# EXPERTS' PERCEPTIONS OF THE CURRENT STATE AND THE FUTURE OF SEARCH ENGINE OPTIMIZATION: A QUALITATIVE STUDY

## Jyväskylä University School of Business and Economics

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#### **ABSTRACT**

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#### Abstract

This master's thesis examines the current best practices and the future of search engine optimization through the perceptions of experts in the field of SEO. The purpose of the research is to create an understanding of the individual actions that are recommended to utilize when executing search engine optimization and how professionals in SEO perceive the field to change in the future. The majority of research about SEO is done through other means than interviewing experts and they typically only consider some dimensions of search engine optimization rather than focusing on the whole entity with its three dimensions: on-page, off-page, and technical SEO. Moreover, current academic research on search engine optimization's future is scarce.

The research utilized a qualitative method, and its data was gathered through semi-structured interviews. The data was gathered in September-October of 2023. A total of six professionals with work-life experience in SEO from a year and a half to nine years were interviewed. All the interviewees worked in different industries. The analysis of the data was done through an inductive method.

The research found that while the individual best practices that have been prevalent in the past still apply, especially in content creation they do not suffice anymore. Instead, nowadays the content needs to be written in a more urgent format, matching the search intentions and answering the questions or problems of the website visitors quickly, without extra fluff in the content. Moreover, the research found that so called illegitimate "black-hat" techniques are mostly outdated due to the increasingly evolved search engine algorithms and their ability to detect the use of these techniques. The future of SEO is considered to be in a break-point due to the emergence of AI programs such as Chat GPT and the emergence of substitute platforms in information search. For future research, it is suggested to commit research on these platforms such as TikTok and study how the search behavior of consumers has shifted to use those instead of search engines like Google.

#### Key words

search engine optimization, SEO, on-page SEO, off-page SEO, technical SEO, future of SEO, semi-structured interview, thematic analysis

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#### TIIVISTELMÄ

Tekijä				
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Tiivistelmä

Tämä Pro-gradu tutkielma käsittelee hakukoneoptimoinnin tämänhetkisiä parhaita käytänteitä sekä tulevaisuudennäkymiä ja sen tavoitteena on luoda ymmärrystä alan asiantuntijoiden näkemyksistä näiden osalta. Valtaosa aikaisemmista tutkimuksista on toteutettu muilla keinoin kuin haastatteluilla ja niissä keskitytään vain johonkin hakukoneoptimoinnin osa-alueeseen eikä oteta kantaa hakukoneoptimointiin kokonaisuutena. Tämän tutkielman kirjoittamishetkellä myös akateeminen kirjallisuus hakukoneoptimoinnin tulevaisuutta kohtaan oli lähes olematonta.

Tutkimus toteutettiin kvalitatiivista puolistrukturoitua haastattelumenetelmää hyödyntäen. Tutkimuksen aineisto kerättiin vuoden 2023 syys-lokakuussa. Tutkimuksessa haastateltiin kuutta hakukoneoptimoinnin asiantuntijaa, joiden työkokemus hakukoneoptimoinnin parissa vaihteli 1,5-vuodesta yhdeksään vuoteen. Tutkimuksen aineisto analysoitiin aineistolähtöistä menetelmää hyödyntäen.

Tutkimuksen tulokset osoittivat, että vaikkakin jo aiemmin tunnistetut SEOn parhaat käytänteet pätevät yhä, erityisesti sisällöntuotannossa niiden hyödyntäminen ei enää ole riittävää. Nykyisin sisällöntuotannossa tulee vastata hakijoiden kysymyksiin ja ongelmiin nopeasti, ilman ylimääräistä tekstisisältöä, vastaten hakijoiden hakuintentioihin. Lisäksi tutkimus osoitti, että epäeettisten SEO-menetelmien hyödyntäminen on nykyisin hyödytöntä, sillä hakukoneiden algoritmit ovat kehittyneet tarpeeksi eteviksi, että ne havaitsevat nopeasti kyseisten menetelmien hyödyntämisen. SEOn tulevaisuuden nähdään olevan suuressa muutoksessa vastikään esiintyneiden tekoälypohjaisten ohjelmien kuten Chat GPTn sekä hakukoneita korvaavien uusien alustojen johdosta. Tulevaisuuden tutkimusehdotuksia on juuri näiden uusien alustojen kuten TikTokin tutkiminen hakukoneen korvikkeena tiedonhaussa sekä alustojen aiheuttaman käyttäjien hakukäyttäytymisen muutoksen tutkiminen.

#### Asiasanat

hakukoneoptimointi, SEO, puolistrukuroitu haastattelu, temaattinen analyysi Säilytyspaikka Jyväskylän yliopiston kirjasto

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### 1 INTRODUCTION

In 2023, the majority of companies have built a presence on the internet, either with their websites or as profiles in social media. The role of the internet in business and as a marketplace is ever rising, calling for further marketing actions to increase brand visibility online in order to compete with other companies. In addition, the internet works as a facilitator for the search of information which both the consumers and business executives utilize to gain insight into the products and services they're interested in. To find the desired information from the internet, the users utilize search engines such as Google, to match their search queries with relevant web pages. Two kinds of search results exist in a search engine: organic and paid (or sponsored) results (Zhang & Cabage, 2017). Search engines provide organic results based on their ranked relevance towards the search query, whereas the paid or sponsored results (i.e. advertisements) are provided through a competitive auction mechanism (Berman & Katona, 2013). The actions to implement to show up on either the organic or paid results fall under the techniques of Search Engine Marketing (SEM) (Nagpal & Petersen, 2021). A noteworthy point is that using paid search does not limit the possibilities of using Search Engine Optimization (SEO) or vice versa, to increase traffic to the website. SEO increases its importance especially when a company cannot choose to advertise in search engine due to budget or other reasons (Berman & Katona, 2013).

To show up in organic results, the company has to produce content to their web page that meets the various criteria imposed by the search engines. This is called Search Engine Optimization (SEO). (Nagpal & Petersen 2021.) SEO in its basis is relatively cheap, as the tactics to implement SEO into websites are free, but paid SEO tools do exist that assist to better ensure that the content is properly optimized (Sheffield, 2020). While these tactics and extra tools facilitate better rankings in Search Engine Result Page (SERP), the exact way the search engine algorithms rank web pages are not of public knowledge (Sheffield, 2020).

As search engines play a large role in the information search of people globally, it is imperative to understand how the results for searched queries are formed. Zhang & Cabage (2017) point out that as the internet is constantly

becoming more and more crowded with websites and pages, it makes it more difficult to both the companies selling their products as well as the customers searching for them to find each other. In other words, as competition increases in the digital world, search engine optimization's relevance increases to ensure that potential customers find their way to the companyies' websites. Zhang and Cabage (2017) also argue that for an online business to succeed within the digital playing field SEO plays a critical role. This critical role is the organic visibility that can be attained with SEO techniques. In addition, according to Berman and Katona (2013) and Bremer and Funk (2017) consumers trust the organic results more than paid ones, which increases the importance of showing up high on the organic rankings. Furthermore, Chan and Leung (2021) argue that through SEO the company can increase its brand awareness and establish authority and trust-worthiness in the field or product category they operate in.

As SEO has argued relevance for companies' business, it is essential to understand how the people in the roles responsible of using SEO operate in terms of the practices they use and create understanding on the actions used to achieve better organic visibility in search engines. This knowledge can better light the way how to attain better rankings in search engines and gain valuable, organic traffic that can ease the pressure of driving traffic solely through advertising. Moreover, as the field of SEO is constantly changing, it is imperative to understand how the practitioners within the field prepare themselves for the changes and how do they perceive the future of SEO.

This study strives firstly to find out the current best practices for SEO execution through analysis of academic sources and interviews with marketing professionals. Secondly, the study strives to create understanding on how these marketing professionals perceive the future trends of SEO and what it takes to properly rank in the search engines in the future. While multiple search engines, such as Bing and Yahoo exist, Google is the largest search engine by usage, as over 90 percent of the search queries globally are committed with it (Leung & Chan, 2021). Due to Google being the dominant search engine this study focuses solely on the SEO techniques of this search engine and doesn't delve into the possible differences within other search engines.

## 1.1 Background of the study

While search engine optimization is a vastly researched subject, the research typically concerns only one of the three dimensions of SEO at a time: on-page, off-page, or technical SEO. Sheffield (2020) noted that the research typically focuses on the more technical parts of SEO such as link building and the way a website should be built to be effective in search engines, rather than focusing on the content. To fill this gap, Sheffield (2020) added a focus on content creation and the best practices in SEO through interviews with experts in the field. Their results found that the best practices in content creation are actions such as conducting keyword research, placing the keywords correctly on the page, and utilizing title

and heading tags. Leung and Chan (2021) also researched what to include within the content of a web page to make it rank better within search engines. They analyzed thousands of search results to find the individual practices to properly optimize a web page. In their research, they found that one needs to optimize page titles, meta descriptions, and create engaging, thorough content about the topic to facilitate better rankings within search engines, aligning much with what Sheffield (2020) had found out a year before. Other researchers, such as Zhang and Cabage (2017) focused solely on the link building dimension within SEO. They researched the effects of link building and sharing the content in social media platforms. In their research they analyzed three websites and found that through link building, the websites could increase the traffic, ad revenue, keyword rankings and domain authority and a website utilizing social sharing could increase traffic and ad revenue quickly but only shortly.

Using these researchers as an example, it can be noted that the research in search engine optimization is typically limited to only include certain aspects of SEO, excluding the other factors that affect the ranking of a web page. In fact, the research on best practices in SEO as a complete entity by including all three dimensions in focus is scarce. As mentioned for example, Sheffield (2020) focused solely on content creation, and while one of their interviewees pointed out the importance of gaining links pointing to one's content from outside web pages, no practices for gaining them were introduced, leaving out one important dimension of SEO. The research about SEO is also typically done through examining academic literature or conducting research through means other than interviewing professionals working in SEO. Qualitative research through interviewing SEO experts is scarce, and when found, it only focuses on certain aspects of SEO, such as Sheffield (2020), instead of creating cohesive understanding of how each of the dimensions of search engine optimization should be executed. While it's important to conduct research on various ways about SEO and its individual aspects, such as conducting tests on what actions can better increase the organic performance like Zhang and Cabage (2017) did, gaining insights on how the experts on the field operate and perceive the full scope of best practices in SEO to be is also an important perspective to get.

As for the future of Search Engine Optimization, the current academic research is scarce. Instead, a plethora of information and hypotheses can be found within the SEO community. These types of sources include expert blogs and websites such as SEMrush, Ahrefs, and Search Engine Journal. Emerging tools utilizing Artificial Intelligence, such as ChatGPT have entered the playing field, which can change the way professionals produce content or conduct keyword research to an extent. At the point of writing this paper, no peer-reviewed academic research about the practical use cases of ChatGPT and other generative AI programs in Search Engine Optimization can be found.

Justified by the limitations in research of search engine optimization presented above, this research aims to add more perspective by:

- Filling the gap of researching search engine optimization as a complete entity by including all its three dimensions: on-page, off-page, and technical SEO.
- Filling the gap of lack of research through interviews with experts in the field.
- Filling the gap of research about the current perceptions for the future of search engine optimization.

