

# The Benefits of Search Engine Optimization in Google for Businesses

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# **Abstract**

This study concentrates on search engine visibility and the benefits of search engine optimization (SEO) in Google for businesses. It seems that search engine visibility has undeniably an important role in business. Most of the people use internet, more than half of Internet traffic begins with search engines and majority of users search for information about goods and services on a regular basis. Google has the largest market share of all search engines.

SEO has been studied since 1998 when Google was founded. In earlier studies the topics varied from the basics of SEO to the SEO process in practice and finally to the benefits of SEO. Only a limited number of information systems theory (IS) studies focus on the role of organic listing in search engine visibility. That is why some of the references in this literature review represent also general business research.

The research question is "What are the benefits of Search Engine Optimization (SEO) in Google for businesses?" and the sub questions are: "Why search engine visibility is important for businesses?", "How can business achieve organic search engine visibility in Google?" and "What is the future of Search Engine Optimization (SEO)?" This is a qualitative empirical study which utilizes eight semi-structured interviews on the matter. The main contribution of this study is to find the differences between academic research and empirical study findings. The goal is to create a comprehensive understanding about the topic.

The main benefits of SEO for businesses are better search engine visibility, more visitors and better-quality visitors on website and more conversions. It has been noted in many articles, that SEO alone will not provide us the desired return on investment (ROI). In the empirical results of this study, the interviewees also mentioned better understanding of search engine users, website programming and business as one of the benefits.

#### Keywords

Internet marketing, search engine visibility, search engine marketing, search engine advertising, search engine optimization, search engine, Google, Google algorithms

#### Supervisor

PhD, Professor, Marianne Kinnula

#### **Foreword**

I chose this topic because I have been working on digital marketing field over eight years now. All this time digital marketing practices linked to Google search engine have been my core competences. My primary goal was to compare academic articles to empirical study findings and find the differences between them. This study reveals, what are the benefits of SEO for businesses today.

During the reading process I realized, how academic publications change over time. First, they concentrated on fooling the search engines in order to provide better search engine results for the chosen websites with the chosen keywords. After that "white hat optimization" and "black hat optimization" tactics were separated, and the studies started to pay attention also to the user experience in the process. Over time academic studies made the conclusion that SEO alone cannot create a positive ROI. Only, the company's brand awareness and search engine visibility together with a usable website and engaging content create profit for companies. This finding was confirmed by the empirical study as well.

I would like to express my special gratitude to my supervisor Marianne Kinnula for the continuous support of my master's thesis study, for her advice, motivation, and knowledge. I must also express my very profound gratitude to my dear husband Vesku for providing me with unfailing support and continuous encouragement.

Riikka Pohjanen

Oulu, September 22nd, 2019

# **Abbreviations**

BR Bounce rate

CPC Cost-per-click

CMS Content Management System

CTR Click through rate

ODP Open Directory Project

PPC Pay-per-click

ROI Return on Investment

SEA Search Engine Advertising

SEM Search Engine Marketing

SEO Search Engine Optimization

SERP Search Engine Result Page

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#### 1. Introduction

The World Wide Web has become a key player between companies and customers (Pant and Srinivasan, 2010). More than half of Internet traffic begins with a search engine. An overwhelming majority of users search for information about goods and services on a regular basis (Dou et al., 2010). Kennedy and Kennedy (2008) have claimed that all businesses should have a web presence. Pant and Srinivasan (2010) pointed out that website usability becomes relevant only if the website is discoverable. Google is a remarkable player, because it is the search engine with the largest market share (Clemons, 2010).

One of the main challenges in digital marketing field is, how to reach the potential customers and lead them to company's website. The key to being found by the right people at the right time lies in search engines. (Kritzinger and Weideman, 2013.) People use internet to check features, compare prices and finally even purchasing (Panda, 2013). When a person uses search engine, search engine returns a SERP (search engine result page) in response to each search query. Each SERP contains two lists of hyperlinks: the organic list and the sponsored list. (Kritzinger and Weideman, 2013; Xu et al., 2012.) With effective search engine advertising or optimization techniques, even unknown brands can appear ahead of well-known ones in SERP (Dou et al., 2010). That is why search engine visibility becomes increasingly important. (Berman and Katona, 2013; Klatt, 2013.)

In SEA (search engine advertising), companies pay for having links to their websites displayed in the sponsored list of a SERP (Dou et al., 2010). Organic list consists of the results that Google's algorithms suggest the most relevant for the user based on the terms they search (Clemons, 2010). The operations which improve website's organic list positions are called search engine optimization (SEO) (Jones, 2013, xviii). In SEO, companies strive to push the rankings of their websites higher in the organic search results through a variety of SEO techniques or by hiring external SEO consultants to do that for them (Dou et al., 2010).

SEM (search engine marketing) is a concept which in academic research means improving website's visibility in SERP (both, the organic list and the sponsored list) but authors like Google use this term meaning just for the sponsored list in SERP. In this study I try not to use this concept after the chapter 2 to avoid confusion. Instead I will separate SEO from SEA and use the term "improving search engine visibility" meaning the process of improving website's visibility in SERP.

This study focusses on SEO. This topic has been studied starting from 1998 when Google was founded. In earlier studies the topics varied from the basics of SEO (Barry and Charleton, 2009; Berman and Katona, 2013; Dou et. al., 2010; Clemons, 2010; Iskandar and Komara, 2018; Jansen and Spink, 2009; Jones, 2005; Kennedy and Kennedy, 2008; Klatt, 2013; Malaga, 2008; Moody and Galletta, 2015; Ortega and Aguillo, 2010; Pant and Srinivasan, 2010; Sun and Spears, 2011; West and Valentini, 2012; Yang and Ghose, 2010.) to the SEO process in practice (Beldona et al. 2012; Eswarawaka et al. 2017; Gregurec and Grd, 2012; Dick, 2011; Killoran, 2013; Kritzinger and Weideman, 2013; Malaga, 2010; Marszałkowski et al., 2014; Panda,

2013; Sathitwitayakul and Prasongsukarn 2011; Zhang and Cabage, 2017; Wang and Zhang, 2011; Wang et al. 2015; Xu et al., 2012.) and finally to the benefits of SEO (Baye et al., 2015; Bhandari and Bansai, 2018; Cui et al. 2007; Ho et. al., 2010; Killoran, 2010; Konidaris and Koustoumpardi, 2018; Malaga, 2007; Tomasi and Li, 2015; Wu et al., 2005.)

I will address the previous issues in my study. Therefore, the primary research question is:

RQ1. What are the benefits of Search Engine Optimization (SEO) in Google for businesses?

And the sub questions are:

- Why search engine visibility is important for businesses?
- How can business achieve organic search engine visibility in Google?
- What is the future of search engine optimization (SEO)?

This is a qualitative empirical study which utilizes eight semi-structured interviews with people who had at least limited experience on the matter. The main contribution of this study is to reveal the differences between academic research and the empirical findings. The goal of this study is to create a comprehensive understanding about SEO and the benefits businesses can get from it. Another ambitious attempt is to try to forecast the future role of search engines and SEO for business operations.

The structure of this study is the following. In chapter 2 the core concepts will be defined. The chapter 3 concentrates on literature review and in chapter 4 the research methodology will be presented and explained. Chapters 5 and 6 present and discuss the empirical study and the findings of this study. Finally, in chapter 7 the conclusions of this study are summarised. The list of references forms the chapter 8 and the interview framework of the semi-structured interview is available in appendix A.

# Basics of SEO

This chapter defines the core concepts of the study: search or query, internet marketing, search engine, Google, Google algorithms, search engine visibility, SEM, SEA and SEO. In the end of this chapter, the relations of the core concepts and the information searching process are explained with Figure 1.

# 2.1 Search or query

Nowadays, we all as consumers search for things we want to buy (Ravi, 2006). Consumer information search is the stage of the decision-making process where consumers actively seek information from both internal and external sources. Internal information search involves memory and external information search is anything else but memory. (Sun and Spears, 2011.) In the past people made searches mainly offline, but during the past decades, most of the searches have transferred online. The reason for that is the effective search tools that web provides. Online search tools have significantly reduced the time used searching. (Ravi, 2006.) When we talk about search engine searches, the term query is commonly used as a synonym for search (Bhandari & Bansai, 2018; Clemons 2010; Xu et al., 2012). Today, search represents one of the most important activities for Internet users. An overwhelming majority of users search for information about goods and services on a regular basis (Dou et al., 2010). From a user's perspective, web search engines need to provide relevant and useful results. Web search engines use dozens of factors in determining how to score relevance and to rank the retrieved results. Typically, the user has no idea what factors lead to a particular result being retrieved and ranked. (Jansen and Spink, 2009.)

The phenomenon of consumers' search for information has been studied not only in business studies but also in information systems theories. One of the major theories used by economists to explain it is the economics of information search theory. Its basic argument is that consumers search for information if the marginal gains from the search are higher than the marginal costs. This means for example, compared to the time it takes, it gives more benefit. (Ravi, 2006.)

# 2.2 Search engine

Search engine is a software, which collects data about websites which are indexed and stored on a database. Search engines may return many millions of documents for each user query, but the user only looks at a selected few, so it is very important for companies to be on top. (Gregurec and Grd, 2012.) Search engines can be classified into three sorts: crawler-based search engines, human-powered directories and hybrid search tools. Modern search engines use crawler or spider programs which create databases automatically. A bit old fashioned human-powered directory, also known as "open index systems", rely upon manual work. Hybrid search engines utilize both crawler-based and manual work. (Bhandari and Bansai, 2018.) Before search engines and their search robots we used to have Open Directory Project (ODP), a manually edited web directory, also known as DMOZ. ODP arranged millions of selected websites in a

topical hierarchy. In 2010 ODP had hierarchically arranged more than 48 million websites and over 75,000 editors. Google's directory service also used to be based on ODP data. (Pant and Srinivasan, 2010.)

Search engines are valuable, because they locate a vast array of information on a wide range of topics quickly (Kritzinger and Weideman, 2013). Search engines are responsible for many visitors to a company's website, especially new customers who search for information regarding products and services (Tomasi and Li, 2015). A good search engine analytical tool can help companies to spot those visitors (Panda, 2013).

#### 2.3 Google

Google was founded in 1998 by Larry Page and Sergey Brin while they were students at Stanford University. The idea behind it was to create a search engine that would "organize the world's information and make it universally accessible and useful" (Jones, 2013, p. xviii). Google uses crawler or spider programs which create databases automatically (Bhandari and Bansai, 2018). Google continuously updates its rankings of search results to generate the most relevant search results, which means for example that search engine result page (SERP) can depend on users' past clicks. (Baye et al., 2015.) Google's SERP is a co-listing formed of organic listing and sponsored listing. The two lists are competing against each other for consumers' attention. (Xu et al., 2012.)

Google is the search engine with the largest market share (Clemons, 2010). Google had 67% of U.S. search market, followed by Microsoft Bing (19%), and Yahoo (10%) in September 2014 (Zhang and Cabage, 2017). According to Alexa Traffic Rank, in 2011 Google.com was the most popular website in the United States as well as in the world, and in May 2011, it was the first website to achieve one billion monthly unique visitors. (Baye et al., 2015.) Besides the search engine, Google had a wide range of business activities not related to search already in 2010 (Clemons, 2010).

Google's global share is lowered by a few large countries like China and Russia with dominating local search engines (Baidu and Yandex) (Marszałkowski, Marszałkowski and Drozdowski, 2014). Under China's internet sensorship policy, Google websites are blocked in China ("Websites blocked in mainland China," 2019). Additionally, it has been argued that Google's lack of market leadership in China is because English-language—based search engines support Western websites. In China Baidu has been developed specifically for the Chinese market leads and its overall market share is close to 60%. (Beldona, Lin and Chen, 2011.) In other countries more than 90% searches are served by Google (Marszałkowski, Marszałkowski and Drozdowski, 2014).

# 2.4 Google algorithms

Search engines were developed to support the access to the enormous amount of information on the Internet by crawling, retrieving, and presenting relevant information for users based upon the engines' search algorithms (Klatt, 2013). The goal was to design the algorithms so, that they find the most relevant items for the user based on the terms in their search (Clemons 2010). Modern search engines compile an index of words on websites by sending spiders or robots to crawl around sites that are registered with that search engine. The search engine algorithm estimates the index according to different parameters and then stores the index as part of a database on a web server.

This index is searched when potential customers type in keywords in search engine's search bar. (Bhandari and Bansai, 2018; Gregurec and Grd, 2012.)

The key to Google's early success was its' algorithms. The Google algorithms are more complex than just analysing who links to whom (Jones, 2013, p. xviii). Google's Matt Cutts, a frequent spokesperson on SEO issues, split Google's over 200 algorithms into two general classes (Killoran, 2013):

- (1) "Trust—of which PageRank is only the most well-known component—an assessment of a site's authority and reputation
- (2) Relevance—an assessment of how well a site topically matches a query."

Google's most original and productive feature of algorithm is perhaps PageRank, introduced by Stanford University doctoral candidates Sergey Brin and Lawrence Page in 1998 (Killoran, 2013). Google has patented the PageRank algorithm, so it is one of the few subjects they discuss openly (Killoran, 2010). PageRank is an algorithm that calculates a web metric which shows how reputable a page is according to Google. PageRank takes into consideration the quality and the quantity of the incoming links, with other parameters such as the number of outgoing links per page, the visibility of the links etc. PageRank values are on a scale from 0 to 10. (Gregurec and Grd, 2012.) Sites which have developed their link authority over a longer period generally have a higher PageRank (Dick, 2011). Although the exact algorithms differ across search engines, major players in the field, like Google and Yahoo, rank and display search results by considering the similarity of a website's content to the users' query, as well as the authority of the site (Dou et al., 2010). Search engines' organic ranking rules are commonly believed to fairly reflect relevance or relative importance of different websites (Xu et al., 2012).

