogs can be used to support advertising in social medias and it is a tool that should not be ignored when we are discussing search engine optimizing.

3 SEARCH ENGINES

In this chapter focuses on the search engine itself. “Search engine optimization is the art and science of aligning what the search engine wants with what you want” (Lutz 2009, 229). SEO is highly dependent on the results gathered with the PPC campaign. These two factors are bound to each other. After discovering the keywords which constantly produce visitors who take action on your site, the focus of getting a better result in the natural listings can begin. Search engine optimizing comes down to using your top performing keywords and re-create your web site to increase findability under those terms.

3.1 Anatomy of search engine

The search engines have three main components. Software runs on the search engine extracting data from the Web by following links and collecting Web page data. This kind of software is known as crawlers, spiders or Web bots. The massive data gathered by the crawlers are then being indexed to modify the data into rapidly accessible format. For example, if you have a book and you need to find a certain word. With an index, you do not have to go through the whole book to find the word, but the index tells you which page the word can be found. Although computers are fast in calculating, even they find information far faster if it is correctly indexed. (Whittaker 2008, 43)

After the pages have been crawled and indexed, the next phrase is that someone types a keyword into a search engine browser. The words are transferred to the search engine which consults the index creating a list of the relevant pages. At this stage the search engine needs to decide the page ranking. These algorithms that decide the final listing is the most protected secret of the search engine providers as it is the most important function of a search engine. (Whittaker 2008, 44)

The main responsibility of the search engine is to provide the users with relevant results for keyword searches. Search engine providers are businesses as any other; they are conscientious that all top 10 positions are the most credible sites available. Search engine providers build their reputation and trust with users by providing the most reliable sites available. Every time you use a search engine, you trust that the search engine provides you with sites that are not filled with spam or non-relevant information. Maintaining this reputation is a number one priority for the search engines. A good example of this is Google, which has become a concept in a public's mind. The phrase "Google it" has become a part of everyday talk when concerning search engines. (Lutz 2009, 228)

Although the algorithms of the search engine PageRank are a well-guarded secret, we can take a look at Google's patent application abstract which states the following. "A system identifies a document and obtains one or more types of history data associated with the document. The system may generate a score for the document based, at least in part, on the one or more types of historical data." (Whittaker 2008, 45)

3.2 SEO factors

There are many theories how to improve one's natural search results, however one must bear in mind that the proprietary search engines such as Google, Yahoo! and MSN, keep their algorithms closely guarded secret. If not, SEO practitioners would find a way to use the engines to their advantage. The Search engine providers have left clues of how the search engines themselves work and there are few things we can be sure.

Search engines use crawlers (or spiders) to map your site. The crawlers themselves do not affect the ranking of the page. The crawler simply gathers but the information from the site and sends it to a data center where the pulled data is being analyzed. This also causes a problem of maintenance. If your site is temporary down when the spider arrives to the site, there is a possibility that it determines that the site has been deleted and lowers the ranking of the page in the natural listing of the search engine. (Lutz 2009, 233)

One of the factors is searchability of a page. The site needs to contain a certain link structure which enables the crawler to gather up data from all pages on your site. A page that is not linked to any other page on your site will most likely not be crawled unless it is send directly to the search engine. The site also needs to be submitted to the search engine. Submitting a site does not automatically guarantee a listing and multiple submissions might harm your position in the ranking. A site should be submitted only once in case of brand new domain. The content of a site should be search engine friendly. In practice this means keywords or keyword phrases. We will come back to this when taking a look of the theming of a Web page. In a nutshell, the keywords the site is optimized for should also be found in the website. (Whittaker 2008, 58)

As mentioned before linking within the site is crucial for the crawlers. However, there is evidence that the more links lead to your site enhances the PageRank. This is especially effective if the linked sites are relevant and the links have relevant 'anchor text'. The site needs to be regularly updated. Search engines prefer fresh information and this is also one aspect that the crawlers look for. If the site has old material, the search engine determines that the information is no reliable anymore and the PageRank is diminished. (Whittaker 2008, 47)

Google Sitemap software is a good tool if the content of your site changes a lot. This might also have an effect on your PageRank as the pages set up by Google Sitemap are spidered more often. As mentioned before, spidering (crawling) is the process by which a search engine moves through a site collecting site content and links. (Whittaker 2008, 79)