## 1.2 Research objectives and questions

This study strives to figure out how professional marketers in Finland utilize SEO as a marketing tool as well as what are their perceptions of the best practices in producing SEO friendly content, the practices to gain "backlinks" to increase their web site's authority, and practices in ensuring the proper functioning of their websites. Forming a concise picture of the current best practices in search engine optimization is especially relevant as the search engine algorithms are updated constantly, changing the ways how SEO is done properly. After the current best practices have been established, this paper strives to create understanding on how the professional practitioners perceive the future of Search Engine Optimization and the possible changes in executing these best practices in the future, which creates understanding on where the experts perceive the industry to be heading. This paper has two research questions which are as follows:

1. What are the current best practices the professionals follow when executing search engine optimization?

Researching the current best practices within search engine optimization as a whole is imperative in understanding what it takes for a web page to rank in search engines. With this research question the aim is to find and depict best practices in all three dimensions of search engine optimization: on-page, off-page, and technical SEO. While it is important to understand the best practices, the aim is also to find out what are the types of actions that should not be done when executing SEO. The reason for figuring out also the practices not to commit to is because there is no fine line about what is acceptable and what is not when executing SEO, but some actions may get penalized if Google perceives them to be illegitimate. Creating understanding and mapping out those practices that risk causing a penalty given by the search engine is important, as they distinctly go against the best practices used to achieve a better ranking within search engines. As the research question strives to create understanding in SEO, it is also important to find out how the professionals perceive the relationships between the three dimensions and how they should be implemented to work together.

2. How do the professionals perceive the future of SEO?

The future of SEO is a timely subject, as new tools such as a generative artificial intelligence, Chat GPT has been recently introduced. This research question strives to firstly create understanding how the professionals perceive the best practices to change in the future. In addition, as search engine optimization changes rapidly within time, this research question strives to find out the potential challenges and opportunities in the future of SEO. Lastly, the question aims to figure out what role does AI play in the future and how will the tools used in SEO change in the future.

## 1.3 Structure of the study

This study consists of five chapters. The theory chapter, which follows the introduction delves deeper into the different dimensions of SEO, introduces the academically accepted best practices of executing SEO strategies, and presents current research on the future of search engine optimization. The chapter that follows the theory is the methodology chapter in which the data gathering method, semi-structured interview and the data analysis method, thematic analysis are introduced. The fourth chapter discusses the findings from the data, and lastly the fifth chapter converses the relevancy of the findings and the recommendations for future research related to this study.

### 2 THEORETICAL FRAMEWORK

This chapter begins with presenting the background of search engine optimization by explaining the key terms related to the topic and its place within search engine marketing to form a better understanding of what search engine optimization is. Following those, the chapter delves deeper into search engine optimization by presenting its three dimensions, how SEO's performance is measured, and the ranking factors that affect the performance of SEO. After the overlying themes behind search engine optimization and how it's used are explained, the chapter focuses on explaining the researched current best practices to execute SEO and the black-hat techniques considered to be illegitimate actions that try to trick the search engine to boost the organic rankings of a web page. The final portion of this chapter focuses on the future of SEO.

To study the nature of search engine marketing and search engine optimization, it is imperative to first explain the terms search engine, search engine result page and keywords as they are what make search engine marketing possible in the first place.

#### Search engines

Pabitha (2012) defines search engines as web-based programs which provide results for searchers through their index in which they contain web pages across the world. Search engines provide information relevant to the searchers queries based on the analysis of the content on web pages for example by titles and headings. When a user inserts keywords in the search bar, a search engine goes through web pages and then returns results based on the keywords in a hierarchical order mandated by the relevancy of the page towards the search query (Leung & Chan, 2021.). In other words, a search engine works as a facilitator of bringing the user and the web page containing the correct information together. It does it through examining the contents of the pages and ranking them with their own criterion to provide the best match possible for the search query.

Search engines provide search results by going through their index to find the best possible matches to the search query. Search index is a library of web pages (Killoran, 2013). Search engines add new web pages to their index by crawling through a web link to analyze the content within the page. When a page is within an index, the search engine occasionally repeats the crawl to check possible changes within the page such as new content or links. The actual crawling of a web page is done by a program called a spider or a bot (Killoran, 2013.). Spiders are therefore the ones who analyze the content to better understand what the page is about. This information is then used to have web pages show up in a search engine results page to match a relevant search query.

#### Search Engine Result Page (SERP)

Search Engine Result Page (SERP) is a page with a list of search results towards the searched query. The results appear with hyperlinks to each result page and a short description about the contents of that web page (Zhang & Cabage, 2017.). Each SERP is unique, as search engines utilize the user's data to customize the search results to provide best results possible towards each query. The data utilized can be for example the user's location, social settings and browsing history. (Wordstream, 2023.) By default, a SERP shows results sorted by relevance and it shows ten results in a page (Killoran, 2013). These settings can however be changed to show the results sorted by created date or increase the number of results shown up to 100 (Google, 2023a).

## Keywords

Keywords are singular words and sentences that are used in search queries in a search engine. Search engines utilize keywords to provide as relevant information as possible to match these queries (Leung & Chan, 2021). They can also be formed as sentences which search engines can answer to (Matoševic, Dobša & Mladenic, 2021). Keywords can be short-tailed (consisting of up to two words) or long-tailed (at least four words). Long-tailed keywords are more specific and answer to more thorough search queries. (Kritzinger & Weidemann, 2013.) Long-tailed keywords suffer from smaller amounts of search queries but make it up by being easier to rank with, as they provide more specific results with less competition (Killoran, 2013). An example of both short-tail keyword can be for example "cat food" and a long-tail one "best cat food for large cats". Other terms used for short- and long-tail keywords are "head" and "tail" keywords (Killoran, 2013).

Keywords are the main components of both paid search as well as SEO. Multiple tools exist to help identify proper keywords to utilize. One of these is for example Google's own Google Keyword Planner. It provides the average monthly search queries with the typed keyword and suggests similar keywords (Google, 2023b) which can be utilized in both paid search as well as SEO. Keywords can and should be used within the content of the web pages, as well as alternative tags and filenames within images (Leung & Chan, 2021) to ensure a better potential for ranking.

## 2.1 Search Engine Marketing (SEM)

Search engine marketing is a function within an online marketing strategy in which the goal is to increase and maintain a rank of the proprietor's web page within a search engine result page (Clarke & Clarke, 2014) to increase the website's visibility (Duk et al., 2013). In other words, search engine marketing strives to increase the rank of a web page as high in a SERP as possible, so the potential customers or web site users may find the page on their search queries. The majority of internet users only go through the very first page of results in a SERP (Duk et al., 2013), therefore it is imperative for a company to put in efforts in order to appear on the first page.

Search engine marketing can be divided into two separate functions; search engine advertising, also called paid search (Clarke & Clarke, 2014) and search engine optimization SEO (Dou et al., 2020). What differentiates these two functions is the nature of driving traffic to the websites. In paid search, the traffic is driven through bidding on keywords which are then used in search advertisements. When a search engine user clicks on an ad, the entity using paid search ads will pay for the search engine as a cost-per-click method. (Clarke & Clarke, 2014.) Paid search can also be perceived as purchasing online space for advertising (Leung & Chan, 2021). Search engine optimization drives traffic through organic search results (Nagpal & Petersen, 2021) therefore not having the paid dimension within it. In other words, search engine optimization drives traffic through organic results, which means through only the relevance of the web page towards searched keywords without the dimension of bidding for keywords. Another separating factor between the two functions is the time it takes for the pages to rank high on a SERP. With SEO the process is much slower (Duk et al., 2013).

Both the paid search and organic results are shown on the same page of SERP with paid or PPC ones showing above the organic results. Search engines therefore increase competition within the web pages as first the engine creates a result list of sponsored links and then it provides the secondary list of organic results. (Kritzinger & Weideman, 2013.) In other words, two kinds of competitions for ranking exist within a SERP; paid one and an organic one. Examples of paid (circled with red color) and organic (circled with green) search results can be seen in Figure 1.

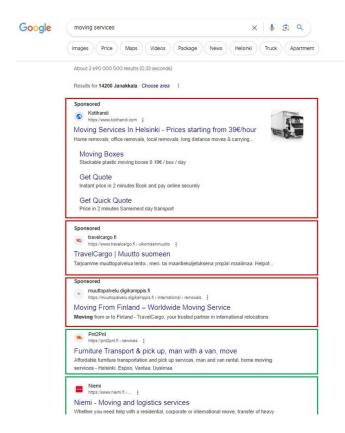


FIGURE 1 Screenshot of a Google SERP showing Paid and Organic search results.

## 2.2 Search Engine Optimization (SEO)

There are different types of definitions for search engine optimization in the academic literature. While they are not mutually exclusive, they differ in perspectives: some define it based on its purpose or goal and others by the practices it includes. When perceived on the view of SEO's goal, for example Moreno and Martinez (2013) define search engine optimization as a process of driving an increasing amount of visitors to a website by ranking on a high position in search results of a search engine. Leung and Chan (2021) on the other hand expand this definition with a dimension of furthering the transformation of prospects into customers through increased traffic. On the perspective of practices of SEO, Zuze and Weideman (2013) define SEO as a process in which on- and off-page elements of a web page are modified to achieve a better rank within a SERP. In this study, SEO is defined as a combination of these definitions above. The definition of SEO in this study is as follows: SEO is a process of editing different elements of a website in order to rank better in a SERP to drive an increasing number of traffic to the web page.

The higher a website appears in the organic results of a SERP the higher the ranking of the website is (Kritzinger & Weideman, 2013). For example, when a website appears as the first result when a certain keyword is searched, the website's rank on that specific keyword is number one. Achieving a high rank in

organic search typically requires higher knowledge about the search engine's algorithms related to web rankings (Matoševic, Dobša & Mladenic, 2021).

The organic search results are returned to the searcher through various criteria based on the search engines own mandates. These criteria include for example the website's authority, quality of links directed towards it and the relevance of the content towards the initial search query. (Nagpal & Petersen, 2021.) The techniques to improve web page's SEO can be divided into three categories; on-page, off-page (Nagpal & Petersen, 2021) and the sitewide dimension, or Technical SEO (Clarke & Clarke, 2014; Lopezosa, Codina, Díaz-Noci & Ontalba-Ruipérez, 2020). On-page optimization refers to the content within a web page such as the titles, whereas off-page refers to social signals and authoritative "backlinks" that are directed to a page. Technical SEO refers to actions that affect the rankings of a whole website instead on a singular page. (Clarke & Clarke, 2014.)

## 2.2.1 On-Page optimization

On-page optimization refers to the actions within web pages that SEO specialist can control by themselves (Matoševic, Dobša & Mladenic, 2021). These actions include the optimization of the body text within the web page, images and filenames, titles and headlines, URLs, navigation, tables and HTML code (Matoševic et al., 2021; Shah, Shah & More, 2021). In short, on-page optimization is the optimization of various elements within a web page. More thorough list of on-page optimization techniques is discussed later in chapter 2.6. "Current search engine optimization best practices".