Confirming their importance, or doing any reverse engineering of the Google algorithm, is problematic due to Google keeping the factors and the SERP ranking algorithm secret. They are the most valuable things for SEO industry, as even Google admits that if the algorithm was known, then it could be outplayed. (Marszałkowski et al., 2014.) Search engines use continuous as well as drastic updates of their search algorithms. Entering the same query at different times, can produce different SERP rankings, as Google modify its algorithm at least 500 times per year (Killoran, 2013). The impact of these updates on website traffic is uncertain. Some SEO experts reported traffic drops of more than 50 percent in their company while other businesses were not affected. Similarly, the rebuilding of the affected websites is an art. Even experienced SEO professionals must find new ways to provide organic visibility due algorithm changes. (Klatt, 2013.)

# 2.5 Search engine visibility

Search engine visibility means the presence in SERP. In organizing the SERP, Google used to place the organic list in a wide column on the left and the sponsored list in a narrow column on the right (and sometimes a highlighted area on the top of SERP as well) (Xu et al., 2012). In figure 2 the old-fashioned Google SERP is presented.



Figure 1. Google SERP for "Marriott Marquis New York on January 6, 2010 (Clemons, 2010).

It is important to notice that the SERP of Google is constantly changing. Some of the references in chapter 8 were written during the time Google's search results page was like figure 1. Today Google's search result page looks like figure 2 presents.

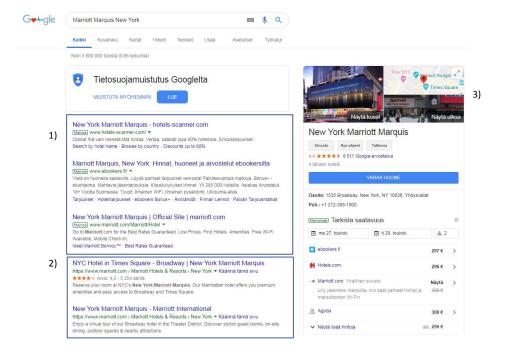


Figure 2. Google Search Results for "Marriott Marquis New York" on May 21, 2019.

Today a SERP consists of one list of hyperlinks: the sponsored list (number 1 in figure 2), which is a list of advertising slots that are sold via auctions, are located on top of the page and underneath the maximum of ten organic search results (number 2 in figure 2). There usually is a maximum of four ads on top on the search results and more underneath the organic search results and next to them a company information window that is controlled via free Google My Business tool (number 3 in figure 2), but Google is testing different kinds of combinations all the time.

Some people say that the new design of Google's SERP causes confusion. The ads seem now more like the organic search results. Already in 2010, consumers appeared to be confused about the nature of sponsored search. Some consumers did not notice that the top lines were labeled "sponsored links" and some did not understand that they were different from organic search results. (Clemons, 2010.) Jansen and Spink (2009) studied the effect of integrating sponsored and non-sponsored links within the same SERP listing. It seemed that it was not clear to the user whether he or she clicked on an add or an organic search result.

# 2.6 Search engine marketing (SEM)

In this chapter, the concept of search engine marketing (SEM) is explained. In the subchapters the two SEM embodiments, search engine advertising (SEA) and search engine optimization (SEO) will be also defined.

SEM is a method that uses data observation and marketing research to identify the most suitable "keyword" for the website and is also called "keyword advertisement" (Malaga, 2007). SEM is a growing strategy that businesses use to improve the visibility of their website in non-sponsored and sponsored section of SERP. The goal is that the search engine users end up to the website so the businesses can achieve their informational or commercial goals. (Barry and Charleton, 2009.) Keyword advertisement entails a lot of knowledge, such as how to choose keywords, how to use keywords to make websites to be quickly found by search engines, and how to enhance the website's ranking in search engines (Chen et al., 2011). SEM provides marketers with higher return on investment (ROI) than traditional Internet marketing. In conventional internet marketing marketers commence their advertisement through banner ads with certain payment rates. Banner ads have lower ROI compared to SEM because banner ads use an inflexible payment rate, where the payment remains the same no matter what the respond rate is (Sathitwitayakul and Prasongsukarn, 2011).

SEM is a problematic term. In academic studies it means most commonly a type of online marketing that improves website visibility in SERP through the SEO and SEA practices (Sathitwitayakul and Prasongsukarn 2011). Some articles as well as authors like Google and SEO industry use term SEM just for the sponsored list in SERP. In this study I try not to use this concept after this chapter to avoid confusion. Instead I will use "process of improving search engine visibility".

# 2.6.1 Search engine advertising (SEA)

Search engine advertising (SEA) represents the sponsored section of the SERP. In SEA, also known as sponsored search, companies pay to have links to their websites displayed in the "sponsored section" of a SERP (Dou et al., 2010). The concept of SEA is widely studied (Berman and Katona, 2013; Clemons, 2010; Dou et al., 2010: Jansen and Spink, 2009; Sathitwitayakul and Prasongsukarn, 2011; Xu et al., 2012). Selling sponsored links is typically the leading revenue stream for search engines, and in some cases, the only one. During the sales process, advertisers submit bids for having their ads placed among the sponsored links, and generally the highest bidders win the most visible links, usually on the top of the list. (Berman and Katona, 2013.) Search advertising has proven itself also as a successful advertising model for the marketers during the recent decades (Xu et al., 2012).

The SEA strategies such as "cost per click" (CPC) (also known as "pay per click", PPC) offer a flexible payment rate to the Internet marketers. The payment rate directly relates to the rate of responses to the actual ads, which is determined by the number of clicks on the sponsored links. (Sathitwitayakul and Prasongsukarn, 2011.) Google has moved from only "cost per click" which places the highest bidder on top of the SERP, also to "rank-by-revenue," which places the most profitable bidder on top, from Google's perspective. The most profitable bidder is usually also the highest-quality bidder, providing the bidder pays "enough" for the use of the bidder's own trademark as a search term. Rank-by-revenue has been universally adopted not only by Google but also by competitors such as Yahoo! and Bing. (Clemons, 2010.)

# 2.6.2 Search engine optimization (SEO)

Organic search results represent the non-sponsored section of the SERP (Dou et al., 2010). The process of improving website visibility in organic search results is referred to as search engine optimization (SEO). SEO is a process of creating a website so that it ranks well for chosen keywords within the organic search results of major search engines (Iskandar and Komara, 2018). SEO is also the process of improving the volume and quality of traffic to a website from search engines via "organic" search results for selected keywords (Kritzinger and Weideman, 2013). Unlike search advertising, which requires you to pay for every click sent to your website from a search engine, traffic sent to your site from a search engine's organic results is free (Chen et al., 2011).

SEO is a series of processes that are conducted systematically for improving the volume and quality of traffic through search engine to the website. The process adapts a website to the working mechanism or algorithms of search engine. (Iskandar and Komara, 2018.) In SEO, usually companies strive to push the rankings of their websites higher in the organic search results through a variety of techniques or by hiring external consultants to develop specific techniques that will cause search engines to index their sites in higher positions (Dou et al., 2010). Currently, a growing SEO industry focuses on providing advice and content management to website owners with the purpose of improving their site's rankings on popular search engines like Google (Pant and Srinivasan, 2010).

Despite the apparent importance of the topic, there has been very little research done on SEO. At the same time, SEO has grown to become a multi-billion-dollar business. (Berman and Katona, 2013; Klatt, 2013; Panda 2013; Xu et al., 2012.)

#### 2.7 Relations of the core concepts

The relations of the core concepts are presented in the Figure 1. When an internet user uses internet to find information, he either makes a search or a query in search engine or internet marketing leads him to the information (banner ads etc.) from some other source. If the person ends up using search engine to find information, he makes a query and search engine returns a SERP. The SERP contains organic search results and sponsored search results. Good search engine visibility (position on the first SERP) can be reached by doing SEM: SEO or SEA.

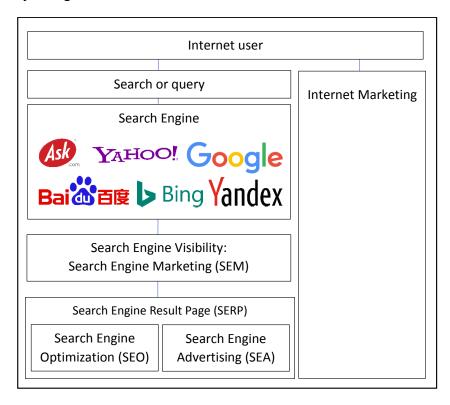


Figure 3. The core concepts of this study and their relations.

In this study we focus on search engines, most of them to Google and to the organic section of the SERP.

# 3. Search engine visibility

This study is all about search engine visibility and its benefits for businesses. Figure 4 presents online marketing strategies presented in this study. The platforms where information is provided for the users are divided to search engines and internet marketing. The visibility in search engines is divided to SEO and SEA which form the SERP. SEO is divided to white hat and black hat SEO tactics. Compared to Figure 1, in Figure 2 presents SEO strategies "white hat SEO" and "black hat SEO".

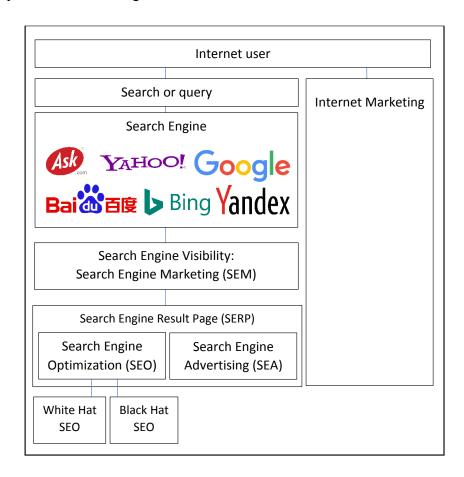


Figure 4. Online marketing strategies presented in this study.

This chapter answers the questions: Why search engine visibility matters? What are the characteristics of search engine visibility? What is the difference between SEA and SEO? What is the difference between black hat and white hat SEO? How can business achieve organic search engine visibility in Google? And what are the benefits of SEO for businesses?

Only a limited number of information systems theory (IS) studies focus on the role of organic listing in search engine visibility (Xu et al., 2012). That is why some of the references in this literature review represent also general business research.

# 3.1 Why search engine visibility matters

Search engines are among the most popular tools that consumers use to discover information online. More than half of all visitors to websites now arrive from a search engine rather than through a direct link from another website. That is why search engine visibility becomes increasingly important. (Berman and Katona, 2013; Dou et al., 2010: Lin and Chen, 2011; Klatt, 2013.) There are two methods, how a customer can find a company website from a search engine: through the non-sponsored result listing or the sponsored listing (Kritzinger and Weideman, 2013). With effective SEA or optimization techniques, relatively unknown brands can appear ahead of well-known ones (Dou et al., 2010). It is also noted that search engines' visitors spend more time on website and hit more pages than the users from other points of access. (Ortega and Aguillo, 2010).

The goal in search engine visibility might be increased sales, improved brand awareness, consumer education, or to spread socio-political messages. Regardless of the goal, organizations want to deliver relevant information to potential consumers. Search engines provide a simple and popular interface between the companies and the consumers. (Pant and Srinivasan, 2010.) Dou et al. (2010) claim that firms can apply a "brand positioning" strategy in search engine visibility to achieve two fundamental promotional objectives: build awareness and shape attitude.

The SEA strategies such as "pay per click" and "cost per click" offer a flexible payment rate to the Internet marketers, because the payment rate directly relates to the rate of responses to actual ads. That is determined by the number of clicks on the sponsored links. The long-term search engine visibility strategy of SEO, on the other hand, enables marketers to improve their website's organic search-result ranking. (Sathitwitayakul and Prasongsukarn, 2011.) Search engine visibility creates a desire to buy or a sense of trust in a brand that might lead to buying later (Clemons, 2010).

Google has turned search engines into the essential device used to find data on the web. Multiple studies reveal that most of search engine users click only on results that appear on the first SERP and clicks on sites appearing beyond the third SERP declines quickly. (Bhandari and Bansai, 2018; Luh, Yang and Huang, 2016; Malaga's article, 2008.) Many companies believe that even if a user does not click on the site link in SERP, he or she may gain a positive branding experience. This effect may be especially positive for the top-ranked results, because the user may believe the company must be outstanding or trustworthy in some way to be listed at the top of major search engines such as Google. (Dou et al., 2010.) According to comScore in December 2009, internet users made over 131 billion search requests worldwide. Google served 66.8% of this (Marszałkowski, Marszałkowski and Drozdowski, MarketingSherpa's study from the year 2005 about search engine marketing industry shows that websites that are optimized to appear higher in SERPs have a higher conversion rate or sales per visit (Malaga, 2007). Ortega's and Aguillo's (2010) study show that compared to other sources the visits through organic search results may be considered the best quality visits. Based on previous studies, the web managers must give more importance to the visibility and position of their websites in search engines.

Companies' spending on search engine visibility is growing faster than spending on other online advertising (Dou et al., 2010). Two features deserve special attention in studying the role of organic listing. One is the unique information structure associated with a SERP and the other is the characteristics of the organic ranking mechanism. (Xu et al., 2012.) Frequently, the success of digital businesses depends on their listings in SERPs. These SERPs represent more than pure information and frequently build

awareness and push brand strength. Unfortunately, SERPs are frequently affected by changes in the search algorithms. In the consequence to these updates, some businesses suffer immediately while others experience stable traffic or even benefit from these changes. (Klatt, 2013.)

It is also important to recognize that search engines are only one of many online platforms where consumers search products. Baye et al. (2015) noted that in June 2012, consumers using browsers conducted 634 million product searches at retailer sites (such as Walmart.com), 134 million product searches at price comparison sites (such as Dealtime.com), and 877 million searches at marketplace sites (such as eBay.com).