3.3 Search engine optimization

After familiarizing with the anatomy and factors affecting search engine functions, it is natural to begin the SEO project. This chapter consists of the basic initial steps needed to undertake a SEO campaign. As mentioned beginning of the study, the main weight is put to give an inexperienced user the tools to start with their own SEO project. The study looks at the different steps crucial for gaining a better PageRank. The aim of the steps is to optimize the site in a manner which makes it as clear entity for the crawlers to gather up data, and by so, have an effect on the given rank by the search engine algorithms.

“Page theme means taking related keyword phrases and matching them to a relevant content page on your web site” (Lutze 2009, 233). The pages which are specifically targeted by keywords are more easily found in the search engine results. Theming is important as the search engines lack real intelligence. As mentioned before search engines use spiders to determine the content of a page. The spiders are fundamentally simple software and can be confused by covering too many topics on one page.

Figure 5 represents a structure of a model page of Mike’s Pet Shop prior to SEO effort. Theming aims at a situation in which every page of a website is defined by two or three keywords that directly relate to the content of the page while representing the page theme. Figure 6 shows a structure of a model page of Mike’s Pet Shop after theming has been taken into action.

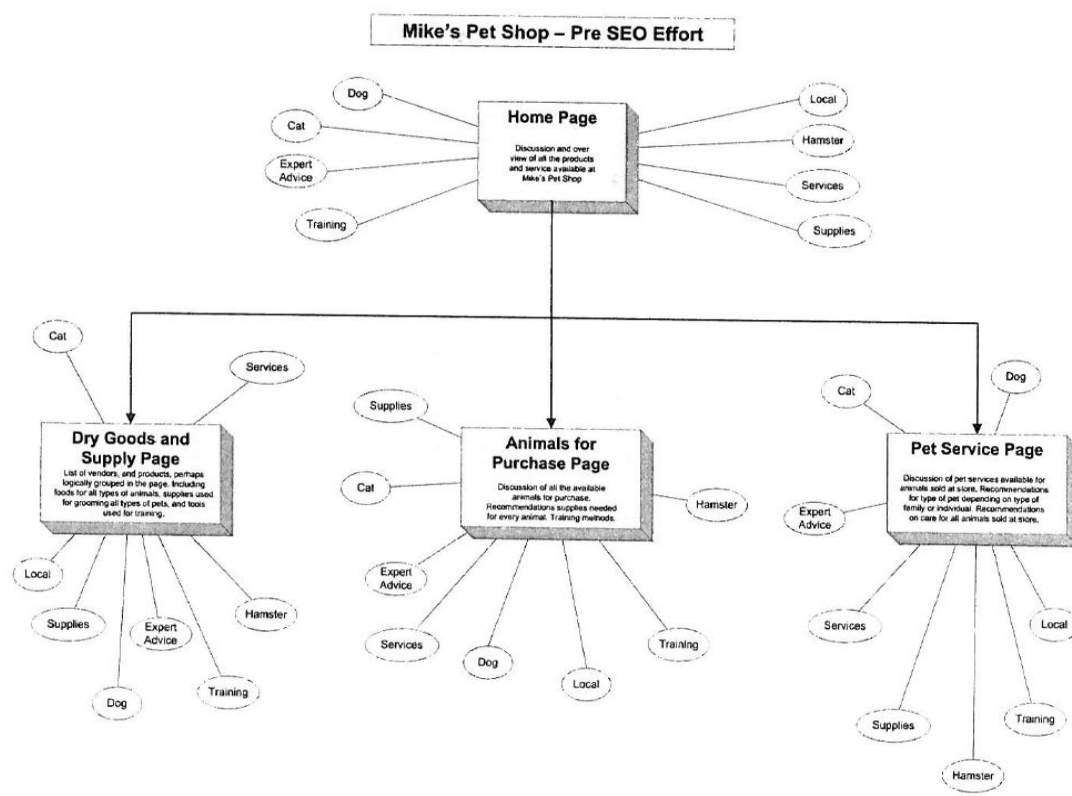


FIGURE 5. Mike's Pet Shop Pre SEO (Lutz 2009)