#### 2.2.2 Off-Page optimization

Off-page optimization refers to the factors which are not fully in control of the web pages author (Matoševic, Dobša & Mladenic, 2021). Typically, off-page factors refer to the in- and outbound links to and from the website and more importantly the quality of them. The outbound links towards the web page are often called "backlinks". Shah et al., (2021) point out that when a web page has more backlinks leading to it, it signals the search engine that the page has something relevant within it.

Google was the pioneering search engine that began to analyze the links between web pages to evaluate the importance of websites on the internet (Lopezosa, Codina & Gonzalo-Penela, 2019). Google utilizes PageRank, a method of analysis of the link structure of a web page to compute a quality ranking for it among other web pages. PageRank computes the total amount and the quality of backlinks directed to the web page to calculate the importance and quality of the web page. (Bring & Page, 1998.) This means that each web page is given a PageRank based on the quality of links being directed to them. The authority of a web page is mandated by the PageRank system (Brin & Page, 1998; Lopezosa et al., 2019).

The linking website's authority affects the strength of a backlink. When a high authority web page links to another web page through a backlink, it transfers their authority to the other page, making that page of higher authority (Lopezosa et al., 2019). What this means in action is that when an authoritative web page links to another web page, it signals to search engine that there's something of value on the other page as well. Search engine then factors this in when it's crawling through the web site where the links leads to.

Lopezosa et al., (2019) identify two link building techniques for off-page SEO. The first one, the "natural" or "editorial" method, relies on publishing high quality content to gain authority by having other websites link towards it. The second one is "strategic link building", in which the websites manager actively reaches out to other websites asking for links to their website. A problem occurs within the strategic approach as if the search engine's detect high numbers of unnatural links between websites, they may penalize the website by decreasing their rank or in most extreme cases deindex them from their indexes (Google, 2023c).

Different types of links exist: dofollow and nofollow links. Dofollow links work as a link between two web pages transferring PageRank authority from one to another. The name itself tells the search engine to follow the link from a web page to another, creating a connection with the PageRank to the receiving page. (Lopezosa et al., 2019.) Not all backlinks provide authority, and some links are completely ignored by search engines. These are called nofollow links, which are opposites to dofollow links. These links include a source code tag telling the search engines not to follow the link to another web page. Nofollow links also inform that they do not factor in a PageRank of a website. If a link is an advertisement, it should be marked as nofollow, as the nature of advertising makes the authority of the link questionable. (Lopezosa et al., 2019.)

#### 2.2.3 Technical SEO

Technical SEO consists of actions to improve and maintain the optimization of a website for search engines, but it can include a perspective of improving the usability of the website for human users as well (Pol, 2023). The reasoning behind this is to create a well-functioning website, which operates well without major issues concerning for example loading speed or broken pages. Out of the three dimensions of SEO, according to Lopesoza et al., (2020) Technical SEO is the most important one. While this does not undermine the other two dimensions, its importance is justified as to optimize the content and execute a link building strategy, it requires a properly functioning website that enables the creation and modification of its content.

Executing Technical SEO typically includes a technical SEO audit, which examines the structure and health of a website, pointing out the potential flaws needing to be fixed (Tomič & Šupín, 2019). These types of flaws can include for example long loading times for individual web pages and broken pages that return a 404-status code (Tomič & Šupín, 2019; Pol, 2023) or missing an SSL certificate that enables the use of HTTPS instead of HTTP, authenticating to both

the search engines and users of the security of the website (Pol, 2023). In addition to increasing the quality of a web page, the page speed affects the behavior of the web page's users. When the page loads faster, the users tend to browse throughout the website to other pages, increasing the probability of filling out different forms or purchasing products from the website. (Drivas, Sakas, Giannakopoulos & Kyriaki-Manessi, 2020.) Slow web page on the other hand makes it difficult for the user to navigate throughout the website (Gregurec & Grd, 2012), this can increase the bounce rate of the website (Drivas et al., 2021). Slow running pages can be penalized by the search engine to encourage the proper optimization for increased user experience (Garais, 2015). In other words, to achieve better ranking within SERP, it benefits the SEO optimizers to optimize their website for smoother page experience. SEO's three dimensions are depicted in Figure 2.

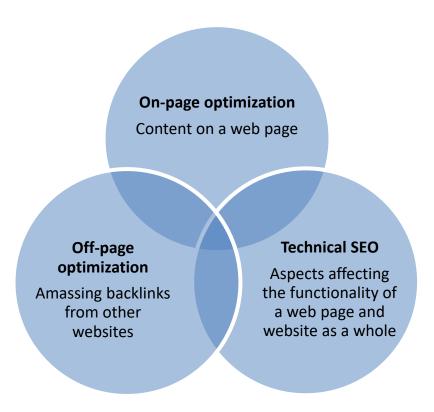


FIGURE 2 Depicting the different dimensions of Search Engine Optimization

## 2.3 Measuring Search Engine Optimization performance

As stated in chapter 2.2, the ultimate goal of Search Engine Optimization is to drive organic traffic to the website through Search Engine Results Page (SERP). To measure the performance for SEO, different metrics are used. Multiple tools provide platforms for measuring SEO performance such as Ahrefs, SemRush and Google's own Search Console. The metrics to measure search engine

optimization's performance through Google's own tools include impressions, clicks, average position and click-through rate (Google, 2023d). In addition to this list, multiple researchers and experts include bounce rate as one of the metrics to follow when measuring search engine optimization's performance (Garais, 2015; Ziakis et al., 2019; Silva, 2022).

#### Clicks

As Moreno and Martinez (2013) argued, the goal of Search Engine Optimization is to drive larger amounts of organic traffic to a website. When a person commits a search query on a search engine, they are presented a Search Engine Results Page. Click is simply the action of a user who landed on a website from a SERP. Clicks as a metric counts the total amount of individual clicks to a website from a search result (Google, 2023d).

#### **Impressions**

Impressions measure the total amount of times a user has seen a link to a website in the search results, whether they clicked into the website or not. Impressions are measured only when the user has had a chance to see the link to a website in a SERP they're at, meaning that if the user has not visited the second page of search results where the link would appear, no impression is measured. (Google, 2023d.)

#### Average position

Position measures the rank in a SERP of a given URL in a search engine. As the position varies within each search query, Google reports positions as average positions in Search Console. (Google, 2023d).

#### Click through rate (CTR)

Click through rate (CTR) is an important ranking factor to a search engine, as it shows how often a page gets visitors compared to how often it is shown in SERP. To increase CTR websites should edit the web page title and the descriptions metatag (meta description) to be as interesting as possible to the searchers. This is so the web page would stand out from the competition in a SERP and would gain more visitors. (Leung & Chan, 2021.) Click through rate is calculated by dividing the number of clicks by the number of impressions (Google, 2023d).

While gaining a better rank in a SERP amounts as an increased number of organic traffic to the web site, it is especially beneficial to appear in results 1-3 (Dean, 2023). According to a study they conducted, the first organic position has a click-through-rate of approximately 28%, which decreases to 16% and 11% as the rank decreases from first to second and then third. They also show that long-tailed keywords tend to have higher CTRs and if the search query is branded, the

CTR increases even more. This shows that the CTR based on ranking fluctuates, but as the rank is higher, the higher the CTR will be.

#### **Bounce** rate

Bounce rate is a metric that shows the percentage of web site visitors that spent a short period of time within a website and closed or left the website without navigating further from the one page they landed on (Garais, 2015). Conflicting information can be found whether the bounce rate of a web page affects its ranking or not. Ziakis et al., (2019) explain that a page with a low bounce rate communicates to search engines that the page contains quality content, which they then use as a ranking factor, pushing the page higher in a SERP. According to Silva (2022), a SEO expert writing on a blog for Semrush, a widely used SEO industry tool, the bounce rate is not a confirmed ranking factor, but it can give insight on how the audience perceives the content and the website. Even though it is not confirmed as a ranking factor, it does provide value to the web site's editors and should not be left unanalyzed.

## 2.4 Search Engine Optimization ranking factors

As it was stated in chapter 2.3, executing search engine optimization consists of multiple different ways of working within each dimension of SEO. Each dimension of SEO has proven individual practices that can help the optimizer in reaching better rankings for their individual web pages. This chapter delves deeper into the perceived best practices within the researched scientific literature and examines the practices that are perceived to be disallowed and unethical.

#### Ranking factors

As it was stated in chapter 2.3, search engines rank web pages within their index on a set of factors, however, these factors or criterion are constantly changing and updated. According to Luh, Yang and Huang (2016) Google utilizes over 200 different ranking factors, majority of them being unknown to the public within its algorithm when analyzing and ranking a web page. Majority of them being a secret makes creating a definitive list impossible, but there are some acknowledged ones an optimizer can utilize to achieve better rankings for their web pages.

Some sources divide the actions involving these known ranking factors into two categories: white-hat and black-hat SEO. Of these two the former refers to the practices that are done "by the book" while the latter refers to the illegitimate practices to achieve better rankings (Killoran, 2013; Pabitha, 2012). White-hat SEO is about creating content for web users rather than just for search engines to read. Black-hat SEO on the other hand tries to trick the search engine

to rank the web page better by using illegitimate methods such as hiding keywords within the web page with a font that this the same color as the background of the web page (Pabitha, 2012).

## Google ranking factors

While the exact ranking factors are a secret, Google does give hints on how to produce content in order to rank well within its search engine. According to Google (2023e), they analyze the relevancy of the page towards the search query (keyword), usability of the web page, location and context, "freshness" meaning the recency of the content, and the expertise of the source, which refers to the quality of the content. It can be noticed that Google does not give specific information on how to achieve a higher ranking, but how the content should be as a whole in order to achieve it.

Multiple academic researchers, such as Luh et al., (2016), and Ziakis, Vlachopoulou, Kyrkoudis and Karagkiozidou (2019) have studied the factors perceived to affect rankings in Google. In both of Luh et al's., (2016) and Ziakis et al's., (2019) studies the amount of backlinks was highlighted to be very important. Other factors were for example the keyword in meta description, title and URL (Luh et al., 2016), and bounce rate and SSL certificate (Ziakis et al., 2019).

In addition to the academic researchers, multiple industry experts from companies providing SEO services have tested and analyzed Google's ranking factors. Hardwick (2022) from Ahrefs has listed seven confirmed factors including: page speed, quality and quantity of backlinks, relevance to search query, freshness of the content, using HTTPS, mobile friendly websites, and the use of banners instead of page overlays. Page overlays are considered as intrusive and limit the usability of the website, as they interrupt the usage of the web page (Hardwick, 2022). A full list of ranking factors according to the findings of these studies is presented in the Table 1.

TABLE 1 Ranking factors according to studies by Hardwick (2022), Ziakis et al. (2019), and Luh et al. (2016).