## 3.2 Characteristics of search engine visibility

SERP's co-listing structure forms two lists competing against each other for consumer's attention. Experiments tracking eye movement of users viewing Google search result pages show that the top organic links attract the most attention, whereas the top sponsored link attracts considerable attention but could be less significant. It seems that the organic list not only competes for consumer attention but even plays a dominating role in that competition. Note that those commercial websites interested in sponsored bidding may also appear in the organic list and can get significant attention from the organic list without paying anything. This raises questions like why advertisers placed at top organic positions would still be willing to spend money on sponsored bidding, and whether the presence of such a competing list would affect the search engine's revenue. (Xu et al., 2012.)

Internet and search engines are equal to all size of businesses. They offer the promise of good search engine visibility also for small-and-medium-sized enterprises (SMEs) or new entrants to the e-commerce arena, if they can use search engines to enhance their visibility and promote their brands. (Cui et al, 2007.) When firms were asked about the main challenges of creating search engine visibility, the greatest challenge mentioned was competing for and achieving a high rank on the SERP. Another challenge that came up was the shortage of measurement tools available for search engine visibility. (Barry and Charleton, 2009.)

According to Kritzinger and Weideman (2013), even though search engines are handy, they receive criticism as well. Even if Google's rankings are automated, they are not necessarily coherent. For example, if someone enters the same query into Google from different web browsers (e.g., Firefox or Chrome), the search engine can produce different SERP rankings. The reason is that Google creates the "sociological" forms of each device and browser combination's users. Entering the same query at different locations can also produce different SERP rankings, because Google maintains different data centers around the world, and they might not be fully synchronized to each other. (Killoran, 2013.)

It is also argued, that search engines may be dissatisfied if companies spend significant amounts on SEO instead of paid links and content creation. One possible solution to this is to allow payments for "organic links" and to pocket the money that sites would have otherwise paid to third parties. An example of such an implementation, Baidu, the leading Chinese search engine and the world's third largest search engine brand, does accept payments for "organic links". (Berman and Katona, 2013.) In early 2012, the European Commission announced that it was investigating whether Google is favoring its own search over competitors by linking competing services to its own search results.

Google has argued that its search service does not favor its own products or services. The company maintains that its algorithms are not unfair, and it distinguishes ads from unpaid search results. Some research had found that Bing searches favored Microsoft products 14.3% of the time compared to the 6.7% of the time that Google searches favored its own products. (West and Valentini, 2012.)

#### 3.3 SEA vs. SEO

When search engines introduced SEA to SERP, organic results had to compete against each other as well as against them (Kritzinger and Weideman, 2013.) Both Google and its supporters argue that the presence of sponsored search and ads increases consumer choice by suggesting items consumers might not have known existed. It is argued that making consumers aware of numerous additional alternatives, increasing consumer choice, improves the consumer shopping experience. (Clemons, 2010.)

SEA requires a bid for the higher ranking of ads; the Keyword Price Index (KPI) alters the bid rate from one to the other keywords in which high competition among keywords will increase the KPI (Sathitwitayakul and Prasongsukarn, 2011). Baye et al. (2015) study shows that retailers with a sponsored link on the first page of search engine results receive 37% more organic clicks after controlling for rank, brand equity, and other drivers of clicks. This positive relationship suggests that these sponsored links may provide searchers information about the retailer that increases the perceived value of clicking its organic link. The internet marketers who cannot afford to bid for certain keywords may either change the keywords or switch to a lower-tier search engine resulting in various search engine visibility issues, such as "click fraud", which refers to clicking on ads without any interest, and "lower impression", which refers to the lower searcher perception about the ads. (Sathitwitayakul and Prasongsukarn, 2011.)

Chen et al. (2011) list differences between SEA and SEO. From the media cost point of view SEO could be regarded as a free search engine visibility, so the cost will be lower than in SEA in the long run. In SEA one must pay per click of the keyword whenever someone clicks on ad. And the risk of invalid clicks bears only in SEA because in SEO one do not need to pay for clicks. From the "stay of rankings" point of view SEO ranking is more permanent than SEA and will not change that easily. Although the goal of SEO seems to be optimizing the organic traffic a website receives through searches on search engines, the fundamental goal is presumably maximizing the company's profits. One of the initial steps in this optimization process is identifying the benefits and costs of different strategies for increasing traffic. (Baye et al. 2015.)

Many studies have shown, that users have more trust in organic listings, which also have higher conversion rates, than in SEA campaigns. In other words, organic results at the top of search results have higher probability of being clicked compared to sponsored listing and the quality of the visitors through non-sponsored list is better. (Jansen and Spink, 2009; Klatt, 2013; Panda 2013.) According to Sun and Spears (2011), in order to achieve the largest possible amount of "clicks" to their websites, search advertisers strive to choose the most relevant terms in their links or link descriptions. Occasionally, however, the search results may not be what the consumer expected to find. Since the organic links are viewed as more trustworthy by consumers, websites receive positive benefits from visitors arriving through clicks on them. (Berman and Katona, 2013.)

According to Kritzinger and Weideman (2013), both SEO and SEA have their own advantages and disadvantages. SEA can ensure that a website will be listed immediately

and the top rankings in Google SERP, if we have high enough bid price and quality score. On the other hand, SEO cannot ever ensure top rankings and it might take long time to experience ranking improvements as a result of SEO process. The main challenge of an effective SEO process is that each search engine has its own guidelines, which means that a website optimized for one search engine (like Google) might not be optimized for the others (like Yandex). Another challenge is that search engines also continuously change their ranking algorithms to prevent low quality websites from indexing high in SERP. Because of that, SEO professionals need to be constantly updating their SEO strategy, which might become costly. SEO's biggest advantage is that SEO listings hold the main area of a search engine's result page, so the search engine users cannot easily ignore them.

Sathitwitayakul and Prasongsukarn (2011) suggest in their article that the most effective strategy for search engine visibility is to implement both SEO and SEA. Kritzinger and Weideman (2013) agree with them. Their study confirms that both SEO and SEA are required for maximum website exposure. According to Yang's and Ghose's (2010) study, the presence of organic listings is associated with a higher probability of click-throughs on paid ads, and vice versa. This suggests that firms, which tend to rank highly in organic search, are more likely to benefit from sponsored search advertising.

#### 3.4 Black hat SEO vs. white hat SEO

Improving website's non-sponsored search engine visibility can be accomplished either by making the site more relevant for consumers, or by investing in techniques that affect only the search engine's quality ranking process. These two types of SEO techniques are sometimes referred to as white hat SEO and black hat SEO. (Berman and Katona, 2013.) Search engines typically take a stance against black hat SEO and consider it cheating. In some cases, websites caught conducting black hat SEO activities are removed from the organic list. (Malaga, 2010.) To justify their position, search engines typically claim that manipulation of search engine results hurts consumer satisfaction and decreases the welfare of "honest" sites. (Berman and Katona, 2013.)

To set the rules, search engines sometimes publish guidelines describing undesired practices (Berman and Katona, 2013). The SEO methods which stay within the search engine's guidelines are generally termed white hat, while those that violate the guidelines are called black hat (Malaga, 2010). White hat SEO improves the site content increasing visitor satisfaction and making the site more relevant, while black hat SEO only improves the ranking of a site among search results without improving its quality (Berman and Katona, 2013). Google advises businesses to base their SEO to white hat methods:

"...optimization decisions first and foremost on what's best for the visitors of your site. They're the main consumers of your content and are using search engines to find your work. Focusing too hard on specific tweaks to gain ranking in the organic results of search engines may not deliver the desired results." (Baye et al., 2015.)

Black hat strategy is designed to "trick" search engines to improve website's position in organic search results (Baye et al., 2015). The three main methods that fall into this category are cloaking (e.g. white text on white background), doorway pages (low-quality pages which are made to support SEO) and invisible elements (elements that search engine can see but the users cannot). (Malaga, 2008.) Search engines have created algorithms to ensure that search engine users receive relevant results (Baye et

al., 2015). According to Zhang and Cabage (2017), website could easily rank well with grey or black-hat SEO practices such as stolen, duplicate, thin or no content, keyword stuffing or spamming, link spam, purchased links or other link manipulation and top-heavy ad sites. Most of these methods are aimed at providing certain content only to the spiders, while actual users see completely different content. (Malaga, 2008.) One of the oldest tricks black hat SEOs use to attract search engine spiders is called blog-ping (BP). This technique consists of establishing hundreds of blogs. The optimizer then posts a link to the new site on each blog. The final step is to continually ping the blogs which means sending automated messages to several blog servers that the blog has been updated. The number of blogs and continuous pinging attracts the search engine spiders. (Malaga 2008.) Examples of white hat and black hat SEO methods are listed in table 1. The content is collected from the referral articles of this study.

Table 1. Examples of white hat and black hat SEO methods.

SEO methods	White hat SEO	Black hat SEO
Methods stay within the search engine guidelines (Malaga, 2010)	X	
Methods violate the search engine guidelines (Malaga, 2010)		X
Cloaking SEO methods (Malaga, 2008)		X
Keyword analysis and selection (Gregurec and Grd, 2012)	X	X
Title and meta description changes (Sathitwitayakul and Prasongsukarn, 2011)	X	X
Technical optimization on website (Sathitwitayakul and Prasongsukarn, 2011)	X	
Engaging content for website users (Berman and Katona, 2013)	X	
Stolen content, duplicate content, thin content (Zhang and Cabage, 2017)		X
Keyword stuffing or spamming (Zhang and Cabage, 2017)		X
Doorway pages (Malaga, 2008)		X
Invisible elements (Malaga, 2008)		X
Link building, internal and external links (Zhang and Cabage, 2017)	X	
Link farm, purchased links, link manipulation (Zhang and Cabage, 2017)		X
Blog-ping (BP) (Malaga, 2008)	X	X

Black hat SEO strategies might improve the position of a website's link but not necessarily impact its clicks. For this reason, SEO strategies purely based on "tricking" or "spamming" search engines are unlikely to create sustainable improvements in rankings. They also may not result in additional clicks and can even backfire as a result of negative effects on reputation. (Baye et al., 2015.) Webmasters cannot simply ignore black hat optimization even if they wanted to. Black hat methods may lead to worse rankings for white hat sites, because black hat sites might rank better temporarily. In addition, white hats should not ignore black hat approaches as they can learn or adapt new SEO methods from them. For example, many white hat optimizers have successfully used the blog-ping approach, in a more moderate manner, to achieve quick search engine indexing. (Malaga, 2008.)

# 3.5 SEO process in practice

In this chapter we go through SEO factors that can be divided to four categories in two groups: on-site factors like keywords and content SEO, and off-site factors like technical SEO and link building (presented in figure 5) (Wang, Li and Zhang, 2015.) Before that there is some fundamental information about SEO process.

# 3.5.1 Fundamental characteristics of SEO process

When we enter keywords or key phrases into search engine, the search engine uses hundreds of factors in the ranking process. Search engine analyses the age of the site and its content, links and the reputation of linking sites, regularity of content updates on the website, uniqueness and use of keywords in the content, use of sub-domains, presence of coding errors, use of Flash, graphics, forms and frames to a minimum and quality of HTML just to mention a few factors. (Barry and Charleton, 2009.) SEO factors are usually divided into two categories: on-site and off-site factors. On-site factors apply to the content, its importance and its readability. Off-site factors apply to page popularity over the internet and a group of query independent factors, which often concentrate on technology. (Marszałkowski et al., 2014; Wang, Li and Zhang, 2015.)

According to Zhang and Cabage (2017), black hat SEO used to be a shortcut to gain more website traffic. Today, black hat SEO tactics have much less of an impact on search rankings. While fundamental SEO tactics like on-page tag optimization and site structure continue to help search engines to discover and understand the content of a website, this is no longer enough to create sustainable improvements in SEO rankings due to search engine algorithm updates. Now search engines are seeing positive user experience, responsive website design, strong link profile and social presence as additional quality signals to determine the rankings of the website. One proof of importance of user experience is Google's ranking algorithms, which pay attention to the "click-through rate" (CTR) from Google to a website and the "bounce rate" (BR) from the website back to Google. The CTR is the percentage of times searchers click on the link to a website listed in Google's SERP. A high CTR indicates to Google that searchers entering that query think that the landing page is highly relevant for them. Google's algorithm will weigh that in the website's favour in future searches. The BR is the percentage of searchers who return from a "clicked-through" webpage back to Google's SERP and try some other website instead. A website's BR has the opposite effect: a high BR indicates to Google that searchers entering that query are disappointed with that landing page. As a result, Google's algorithm will weigh that against the website in future searches. (Killoran, 2013.) Google has also begun to serve organic search results based on user profiles in its recently developed personalized search results. Websites that users have already visited will usually rank higher on subsequent queries if users have that feature enabled. (Yang and Ghose, 2010.)

According to SEO industry, everything starts with choosing the effective keywords. If the keywords that have no queries are chosen, the SEO will be just a waste of time. After the keyword analysis, effective landing pages should be chosen (pages where the visitor will end up or "land" after clicking company's result on SERP) for each selected keyword. During the SEO process, an effective website structure should be formed, new content must be provided for the landing pages, it must be ensured that the company's website is programmed according to search engine's guidelines and internal and external links should be built. After that the website's status can be improved even more for example by doing social media optimization, optimizing website's quality score and optimizing for local search. (Jones 2013, p. xviii.) SEO is an on-going process rather than a project as presented in Figure 5.