To find out all the top performing keywords, run an “All time Keyword” report in your PPC account. Map out your website similar to the figures presented and pick two or three related keywords that has the best performance by conversion and clicks. Match your performers with content-related page. If there appears a site that is not content related, a new page should be created. Every page should be mapped excluding only Contact Us, Privacy and FAQs. (Lutz 2009, 234)

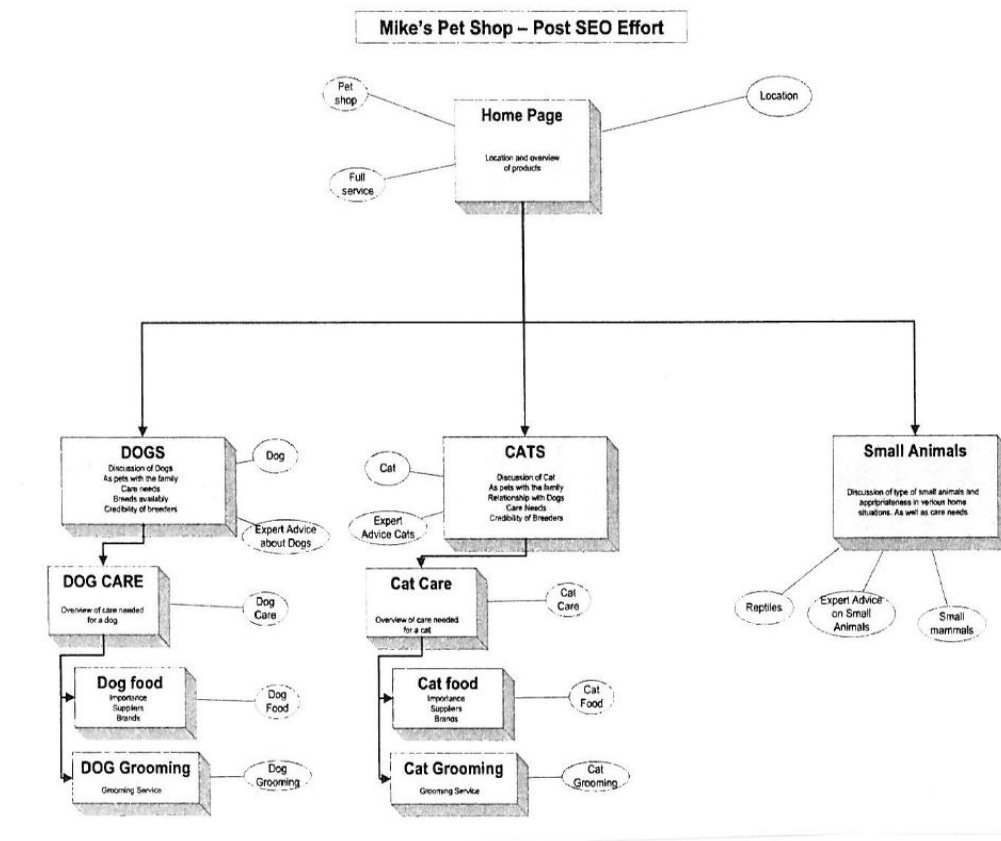


FIGURE 6. Mike' Pet Shop Post SEO (Lutz 2009)

Next phase is to run multipage keyword density analysis. Keyword density is one of the factors a search engine uses to evaluate the relevance of a page. "Keyword density refers to how often a key phrase appears on a single web page relative to the amount of overall content. This is a ranking factor used by major search engines to 'score' Web pages." (eFlaunt 2012) Before starting the keyword density analysis one must remember that search engines work hard to exclude spammy content from their search results. In other words, loading your site with keyword over and over again might harm your site and cause poor user experience.

There is a tool by Bruce Clay which can be used as a help for SEO projects and a free version is available. However there are many similar types of software available. Run the diagnostic analysis for every page in your theming document. The tool by Bruce Clay runs an analysis for selective keyword and runs a keyword density analysis for the top seven websites of the given keyword. The tool analyses the pages and determines the commonality of the collective. When you align your page with the results gathered by the analysis, it will put your pages in contention with the other top-ranked sites. (SEO ToolSet 2012.)