Ranking Factor	Dimension of SEO	Researcher	Confirmed by Google	
Backlink quantity and/or quality	Off-page SEO	Hardwick (2022) Ziakis et al. (2019) Luh et al. (2016)	Х	
Bounce rate		Ziakis et al. (2019)		
Keyword in Meta description	On-page SEO	Luh et al. (2016)		
Keyword in title	On-page SEO	Luh et al. (2016)		
Keyword in URL	On-page SEO	Luh et al. (2016)		
Mobile friendly website	Technical SEO	Hardwick (2022)	Х	
Page loading speed	Technical SEO	Hardwick (2022)	Х	
Quality content that is timely	On-page SEO	Harwick (2022)	Х	
Relevance to search query		Hardwick (2022)	Х	
SSL certificate (use of HTTPS)	Technical SEO	Hardwick (2022) Ziakis et al. (2019)	Х	
Using banners instead of page overlays	Technical SEO	Hardwick (2022)	Х	

It should be noted that no certain, lasting knowledge about the ranking factors can be gathered, as within each update in search engine's algorithms the ranking factors may change. For example, Ziakis et al. (2019) noted this as they got differing results to another study that was conducted in 2015. Luh et al. (2016) also point out that no SEO company or professional knows the exact details of ranking in search engines, and after major algorithm updates it's very difficult to figure out what has changed. To have timely information on what factors matter in ranking, one has to experiment and observe how each change in a web page affects the ranking (Luh et al., 2016).

## 2.5 Current Search Engine Optimization best practices

This chapter delves deeper into the perceived best practices within Google. These practices are those within "white hat SEO". The term "white hat SEO" means those actions, that are considered to be proper ways of getting the content to rank well within search engines (Killoran, 2013). In other words, the best practices presented are those that have been seen to affect the ranking of a web page in SERPs in a manner of not trying to trick the search engine to give the page a better ranking. The best practices are divided within the search engine optimization's three dimensions: on-page, off-page and technical SEO. A list of current best practices can be seen in Figure 3.

#### **On-page optimization**

- Conduct keyword research
- Optimize text using keywords
- Use keywords in page title and headlines
  - Optimize meta description
  - Include keyword in URL
- Optimize image names and add alt-texts

#### Off-page optimization

- Consider contacting relevant online sources to write posts on them with links to the website
- Commit to social sharing by posting content on social media channels to create conversation

#### **Technical SEO**

- Acquire an SSL certificate
- Ensure high page loading speed with moderate use of special effects and graphic components
- Ensure the mobile-friendliness of a website
- Compress images for smaller sizes
  - Use banners instead of page overlays
- Fix broken pages returning a 404-
  - Avoid duplicate content

FIGURE 3 Depicting each SEO dimension's current best practices

### 2.5.1 On-page SEO best practices

#### **Keyword research**

Before any optimization within a web page is done, the web developer should conduct research on what keywords their target audience uses to search for information on the search engine (Killoran, 2013). The purpose behind this is to match the content with the search queries. Keyword research has been the number one step in SEO process for many years as Wilson and Pettijohn (2008) list it as number one step and according to the results by Shefifeld (2020) keyword use and research is one of the most important parts of SEO.

Some variables exist when choosing a proper keyword to use. According to Sheffield (2020) it's imperative to understand what keywords the searchers are using. The reasoning behind this is that if certain keywords do not have a lot of search queries over substitute keywords, it isn't optimal to utilize them. Killoran (2013) also points out that the target audiences and content creators may use completely different terms in their search queries, which highlights the importance of the research behind the chosen keywords. One tool Sheffield (2020) brings up is Google's own related searches function through which one can see what similar search queries are made with that same keyword.

Another aspect essential to realize is which keywords are possible to rank with and which are out of reach for the company. The size of the business may affect their ability to rank with certain keywords if a keyword has a high search volume and the business itself is small (Sheffield, 2020). In these cases, it can be optimal to search for synonyms for the keyword or to utilize a long-tail keyword. Long-tail keywords are more detailed and are often asked as questions through for example a voice assistant like Siri. (Sheffield, 2020.)

#### Use of keywords

As mentioned in chapter 2.1.2, keywords are words and sentences that users type to form search queries in a search engine. Search engines utilize these keywords to return search results that match the relevance of the searched keyword. In addition to optimizing a web page towards one keyword, Sheffield (2020) recommends using synonyms and other related words within the content to provide variety. According to Sheffield (2020) to create variety, the content writers typically choose a primary keyword and utilize synonyms and other words from the same concept to enrich the content surrounding the primary keyword.

Important factors within the use of keywords are that their use should be natural and varied. As the search engine's algorithms are secret, no exact science exists of how the keywords should be implemented. (Sheffield, 2020.) There are however researched and tested places on a website where the keywords should appear.

## **Text optimization**

Optimization of the text refers to the production of quality, informative content which includes relevant keywords with which the page is wished to rank with (Garais, 2015). According to Sheffield (2020) text optimization means all the sections of a content page excluding the headings and a title of a page. Usually these are tagged as paragraphs (Sheffield, 2020). The targeted keywords should be used within the text multiple times to make it clearer what the text is about. This is defined by Ziakis et al. (2019) as the keyword density, which is ideally from 2 – 8% of the total amount of words within a page. In addition to using keywords within the text, they should also be utilized within the title and headlines of the text.

### Optimization of page title and headlines

Optimizing the page title and headlines plays a critical role in SEO, as they are the main giveaways in explaining what the web page is about. Inserting a keyword to a page's title is one if not the most important location for it for users (Killoran, 2013). This is because the title is shown listed in a SERP (Killoran, 2013; Sheffield, 2020) and it is along with meta description the first thing a searcher sees (Sheffield, 2020).

Optimizing a web page with titles and headlines requires segmenting the text under main and sub-headings. These headings are numbered from 1 to larger numbers. The smaller the number, the more "important" the heading is in terms of explaining the content. (Sheffield, 2020.) H1 of the page is the main heading, which explains the reason of the web page in a broad context. Optimization of page title and headlines requires the proper usage of the targeted keyword. Sheffield (2020) points out that using a keyword is only helpful within a H1 if it provides clarity on the content of the page. In other words, using a keyword within a H1 is important in terms of SEO, but if it's added in an unnatural manner so it doesn't fit within context of a H1 it does not provide value. Utilizing headings accordingly structures the content for both the users and search engines making the content easier to understand. In addition, using alternate keyword variations naturally within the headings is advisable. (Sheffield, 2020.) When creating a website, the developer should be creative when adding content. For example, when home and product pages are being created, the web page developers should avoid using generic words such as "home" and "products" as they do not explain enough what the pages are about in terms of what is different from another website's home or product pages (Killoran, 2013).

### Meta description optimization

While the meta description does not factor in the page's ranking, they are one of the first bits of information a searcher sees on a SERP about the web page. Meta description is a short summary on the contents about a web page that helps the searchers make a decision whether to enter a web site or not (Sheffield, 2020). Meta description should also include keywords and the preferred length for a meta description is 155-160 characters (Somosi, 2020). If it exceeds that, it may be cut short within a SERP, leaving out some of the information within it. Along with meta description a title of the web page is provided within SERP. The title and meta description of a web page are shown below in Figure 4.

```
https://www.apple.com > iphone :
iPhone - Apple
The ultimate iPhone. From $999. Buy · Learn more · View in AR. 6.7" or 6.1". Super Retina XDR display. ProMotion technology. Always-On display.
iPhone 14 and iPhone 14 Plus · iPhone X · Shop iPhone · iPhone SE
```

FIGURE 4 Web page title and meta description

#### **Image optimization**

Image optimization refers to the actions through which the images on a website are optimized so they support the quality of the content and can be found using Google's image search. These actions include proper naming of the images, adding in ALT-texts to explain what the images are about, and compressing the images to be of smaller sizes so they do not slow down the loading time of the web page. Alt-text provides more information about the images within a web page for search engines which enables their proper indexation (Ziakis et al., 2019). Proper naming of the images refers to including the keyword within the name so Google can better understand the content (Patel, 2022). Compressing the image sizes refers to decreasing the time it takes to load them on a web page. It is explained more in chapter 2.5.3. "Technical SEO best practices".

#### **Optimization of URLs**

URLs refer to the addresses of the web pages and they include the name of the domain within them (Matoševic, Dobša & Mladenic, 2021). Search engines prefer static, shorter and more concise URL structure that includes keywords instead of dynamic URLs. Static URL refers to the edited version of an automatically generated, dynamic URL. (Gregurec & Grd, 2012.)

#### 2.5.2 Off-page SEO best practices

As stated in the chapter 2.2.2 off-page SEO is a dimension that is not fully in control of the person doing search engine optimization (Matoševic et al., 2021). However, instead of creating content and waiting around to gain backlinks, there are actions one can take to increase the chances of gaining them.

#### **Guest posting**

Zhang and Cabage (2017) suggest that one way to gain backlinks is through guest posting, which they refer as contacting relevant online magazines or writer's networks that have high authority and proposing to publish articles within them, adding links to the website. In other words, the content is produced to a more popular website, which then links to the website that is wanted to gain more authority through relevant backlinks.

### Social Sharing

Another way of gaining backlinks according to Zhang and Cabage (2017) is social sharing, which they describe as creating interesting content and sharing it on social media, striving to get the content to go viral and have people share it within their social media channels and websites. This strategy extends beyond the search engine, as it utilizes other platforms to gain authority within Google.

## 2.5.3 Technical SEO best practices

As technical SEO can be perceived as creating and maintaining a functional and user-friendly website (Pol, 2023), the best practices are as the name suggests, technical instead of creative like in on-page SEO. When analyzing TABLE 1 illustrating the ranking factors, it can be seen that most of the factors confirmed by Google fall under the dimension of Technical SEO, such as having an SSL certificate, optimizing towards high page loading speed, using banners instead of page overlays, and having a mobile-friendly website.

### Acquire an SSL certificate

Secure Socket Layer (SSL) refers to a standard encryption technology which prevents hackers to acquire the data users leave on websites when visiting them (Hoque, Alsadoon, Maag, Prasad & Elchouemi, 2018). In other words, it ensures the safety of a website, and its use factors in organic rankings within Google as well.

#### Optimizing pages for high load speeds

To ensure high page loading speed, image sizes are a factor to consider, as images affect the loading time of a web page by increasing the time it takes for the page to load. To ensure the proper functionality of a web page, the images can and should be reduced in size. (Somosi, 2022.) It is also worth mentioning that the excessive use of special effects and other graphic components within the images can slow the loading of the page (Ziakis et al., 2019), therefore, to achieve a smooth experience for the user, the page creator should consider how many of these special effects to use without harming the user experience.

## Use banners instead of page overlays

To ensure that people find answers to their problems from search engines especially on mobile, on January 10, 2017 Google began to penalize pages in rankings which added intrusive pop-ups that prevented the user from seeing the content on the web page. These types of page overlays can include intrusive cookie declarations, pop-ups talking about discounts or age verification pop-ups (Google 2016.). In other words, the pop-ups are intrusive when they limit the website visitor from seeing the content without having to close the pop-up from the way. To comply with Google's policies, it is suggested to use banners that do not fill the whole screen of a mobile device (Google, 2016).