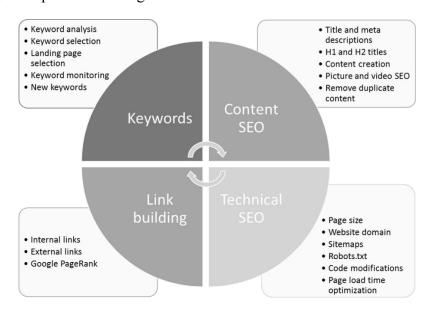


Figure 5. SEO as an on-going process (figure by Riikka Pohjanen)

Some optimization techniques do not change over time and they form the foundation for SEO (Iskandar and Komara, 2018). However, to ensure that the audiences can continue to easily find the content through search engines, web developers and SEO professionals should keep up to date with the evolving search algorithms, SEO practices, website's traffic, and the competition (Killoran, 2013). This is what makes SEO an on-going process (Figure 5) (Barry and Charleton, 2009). In the following subchapters, the four categories, presented in figure 5, will be explained in the same order and the references will be mentioned.

#### Keywords

The key to a good SEO is to choose effective keywords or key phrases on which the site should be optimized. Even the most elegantly designed site with the most useful information on the web is of no value to those who cannot find it. (Gregurec and Grd, 2012.) Keywords should be used in HTML tags (title, meta descriptions and headings) (Dick, 2011).

SEO process starts from the SEO professional who develops a list of keywords or key phrases (Malaga, 2008). According to Killoran (2013) when choosing the keywords for SEO, we need to keep the audience in mind. We must make it easier for audiences to find the relevant information and websites through search engines. The best keywords are related to each organization and each website. Good keywords commonly recommended by SEO professionals include, for example, words and phrases naming the problems or needs that the organization resolves. (Killoran, 2013.) A survey of US consumers found that, in searches for local businesses, almost half enter a geographical term to localize their search (Killoran, 2013). The Baye et al. (2015) study found that consumers who are older, wealthier, use shorter queries, or include a brand name in their search, are more likely to click an organic link following a product search.

Popular search terms form less than 30% of the overall queries performed on the web. The 18.5% of searchers with the highest frequency are known as the Fat Head. The next 11.5% is named the Chunky Middle, while the last 70% is called the desired Long Tail. The long tail search queries normally consist of more than one keyword per search phrase. (Kritzinger and Weideman, 2013.) Targeting longer, more specific keyword phrases, rather than a few short, broad terms, can bring more qualified traffic to a website and higher conversion rates (Dou et al., 2010). A useful tool for discovering other potential keywords is Google's Keyword Tool, which returns not only the estimated search volume of a keyword but also hundreds of related keywords and key phrases. (Killoran, 2013.)

#### Content SEO

During the second step of SEO process, the SEO professional fix the on-page elements: metatags, page content and site navigation, to make the website more attractive to search engine spiders (Malaga, 2008). According to Konidaris and Koustoumpardi (2018) quality content is a major factor for better Google rankings, and this is not a technical SEO issue. The assigned keyword in meta description should be included in the content so that the percentage of the keywords used is between 3 to 9 percent of a certain landing page's code. Moreover, it is highly recommended that title name and meta description are included in the code. (Sathitwitayakul and Prasongsukarn, 2011.)

Title tag is one of the most important elements in SEO. It describes the content of a website. (Dick, 2011.) Title tag appears in three key places. First, title tags show up at the top of a browser and in applicable tabs. Second, title tags show up in SERP. Third, external websites (especially social media sites) will use the title of a website as its link anchor text. Maximum number of characters displayed in search results is about 70. The characters above that will not be displayed. (Gregurec and Grd, 2012.) According to Killoran (2010), the relevance of such meta tag descriptions to search engines has been diminishing lately from SEO point of view. Therefore, it is necessary for sellers to have attractive product titles, with features that are of interest to consumers. These kinds of titles can improve consumers' first impression of products and the whole company or brand. (Wang et al., 2015.) Meta descriptions are HTML attributes that provide explanation of the contents of websites. In the past, information in meta descriptions could increase a page rank for the words that were contained within it. Today, neither Google, Bing, nor Yahoo! use meta descriptions as a ranking signal. Still, also meta descriptions appear in the 3 important places with title tags. (Gregurec and Grd, 2012.)

Website content has also specific elements which should be noted during SEO process. The text size should be varied according to the priority of the content using header tags

<H1> or <H2> (Sathitwitayakul and Prasongsukarn, 2011). Header tags are one of the most important on-page SEO factor. Sites optimized with quality H1 receive significantly better ranking. Search engine crawlers look for H1 description, to determine the relevance of a page. (Gregurec and Grd, 2012.) Besides header, content is the lifeblood of company's website. Google appreciates content and website with more, better quality content will defeat a weaker website. Keywords and synonyms carried over from title content into body text will boost ranking. Keyword use in file names, and in other fields (such as picture captions) are also ranking factors, but less significant. (Dick, 2011.) Pictures and videos can be part of SEO when using the HTML "alt" attributes to describe images and videos which search engines cannot otherwise "see" (Killoran, 2010).

According to Jones (2013, p. 92-96) one should write and structure website content for people, not search engines. Search engines use latent sematic indexing to determine a site's thematic relevance to a search query. It allows the content writer to establish site's relevance through thematically linked terms. Search engines also value the elegance and accessibility of one's writing. The search-engine spiders understand language and are aware that poor content and clumsy sentences are displeasing to users. Useful and informative content will attract users' attention. Search engines have been getting smarter in finding duplicate content. Some advice to block the duplicate content pages, some to redirect them (Gregurec and Grd, 2012). Search engines penalize website owners that publish the exact or very similar content to what has already been published on the web. (Jones, 2013, p.96-98.) The growing popularity of corporate blogs can result from the fact that search engine algorithms favour webpages that receive frequent updates (Killoran, 2010). Finally, the social analysis should be done regularly to discover what customers and potential customers are saying about the brand, the website quality, and the competitors. Social analytic tools might help businesses to collect and understand the most interesting topics and influential conversations for future marketing decision-making. (Zhang and Cabage, 2017.)

#### Technical SEO

The third step in SEO process is to get the website into the search engine index as soon as possible (Kritzinger and Weideman, 2013). This can be achieved by manually submitting the URLs or the sitemap to the search engines for consideration (Weideman 2012). Sitemaps are maps of a website. Sitemaps make navigating websites easier. Sitemaps can be used on websites of any size however, if a website has more than 16 pages, implementing a sitemap is essential from a SEO point of view. (Gregurec and Grd, 2012.) The use of standard HTML and XML sitemaps can ensure that search engines quickly and accurately notice all the website's content (Zhang and Cabage, 2017). If one does not want to index some content or some of the pages, he can use Robots.txt files. Search engines index as much high-quality information as they can, and they will assume that they can crawl everything unless told otherwise. With Robots.txt files one can communicate with the search engine and tell them what should be indexed and what not. (Gregurec and Grd, 2012.)

Website domain names have been strong ranking indicators in Google. A SEOmoz survey revealed that many SEO professionals have long suspected a decreasing importance for a domain name. When choosing a website's domain name, SEO professionals normally recommend choosing a name based either on an existing keyword or a new brandable name that the site will be optimized for. (Killoran, 2013.) Second strong indicator is page size. According to Wang, Li and Zhang (2015), the

concept of "Page Size" is defined as the sum of the file sizes for all the elements that make up a page, including the defining HTML file as well as all embedded objects. Their estimation is, that most search engines will not fully index pages that are greater than 150 kilobyte. Slow page load time (Google says over three seconds) creates difficulties for users to effectively browse a website (Gregurec and Grd, 2012). In April 2010 Google announced site speed as a new factor in their ranking algorithm. Google is gathering two metrics of site speed: crawl time and page load time. Crawl time is the file download time measured by the Google crawlers when indexing the website. Page load time or page speed is the time of loading and rendering a complete page with all the files required by HTML (JS, CSS, images). (Marszałkowski et al., 2014.)

Companies modify their site code to make it more relevant and therefore more search engine compatible (Sen, 2005). Sathitwitayakul and Prasongsukarn (2011) give specific instructions, how to program SEO friendly website:

"The Web crawler or spider considers the simplicity of programming language including the arrangement of the language. Hypertext Markup Language (HTML) is the prime form of markup language for interpreting the text, which is considered the most SEO friendly language for webpages. Another SEO friendly programming language is eXtendable Hypertext Markup Language (XHTML) which belongs to the XML family which is an extend version of HTML. On the other hand, a Web spider considers the appearance and layout of the content, therefore, Cascading Style Sheets (CSS) in the programming language improves the SEO friendliness of a website. Nevertheless, flash objects confuse the spider and it may cause the spider to leave the page once those objects are crawled, resulting in higher opportunity cost. Script languages such as Hypertext Preprocessor (PHP) and JavaScript are not SEO friendly, however, they do not cause the spider to leave the page."

One should also keep in mind, that search engines appreciate URLs that do not contain long query strings. URL like http://www.example.com/keyword can be indexed much easier than http://www.example.com/product/keyword, which can confuse search engines and cause them to miss possibly important information contained in the URL. With clean, simple URLs, the search engines can distinguish folder names and can establish real links to chosen keywords. (Gregurec and Grd, 2012.) Web usability experts also noted that complex and long URLs hurt both, usability and SEO (Pant and Srinivasan, 2010). The URL should also illustrate the chosen keyword of the selected webpage. Besides that, the URL should be in the same language as the webpage or assigned keywords. (Sathitwitayakul and Prasongsukarn, 2011.)

According to Wang, Li and Zhang (2015), broken links or 404-status links should be fixed. 404 error occurs when server cannot find the page requested. This might result from the website structure renovation during the SEO process. A common belief is that it the best practice is to simply 301-redirect pages that return a 404-status code to the homepage of the given domain, but Gregurec and Grd (2012) claim that it is a common misconception. Google reminds the website builders that user satisfaction should be the goal and all we do should be based on that (Eswarawaka et al., 2017).

Search engines have started to provide better tools for webmasters. For example, Google Webmaster Tools (name of the tool is Google Search Console in 2019) allow webmasters to set geographic target, preferred domain, URL parameters, and crawl rate so that Google can crawl the site more efficiently and rank the site better. The tool also provides diagnostics that inform webmasters of errors (like 404 sites) found while crawling their site. Webmaster tools provide for example keyword impressions, CTRs,

top pages delivered in search results, and linking statistics. This tool also allows webmasters to submit sitemaps and test robots.txt files. Since Google is paying attention to the user satisfaction, this tool also provides solutions to check website's mobile friendliness or site speed. (Zhang and Cabage 2017.)

#### Link building

Google's SEO Starter Guide acclaims, "Link building is an art. It's almost always the most challenging part of an SEO's job, but also the one most critical to success." (Zhang and Cabage, 2017). According to Zhang and Cabage (2017), there are three good ways to build effective links. First of them is manual link building. The links can be manually built for example by e-mailing co-operators for links, submitting sites to directories and authoritative sites. Paid links are not encouraged as search engines like Google has been decreasing the weight of the paid links in the organic search results. Second link building strategy is self-created, non-editorial link building. This means creating links to the website through blog comments or for example social media user profiles. These links offer the lowest value, but they can still make a difference. Third way is editorial link building. This means creating relevant and valuable content on external popular blogs or websites with a link back to the website. A good way to build effective editorial links is to volunteer to publish articles and blog posts in popular blogs or online magazines. Besides those three, website should earn inbound links (also called "backlinks") from other websites. Google highlight the quality of inbound links over their quantity, specifically the authority of the linking sources and the topical relevance of the linked sites to each other. (Killoran, 2013.)

Link building does not only contain external link building, but internal linkage as well. The recommendation is to link supporting content to the main SEO landing pages. If an internal link is located in the content text, an anchor should be used. (Dick, 2011.) The anchor is the website interlinks tags: when the user clicks on it, the links will lead to another page allocated by the webmaster. The anchors benefit both SEO and user-friendly issues of the website as they allow spider to crawl on them and provide simplicity to the user. (Sathitwitayakul and Prasongsukarn, 2011.) Link estimation should be performed periodically. In those estimations one should check the quality and effectiveness of the links, the number of new incoming links, overall backlink portfolio, quality and authority of the sites linked to the primary website and ranking and traffic change. Popular link analytic tools are for example Majestic SEO, Raven SEO Tools, Screaming Frog, SEOmoz, and Wordtracker. (Zhang and Cabage, 2017.)

How Google search engine stood out from the competitors in the early years was its ability to analyse the inbound links and determine the relevancy of a website. Through links, Google can analyse popularity of a website based on the number and popularity of pages linking to it and other metrics like trust, spam or authority. (Zhang and Cabage, 2017.) According to the Google PageRank SEO strategies, inbound links should be from high PageRanked websites because it will provide company's website with a higher amount of value than backlinks from the lower PageRanked websites (Sathitwitayakul and Prasongsukarn, 2011). There is some evidence that home pages tend to have higher PageRank than other pages within a site (Dou et al., 2010).

Google's Matt Cutts confirmed in 2010 that Google uses some social media signals, explicitly mentioning Twitter and Facebook links as well as the reputation of the linking authors (Killoran 2013). Search engines have recently started integrating also public

social mentions and social sharing in their SERP ranking algorithms (Zhang and Cabage, 2017).

#### 3.6 The benefits of SEO for businesses

Baye et al. (2015) found that search engines tend to place high quality sites in better positions, which results in additional clicks because consumers tend to click links in more favourable positions. Also, the quality of a website appeared to be especially important in attracting organic traffic from individuals with higher incomes. When confronted with a list of potentially "relevant" search results, consumers are more likely to click the link of the company with the greatest brand equity. That is, holding other drivers of clicks constant, consumers tend to click companies that are more recognized, trusted and have good reputations in providing value and service (well-designed websites, return policies, secure payment systems etc.).