The keyword density analysis gives users the knowledge of how to arrange a site to match the top ranking pages. The numbers tell how long and which kind of variables should each component of a page have. To have the Page One visibility on the search engine, the top performing sites must be mimicked. This is the only way the search engines consider your site as a contender for Page One rankings for the chosen term. (Lutz 2009, 237)

“The title and meta tags are HTML codes that give the search engines an idea of the nature or theme of the page” (Lutze 2009, 240). They can be found in the upper part of the page code. Meta tags are an important element that the search engine looks at to determine the content and theme of your page. However, Meta tags have lost a part of their significance and not every search engine considers them equally. According to Google, their search engine uses over 200 criteria to rank a page. With a high probability, Meta tags are part of that criterion. The tags should be written to match the page themes from your theming document. (Google 2012.)

When writing a new website page copy, the keyword density analysis should be the controlling force behind the strategy. The aim is to match the content to come as close as possible to the target numbers received from the keyword density analysis (Table 2). Length of the pages can be judged by the webmaster.

However, if the numbers for your home page body copy seems excessive, the user experience factor needs to be weighted. Search engine optimizing might end up harming the user experience of the page. In other words, the recommendations should be met but use your own judgment; Customer first, Search engine Second. (Lutz 2009, 241)

TABLE 2. Keyword Density Analysis (Lutz 2009)

Recommended "personal injury attorney" Configuration										
	META Title	META Description	META Keywords	Head Tags	<!--Comment-->	ALT Codes	Hyperlinks	First Words	All Body Words	ALL Words
Page total word usage	11	18	46	12	1	15	1	200	615	719
attorney	9.1% (1)	5.6% (1)	4.3% (2)	33.3% (4)	100.0% (1)	13.3% (2)	100.0% (1)	1.0% (2)	0.8% (5)	2.4% (17)
injury	9.1% (1)	5.6% (1)	6.5% (3)	16.7% (2)	100.0% (1)	6.7% (1)	100.0% (1)	2.0% (4)	1.6% (10)	2.8% (20)
injury attorney	18.2% (1)	11.1% (1)	4.3% (1)	66.7% (4)	200.0% (1)	26.7% (2)	200.0% (1)	1.0% (1)	0.7% (2)	3.6% (13)
injury lawyer	18.2% (1)	11.1% (1)	4.3% (1)	16.7% (1)	200.0% (1)	13.3% (1)	200.0% (1)	1.0% (1)	0.7% (2)	2.5% (9)
lawyer	9.1% (1)	5.6% (1)	4.3% (2)	8.3% (1)	100.0% (1)	6.7% (1)	100.0% (1)	0.5% (1)	0.3% (2)	1.4% (10)

At this stage the new titles, meta tags and page content can be updated on the website. If you are not the one in charge of the update, it is better to check the updates to make sure no liberties were taken. In addition to this the website needs to be submitted to Search Engine. Google uses <http://www.google.com/addurl>; here it is crucial that the website is send only once. Multiple submissions can be penalized by lowering the page rank. If the page is sent once, the crawlers will find it. (Ibid., 241.)

There are tools such as Google's webmaster tools which help users to set up advanced tracking tools to check elements like robot.txt and site maps. "Robot.txt is a file that is stored in the root of your directory which directs the search engine crawlers where they may crawl (if at all) and shows them which files they are allowed to open." (Whittaker 2008, 147) This file can be used to exclude some crawlers however they have no obligation to obey.

After submitting and tracking the status of the site a reporting tool is needed. Bruce Clay provides the tools straight but there are a lot of tracking software available online. This software run daily or weekly reports on the ranking by keywords and provides users with valuable data. One resource to find these tools is <http://www.mikes-marketing-tools.com/ranking-reports>. The improvements in page ranks takes time, as the engines index the site, trust the site, evaluate and determine if it is relevant enough for page one visibility. This might take up to six months. (Lutz 2009, 242)

Linking is another way to enhance the picture in the eyes of search engines. In a nutshell, the search engines prefer sites that have outbound and inbound links leaving and arriving to the site. The bigger net the site forms through links, the better rating it gets. The search engines follow a certain hierarchy when concerning link as Figure 7 shows;