#### Ensure mobile friendliness of the website

Mobile-friendliness has become a critical factor in technical SEO since Google rolled out an update on ranking mobile-friendly websites higher in mobile search results in 2015 (Google, 2015). Mobile friendliness refers to the responsivity of the website that allows the mobile users to interact with the website with ease (Hoque et al., 2018).

#### Redirect pages with 404-status code

If a page is broken and returns a 404-status code, it needs to be redirected to a working page (Tomič & Šupín, 2019). Having links to broken page harm the user experience and make backlinks to those URL addresses useless as they point nowhere (Pol, 2023).

#### Avoid duplicate content

Managing the content to avoid duplicate content is another aspect within Technical SEO (Fromanek, 2021). Duplicate content from one's own website or another source on the internet is an issue as it can cause difficulties within search engine to determine which of the pages is the most authoritative as an information source for the topic (Wong, 2014). In other words, when the content is published identically more than once, it causes problems in proving what is the original source of information. In addition, it can be redundant as instead of publishing the content twice, a link to the original source can be used instead.

## 2.6 "Black-hat" SEO techniques

Search engines constantly change their ranking algorithms to prevent spamdexing (Kritzinger & Weideman, 2013) which refers to the black-hat techniques utilized to increase the ranking of a web page through unethical methods. Before it was possible to increase website traffic by utilizing these

"black-hat" techniques (Zhang & Cabage, 2017) but within time search engines have started to penalize this type of unethical behavior. If a search engine notices these type of techniques to being used, it might penalize the website by either deindexing it or by decreasing its ranking (Sheffield, 2020).

"Black-hat" techniques refer to the illegitimate actions to manipulate the search results into ranking one's web page higher in a SERP. The techniques include for example stolen or duplicate content, keyword stuffing or spamming and purchasing links (Zhang & Cabage, 2017). Spamming links refers to the action of inserting the web page's link to a comment section of other websites such as blogs or forums that have no relation to the website just to increase the amount of inbound links (Garais, 2015). Other black-hat techniques are for example the hiding of text to the background of a web page or "cloaking" which refers to the action of giving a different web page for users and search engines when they enter the web page (Pabitha, 2012).

Berman and Katona (2013) discuss of an example of JCPenney, an American retail company, which increased their organic visibility quickly through the use of "black-hat" techniques with an end result of their rankings being reduced greatly. JCPenney had taken part in purchasing a large amount of backlinks from various websites, some with the sole purpose of including links to websites that had purchased them from them. This caused JCPenney to go from an organic rank of 1 all the way to number 71 in a matter of few hours. (Segal, 2011.) JCPenney acts as an example of the potential risks a company takes when they try to "game" their way to the top of the organic rankings. If caught by Google, the result may be the quick loss of ranking.

## 2.7 The future of Search Engine Optimization

As discussed in chapter 2.3, SEO is a constantly evolving field with uncertain ranking factors that are changed within each search engine update. In the constant change, the SEO practitioners also encounter new tools to help further their page rankings and content. One of these tools is ChatGPT, an Artificial Intelligence powered tool launched in the end of 2022, which answers to queries and replies to questions closely to how a person would (OpenAI, 2022).

The future of search engine optimization is widely conversed topic within expert blogs and websites, but the academic literature is scarce. According to Devanur (2023) due to emerging increase in voice assisted searches such as the voice search in mobile search engine applications, the content should be optimized towards question phrased search queries instead of typical keywords. In other words, the content should include questions in form of how the search engine users are asking them. This answer engine optimization, or AEO as Devanur (2023) calls it strives to get the content to be shown on the "People also ask" answer boxes in search engines. "People also ask" answer box is shown below in Figure 5.

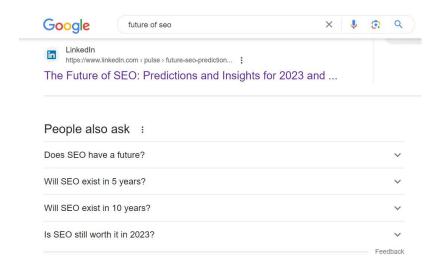


FIGURE 5 Screenshot depicting "People also ask" answer boxes.

Lopezosa, Codina, Guallar and Pérez-Montoro (2023) conducted a recent study about the emerging relevance of voice search optimization in which they interviewed a total of 32 professionals in Search Engine Optimization. They defined voice search as using voice- or integrated assistants to get answers through spoken word queries. The results of their interviews stated that majority (23) of their interviewees perceived that voice search optimization will gain more prominent importance within medium to long time period.

## 3 DATA AND RESEARCH METHOD

This chapter focuses on presenting and defining the research method and the data of this study. The chapter first introduces the methodology of qualitative research, then delves deeper into the more specific data collection method, semistructured interview, and finally presents the collected data. The goal for this study was to find out the interviewed experts' perceived current best practices to execute search engine optimization within each of its three dimensions and how they perceived SEO's future. Because the purpose of this research was to create understanding of how the professionals working in search engine optimization execute the practices to increase their organic presence in search engines and how they perceive SEO's future, it was decided to approach the research subjects with qualitative research method as it was more suitable than a quantitative one. In addition, qualitative research through interviews was chosen as the method, as the research of SEO has been typically done with other means, such as analyzing multiple websites (for example Leung & Chan, 2021) or conducting tests with multiple websites (Zhang & Cabage, 2017). Interviews with experts in the field was then hypothesized to add more perspective to the research of search engine optimization.

#### 3.1 Research method

This research was conducted by using a qualitative research method. Qualitative research strives to create an understanding of the topic through describing it or giving it a theoretical interpretation (Tuomi & Sarajärvi, 2018). It is based on data that consists of text (Eskola & Suoranta, 1998) instead of numbers. In this research, the focus of study were the interviewees who through the pre-decided themes of the structured interview questions provided the data for the analysis. According to Eskola and Suoranta (1998), the basis of qualitative research is that the researcher can begin their research without pre-set assumptions of the result and can be perceived as data-based research, which forms the study around the data.

In other words, qualitative research gathers data through qualitative methods and extends the knowledge based on the results. In this research, the study was formed around the gathered data through interviews with experts. According to Tuomi & Sarajärvi (2018) it is important to research subjects with experience or as much knowledge of the topic as possible. This is why the research was conducted through interviews with professionals with at least one year of experience within the field of search engine optimization.

#### 3.2 Semi-structured interview

The chosen method for the research was a semi-structured interview. This method was chosen as it utilizes pre-planned questions and topics but allows the interviewees to answer them with their own interpretations of the questions (Eriksson & Kovalainen, 2008). Semi-structured interviews utilize a "road map" to navigate the interview (Adams, Khan & Raeside 2014, 144). The road map refers to the series of questions a researcher has prepared for the interview. When preparing the questions, the researcher should pay attention to the clarity of the questions to avoid any problems within them. The problems inadequately prepared questions may have are: incomprehensiveness, inappropriate language, or possible double meanings within the questions (Adams et al, 2014, 146).

Semi-structured interview uses the same questions across all the interviews, but the levels of answers may vary as no pre-set answers are provided (Eskola & Suoranta, 1998). This means that the answers are open-ended and solely provided by the interviewees. A benefit of a semi-structured interview is that the researcher can ask the interviewee to specify their replies and shift the focus of the interview according to the replies from the interviewees (Tuomi & Sarajärvi, 2018). What this means is that if one of the interviewees shows expertise surrounding some aspect of the topic of research, the researcher can have the interviewee to delve deeper into said aspect to provide more thorough information about it.

According to Tuomi and Sarajärvi (2018), debate exist whether all the interviewees of a research should be presented with the same questions, in the same order and with the same words. According to them, it depends solely on the mandates given to the researcher whether the interviews must be structured exactly the same or not. In this research, the same questions will be presented to each of the interviewees, but for some the questions and the interview will be held in English and for some in Finnish. This depends on the interviewee and their preference on using English over Finnish or vice versa.

The approach in the interviews is emotionalist which refers to the type of research that does not focus solely on factual information but on the perceptions, understanding and viewpoints of the interviewees (Eriksson & Kovalainen, 2008). The approach was chosen as while universal "best practices" of SEO exist, it depends on the person executing SEO which of these practices they utilize and emphasize. In addition, the perceived importance of different aspects of SEO

might vary between the interviewees giving an emotionalist spin on the information gathered from the interviews. Moreover, as the technology rapidly evolves and SEO as a playing field evolves with it, the future perspectives and viewpoints can vary between the interviewees.

## 3.3 Implementation of Interviews

Because this study focused on the current best practices and the future perspectives of SEO, the interviewees were chosen from digital marketers specializing directly in SEO. The decision whom to interview was done based on purposive sampling, more specifically expert sampling, which Etikan, Musa and Alkassim (2016) define as choosing the participants based on their qualification for study when there's no way to test or analyze and observe the evidence gathered. In other words, the interviewees were deliberately chosen because this research did not attempt to analyze whether the facts given by the experts would work or not, but to create understanding what they perceive to be effective when executing SEO and how they view the future of the field of SEO. According to Tuomi and Sarajärvi (2018) the decision making on choosing the individual subjects for research cannot be random but needs to be thoroughly considered to get the information the study is striving to gain. To gather the individuals for interviews, they were contacted from a wide personal network of colleagues across different companies. When evaluating their competence for participating in the interviews it was decided that they should have a minimum of one year in the work life with SEO, and that they should be full-time workers with their own, tasked responsibilities instead of trainees. The one-year minimum limit was chosen, as it was believed that within that time a person specializing in SEO would have gained a sufficient expertise to be able to discuss different SEO aspects from their own experience instead of having to repeat text-book answers that the existing theory of SEO gives. Because SEO exists as the same field within B2B and B2C markets, it was decided not to limit the research to focus solely on one of them. In addition, to gather more complete understanding on SEO and its future, it was decided not to limit the research solely on small or large companies. Moreover, as SEO practices do not differ between languages, a choice was made not to limit the interviewees by their targeted market, global or local.

The interviews were conducted during September-October of 2023. Data was collected from six professional marketers who worked within content creation or other SEO processes in their respective companies. When conducting the interviews, it was noted by the researcher that the information gathered from the interviewees aligned a lot and the amount of six interviews provided enough information to begin the reporting for the research. By limiting the number of interviews to six, no point was reached where the data would have become oversaturated. Saturation in research refers to a point where no more new data is being gathered from adding new interviews to the process (Tuomi & Sarajärvi, 2018). Before the interviews, the interviewees were sent a privacy policy,

information about the study and the interview questions so they could get a better understanding of the goals of the research. The questions were sent beforehand also because this gave the interviewees a chance to evaluate whether they wanted to participate in the interviews and in order for them to get a better understanding of the main topics the interviews consisted of. All the approached interviewees participated gladly in the interviews. In practice, the interviews were collected as individual calls via Zoom which were recorded on the approval of the interviewees which were then transcribed to further analyze the data.

The duration of the interviews varied from 41 to 70 minutes. Out of the total of six interviews, one was conducted in English and five in Finnish. All the interviewees selected to participate in the study were working in Finland at the time, while two of them had experience working in SEO also abroad. All the subjects worked in different companies, operating in different industries. Their experience within search engine optimization varied from a year and a half to nine years. The basic information of each interviewee is presented in Table 2.