In digital marketing everything should be measurable. Multiple studies reveal positive search engine visibility results on different markets all around the world. Lin's and Chen's (2011) study shows that nearly 80% to 90% of all website traffic originates on generic search sites such as search engines and directories. In addition to this, the ranking of the website in the search engine results is crucial for generating traffic and sales. According to Killoran (2010), a commercially sponsored survey found that 82% of U.S. consumers used search engines to find local businesses, and that 50% would turn to search engines first.

There are multiple studies proving that SEO works. In Malaga's (2007) study a SEO project was undertaken at a new e-commerce site. The site's search engine rankings and traffic were measured after each phase in the project. The results indicate that SEO is an effective method for improving search engine rankings and site traffic. In addition, when the costs and benefits of the SEO project were compared with a SEA campaign, the SEO process proved to be more cost effective. Ho's (2010) study results showed that the ranking of a motel website had significant increases after applying the process of SEO. Ho states in his study that SEO strategy can be applicable also in other industries. Zhang and Cabage's (2017) results show that a website which applied SEO link building, generated the most traffic, domain authority, SERP rank, and even better ad revenue. Such increases occurred gradually and exponentially after the links were built.

SEO will always be an ongoing challenge for marketers as search engines never disclose their ranking algorithms (Barry and Charleton, 2009). But SEO alone cannot solve all the issues. (Baye et al., 2015; Sun and Spears, 2011; Wu, Cook and Strong, 2005.) As competition online increases, website owners investigate ways in which they can attract and retain more users. One option is to reduce frustration and stress for the users. One way to do so is to improve user experience online. For example, since most of the queries are made with mobile devices, website owners should pay attention to website loading time on those devices. (Moody and Galletta, 2015.) According to Wu, Cook and Strong (2005), when potential customers visit a website, firms should provide them with engaging content and user-friendly navigation to create the desired outcomes such as further inquiry, purchase or user satisfaction. Sun and Spears's (2011) studies show that ineffective information searches can produce frustrations that impact attitudes toward the searched product and might lead to abandonment of the shopping chart.

For an effective search engine visibility process, companies should work with their technology teams and plan out a long-term strategy by undertaking site analysis. This can be done by using web analytics. If proper actions backed up by ranking algorithms can be done, then the sponsoring company can expect a better ROI. (Panda 2013.) Wu, Cook and Strong (2005) remind us that measuring and understanding the behavior of website visitors and its linkage to the desired system outcome is the key to success.

# Research methodology

This chapter explains how the research was done and why the selected research method is suitable choice for this research. This chapter also defines, how the empirical study was arranged, and how the data was collected, analysed and discussed in this study.

#### 4.1 Literature review

When starting this research, a literature review was conducted in order to map out whether SEO had been studied in IS studies before. In order to conduct a successful literature review, relevant search terms for the process had to be be mapped out ("Conducting a literature review", 2019). In this case the list of search terms started with "search engine visibility" and "search engine optimization". In the first reading process I noted that meaning of concepts "search engine visibility" and "search engine marketing" were mixed in IS studies. Some academic articles, Google and digital marketing industry consider the concept SEM as a synonym to concept SEA – meaning the sponsored section in SERP. At the same time in other academic articles SEM was defined as an umbrella term for SEO and SEA – meaning the whole SERP. In this study the term SEM has been avoided to minimise the risk of confusion. That is why also keywords "search engine marketing", "search engine advertising", "search engine", "Google" and "Google algorithms" had to be included to the list to find all the relevant articles.

First, all suitable articles from basket of eight journals which are considered as the top journals of IS field ("Senior Scholars' Basket of Journals," 2019) were included. After that the articles which were cited in those articles were included starting from the most recent publications. It was mentioned in many references, that only a limited number of IS studies focus on the role of organic listing in search engine visibility (Xu et al., 2012). That is why some of the references in this literature review represent also general business research. The chosen articles together created a timeline from 2005 to 2018. Articles older than that did not seem relevant in this case, since the topic has constantly changed. It was interesting to see how academic research has developed over time. The early articles concentrated on technology and how to utilize it effectively. After a while, also user centeredness came in. This same phenomenon has happened also in a broader scale in IS studies. (Iivari and Iivari 2011; Hirschheim and Klein 2012; Sidorova et al. 2008.)

Preliminary idea for the research was to reveal the differences between academic research and the findings in the empirical study. The goal of this study was to create a comprehensive understanding about SEO and the benefits businesses can get from it. Another ambitious attempt is to try to forecast the future role of search engines and SEO for business operations. Literature review is the foundation of this study, but it is accompanied with empirical study findings.

#### 4.2 Selecting research methods

Qualitative research is primarily exploratory research. It is used to gain an understanding of a selected phenomenon (Sarker et al., 2013). In this study the selected phenomenon was related to search engines, how businesses benefit from organic search engine visibility and do they evaluate Google so high that they would invest in SEO also in the future. This topic is actual because Google, the search engine with the largest market share (Clemons, 2010) is changing rapidly and nobody knows, what is the role of search engines and SEO in the future's business operations.

It is typical for empirical research methods to collect as broad selection of material as possible: reasons, opinions, and motivations. The goal is to enable the broadest possible examination of the selected phenomenon (Sarker et al., 2013). In this study the underlying effort was to try to understand the role of search engines and SEO for businesses currently and assess their possible role in the future. Qualitative research methods provided a chance to collect also opinions and motivations from persons who know Google and SEO. The very same persons also use Google constantly, so they are Google's customers as well. That is why, their feelings and opinions truly matter. With quantitative research methods the feelings would not have come up the way they did in this qualitative study. (Kaplan and Duchon, 1988.)

#### 4.3 Semi-structured interview

Interviews are the most commonly used data collection method and the semi-structured format is the most frequently used interview technique in qualitative research (Kallio et al., 2016). In an unstructured or semi-structured interview there is an incomplete script. The researcher may have prepared some questions beforehand, but there is also a need for improvisation. On the contrast, structured interview should have a complete script that is prepared beforehand and there is no room for improvisation. (Myers and Newman, 2007.) In this case, the questionnaire script (Appendix A) was carried out based on the literature review. It was divided to four sections to make it more comprehensible: background information about the interviewees, SEO process, benefits of SEO and future of SEO. The phenomenon is broad and constantly changing so the questionnaire had to be loose enough to appreciate all kind of answers and discussion between the researcher and the interviewee. (Baxter and Jack, 1988.) For that reason, semi-structured interview seemed to be the best option for the empirical study.

One of the main advantages is that semi-structured interview method has been found to be successful in enabling reciprocity between the interviewer and participant, enabling the interviewer to improvise follow-up questions based on participants and allowing space for participants' individual verbal expressions. (Kallio et al., 2016.) To avoid problems based on research questions, like too broad or non-mandatory questions, it was important to place boundaries to the study (Baxter and Jack, 2008). In this study the boundaries were the focus on companies and the benefits companies can gain from SEO. Another boundary was the focus on Google search engine. Qualitative research interview seeks to describe the meanings of the selected phenomenon. As the interviews were chosen to be the primary instrument for data gathering, the questions were carefully designed with a main question and follow-up questions beforehand.

The empirical part of this study consisted of eight interviews. The interviewees were connected through researcher's personal social media profiles (LinkedIn and Facebook). The researcher published an open announcement: "I'm looking for interviewees for my master's thesis empirical study. If you fulfil the following requirements, please, enrol in! Requirements: You are employed (or self-employed), you are interested about SEO, you have participated in a SEO process somehow and you have opinions about the benefits of SEO" The aim was to find persons with different backgrounds and job descriptions. All together, 10 people enrolled in, 4 in LinkedIn and 6 in Facebook, but due scheduling issues two of them could not participate in the end. None of the interviewees were the researcher's customers or co-workers. All interviewees were in Finland but some of them represented companies which operated on international markets. Half of the interviewees were female (marked with F in table 2) and half were male (marked with M in table 2). More specific information about the selected interviewees is listed in table 2.

 Table 2.
 Background information about interviewees, abbreviations and durations.

	Age	Interviewing Method	Employees	Market	Duration	Experience in SEO
Interview 1, M1	33	Face-to-face	12	International	46:12	A lot of experience
Interview 2, F1	43	Video conference	1	Finland	36:51	Limited experience
Interview 3, M2	52	Face-to-face	1	Finland	57:01	Limited experience
Interview 4, M3	37	Video conference	32	International	25:27	Limited experience
Interview 5, F2	36	Video conference	12	Finland	32:49	Professional
Interview 6, M4	31	Video conference	1	Finland	33:28	Some experience
Interview 7, F3	31	Face-to-face	40-50	International	35:05	Professional
Interview 8, F4	28	Video conference	10	Finland	28:44	Professional

The durations of the interviews varied between 25:27 and 57:01 minutes (Table 2). They were recorded, transcribed word-by-word in Finnish right after the interview and categorized by researcher. The Interviews were held both face-to-face and via video conference software. The interviewees were informed in advance, that the interview would take maximum one hour. The interviews were in Finnish and the data was translated in English for this study during the writing process. The original material is stored as well.

#### 4.4 Data analysis

Qualitative content analysis was adopted in this study. Content analysis is commonly used in qualitative research (Kohlbacher, 2006). Researcher's responsibility is to analyse the findings in a concise manner and convert complex phenomenon into an easily understandable format for the reader (Baxter and Jack, 2008). In the empirical study the data was recorded in Finnish during the interviews and transcribed word-byword in Finnish right after. During the content analysis, research material was organized according to interview frame (Appendix A) so that the data was easy to handle, and valuable information was secured (Kohlbacher, 2006.) With the help of content analysis, the information related to the core themes of this study was separated. The themes were the benefits of SEO, the features of SEO process and the future of search engines and SEO.

During the writing process the findings of the empirical study were concluded. First, the findings were presented according to the four sections of the questionnaire script (Appendix A) in chapter 5. Citations from interviews were handled in Finnish and they were translated in English in the end of the analysis. This method was meant to ensure that the data would not distort during the process. All the original material was also preserved. After that the empirical study findings were also pulled together with the literature review findings and the research question together with the sub-questions were answered in the chapter 6.

The reliability and validity of the study had to consider providing a reliable research. According to Hirsjärvi and Hurme (2001, s. 185) the concepts of reliability and validity are based on the idea that a researcher can reach the objective reality and objective truth. A study can be considered reliable if two reviewers end up to a similar result, or if a person is studied, two separated studies end up to a similar result (Hirsjärvi and Hurme, 2001, s. 186). In this study the reliability was ensured by having a broad literature review and as many as eight long interviews during the empirical study. Wider data will fade out anomalies and repetition bring out the facts. Validity means authenticity. The material is valid when the interviewees are expressing themselves related to the same topic the researcher assumes. (Hirsjärvi and Hurme, 2001, s. 187.) In this study interviewees were briefed that this interview will be related to search engines and SEO. They were informed that the questions would concentrate on opinions, feelings and motivations behind the phenomenon. All interviewees knew SEO and had at least some basic knowledge about the issue behind it.

# 5. Empirical research

In this section the findings of the empirical study are presented and discussed in relation to earlier research. This chapter is divided to four sections according to questionnaire script: background, SEO process, benefits of SEO and future of SEO. The interview data is individualized by numbering the respondents and using gender as individualizing attribute: the four female interviewees as F1, F2, F3 and F4 and the four male interviewees are marked as M1, M2, M3 and M4.

#### 5.1 Background

The interview started with the background section. In the first section interviewees were asked, why do they think search engine visibility is important, what is the role of SEO for them, have they used any other digital marketing methods, how they ended up doing SEO, who can do SEO in general and why did they do SEO in Google.

The importance of search engine visibility was shared among all interviewees but the reasons, why they became interested about the topic varied. Those who founded their own companies (F1, M2, M4) realized that search engine visibility is important when no-one knows that your company exists. Those who ended up working in digital marketing industry (F2, F3, F4) or those whose job description included digital marketing (M1, M3) realized quite soon, how important search engine visibility is for their company and their customers' companies.

Search engine visibility can be provided with SEO or SEA. Many interviewees had tried them both. When the interviewees were asked, why they ended up using SEO, the answers were divided from SEO is cheaper (F1, F4, M2) to the notion that people trust more the organic search results (F2, M3, M4) and finally to the statement that in some cases SEO is more effective and in others SEA works better (F3, M1). M1 said that each case is different, and the challenge is to find the best channel to reach the right target market. He told that in many cases SEO worked better than SEA, even though SEA is a tool specifically made for finding the right people in search engine. M4 argued that noone clicks the search engine ads but F3 stated that she knows this argument is not true. M4 warned that Google Ads might be even harmful for company's brand:

"...I don't regard the advertising quality of them good and companies should consider carefully, what keywords provide enough value so that it's justified to buy the presence within them [...] and in which cases the use of search engine ads might even harm company's brand..." (M4)

F3 said that Google tries to support SEA by broadening the area of ads step-by-step. She even claimed that Google does not want to be a search engine but a marketing platform instead. The most common argument for SEO was money (F1, F2, F4, M1, M2, M3, M4). SEO is considered to be the "free" digital marketing channel because you do not need to pay for the media, and that makes it more attractive.