Link hierarchy:

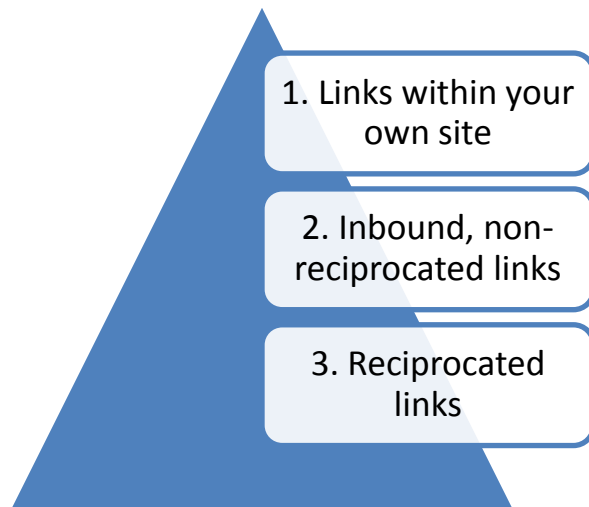


FIGURE 7. Link Hierarchy

The aim is to get as many links from other sites, nevertheless keeping in mind the link hierarchy. Eventually, any link from an honorable site should be included into the website. (Lutz 2009, 244)

4 COMPANY PRESENTATION

Total Sec Oy is known and widely recognized company in the security field. The company is located in the city of Lahti in Southern Finland. Total Sec Oy is constantly evolving and growing, with their uncompromising work ethic and flexible service attitude they have achieved a solid position in the security field as reliable and professional partner for security solutions.

The company operates in multiple fields of security which involves event security management, property guarding, CIT services, personnel protection, education services, security planning, security consulting, product sales and importing.

Total Sec Oy started its operations in 1999 as a sole trader. The company was founded by Hannu Vappula and Miko Linnavirta whom both were professional security officers and have long experience in the security field. At the time there was an increasing trend of outsourcing the security services of the restaurant sector. The idea of starting of an own business became as they noticed that there was a lack of service providers with a high profile in the market. There was a demand for their services and they launched their business. (Total Sec 2012.)

In the beginning the business was focused on security management services, which was their core competence. They served only the amount of customers they could without sacrificing their most important principle: “The customer is not truly satisfied until we have exceeded their expectations”. This principle is the basis for the values of the company. (Ibid.)

The year 2003 the company had stabilize their position and their operations had expanded to the extent that it was time to change their form of company from sole trader to Limited Liability Company. The market situation had also changed to more competitive. The number of companies providing security management services had multiplied. The sector of professional proctors had changed into the usage of temporary staff. This caused the experience of proctors to turn into a vanishing resource. Total Sec Oy decided to respond to the challenge by increasing educational services. This was the beginning of a whole new branch of business for the company. (Ibid.)

The education services immediately adopted the same high standards according to which the company had operated in the field of security management. Professional instructors filled the courses of participants and Total Sec rose to the leading provider of security management training. The following years they expanded their education services to the other parts of security without compromising their promise of quality. Through the education services Total Sec Oy has been able to fulfill the high standards which they have set for their employees. (Ibid.)

Finnish security culture took a major step forward at the beginning of the new millennium; people started to pay more attention to security planning. Total Sec have offered this service to their customers earlier. Risk analysis and preliminary planning has been included to the company's services from the very beginning. However Total Sec was prepared to reply to the increased demand. Total MH Oy was founded as addition to the Total Sec family. Total MH is a unit focused on demanding assignments and it has unlimited permission to operate in field of security and property guarding all around Finland. (Ibid.)

Total Sec expanded their operations into product sales in 2009. They already possessed the solid understanding of the quality requirement that security professionals expect from their equipment. Adding to the mix combat sports which are closely related to the business; the Total Shop was created. Small store was founded in connection with the Total Sec office and a web store was opened. Many “price and quality” aware customers have founded Total Shop. Their revenue and range of products keep constantly growing. (Ibid.)

Total Sec Oy will continue its stable growth at the different sectors of security operations without compromising their promise of quality.