TABLE 2 Background information of the interviewees for the research

Interv- iewee	Current job title	Industry	Years on the job	Years of working in SEO	Experience within the three SEO dimensions	Length of the interview
1	Content marketing specialist	Wellness industry	1.5 years	1.5 years	All three	70min
2	Growth marketing lead	Furniture industry	One year	7 years	Off-page Technical SEO	45min
3	Administrative director	Industrial sector	Two years	2 years	All three	41min
4	Talent marketing specialist	Technology industry	10 months	7 years	On-page Technical SEO	57min
5	Digital marketing specialist	Insurance industry	1.5 years	1.5 years	On-page Technical SEO	43min
6	SEO consultant	Mainly gaming industry	2 years	9 years	All three	56min

To protect the privacy of the individual participants in this study, they are presented in a manner in which they as individuals or their places of work cannot be recognized. Their replies are not presented in order but are presented as a mix of recognized themes so their replies form a focused collection of answers instead of being listed as cohesive individual replies.

## 3.4 Analysis of Data

The data analysis was done through a method of thematic analysis. According to Braun and Clarke (2006), thematic analysis is a method which strives to find and report patterns from the data gathered. The number of times each pattern is emerging from the data is of no relevance, as even if the pattern is only scratched from the surface in some or most interviews, a few interviews with in-depth data can make it an important theme to report as it is up to the researcher's judgement whether the theme is of importance or not (Braun & Clarke, 2006). Within thematic analysis, an inductive approach was used. Braun and Clarke (2006) define inductive approach as a data driven method, which doesn't take in consideration the personal interest of the researcher for the topic, and doesn't try to link the data to an existing literature. In other words, inductive approach focuses on the gathered data and analyses the themes found from it without trying to fit the data or its analysis to pre-existing frameworks. What this means is that this research strived to create understanding on the topic based on the interviews, rather than relying on the data already gathered by other researchers on the topic. This method was justified, as search engine optimization evolves with time and what was researched before may or may not have been as prevalent in current time. Within the analysis of the data, Braun and Clarke's (2006) six-phased model was used. The phases of the model include: getting familiar with the gathered data, coding the data, searching for themes in the data, reviewing the found themes, defining and naming the chosen themes, and finally producing the report.

Within the first phase, the researcher familiarized themselves with the gathered data. However, in order to be able to do that, the data was first transcribed in written format. Before starting each interview, it was ensured that the recording of the interviews was successful in order to be able to record the data being gathered. After each interview, the audio was re-listened to and transcribed in written format. During the transcribing, the analysis of the data was started. The total amount of transcribed data was 69 pages in text. After all the interviews were transcribed, the first phase of Braun and Clarke's (2006) model properly began. In this phase, the data was re-read with a purpose of searching patterns within it to better gain an understanding of the themes prevalent within the data (Braun & Clarke, 2006). When a pattern was found, it was highlighted in the text file for later use.

In the second phase, the already highlighted parts of the transcribed data were coded. The generation of the codes refers to the identification of interesting features of the data which are then highlighted and combined to form a more cohesive entity about each found pattern (Braun & Clarke, 2006). For this research the interesting codes were sections of the interviews where singular actions, or best practices within SEO were mentioned, the mentions of where the field of SEO is heading, as well as the sections where the newly introduced use of AI programs and the way they have changed the field of SEO, or other platforms

that have potential to change SEO emerged. These parts were highlighted with different colors, so they could be better found from the transcribed data.

The third phase according to Braun and Clarke (2006) consists of finding broader themes from the emerged codes and the potential use of tables or mindmaps to better visualize the themes. Within this phase, the best practices in all three dimensions of SEO were formed, as they were easy to pinpoint from the codes. Other themes included some highlighted tools the experts used in SEO, how they measured success in SEO, how they defined SEO, and different themes concerning the future of the field. Some of these themes were cut from the final reporting in the next phase due to being irrelevant towards the initial research questions.

The fourth phase handles the reviewing of the found themes. In this phase, the found themes are refined and critically analyzed to figure out whether they might overlap with other themes or be found to not be sufficient enough to justify due to a lack of data to support them. (Braun & Clarke, 2006.) It was within this phase, where a theme about the tools, definitions for SEO and in-depth measurement of the performance of SEO were cut. The decision to cut these was because they did not contribute directly to the current best practices, or the future of search engine optimization.

In the fifth phase, the chosen, working themes are defined and named. After this, they are formed as cohesive themes, and the possible sub-themes can be identified. (Braun & Clarke, 2006) Finally after the fifth phase, the last phase is to produce the report with a support of the refined themes found through in depth thematic analysis of the data. The refined themes chosen were formed based on the interview questions and are presented in chapter 4 as secondary headlines with the sub-themes as tertiary headlines.

# 4 RESEARCH FINDINGS

This chapter presents the findings from the analysis of the data gathered through interviews with experts in search engine optimization. The first portion of this chapter discusses the interviewed experts perceived best practices of search engine optimization in each of the three dimensions of SEO: on-page, off-page, and technical SEO. The first portion of the chapter also focuses on the perceptions of black hat techniques in SEO and whether they are tactics one should avoid or utilize. The second portion focuses on the future of search engine optimization, presenting the data gathered about the future perceptions of SEO the experts had.

# 4.1 Current best practices in search engine optimization

The current state of search engine optimization was said to be in its golden age, as people are more and more living through their smart phones. This was explained as whenever there's a solution people need or a fact they don't know about, instead of scrolling through papers and magazines they go directly to Google to find answers to their problems.

### 4.1.1 Best practices in on-page SEO

While the individual best practices, such as proper keyword use in headlines, meta-descriptions and in the names and alt-texts of images when creating content were mentioned by multiple interviewees, the clear consensus between the interviewees was to produce content that is helpful to the searcher and matches their search intention. Interviewee 2 shared that to get the content shown, it is imperative to answer the questions of the searchers and these questions are the top things to keep in mind when writing the content. The overall importance of concise, informative content has also seemingly increased lately as mentioned by Interviewee 6, with Google updating its algorithms towards highlighting more helpful content. Moreover, Interviewee 6 added that showing expertise and

experience of the topic by the writer is imperative nowadays and that this can be shown by writing thorough content with something extra that the other competitors do not have in their content.

- "... even though you optimize towards certain keywords, but like that it's also user friendly (the web page) that you always think of the users. You're not creating the content for the search engine, but for the person who reads it." (Interviewee 4)
- "...and when writing the content, it is imperative that the content is created on the basis of writing it to your customers, to those who you want to help and then you just bring in the SEO aspect to the text." (Interviewee 1)
- "...the content should answer to the questions that the potential customer is looking for from the website. And who does that the best and with the highest quality, usually manages the best within the search engine." (Interviewee 5).

Another point aligning with matching the search intention was to have a sense of urgency in giving the answer to the searcher. This was due to the fact that the modern searcher is used to getting answers immediately, without any extra surrounding content. Therefore, not only does the content need to be created with search intention in mind, but it also needs to be written so that the searcher doesn't need to scroll through the whole page in order to get answers to their questions. Interviewee 5 recommended on creating the pages layout in a manner, where the important information is added to the top level of the page to smooth out the user experience.

"Nowadays its maybe about answering to what the searcher is actually looking for. And the attention span of people nowadays is so bad, that the answer must appear almost immediately... So, the answer has to basically appear immediately that "you will find exactly what you were looking for on this web page". Before, there was more chances to go on and on to feed content for the algorithm, but nowadays it is important to get the user to stay on the page and there's not so much time to get their attention." (Interviewee 6)

When discussing on the individual best practices when doing on-page SEO it was notified by Interviewee 5 that creating a lasting list "carved into stone" of the best practices is not possible due to the constant changing nature of the Google's search engine algorithm. Instead, one thing that stands is the search intent. However, when delving deeper into the individual best practices, each interviewee highlighted that it all starts with proper keyword research to figure out what people are searching for and what are the terms to use when beginning to produce the content. It was also highlighted by Interviewees 1 and 6 that

choosing the most competitive keywords is not always the best way to proceed, but instead figuring out long-tail keywords related to the highest competitive keywords is more probable way to get traffic, if the web page where the content is written is not one of the most authoritative ones talking about the topic.

".. but I always believed in the fact that content is king, so first of all you got to make sure that due to the fact SEO is search engine targeting user. So first of all, you've got to make sure that you have a decent amount of search volumes per topic that you are developing the content about..." (Interviewee 2).

"... surely, it's that firstly you conduct keyword research, so you look for or do research on what people are searching. That is like the most prominent thing. Then you create a systematic strategy how you start to implement it... (Interviewee 1).

After the keyword research, it is important to begin to utilize the chosen keywords within the content. According to Interviewee 1, it is important to have the keyword appear often enough in the content, but not in a "spammy" way. They mentioned that the keyword needs to show up in headlines H1 and H2 at least, and if applicable, they should be added to H3's as well. This way Google better recognizes the context of the web page and can more easily recommend it within searches made with the keyword. Interviewee 1 also pointed out that the keyword should be added to the URL of the web page. Both the Interviewee 2 and 1 notified that to properly optimize the content, the keyword should also be added to the alt-texts of images and meta titles and descriptions of the web pages. Moreover, when adding the keyword to the content, Interviewee 1 suggested that if it's a sentence, it should be written in its exact form that it is queried in the search engine and not in an inflected form. As the point of meta title and description is to tell the searcher what the page is about in SERP, it was said by Interviewees 1 and 3 that they should be written in a catchy format and the keywords within them should work as a supporting factor for the communication to the potential web site visitor. Interviewee 2 highlighted the brand building nature in search engine optimization, that it must be made sure that the message delivered to the user is relevant and that the appearance in SERP must be trustworthy to have the authority voice in delivering the message.

"...also, the metatexts that show up on Google's side have to be optimized and it has to be notified that the keyword shows up on those as well... and it has to be written for the people interested in the subject and so it's enticing so they would click on the link to the page. It's also a part of this whole." (Interviewee 1).

When optimizing the content, it should also be noted that the user can continue their search journey on the website past the page they landed on. Interviewee 4 pointed out that the content needs to be smooth and give clear chances for the user to navigate to other pages within the website from the landing page. Interviewee 5 added to the point that adding links to articles related to the topic of the page should be applied to give more context of the content to the user.

"... it's no use to create content and to have people immediately leave after they find answers from the page, as it adds bounce rate, which hinders the success in search engines." (Interviewee 4)

Sometimes the already optimized content may need revisiting and re-editing. Interviewee 6 noted that sometimes it is not possible to rank with the highest competitive keywords, and in those instances if a page was optimized towards that kind of a keyword, it should be edited for a less competitive one. This was suggested as a good content strategy overall by them, that instead of focusing solely on the keywords with high searches one should focus on building relevancy of a website through targeting less competitive keywords, so Google would eventually start ranking the website also in the more competitive ones. The complete list of found best practices within on-page SEO can be seen in Figure 6.