Besides search engines, also other digital marketing channels are available. When asked, what other digital marketing channels were used, the social medias were always mentioned. User data provided by Google or Facebook was also mentioned and the opportunities it provides for marketers:

"I strongly believe in data about people collected by the social medias and the targeting opportunities they provide for professionals, B2B and B2C-marketing by using that data [...] it makes marketing so much more affordable so from that point of view it's worth investing resources..." (M4)

When discussed about the role of SEO, all interviewees considered it extremely important. The role of SEO depends also on the phase where the company is in. Especially in the situations where a company is new or has been in smaller markets and all the sudden expands its markets, the role of SEO becomes even more crucial (F1, F2, M1). The reason why search engine visibility was considered more effective than for example banner ads in social media or display network, was explained well in one of the interviews:

"when a person uses search engine, he's craving something, he either searches for information or he's probably willing to buy [...] So, in a way, when that person uses a search engine and he has that urge in the back of his head, if we are able to lead him to our website at that moment, he's a much warmer customer than a person who just sees a display ad on a random website." (F2)

Some of the interviewees had done SEO by themselves (F2, F3, F4), some of them had had some help in the beginning (F1, M4) but afterwards they continued on their own, and some of them had outsourced the whole SEO process or some parts of it (M1, M2, M3). M1 claimed that only a SEO professional can do SEO well enough but F2 disagrees:

"It's not rocket science, honestly. It is interesting, how some companies make it sound like no-one can do it by themselves ever, and that you surely need an expert to do that even if with a good training everybody is capable of doing search engine optimization on their own website and their own content. It seems that some people try to make it sound more difficult than it is..." (F2)

All those companies who were for outsourcing SEO were operating on international markets (F3, M1, M3). Those who trusted their own skills were operating mainly in Finland (F1, F4, M2, M4). It was noted during the interviews (F2, F3, M1), that when there is not much competition, even the most basic SEO practices might be enough to provide enough visibility in search engines. In a more challenging competition, more operations and resources are required. In these situations, one should consider, whether it is more useful to do SEO in-house or outsource it. Even if the SEO process was done in-house, M1 told that it's good to have external analysis of SEO every now and then. In his opinion an analysis from an external SEO professional might reveal something new, because in those situations there is no need to hide anything.

When asked, where did the interviewee get information about SEO before their first SEO project, the most common sources were Google search engine, own personal connections and SEO professionals. None of the interviewees told that they would have studied academic articles about the topic. M4 had concerns on how to find the relevant information and be able to update that knowledge as frequently as needed taking in

count the fact that Google is changing constantly, and the old tricks might not work anymore. All interviewees had done SEO at least in Google. The question "why Google" raised discussion. Some interviewees had not even thought that there could have been other options (F1, M1, M3), while some just thought that Google is "the place". This is how M1 explained his claim:

"...when you ask customers, what comes to their minds when they hear term search engine – they answer Google or what do they use to find information - they answer that they "google" it..." (M4)

Besides Google, also Bing and YouTube were mentioned as search engines where the respondents had done SEO (M3, M4, F2, F4). F2 told that a SEO process in Google would affect other search engines positively as well. Yandex and Baidu were also mentioned but since none of the interviewees did business in Russia or China, they had not considered them as potential channels to find new customers.

#### 5.2 SEO process

The second section of the interview concentrated on SEO process. The interviewees were asked, how they performed SEO, what were the core methods of their SEO process, was there any challenges and did they find anything surprising during the process. They were also asked if they knew, what "black hat SEO" and "white hat SEO" means and how they felt about them. The SEO methods the interviewees told they used during their SEO process are presented in this chapter. SEO method entities like keywords, technology, content and link building were mentioned in the questionnaire. The interviewees were also asked if they did SEO for pictures or videos.

Many interviewees (F2, F3, F4, M1) mentioned that SEO process starts with an analysis of the current search engine visibility. In that analysis the goals and metrics of the SEO process are also defined. The analysis will show the current state compared to competitors and measure, how big challenges the website will be facing during the SEO process. After the analysis they were able to plan the SEO process and the required resources.

It was noted during many interviews (F2, F3, M1), that SEO is a process where, depending on the competition, the amount of effort needed may significantly vary. The harder the competition, the more it requires. In cases where the markets are located in a limited area in Finland, SEO basics were enough. If we talk about SEO basics, all interviewees began their SEO operations by selecting effective keywords and by using them in important tags of the landing pages as well as in the content. F2 explained, that in many SEO projects she had tried to explain the customer how no-one uses the selected product or service names in Google. In some cases, customers understand, the keywords will be replaced with more effective ones and we reach good results, she says. She gave an example, how only by changing the selected words on a website they made a huge difference in search engine visibility and website traffic.

It seems that content optimization including keyword selection, H1 titles, title texts and meta descriptions were the most common SEO methods. Some interviewees were also paying attention to the website content (F2, F3, F4, M1). M1 told about pillar-pages method which HubSpot released quite recently. In that method website structure will be arranged by the content themes, not the traditional website structure way. If the

competition was more challenging, also technical SEO and link building were mentioned (F2, F3, F4, M1).

"It's mainly checking that there's no technical problems which prevent the website from being ranked, making the improvements we can and after that it's all about content." (F2)

M1 states that even if it is cheaper and easier to create a website within cheap and poor content management systems (CMS) (e.g. Kotisivukone), it will not work properly in the end. If you want to get results, you need to use resources, because that is what your competitors will do. From the SEO point of view, there are big differences between CMSs. Search engine optimization for videos and pictures were also mentioned during the interviews (F3, F4, M3). Video optimization was regarded increasingly important (M3), but it was not explained more deeply. Picture optimization, on the other hand, was a more commonly known process (F3, F4). The most common SEO practices on pictures were fixing the file name, adding title text and Alt-text and making sure that the picture is in a format the search engine appreciates.

When asked about black hat SEO and white hat SEO, half of the interviewees (F2, F3, M1, M2) knew what they are and for some interviewees (F1, F4, M4) it was explained during the interview. M1 explained that black hat SEO is all about manipulating the search engine. He even knew that Google may ban those websites which use the tricks and remove them from SERPs. He told that due to white hat optimization Google sees SEO in a more positive way now. In white hat SEO the website is developed for users and the top priority of a website is to serve the user, he says. F2 told that it is not that common to hear the terms black hat and white hat SEO anymore. She thought that those were more common topics around 2010. She told that her senior colleagues had told stories about how they tried to optimize their website with irrelevant keywords and were able to reach top results of Google by using black hat SEO tricks:

"One guy tested if he was able to rank his Finnish language website with the keyword "Pamela Andersson", so he spammed the meta-keywords repeating thousand times "Pamela Andersson" and had it in white font on white background another ten thousand times and as a result the website ranked to the first position of Google SERP for a while with the keyword "Pamela Andersson". (F2)

None of the interviewees told they used black hat SEO tricks, but most of them (F2, F3, F4, M1, M4) understood, why someone would use such methods. F4 told that in cases where competition is hard, those tricks might be required. "Grey hat SEO" was also mentioned (F2, M1) meaning the tricks that might not be fully black but since they manipulated Google, they were not white either. White hat SEO was commonly used and accepted. M1 demanded sustainability:

"...you just need to understand that content is the king. You need to pay attention to the person you serve online and even if it takes more time, it's the only way to win nowadays." (M1)

Some of the interviewees had done SEO for years and they had noticed changes in Google (F2, F3, M1). The most remarkable change seemed to be the location of Google Ads and how the space provided for Ads had grown year-by-year. F3 pointed out that now you must scroll down to see the organic results at all with mobile devices. The SEO professionals among interviewees (F2, F3, F4) thought that changes in Google

algorithms have had positive effects. F2 told that in the past Google did not understand Finnish so well, so it supported over-optimization and due to that also bad websites could reach the top of SERP. Some interviewees thought that algorithm changes might be so challenging that it might not be useful to do SEO by yourself anymore (M1, M3, M4). F2 said that despite the changes in Google algorithms, you just need to focus on the SEO basics first:

"In a way, even if this industry goes forward and when you read those blogs and find new tricks, you need to remember, that first you need to fix the base. Content needs to be fixed first and after that, only if needed and only if you got a customer who allows long-term development process, you should use those tricks." (F2)

Many interviewees (F3, F4, M1, M3) told that they monitor SEO development constantly on a weekly or monthly basis. F3 suggested that by taking for example the top 50 keywords and their landing pages under SEO process and monitoring their positions in Google on a weekly basis could make a difference. She recommended concentrating on the top keywords because otherwise it is impossible to do constant follow up. Not only the positions are relevant but also the performance of the website and conversions, reminds M1:

"...constantly measure if any changes occurs, if search engines change, how your customers behave, also sort out, how they land to your website, what are they looking for, if that need was relevant for you or not and how can you improve the situation [...] it's technical operations, but also research on purchasing habits and website visitor's habits" (M1)

All interviewees agreed that SEO is not a project, it is a process. Without constant operations your visibility in the search engine will not develop positively. F1 had a case where the SEO visibility had even vanished:

"...nobody visited my website and I wasn't visible anywhere anymore, so you also lose your visibility in Google if you do nothing [...] So now the visibility had improved again since I started updating my website and developing it again and I try to optimize it." (F1)

All interviewees thought that SEO is difficult but mainly SEO professionals (F2, F3, F4) told that you will always face challenges with the SEO process if you are doing things right. The most common challenges were finding the right keywords or explaining to the customer, why certain keywords should be chosen. Bad technology behind a website was also a common problem. F4 told that if you are doing SEO for a big website, it takes a lot of time and in some cases, you start well but get frustrated before the finish line. According to F2, challenges were also caused by the customer companies. In some cases, customer company was not ready to pay for the whole SEO process, so the instructions were made by the professionals and the operations were supposed to be done by the customer. She had quite often noticed that even if they did their part, customer never did the instructed operations. So, the whole process was just a waste of time, she says.

In many cases the interviewee's company's own website was considered as a sand box for digital marketing experiments, but in some cases SEO operations had gone badly wrong and they destroyed the website. M1 told a story, how they started well and reached good results but from some stage on everything was a mess. The base of their

website was well done but since they installed bad applications and widgets to it and made SEO changes without knowing how it would affect other functionalities, the website was destroyed. The worst problem was the vulnerabilities caused by the changes. In the end they had to renovate the whole website just to keep it up and running.

SEO professionals (F2, F3, F4) recalled the importance of including SEO to every-day-business. Otherwise things must be done twice, and it is always a waste of resources. F2 told during the interview, how common it is to start thinking SEO only after the website renovation. In that case everything: the structure, page names, content and all must be fixed again during SEO process. If instead of that, companies would include the SEO process already into the website renovation process, it would make it easier and solve so many issues, she says.

#### 5.3 Benefits of SEO

The third section of the interview was about the benefits of SEO. The interviewees were asked, what expectations they had had, did they reach their goals, what were the benefits the SEO process provided and if they had any surprising outcomes as well.

When talking about the expectations and results of SEO processes, all interviewees told that they were looking for more visibility in search engines cost-effectively. Many interviewees also specified, that only the top results matter. M1 told that only top three results matter and M4 that top 5 is enough. One common benefit was also brand awareness. Many interviewees (F1, F4, M2) told that after the SEO process people seemed to know their brand better and it has helped them to develop their business. M2 told that people seemed to recognize him better also on the streets. More people were smiling and greeting after the SEO process, he told.

During the SEO process the work costs but after that your visibility in Google and the clicks to your website are totally free, told M3 and F1. M1 and M3 told that in SEO there is a great ROI relation available, but only if you do SEO well. M1 also pointed out the role of the company in the SEO process:

"...we need to think of ROI, how it converts to real results and it depends on if we have the visibility in the right platform within the right keywords and if it leads to a purchase path [...] there's no use of doing SEO or increasing visitor amounts on a website if the company is not capable of supporting it and taking care of the leads this system provides [...] I think all sales and marketing should be measurable nowadays. If you claim that it's not possible, you are a bit lazy or you don't know the right tools." (M1)

Some interviewees had monitored SEO results more deeply with website analytics tools. They all had noticed that visitor amounts had grown after SEO and some of them realized also that the quality of the website visitors had improved during the SEO process: website visitors stayed longer, and the BR was decreased. A bit more surprising improvements were also revealed during the interviews:

"...I was expecting more relevant customers to visit my website [...] the visitor amount rose by 58 %, but the interesting thing was that it didn't bring me more than two new customers, but the projects were remarkably bigger after that. That's something I had pursued." (M2)

One common benefit also mentioned was expanded knowledge on digital marketing, websites, content creation, user behavior online and markets. F3 told that during the SEO process she learned, what people write on the Google search bar, what is the content that engages with them, how the trends vary between months etc.

"...I think one advantage is the understanding about the business, what people search and what are the things they focus on... What are the trendy things and when [...] it took a while to understand that, but those are really important issues..." (F3)

M1 told that SEO process helped him to understand business and internet marketing better. M4 stated that when you need to go through the website once again due to the SEO process, the website becomes much better.

Most of the interviewees knew that the search engine visibility alone is not enough (F2, F3, F4, M1, M2, M4). They had monitored websites and visitor flows on their website more deeply and realized that also websites need to be user friendly. F2 told that in one case she recommended a customer to change the position of "Buy"-button and it made a huge difference in conversion rate. The customer used to have the purchase buttons on the same spot where normally there are the social media share icons and the icons were where normally the purchase-button was. A small change made a huge difference, she said.

All interviewees told that SEO is a process, not a project – and it takes time. The best benefits will be received only in the long run. It is along the best practices to do things on a weekly basis, monitor the results and only if the direction is positive, continue the process. Some SEO professionals (F2, F3, F4) revealed that the uncertainty and the constant change in SEA are addictive:

"The most frustrating thing in SEO is that it takes time to see the results [...] but at the same time it's extremely interesting to finally see the results, and monitor and analyze them." (F4)

#### 5.4 The future of SEO

The fourth section of the interview was about the future of SEO. In this section the interviewees were asked, how they saw the future of search engine visibility and SEO, were they going to do SEO also in the future, were they prepared to recommend SEO to other companies and if they were going to do something differently in their own SEO process in the future. The future of SEO and Google seemed to be a hot topic. Most interviewees had thought about it and they had opinions on what might happen in the future. Those predictions will be presented in this chapter.

Some more moderate answers anticipated that SEO will remain important also in the future (F1, F3, M2). M2 thought that the future of SEO depends on the government. The only way to stop the biggest players like Google would be if the government chooses to limit the use of search engines or the markets of search engines. He still doubted that this would ever happen in Finland. Some interviewees thought that technological development will affect SEO in the future, but SEO will remain an effective way to do digital marketing (F2, M1, M4).