5 RECOMMENDATIONS & CONCLUSION

In this chapter we move on the actual recommendations and results for the case company. At this point of the study, it is natural that we move on to analyze the information gathered and try to pinpoint potential development areas of their site and social media marketing. The suggested changes are recommendations and it is up to the company to decide if they will put them into action. Note that the Total Sec website was updated during this study which had an invalidating effect on some of the recommendations presented in this chapter.

5.1 SEO recommendations

The Total Sec Web page experienced an update during this study. The changes made to the site were made for the better. The new design and context is much clearer compared to the old one before the study was begun. As mentioned earlier in the study, changes made to websites and HTTP-code might take months to be seen in the search engine's PageRank. Knowing this, it is impossible to analyze how much effect the changes will have in the eyes of the Google algorithms. It takes time for the spiders to visit and crawl the information from the new pages. Moreover, there is no beneficial way to speed up the process as multiple submissions to the Google database might be punished by negative effect on the PageRank.

5.1.1 Keywords

Keywords are one of the most important aspects of SEO. They are the foundation for users to find a site. Keywords are the first thing crawlers gather when entering a site. As the study mentioned before, the more keywords there is on the main page with a connection to the actual text of the page, the better possibility of the site to be ranked higher in the search engine algorithms.

After analyzing the source- or HTML-code of Total Sec's website, the first thing which was found out was the lack of keywords in the Meta tag in the header. The keyword list consists of four keywords with low correlation with the actual site. However, the home page itself has a list of 11 potential keywords. All of these words should be added to the list. On top of this, the possible variations of the words should be inserted to the list. The study provides tools for creating a solid and functional keyword list.

In addition of the new keywords, the study presents a concept keyword density analysis. This analysis is based on the amount the keywords or keyword phrases actually appear in the text of the page. The idea is to see how many times the keywords appear and then compare the results to the page which has the highest visibility on the Google PageRank. By mimicking the best page ranked in the search engine, and adjusting the keyword densities to match, there is a higher possibility for the search engine to rank the pages as equal importance.

Although all of the tools mentioned in the text do not work with Finnish language, most of them are still useful. As the company grows, there is more and more pressure on making an English version of the website for foreigner visitors. This requires English keyword list which actually brings all the tools provided into action. The multilanguage site would probably raise the profile of the site in the eyes of the search engines. As the spiders have more data to be crawled with relevant connection to the original page, the search engine algorithms should rank the site more efficient information provider and by such raise the visibility of the site.

5.1.2 Translation of the site

Translation of the site is a good way to enhance its profile in search engines. As the site is translated into foreign language, the site actually doubles. The translated sites are seen as completely new entities by the search engine. They are spidered and ranked as separate pages. This gives the opportunity to raise the PageRank of the original site. The new, in this case English site, gives the opportunity to create a new keyword list and keyword density analysis.

The main idea behind this is, of course to serve the potential foreign visitors of the page, but also to create a bigger net of information which is linked to the original page. As mentioned before, the crawlers or spiders do not have real intelligence; this is why it is possible gain benefit from translating the site. The search engine only understands that the English and Finnish pages are linked together, providing accurate information of the subject while creating a large network of links. This should raise the PageRank of the original site and it is recommended to take these actions.

5.1.3 Themeing & linking structure

Theming of the site is one of the strong points of the entire site. The structure of the site has been turned into a clear entity. The main page is short and includes only the necessary information needed yet listing the whole business field of the company by single keywords. This enables the crawlers to get a clear picture of the content of the site.

The site has clear links where a visitor finds what he is looking for. The Main Page narrows the business field of the company. Another link opens up a navigation box where all the services have been sectioned. This link redirects the visitor to the company's web store if needed. There is separate link in the sites navigation bar for security databank which opens a page with useful links, articles and forms needed in the security field. In addition, the navigation bar has links for contact information and security portal.

The security portal opens in the same browser window as the homepage. This creates a controversial link structure as from the security portal the homepage opens in a new tab. There is no sense in opening a new tab if the visitor is able to jump back and forth between the sites through the links. The inbound-outbound link structure, which the crawlers follow, is in effect already.