### On-page optimization

- Match the search intention of information searchers with concise, informative content
  - Show expertise on the topic within the content
  - Have a sense of urgency in giving answers to the searcher
- Focus on long-tail keywords when short-tails are too competitive
  - Include the keyword within the text
  - Utilize keywords in page title and headlines
    - Include keywords in URLs
  - Include keywords in image names and alt-texts
  - Include keywords in meta titles and –descriptions
    - Write long-tail keywords in their exact forms
- Enable smooth navigation to other relevant resources within a website with links to those pages
- Track the performance and reoptimize the content for different keywords if needed

FIGURE 6 On-page optimization's current best practices based on the gathered data.

### 4.1.2 Best practices in off-page SEO

Off-page SEO was considered as a very important factor between all the interviewees. However, it was considered as a very difficult one to apply and it seems to be a factor that needs to be thought of, but when it comes to committing

to it, the ways of working are scarce due to its nature being out of reach. The common consensus between the interviewees was that it is important, but they should invest more time to figuring out ways of doing it. Interviewee 6 said that gaining links is of utmost importance nowadays when it is more difficult to separate oneself from their competition with quality content and technical SEO. Interviewee 6 also pointed out that the best quality links are those that come from the same field of business, but that they are the most difficult ones to acquire. Interviewee 1 recommended doing co-op marketing with influencers to have them talk about their products and to link on their website. Interviewee 2 pointed out that when there are links coming to one's website, they must be managed in a way that there's redirects in place and it's made sure that there are no broken links in place on the website. This way the links directing to one's website come through and do not lead to an old page, that is removed, leading to a 404-page.

"Off-page is critical, but it is out of our hand when it comes to being manageable" (Interviewee 2)

Interviewees 1 and 3 also said to stay up to date on what people are talking about on their own websites about the company, and if the website is of relevance, Interviewee 1 suggested to approach them and ask them to link to their website. Another way to gain backlinks, according to interviewees 1, 3, 4 and 5 is to have partnering organizations to link to one's website. Interviewee 4 also pointed out that off-page SEO is typically a thing that is happening on the side of other SEO work, and it shouldn't be too much stressed about. According to Interviewees 4 and 6, it's important to focus on the safety, reliability, and logicality of the links instead of the amount of them.

- "...I'd acquire them (backlinks) safety and reliability first...So you use partners or verified pages, so you don't take just any links" (Interviewee 4)
- "...but when acquiring the links, so they're logical and do not come from a website that has nothing to do with your own industry." (Interviewee 6)

In off-page SEO it was notified, that the nature of the business is critical when it comes to gaining backlinks. For B2C companies, it was said that it's easy when typically, more websites and people are talking about for example a company's offering of new trendy clothes. This way it was said that it'd be much easier to have different websites to link to a wanted page.

"...it's also kind of difficult to get backlinks on our industry when we're not talking about B2C type of business. In that it'd be easier to create buzz saying, "hey look at their amazing clothes". When we talk about for example industrial products, it's very difficult to get or find pages to talk like that." (Interviewee 3)

Interviewee 6 pointed out that link building also builds authority of the website, which increases the chances it shows up in search engines. Interviewee 2 notified, that the link building is all about relevancy, as relevancy creates authority and relevant connections boost the related message in the content.

"...imagining that if you're selling shoes and you got a referral from let's say a restaurant, then it's not relevant." (Interviewee 2)

The complete list of found best practices within on-page SEO can be seen below in Figure 7.

# Off-page optimization

- Focus on relevancy by gaining backlinks from relevant sources, not just anywhere
- Approach relevant websites where a conversation is being had about the company and ask for backlinks
- Ask partnering organizations to link to the website
- Commit to social sharing by posting content on social media channels to create conversation

FIGURE 7 Off-page optimization's best practices based on the gathered data.

# 4.1.3 Best practices of Technical SEO

To make sure that technical SEO is being done well it was recommended to do routine check-ups that there are no broken links within the website and that all the pages and posts are indexed and can be found from the search engine. Interviewee 3 told that they use Google Search Console to do routine check-ups on the indexation and finding out whether some links are broken or not. According to Interviewee 3, the easiest way to figure out whether something is broken, is to follow the user amount on the website, as if there's drastic changes for worse, it shows that there is a high potential that something is not working properly. Interviewee 6 aligned with the point, saying that if drastic changes for

worse happen in traffic, it is typically due to the content or technical SEO. Interviewee 4 said that when broken links due to removal of old pages happen, it is important to use redirects to fix the link to direct to a working page.

Page speed was another point that was said to be important to maintain. According to interviewee 1, it should be checked, and possible fixes should be implemented to make the pages run faster and smoother, as it plays an imperative role in people's willingness to spend time and scroll through a website. Interviewee 4 highlighted that SEO tools are good to give warnings whenever pages are running slow and need maintenance. Other things to follow when checking the page speed is to check whether some complex elements are causing the pages to run slower. Interviewee 5 said that for example using a chatbot can have large impact on slowing the page down and whether to use one or not should be evaluated on its perceived benefit. Interviewee 4 also pointed out that to minimize the time it takes to load a page, also image sizes should be optimized, so no large image files appear.

Mobile usability also plays a large part in technical SEO. According to Interviewee 6, nowadays Google ranks websites mobile first and that the user experience on mobile needs to be seamless. Interviewee 1 also pointed that the pages should be optimized especially for mobile users these days and not so that they only work for example on horizontal view on mobile devices. This has become very important, as according to Interviewee 1, approximately 90% of their website visitors use mobile devices to scroll through their website. Interviewee 4 also noted that responsivity of a web page is important and that all the content looks good regardless of the platform the user is using.

Monitoring technical SEO was said to be done mainly by using third-party software such as Screaming Frog and Ahrefs. With the help of platforms such as these, it was said to be possible to follow how the website is technically performing and to figure out the areas of focus one wants to follow. Interviewee 2 pointed out that they use a by the book guideline on the maximum number of characters when creating page titles and descriptions. These platforms helped to check up on the titles and descriptions that they were in fact of proper lengths. In addition, Interviewee 2 said that adding alt-texts is important and the fact that they're added to the images is possible as well to check with these platforms.

Technical SEO was pointed out to be best done with the help of a skilled IT-team. This way the implementations to improve technical SEO is easiest to do. Other helpful ways to maintain technical SEO was to have an external partner, such as a consultant to commit more on following up the performance. According to Interviewee 6, there are always things that the automatic scanners of third-party software are not noticing, so it is good to have people with more technical knowledge to check up on the website. The complete list of found best practices within on-page SEO can be seen below in Figure 8.

#### **Technical SEO**

- Commit to routine check-ups about broken links and indexation of pages and posts
  - Redirect the pages and posts that are removed to functioning pages
- Evaluate the need of chatbot as it slows down the website
- Ensure high page loading speed with moderate use of special effects and graphic components
  - Ensure the mobile-friendliness of a website
    - Compress images for smaller sizes
      - Avoid duplicate content
- Utilize a skilled IT-team if available to ensure proper functioning of the website

FIGURE 8 Technical SEO's best practices based on the gathered data.

# 4.1.4 Relationship between the three SEO dimensions

For most of the interviewees, all three different SEO dimensions formed a cohesive package, where each dimension supported one another. This means, that for the majority, none of the dimensions was highlighted to be of more importance than another. However, as the common consensus was that off-page SEO is much more difficult to implement, it was said that while it is important, fully focusing on it is hard. Interviewee 1 pointed out that they consider on-page SEO to be of the highest importance, as it refers to the user experience when the user is getting in contact with the content. Interviewee 5 aligned with their point that in their opinion everything starts with the content, and that content answers to the questions the information searchers have. However, they also pointed out that especially when a certain keyword is highly competed, it is of utmost importance that all the dimensions are being taken care of. According to Interviewee 6, the relationship between the dimensions has been shifting lately, as Google has updated its algorithm with "helpful content" updates to better match the search intent of the user. Therefore, they said that while all the dimensions are important, the technical SEO and off-page SEO have been becoming less important towards on-page SEO. As with interviewee 5, also interviewee 6 brought out the point that if the market and the keywords are highly competed, then one needs to have all the dimensions on an exemplar level.

"(For highly competitive markets) ...it doesn't suffice that you have a properly functioning website or a massive link profile or glorious content, you need to have it all". (Interviewee 6)

# 4.1.5 Perceptions of "black hat" techniques in search engine optimization

Five out of six of the interviewees were aware of black-hat techniques. The common consensus was that using unethical methods to achieve a better ranking within search engines was not worth the risk of trying to trick Google, and even that the use of black-hat techniques is outdated and not effective anymore due to the evolvement of Google's search engine. The possible penalties were said to seem to come quite randomly (Interviewee 6), meaning that even if there is a possibility of getting caught, the penalties might not happen. When discussing about the black-hat tactics, multiple interviewees brought up the point that search engine optimization nowadays is and must be done with an intent to produce content for the people, not the search engines and that Google will notice when one tries to trick it with these methods.

"...about, well before 2015 it was still a thing in the marketing community. I would say that black-hat SEO should not be taken into consideration at all. Especially with the new crawling and index coming from Google. They will punish you or your website heavily if there's any black-hat SEO being discovered." (Interviewee 2)

"...in my opinion this is not good to do, because when Google notices that you're trying to manipulate it, it will quite easily rank your website downwards and nowadays, or probably not even before, you cannot anger Google, as it is one of the most important ways to get customers and therefore revenue to your business." (Interviewee 1)

Despite strongly suggesting against using black-hat methods, one interviewee said that sometimes these methods do work and especially in smaller languages it would be easy to get away with doing it. This was explained that the algorithm in Google has not evolved as much in smaller languages than in English.

"...well, I'd say that like years ago black hat was what sadly really worked especially in Finnish as well, the algorithm is still much more evolved in English. There's a lot what you shouldn't do, but unfortunately, they still seem to work pretty well, especially in smaller markets and in smaller languages." (Interviewee 6)

Various methods for black-hat SEO were mentioned in the interviews. The common methods mentioned were so called keyword stuffing, purchasing backlinks and cloaking, which refers to adding invisible content to the user, to trick the search engine to think that there's more content about the keyword.

Interviewee 4 also pointed out that while not necessary a black-hat technique, a method that is not allowed is to copy and paste content from a page to multiple other ones.

# **Keyword stuffing**

For keyword stuffing Interviewee 4 mentioned that it fights against Google's goal of providing quality results for searchers and Interviewee 2 said that while keyword stuffing was a common method to trick the search engine before, it is guaranteed not to work at all nowadays. However, Interviewee 6 pointed out that unfortunately this method still seems to work in smaller markets and languages. According to Interviewee 6, especially in smaller language areas it seems that the longer the content is, even though the content would be completely unnecessary for the user, it still seems to work.

"...especially in Finnish market, I've seen that one has done a tenthousand-word article about a subject they could have gone through in three thousand words and there's a lot of repetition and same things being said in different terms." (Interviewee 6)

# Link purchasing

Purchasing links was another method that was brought up by the interviewees. Interviewee 2 said that purchasing spamlinks doesn't help as they often come from irrelevant sources.