"...it changes, as I said, things like voice search will demand new things from SEO and us as SEO professionals. [...] We need to use more story-like content [...] also voice search results in Google are organized by algorithms which learn slowly but steadily, how we talk." (M1)

Some interviewees (F4, M3) saw that it is a risk when everybody does SEO and the competition gets tougher. It challenges the people practicing SEO, but it also challenges the search engine users when they try to find relevant information. M3 thought that at some point Google would work like a lottery ticket, and in that case, it is not capable of providing benefit to its users anymore. If that happens, the role of Google will change.

Some interviewees (F2, M2) thought, that new platforms could take over. F2 was said that social medias like YouTube could win search engines at some point. M3 thought that since YouTube has grown so fast, it is possible that some totally new services would appear, and it will take over everything. In that case those companies who can adapt to the new situation best will win the race, he says.

Multiple interviewees thought that things will be more automated in the future. M1 told that he's expecting a phase when software engineers will not be needed anymore. Instead, robots will make the queries and optimize the content for each other's. M4 shared that prediction:

"...I think there will be a middle-man, kinds of services between the search engine and the user. It does the search work for the user and they will change SEO, because we need to think, how to serve these services instead of people." (M4)

Despite the previous answers, most interviewees told, they will do SEO also in the future (F1, F2, F3, F4, M1, M2, M4). They all thought that in the future they will do SEO better by using more of their time to SEO practices and by doing everything right from the beginning. All interviewees told that they would also recommend SEO to other companies. When asked, if SEO fits better to some markets than others, most of the interviewees agreed (F2, F3, F4, M1, M4). Common understanding was that SEO is necessary for e-commerce and not so mandatory for some local companies that everybody knows:

"...the first example is the e-commerce field. When you have the whole purchase path online, the competition is toughest [...] you compete against everybody everywhere – there might be a few local operators against you, then there is China and then then there is States so how can you win over the customers, that's the lifeblood of the whole thing [...] on another hand there is a shoe store in the neighborhood. Some people might come in and buy even if they didn't do SEO" (M1)

When asked if the interviewees recommended doing something differently, most of them advice to use SEO professionals more than they did (F1, M1, M2, M3, M4).

"...I would recommend people to think, what are your core competences and your core business, should you study SEO from all kinds of YouTube videos and do it yourself or should you outsource it and let the professionals do it for you instead." (M3)

## Discussion

In this chapter the results of the research questions are summarized and discussed considering both, the current empirical study and the previous studies in literature review. The following chapters aim to seek the answers to the research question "What are the benefits of SEO in Google for businesses?" and the sub-questions "Why search engine visibility is important for businesses?", "How can business achieve organic search engine visibility in Google?" and "What is the future of SEO?". In the end of this chapter there is a summary about the main findings in discussion.

## 6.1 Why search engine visibility is important for businesses?

The first sub-question was "Why search engine visibility is important for businesses?" Pant and Srinivasan (2010) pointed out that website usability becomes relevant only if the website is discovered. Both, the previous studies as well as the empirical study noted that if a company is not discoverable in search engines, it does not exist (Kennedy and Kennedy 2008; Pant and Srinivasan, 2010). Today people search things they want to buy online and only those companies available online will be included in the comparison – it doesn't matter whether the purchase happens online or off-line. Even the cases where customers visit a store in the end of the purchase path, they may search information about the available products, their prices and finally the location and other contact information of the store (Dou et al., 2010).

Kritzinger and Weideman (2013) claimed that one of the main challenges in digital marketing field is, how to reach the potential customers and lead them to the company's website. The empirical study together with the literature review revealed, that search engines could be the solution. According to Dou et al. (2010) with effective search engine visibility techniques, relatively unknown brands can appear ahead of well-known ones. Multiple studies in chapter 3 as well as the interviews confirmed that more than half of all website visitors arrive from a search engine rather than through a direct link from another website. (Berman and Katona, 2013; Klatt, 2013; Dou et al., 2010.) Ortega and Aguillo's (2010) study reminded us that website visitors who come through search engines are of better quality than others. In the empirical study this result was explained within the notion, that people in search engines are actively looking for solutions and by appearing in the search engines, company offers a solution – which is also good customer service. If we compare the people actively looking for solution to people who were interrupted by a random banner ad, the people in the search engines are warmer leads than the interrupted ones.

Search engine visibility includes the whole SERP, not only the organic search results but SEA as well. As Clemons' (2010) article reveals, Google and its supporters argue that the presence of sponsored search greatly increases consumer choice. Jansen and Spink (2009) disagree with them and their study claims that the current layout of SERP is confusing. Not all users understand, whether they click on a sponsored result or an organic result. Many previous studies show, that majority of search engine users considered non-sponsored links more relevant than sponsored in the SERP. (Jansen and Spink, 2009; Klatt, 2013; Panda 2013.) The interviews confirm this notion as most

interviewees told that they trust more organic links and considered SEO more effective from that perspective. The reason to this might be that even a weaker website can appear high in Google with a sponsored ad, but in SEO the website needs to be better than the competitors in order to reach the top of SERP.

According to Kritzinger's and Weideman's (2013) study, both SEO and SEA have their own advantages and disadvantages. SEO is more cost-effective, but it takes more time to build up visibility in organic search results, whereas SEA provides a shortcut to the top and with the highest bid, the top position is available for sure. Yang and Ghose (2010) suggest, that a well-rounded and effective search marketing campaign to reach the greatest number of audiences should use both SEO and SEA, capitalizing on the positive interdependence in clicks between them. Sathitwitayakul and Prasongsukarn (2011) as well as Kritzinger and Weideman (2013) agree with them by reminding, that both SEO and SEA are required for maximum website exposure. The interviewees had mixed opinions on this subject. Some interviewees shared the notion and told that it should be considered case by case whether SEO or SEA or both together is the most effective option. Some interviewees did not appreciate SEA at all, and they even thought that SEA could harm the company brand. The third group speculated if SEO alone was useful anymore since the competition is getting tougher and the space provided for ads if constantly growing in Google.

When companies choose the search engine, where they are going to do SEO, they should remember, that Google has had the largest market share for years (Clemons, 2010). In the empirical study all interviewees had done SEO at least in Google. Most of them did not even consider any other search engines, because they believed, that Google is the best platform to find potential customers for them. Under China's internet sensorship policy, Google websites are blocked in China ("Websites blocked in mainland China," 2019). Additionally, to that, Berman and Katona (2013) argued that Google's lack of market leadership in China is because English-language—based search engines support Western websites. Based on those notions, it seems that if you do business in Russia or China, also Yandex and Baidu should be considered. And it is also important to realize that search engines are only one of many online platforms where consumers search products. (Baye et al., 2015.) In the empirical study interviewees mentioned also social medias and YouTube search as places where they find information. Big international online stores like amazon or Alibaba should be included to that list, because SEO industry's attention in them is growing as well.

## 6.2 What are the benefits of SEO in Google for businesses?

The research question was, "What are the benefits of search engine optimization (SEO) in Google for businesses?" Ortega and Aguillo's (2010) study shows, that compared to other sources, the visits through organic search results can be considered the best quality visits. MarketingSherpa's study from the year 2005 about search engine marketing industry revealed that websites which are optimized to appear higher in SERPs have a higher conversion rate, which means more business through the web. (Malaga, 2007). The empirical study gave similar results; the main benefits of SEO were considered to be better search engine visibility, more visitors on website, better quality visitors on website and more conversions. Interviewees told, that website visitors who came through organic search results stayed longer, and the BR of those visits was lower. The interviewees also mentioned developing better understanding of e-commerce through the SEO process as one of the benefits. They thought that they had had to broaden their understanding about user behaviour online, website development, inbound marketing

and online marketing strategy. They also pointed out that websites will serve the users better after SEO practices if you do white hat SEO.

When talking about the expectations of SEO process, all interviewees told, that they were looking for more visibility in search engines cost-effectively. One common benefit of SEO was that it was believed to be more cost-effective than SEA in the long run and visitors who came through SEO were believed to be of better quality. Chen et al. (2011) study confirms those arguments. Both the literature review as well as the empirical study recalled ROI and how important it is not only to check whether the number of visitors had changed but also if the return on SEO investment had been checked out. It means that we also need to follow conversions on our website and related to it. The best way to do so is to utilize website analytics tools (Panda, 2013). The interviewees were monitoring not only the positions in SERP but also the analytics on the website and the actual ROI. Some of them reported having covered the costs of SEO with the increased conversions on their website. They also recalled the role of the company by saying, that there is no point in leading visitors to the company's website if the company is not prepared to handle the leads.

Many interviewees also specified, that only the top results of SERP matter. Interviewees argued that only from top 3 to top 5 results are enough. Malaga's article (2008) revealed that 62% of search engine users click only on the results that appear on the first SERP and less than 10% of users click on results that appear after the third page. Due the use of mobile devices, the relevant area might have been narrowed down from those results. According to Dou at al. (2010), many companies believe that even if a user does not click on the site link in SERP, they may gain a positive branding experience. This is possible of course only if the search engine user sees the results. Based on my previous knowledge, only in few rare occasions search engine users browse further that through the first SERP. If the users don't find relevant result on the first SERP, quite often they make changes to the keyword they used in search engine instead.

It was noted that not all businesses benefit equally from search engine visibility. In the empirical study, online stores were considered to be the companies who benefit the most since they have their whole purchase path online. On the other hand, a local store might do well in business even without search engine visibility if people know them and their location. In that case even an ad in a local newspaper might do the trick. But world is changing fast and we can already see the signs of this with hotels which are now promoted mostly by services like Hotels.com or Trivago instead of Google. Same has happened for example with flight and train tickets. In the mobile device era, mobile applications may take over these kinds of specific markets.

# 6.3 How can business achieve organic search engine visibility in Google?

Related to second sub-question "How can business achieve organic search engine visibility in Google?" the SEO method selection: keywords, content SEO, technical SEO and link building were mentioned in both, previous studies and the empirical study. SEO without good keyword analysis is just a waste of time, claimed articles (Gregurec and Grd, 2012), and some of the interviewees agreed. The interviewees told that the keywords with good number of queries would be the best. According to Kritzinger and Weideman (2013) long tail keywords are the most effective, since they

have been formed by more than one word and are thus more specific. This was also confirmed by some of the interviewees.

Gregurec and Grd (2012) claim in their study, that title tags, meta descriptions and headings are the most important content elements in SEO. According to Killoran (2010), title tag's and meta description's relevance to search engines has been diminishing. The basics of SEO in the empirical study seemed to include keyword analysis, title tags, meta descriptions, H1 titles and some landing page content. According to Malaga (2008) content is the key to SEO friendly website. To be able to beat that, you should do more. All interviewees believed that the more competition there are on the selected keywords, the more resources SEO requires. When there isn't much competition, everybody should be able to do SEO, but if your keywords are highly competed, you should trust the SEO experts instead, most of them said. And even if you do SEO in-house, you should ask an objective outside consult to check your SEO status every now and then.

The SEO experts in the empirical study recommended starting with the easy tasks, testing whether they are enough, and only after that, if needed, moving to the more challenging SEO operations. When facing tougher competition also technical SEO and link building should be considered. In technical SEO, companies modify their site code to make it more relevant and therefore more search engine friendly (Sen. 2005). Sathitwitayakul and Prasongsukarn (2011) gave a list of specific technical SEO instructions in their study. One strong ranking indicator in Google has been and still is the website domain name, but studies have long expected a decreasing allocation in its significance (Killoran, 2013). Second strong indicator is the page size, which should be less than 150 kilobytes, according to Wang, Li and Zhang (2015). It was noted in the empirical study, that if the CMS is search engine friendly and the programming of the website is done according to Google's guidelines, the SEO process is easier. Google's SEO Starter Guide claims that link building is normally the most challenging part of SEO (Zhang and Cabage, 2017). Link building does not only contain external, but also internal link building between different sites of the same website (Sathitwitayakul and Prasongsukarn, 2011). It was surprising, how limited the information about link building was in the empirical study even if according to Zhang and Cabage (2017), it's is crucial for SEO. Either the interviewees did not know about it or they wanted to hide the good tips they had concerning this section.

White hat and black hat SEO methods were introduced in the literature review (Berman and Katona, 2013; Malaga, 2010.). Both the previous studies and the empirical study favoured white hat SEO tactics. According to Berman and Katona's (2013) study, in some cases, websites caught using black hat SEO activities were even removed from the organic list of SERP - and the interviewees knew this too. Within the white hat SEO tactics, you can serve your website users better, the interviewees reminded. If you improve your site content, it also increases visitor satisfaction and makes the site more relevant (Berman and Katona, 2013). Most interviewees mentioned also the customer satisfaction in SEO process, not only good positions in the search engine. The reason to do so was the assumption that good search engine visibility alone is not enough to increase conversions.

It is fascinating to realize the similarities between academic research and the empirical study. In the academic research, early articles concentrated on technology and how to utilize it effectively. After a while, also user centeredness came in the picture. (Iivari and Iivari 2011; Hirschheim and Klein 2012; Sidorova et al. 2008.) According to empirical study, the same has happened in the SEO industry: first everybody tried to

reach the top positions in Google no matter what and after a while they realized, how the best results will not be reached if user friendliness is not taken into consideration. Both fields, the academic research and the SEO industry started with a really limited view of SEO right after Google was founded and they both ended up noticing, how SEO alone was not enough. (Sun and Spears, 2011; Wu, Cook and Strong, 2005.) During the past few years both fields have concentrated more on serving customers online (white hat SEO) than tricking Google in providing the top positions in the SERP (black hat SEO). This wakeup call had reached most of the interviewees. One of them thought that the talk about white hat and black hat SEO is rare nowadays, but in 2010 it was common to discuss about these issues. One reason to this might be, that Google is developing its algorithms in order to dilute the effects of the manipulative SEO operations. (Zhang and Cabage, 2017.)