The changes should be made also to the portal itself. The link “training” redirects the visitor to the company’s web store which actually has less information about the trainings than the original homepage of the company. This should be changed as there is already a link below “training” which directs the visitor to the web store. The integrity of a linking structure is the key to give the spiders the picture that all the information in the site is consistent.

5.2 Social media

Total Sec has made an effort to be a part of the social media phenomenon. The company has created a profile in order for the employees to link themselves to their employer by adding Total Sec as their current employer in their own profiles. This works as an advertisement for the people opening the profiles of the employees and raises awareness of the company.

The more important part of the company’s focus on social media is the page created for marketing the company’s store. The Total Shop operates as a physical store in the same premises as the company’s office and as an online store. Total Shop page in Facebook works as a promotion channel for the actual shop and its website. The page in Facebook provides information about new products arriving to the store, current events and video material about trainings, interviews as well as demonstration of the products. The page has had marketing campaigns for increasing its popularity by offering discounts on the products as a compensation for likes.

The discount marketing campaigns are a good way to attract more people to like the page. The study mentions a correlation between the visibility in Facebook and the amount of likes. Total Sec should focus more resources on luring more people into liking the page. The workers of the company actively promote the company in Facebook but the audience stays the same and new likes appear at a slow rate.

One way to change this is to add more visible messages to the videos which are linked to YouTube to like the page in Facebook. Another way would be to add a flyer to all the bags given with the products in the store which suggest joining the Total Shop page in Facebook. This could be connected with a code which allows people liking the page to see, for example exclusive self-defense material.

5.3 Conclusion

This sub-chapter will conclude the study and answer the research questions presented in the beginning of the study. The study has introduced the basic theories around search engine optimization, search engine marketing and a slight touch to social media marketing. By providing tools and ways to implement the theoretical information, the study attempts to make search engine optimization available to all internet users.

5.3.1 Research questions

Is it possible to influence Total Sec's PageRank in Google's search engine?

According to the information found in the study, it seems possible. The literature sources and content supports the suggested actions in the study. After taking these propositions into action in the webpage, the Google PageRank is expected to rise. As mentioned before, the results of the changes made into the website take months to emerge. This prevents making any claims of better PageRank with 100 per cent certainty. However, the keyword optimization, density analyzing, corrections to the linking structure and translation of the site should serve the search engine algorithms.

The first question already gives away the answer to the second question. Is it possible to optimize the current site of the company without professional help? Yes it is. The needed actions are provided to the company and many of them have already been taken into action during the study. There seems to be a dilemma with using of professional webmaster to handle SEO. The author found out that if the customer does not have knowledge about Search engine marketing or SEO; the webmasters might not do a satisfactory job with the optimization.

The customer should also keep in mind that there are many different skill levels of webmasters. Almost anyone can call himself a webmaster. Search engine optimization requires constant effort and activity from the site operator; this is why it would be better for the service provider to have the knowledge to handle their own site. If the use of professional help is required, make sure that the webmaster uses programs and tools that you also have access to. This method secures the possibility for further optimization.

The third question was from a different topic. It was taken into consideration mostly for providing additional information about internet marketing, as the company has put some effort into social media. Can social media be used as an effective marketing channel? Yes it can, however it is a delicate marketing channel. social media marketing is highly dependent on traditional marketing and such social media should be used as an extension for normal marketing channels.

Competition for users is hard even in the social media, especially as the company operates in such a small geographical area. Before gaining the most benefit from the social media, the number of users following, for example the Facebook page, needs to be high. This awareness of the company among users needs to be gained through traditional promotion.

6 SUMMARY

The topic for the thesis, search engine optimization and social media marketing, originated from the authors personal experience from the case company. The main idea was to find solutions to improve the marketing of the company in Internet compared to the competitors.

Theoretical framework of the thesis is based on available SEO literature and electronic sources. The section for social media marketing is left with less attention in order to concentrate on the main subject which is search engine optimization. Properly optimized websites save the company monetary resources from marketing and is the reason why the emphasis of the study is kept on SEO as well as SEM.

The empirical part concentrates on providing the necessary tools for actually executing the search engine optimization campaign, and guiding the reader to implement the tools on their own site. The author tried to contribute the information in such a manner that it would be easily understandable, even for readers with limited understanding of the IT field.