SEO will always be an ongoing challenge for marketers as search engines never disclose their ranking algorithms (Barry and Charleton, 2009). Despite that, in the empirical study the SEO professionals saw the algorithm changes in a positive way. They thought that since Google is trying to tackle black hat SEO tricks with algorithm changes, the outcome would be better quality search results. In that case the websites which are truly qualified will reach the top of SERP. To ensure that the audiences can continue to easily find answers through search engines, web developers and SEO professionals should keep themselves up to date with the constantly changing search algorithms (Killoran, 2013).

According to Panda (2013) companies should work with their technology teams and plan out a long-term strategy for SEO to achieve an effective search engine visibility process. Wu, Cook and Strong (2005) remind that measuring and understanding the behavior of website visitors and its linkage to the desired system outcome is the key to success. SEO professionals in the empirical study also told, that they start their SEO processes by making an analysis of the current state and plan a SEO strategy for the process based on that. After that it is useful to monitor the current state and positions on a weekly or monthly basis and do the operations the situation requires.

## 6.4 What is the future of SEO?

Related to third and final sub-question "What is the future of search engine optimization (SEO)?" the literature review did not give that much information, but the empirical study did. The interviewees were worried, if Google can handle the growing information flow when everybody does SEO. If Google is not able to benefit its users, competitors will take over. Google seems to be trying to prevent that by dividing its search engine to more specific sections like video search, picture search or Google Maps. The best example so far is the YouTube search, which one interviewee considered the biggest search engine in the world.

Berman and Katona (2013) speculated in their study, that search engines may be dissatisfied if companies spend significant amounts on SEO instead of paid links and content creation. In the empirical study interviewees had also noticed how Google has increased the area of SEA and made the sponsored search results look like the organic search results in the SERP. One interviewee even claimed that Google wants to be a marketing platform, not a search engine anymore. According to Berman and Katona (2013), some search engines like Baidu have solved this issue by allowing payments for

"organic links" to make a profit that companies would have otherwise paid to SEO professionals.

Even though Google's power seems to be shaking according to the empirical study, all interviewees were going to do SEO also in the future and the role of SEO seemed still quite steady. Previous studies have showed, that companies' spending on search engine visibility has been growing faster than spending on other online advertising (Dou et al., 2010). In the future, new technologies like voice search should also be considered in SEO processes as well as upcoming new devices, said some of the interviewees. All sources believed that the competition will rise, so organic search engine visibility will demand more skills and resources in the future. Some interviewees anticipated new services, which could make information retrieval easier for the users and automate at least some of the SEO work. Some of the interviewees suggested, that if some kind of "middle-men" come into the picture, the businesses who know how to do SEO for them instead of users will win.

## 6.5 Summary

SEO is only one way to do digital marketing but since search engines have been available so long, it is better known than many other digital marketing options. In empirical study, it was interesting to see, how people in different kinds of work situations and roles had tried to do SEO. In the interviews one common topic was, how Google has reacted to SEO, how SEO has evolved during the past years and if Google prefers ads over organic search results. It was noted that after white hat SEO tactics broke through, Google has seen SEO in a more positive way and it has even provided guidelines, how to do SEO better. The referral articles provided studies about search engine reliability and divided roles as search engines and marketing platforms. Google has done lots of changes during the past years and some of the changes have indicated that they would prefer people to use ads instead of SEO.

It was easy to find the interviewees for the empirical study. Motivation behind participating this study was mainly a willingness to help the researcher but some of the interviewees also wished to receive the finished work at some point. It seems that the topic is hot and people with different positions and job descriptions have ended up participating in SEO processes. It also seems that all kinds of companies need search engine visibility. The interviewees were enthusiastic about the topic and the possibility of learning by doing has kept them going. All interviewees thought that SEO process had taught them lots of valuable information and that is why many of them recommended all people no matter where they work to familiarize themselves with SEO. SEO was also considered as a good way to broaden the markets and thus bringing the company to a new level.

When the interviewees talked about SEO the focus was mostly on finding new customers. They had realized that old fashioned advertisements in local newspapers won't work anymore so they were trying to find new cost-effective ways to reach potential customers. All of them had tried also other digital marketing options but the main reason to focus on Google was based on their common sense; Since they themselves used Google, they thought that also their potential customers would do so. They also claimed that potential customers who come through search engines are warmer leads than those who come example through banner ad. Most of the interviewees had had good results so they decided to continue with SEO.

Search engine visibility is and will be an important part of companies' marketing and sales operations. SEO is more effective as well as cost-effective compared to other digital marketing opportunities. Other benefits include better quality visitors on websites and improved understanding about digital marketing, websites, customers and customer behaviour online. SEO alone might not provide enough ROI, but SEO combined to engaging content and a usable website will do it together.

The range of SEO practices is wide. Some companies focus on the basic SEO methods while some are taking it to a whole new level. Basic SEO includes keyword analysis and content optimization, but more challenging environments demand also technical SEO practices as well as internal and external link building. It is argued that everybody can do SEO, but it requires more skill if the competition with the selected keywords is tough. This happens, when for example SEO process is done in English instead of Finnish.

User satisfaction has been a theme that arises from the latest articles especially in the discussion between black hat and white hat SEO. Google has announced that user satisfaction will be an important SEO factor in the future. The physical evidence of this change is the importance of CTR and the BR in SERP. The interviewees mentioned that the latest algorithm changes on this field include prioritizing mobile friendly websites in SERP when a Google user makes a query with mobile device. Google knows that their status will last only as long as the Google search engine can be helpful for the users. Maybe this sector should be added to Figure 5 in the future.

SEO is a process, not a project and most of the interviewees seemed to understand that. The main reason to this is the algorithm changes. SEO professionals in interviews saw algorithm changes positively. They thought that those changes help Google to separate the good website from the ones which use black hat SEO tactics. They also improve the user satisfaction in the Google search engine and ensure that people will use Google also in the future.

One of the biggest challenges in the SEO field is that SEO process is rarely included to website renovation processes, which causes a waste of resources. In those cases, the website structure as well as the content must be re-designed right after the new website is published and this might cause problems. The best practice would be to include SEO into the website renovation which makes it possible to create a search engine friendly website right from the beginning.

The future of SEO remains a mystery. Some speculations were provided in the empirical study. One interviewee predicted that SEO processes might become more automated in the future or there might be a service which could help customers to find answers in search engines. In that case SEO must be done for those services, not for the actual customers which will change the process. It was also argued that the power of search engines like Google is shaking and some other services might take over in the future. Still, all interviewees were going to do SEO also in the future and they told, that they would recommend other companies to do so as well.

## Conclusions

This study concentrated on search engine visibility and what are the benefits that SEO can provide for businesses. The previous studies together with the new empirical study provided answers to the research question and the three sub-questions. The main contribution of this study was to reveal the differences between academic research and the new empirical findings. Another ambitious attempt was to try to forecast the future role of search engines and SEO for business operations

In the first sub-question "Why search engine visibility is important for businesses?" both, the articles as well as the interviewees pointed out that if your site isn't appearing in SERP, it does not exist. Nowadays people search things they want buy online and only those companies available online will be included to the comparison – it doesn't matter if the purchase happens online or off-line. That is why search engine visibility is extremely important for most businesses. It was noted thought that not all businesses benefit equally from search engine visibility.

When discussing which search engines should be considered, Google was the most common answer. Google seemed to be the search engine in Finland and western markets. According to the empirical study, people do "googling" and name Google as a synonym for a search engine. Still, if you do business in Russia or China, also Yandex and Baidu should also be considered. And if you sell products in multi-national online stores, you should do SEO in them as well. Some interviewees claimed that SEO in Google might have a positive effect on other search engines as well.

Related to the RQ1 "What are the benefits of Search Engine Optimization (SEO) in Google for businesses?" the main benefits of SEO for a company were better search engine visibility, more visitors on the website, better quality visitors on the website and more conversions, according to the literature review as well as the empirical study. It was also pointed out that SEO is more cost-effective than SEA in the long run. In the empirical study, the interviewees also mentioned better understanding of search engine users, website programming and business as one of the benefits. In digital marketing, everything should be measurable. Both the literature review as well as the empirical study recalled ROI additionally to good positions in SERP.

Related to second sub-question "How can business achieve organic search engine visibility in Google", the empirical study had the same characteristics as the previous studies. The SEO methods were most often divided to on-site factors like keywords and content SEO, and off-site factors like technical SEO and link building. It was confirmed that SEO without good keyword analysis is just a waste of time and the more competition there is, the more resources SEO requires. The SEO experts in the empirical study recommended starting with the easy tasks and testing whether they are enough, and only after that doing the more challenging operations. They claimed that if the competition for the keywords is low, everybody should be able to do SEO, but if your keywords are highly competed, you should trust SEO experts instead. One reason to that was that with the more challenging changes, there is a risk of destroying a website, if you do not know what you are doing. SEO is a process, not a project – and it

takes time. The best benefits will be received only in the long run and if you stop doing SEO, the visibility might also vanish.

Related to third and final sub-question "What is the future of search engine optimization (SEO)?" the interviewees were worried, how Google can handle growing amount of information while everybody does SEO. If Google is not able to benefit its users, competitors will take over. Even though Google's power seemed to be shaking according to empirical study, the interviewees were going to do SEO also in the future and they also would recommend SEO for others. When asked if the interviewees recommended others to do something differently, most of them advice to use the help of SEO professionals more than they did.

The theoretical implications of this study were discovering the similarities and differences between literature review and empirical study. The academic research started with a really limited view of SEO right after Google was founded and it ended up noticing, how SEO alone is not enough. The same had happened in SEO industry according to interviewees. During the past few years both, academic research and SEO industry have concentrated more on serving customers online than tricking Google into providing the top positions in SERP. With this strategy, not only the top positions will be reached but it will also provide ROI for businesses. Differences could also be found. Biggest differences rely on terminology so when this kind of studies are done, this issue should be considered.

Even if none of the interviewees mentioned academic articles as a source of SEO information, both, the academic research and the publications of SEO industry have their own important roles. It seems that the benefit of academic research is to present more extensive perceptions instead of isolated cases. The main weakness in academic study is the slow publishing speed which is problematic on this constantly changing field. In the literature review, it was easy to notice that some of the new articles made some of the old articles useless since the Google algorithms had changed in between. That is good to notice when studying this kind of a constantly changing phenomenon. The main benefit of SEO industry publications is the fast delivery and actuality, but the main weakness is that the notions are usually based on isolated cases and they might not be useful in other markets.

The practical implications of this study were provided by the comparison between the literature review and the empirical research. Both recommend starting SEO processes at the same time with website renovation processes, which makes it possible to create search engine friendly website right from the beginning. That would save time and resources. Empirical research revealed the most common SEO techniques and the key to beat the competition is simply to do more. The competition is tougher if the markets are bigger. In both sections, the literature review and the empirical study, the information about video and picture optimization was limited. It seems that on those fields it still could be easier to dominate. Literature review provided only a limited information about future predictions of search engines and SEO. That is why the information provided by the empirical study was valuable in providing information how search engine users and SEO professionals feel about search engines and Google and how they anticipated the future role of SEO. Even if this is pure speculation, this data is valuable for businesses and SEO professionals.

This study is limited within the number of articles selected to literature review as well as interviewees in the empirical study. One limitation is also the fact that this study was made in western countries, in Finland which has an exceptionally small language area.

This might affect the results in this study. The future study topics could be broadening this study to the English-speaking world, but it would also be interesting to see the results from Russia and China. It would also be interesting to study, how SEO in Google varies from the SEO in big international online stores like Amazon or Alibaba. The future of SEO is pure speculation and we need to keep following, what happens on that field.

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# Appendix A. Interview Framework

### Background:

- What do you think about search engine visibility?
  - When did you get interested about search engine visibility (year)?
  - Was there a specific reason for that?
- What do you think about search engine optimization (SEO)?
- Where have you get the information about SEO?
- How much did you study about the topic before your first SEO process?
- Were you only interested about search engine optimization (SEO)?
- Were you interested about search engine advertising as well?
- Why did you end up using SEO tactics?
- Did you do some other digital marketing practices same time as well?

### The SEO process:

- How did you do search engine optimization (SEO)?
- In which search engine?
- Why Google?
- Did you do the process in-house or did you outsource the process?
  - Why?
  - Where did you find the partner?
  - Did you hire a new person for that?
- When was this process done (year)?
- What were the core tactics in your SEO process?
  - Keywords?
  - Technology?
  - Content?
  - Link building?
    - Internal and external link building?
  - Picture optimization?
  - Video optimization?
  - Anything else?
- Have you heard of "black hat" and "white hat optimization?
  - What do you know about them?
  - How do they make you feel?
- Have you done SEO more than once?

(If yes...)

- When was it (what year)?
- Were there any differences between those processes?
- Did you face any problems during the SEO process?
  - What kind of problems?
  - Do you know why they occurred?

#### Benefits of SEO:

- What do you think about the results SEO can provide?
- What are the benefits you were expecting from the SEO process?
- What benefits did you get from the SEO process?
  - Did you get the benefits you expected?
  - Was there something surprising in the results?
  - Did you expect more than you got?
    - Do you know, what was the reason for that?
- Did you get some benefits you didn't expected before the SEO process?
  - What were they?

#### Future:

- How do you see the role of SEO in the future?
- What is the role of SEO in your company's ....?
  - Digital marketing?
  - Marketing?
- With this experience, would you recommend SEO to other companies?
  - Would you recommend them to do something differently you did?
- In your opinion, does SEO fit better to some markets than the others?
- Are you going to do SEO also in the future?
  - When?
  - Does the process vary from the previous ones?