As a conclusion, the website for the case company is able to be optimized for Google search engine according to the revealed theoretical information. The study presents recommendations for the company to be taken into action in their website. The author, as a worker of the company, will ensure that the recommended actions are carried out correctly.

7 REFERENCES

Literature references

Chaffey, D., Chadwick, F E., Mayer, R., Johnston, K. 2009. *Internet Marketing: Strategy, Implementation and Practice*. 4. Edition.

Lutz, H. 2009. *The Findability Formula: The Easy, Non-Technical Approach to Search Engine Marketing*. New Jersey: Wiley.

Whittaker, M. 2008. *An introduction to Internet marketing and planning*. Poway: Billy Fire.

Electronic references

DoubleClick. 2011. *The 1000 most-visited sites on the web* [Referenced: 8.August 2012]. Available in Google Database:
<http://www.google.com/adplanner/static/top1000/>

eBizMBA. 2012. *Top 15 Most Popular Search Engines* [Referenced 18.July 2012]. Available in eBizMBA database: <http://www.ebizmba.com/articles/search-engines>

eFlaunt. 2009. *Keyword density* [Referenced: 30.August 2012]. Available in Eflaunt database: <http://www.eflaunt.com/seo-glossary/keyword-density.htm>

Facebook. 2012. *Ads and Business Solutions* [Referenced 8.August 2012]. Available in Facebook database:
<https://www.facebook.com/help/?page=195623423828629&ref=bc>

Google. 2012. *Algorithm criteria* [Referred 8.October 2012]. Available in Google database: <http://www.google.com/corporate/tech.html>

Google. 2012. *Google Ads* [Referenced 15.September 2012]. Available in Google database: <http://www.google.fi/intl/fi/ads/>

Internet World Stats. 2012. *Internet World Stats Usage and Population Statistics* [Referenced 10. August 2012]. Available in Internet World Stats database:
<http://www.internetworldstats.com>

Lenhart, A. Purcell, K. Smith, A. Zickuhr, K. 2010. *Social Media & Mobile Internet Use Among Teens and Young Adults*. Pew Research Center [Referred: 8. August 2012]. Available in Pew Internet database:
http://web.pewinternet.org/~media/Files/Reports/2010/PIP_Social_Media_and_Young_Adults_Report_Final_with_toplevels.pdf

Pingdom. 2012. *Incredible growth of the Internet since 2000* [Referenced 3. August 2012]. Available in Pingdom database:
<http://royal.pingdom.com/2010/10/22/incredible-growth-of-the-internet-since-2000/>

SEO Toolset. 2012. *The Bruce Clay SEOToolset* [Referenced 12. September 2012]. Available in The Bruce Cay database: www.SEOToolSet.com

Techterms. 2012. *Definition of WWW* [Referenced 20. July 2012]. Available in Techterm database: <http://www.techterms.com/definition/www>

The Social Media Guide. 2012. *50 definitions for Social Media* [Referenced 6. August 2012]. Available in The Social Media Guide database:
http://thesocialmediaguide.com/social_media/50-definitions-of-social-media

Webworkshop. 2012. *Webworkshop definition Pagerank* [Referenced 15. August]. Available in Webworkshop database:
<http://www.webworkshop.net/pagerank.html>

Webopedia. 2012. *Webopedia TERM PPC* [Referenced 13. August 2012]. Available in Webopedia database:
<http://www.webopedia.com/TERM/P/PPC.html>

Wordtracker. 2012. *Wordtracker keyword service* [Referenced 20.August 2012]
Available in Wordtracker database: <http://freekeywords.wordtracker.com>

Wikipedia. 2012 A. *Wikipedia definition Website* [Referenced 8.October2012].
Available in Wikipedia database: <http://en.wikipedia.org/wiki/Website>

Wikipedia. 2012 B. *Wikipedia definition Page view* [Referenced 8.October 2012].
Available in Wikipedia database: http://en.wikipedia.org/wiki/Page_view

Wikipedia. 2012 C. *Wikipedia definition HTTP Cookie* [Referenced
8.October2012]. Available in Wikipedia database:
http://en.wikipedia.org/wiki/HTTP_cookie