"...talking about let's say spamlink buying, so you're buying a bunch of third-party links without relevancy factor... If the links are coming from an irrelevant website, it's not going to do any good for your website or your own organic performance as a whole." (Interviewee 2)

Interviewee 6 provided a counterpoint for link purchasing by saying that especially in the smaller markets it seems that the number of links correlates with the relevancy of a website. They also said that even though it's said that one should not purchase links from so called the wrong kind of websites, it still seems to work, and it doesn't matter where the links come, as long as there are links leading to the website.

### Cloaking

One of the interviewees brought up cloaking as an illegitimate method of doing search engine optimization. According to Interviewee 6, this method is outdated, as Google will nowadays notice this and penalize pages committing this fraudulent tactic.

"...there's a lot and for example invisible content can be added to the code, which doesn't show up for the user but what makes the page a larger one content wise. But nowadays it cannot really be used, as like adding invisible code, those cases will be quite quickly checked out as I've understood." (Interviewee 6)

# 4.2 Future of Search Engine Optimization

As search engine optimization has been evolving constantly in the past, it will do so in the future. Google continues improving its algorithm to serve its customers increasingly better, which causes the need for new strategies to be taken in place. This was also the consensus between the interviewees. The newly introduced AI programs such as Chat GPT have already started to affect the way people in SEO work and has also raised scepticism in the interviewees on how Google will adapt to the use of artificial intelligence in content production. Whereas using Chat GPT makes content creation faster than before, it was noted that using AI-generated content doesn't guarantee better success in search engine optimization due to missing authority and expertise in the field. Multiple interviewees hypothesized that Google would begin to better identify whether the content published was in fact written by a person or a generative AI and will show the actual expert content in search results.

"...as I mentioned AI and how it has emerged in this field. It will absolutely affect that Google will start to review content more thoroughly that it's actually expertise that is talking and not just content optimized to show up in search results." (Interviewee 1)

When it comes to using platforms such as Chat GPT as an information source replacing search engines, it was said by Interviewee 3 that it has potential to leave out important aspects of products when answering questions, as it doesn't tell which websites it is referring to. This means that while this particular AI program can answer questions and provide information, it only refers to some unknown sources and it may not be fully accurate and reliable in its answers. Moreover, Interviewee 3 hypothesized that if the users use Chat GPT for information search, it may utilize different keywords than what many of the content creators are using, shifting the keywords used in searches to other ones.

According to Interviewee 1, SEO has already changed a lot in how more relevant the search results have become towards the search queries. One notable change they mentioned was that social media posts and content from those platforms have started to have a larger presence in search results. Other future trends that have already taken place was the mention of voice search and the increasing use of it instead of typing the search queries. While multiple interviewees perceived it to be a potential major change in the future, it was

commonly said that the implementation of the technology is not ready yet to revolutionize how SEO works.

"...people talk about voice search a lot lately, but I believe that even though there's potential, the implementation is not there yet. Audio search, Shazam is one of the big successes in the market, but I believe that again the application is not that expansive yet." (Interviewee 2)

To keep up with the changes in search engine optimization, the interviewees recommended to staying up to date on the changes by attending the conversation by following expert websites and forums. They were hopeful, that with staying up to date in the changes, also success would be guaranteed. As AI based programs have just entered the field and there's expectations that they will increase in importance, Interviewee 4 recommended to study the programs and figure out proper ways of using them as a tool in SEO.

For companies, it was commonly agreed that hiring people with expertise in SEO and giving them possibilities to grow in their work was of utmost importance to survive in the future. Interviewee 1 noted, that as more companies enter the field, the advertising in Google can become increasingly expensive, which is why having a strong organic presence can help the companies survive when their advertising budgets are becoming exhausted. As how to maintain the expertise within companies, Interviewee 2 suggested of creating a backlog for personal discussion and training.

# 4.2.1 Challenges of SEO in the future

When discussing the challenges of search engine optimization in the future, multiple topics emerged. The constant evolving of SEO and search engine algorithms keep on causing challenges to align search engine optimization strategies, as they can quickly become misaligned when new changes come. Moreover, a challenging aspect of SEO mentioned was that even after new updates of the algorithm, Google itself doesn't give any straight answers how SEO should be done but gives vague instructions how the content should be and even though one would follow them, the results would not come.

"The uncertainty of what is waiting behind the corner is a challenge...the constant changes in SEO will create challenges, as the current strategy might become obsolete quite quickly if there's a major change in the search engine algorithm." (Interviewee 4)

"...there's no crystal ball that would tell how to do the things in the best way in future at this point." (Interviewee 6)

Other challenges noted by the interviewees were the constant increase in competition in the field of SEO, the newly introduced use of artificial intelligence

in SEO, paid ads becoming more prevalent and taking clicks from organic links, and the shift in user behavior from search engines to social media platforms.

# Increase in competition

Many interviewees anticipated that the ever-rising competition in organic search will keep on causing more challenges in search engine optimization. When comparing to the past, Interviewee 6 highlighted that before anyone who optimized their content correctly could succeed, because there were so many who didn't pay attention to search engine optimization. Nowadays, they pointed out that due to the increase in knowhow around SEO, the larger companies can beat the smaller ones in search engines with their higher authority brands and websites when optimizing their content for SEO.

"...now the bigger ones eat the smaller ones by either buying out the smaller competitors or simply by just doing things right and succeed better because of the authority of their brand and their websites." (Interviewee 6)

Another point that was highlighted was that overall competition in search engine optimization causes challenges in committing to it. While it is dependent on the industry, a strict competition between companies in organic search makes it difficult for all to compete on the first positions in SERP. In addition, the already massive amount of content in the web makes it more difficult to rank, which is a trend that will continue in the future as well. Interviewee 5 said that as traditionally content in search engine optimization is based in longer length, the current theme of consuming of fast-paced content is increasingly breaking this tradition. They continued that the challenge is that do the customers want to read the traditional, longer length text, or do they prefer to get the content in another form, such as in the form of videos, and if they do, then how does it play with the algorithms nowadays and in the future.

"...how do we manage in the search results while serving the current customer as well as possible at the same time. That's the biggest challenge. It's pretty challenging." (Interviewee 5)

It was also stated, that in addition to increased competition, also Google itself has become a competitor in a sense, as it has started to take more space with their own content and advertisements. Moreover, Google has started to show more content from the search results in SERPs, so the user might not even have to leave the SERP and enter the web page to get answers to their questions. Interviewee 6 anticipated this trend to continue.

"Of course Google does it, because they get revenue from whenever someone clicks on the ads. So, it can be better for Google if search results go more into that direction." (Interviewee 6)

Other search engine platforms were also expected to become more revolutionizing for search engine optimization. Nowadays, when Bing has implemented an artificial intelligence to its search algorithm, it can cause shifting of users from Google to its services. It was expected, that if Bing's or other search engines AI in search becomes better than Google's, then it will cause a massive change in SEO, as everything that affects rankings must be relearned.

# Use of artificial intelligence in search engine optimization

One topic that caused concern was the rise of artificial intelligence in search engine optimization. While it was perceived to have a lot of good in it, the ways how it was used was seen to be the challenge. It was stated by Interviewee 1, that as people are using AI to create more content, some will misuse it by having it create the content in full and publishing it as it is. As it is not public knowledge how AI works, it is not certain whether it could produce the same content for multiple different users. This would cause the same content to be posted in different websites, causing problems in having original content being posted. When people are using AI to create the content, Interviewee 6 said to be careful just how much it is utilized, as it is not known yet how Google will react to the content made by AI. It is a real possibility that in the next algorithm update Google would begin to penalize websites posting AI generated content. Another challenge with AI generated content is that anyone could create it and if it ranked well, it would distort the field and decrease the rankings of those who created the content themselves. However, Interviewee 1 believed that Google would evolve to identify AI generated content quite quickly as it strives to serve its customers as well as possible.

"...if Google will not evolve to identify AI generated content, then there will only be AI generated content in search results in the future." (Interviewee 1)

Use of AI as a shortcut to produce content quickly also raised concern amongst the interviewees that if it is given the chance, the AI might start to lead the content to a wrong direction. In this case it can become unclear why the content is being produced, and what are the main points one wants to promote within it. This instance will require the person in charge of the content to have a high sense of judgement of who the target audience is whom the content is directed for. The whole use of AI was described by Interviewee 6 as a "double-edged sword" as it can bring a lot of benefits but can also cause harm when it's not treated with caution.

### Paid ads becoming more relevant

As paid ads in search engines are prioritized over the organic links by being placed above them, one of the interviewees had noticed a shift in the way users

tolerate the ads. While in the past it was considered that internet users tend to trust organic links more than the paid ads, Interviewee 6 said that within time the rising amount of paid search ads has decreased the amount of clicks organic links get as nowadays people are trusting the ads more than before.

"...years ago, no one clicked the sponsored content, but now it has changed that users have started to accept them more. Before people scrolled past them to the organic results, but now the ads are accepted, especially when they see that it is a good brand, and the URL is legit..." (Interviewee 6)

# Emerging of new platforms to replace search engines

Multiple interviewees had already noticed changes in user behaviors when it comes to searching information with their devices. Instead of searching for information through Google, some users had already moved on to social media platforms, such as TikTok to get answers for their questions. According to Interviewee 1, this causes more pressure for companies to start optimizing content for social media channels as well. Currently, companies have been creating parallel content for their websites and social media platforms, but Interviewee 5 anticipated this balance between the platforms to change in the future if the users are shifting outwards from search engines and into other platforms. They even hypothesized that if this starts to become a larger trend, then the search engine as a platform must change with it to become more of what the users prefer. It was also believed by Interviewee 6, that Google will and has already reacted in some manner to this shift.

"...the fact that the use of mobile devices is constantly increasing. So, what will the purpose of a web page and a website be compared to for example social media platforms." (Interviewee 5)

"There might be new ways of interacting with search platform, for example my partner uses TikTok to search for things which is not like a familiar practice for me...so I believe that people are kind of like diverting into different set of behaviours." (Interviewee 2)

"...if this (the change in search behaviour) is a trend in your area of business, it might benefit you to take it seriously, so you don't get dropped out in these channels." (Interviewee 1)

### 4.2.2 Possibilities of SEO in the future

The core possibilities in SEO in the future were said to be much of the same they are now: increasing presence and organic traffic with quality content. However, as the social media channels are increasing their importance as information sources, it was highly recommended to begin to use them to drive traffic to the

websites as well. Interviewee 2 noted, that despite the probable appearing of new channels, one needs to learn their ways of working and continue the work on these channels by the channels' own rules.

"For example, you got to learn how to use Google right? You got to learn to describe what you're asking for and I think it's the process that whatever new platform and new ways of working evolve, the people are going to learn how to get the best out of the whatever platform is going to be popular in the future." (Interviewee 2)

With the new technologies emerging, Interviewee 4 was optimistic, that digital marketers will get more data to work with, especially about users and the types of content what is missing and needed. Interviewee 5 believed that search engines and social media platforms will begin to merge more, and the type of content can be wider and not limited just to text. Interviewee 6 said that use of AI brings a lot of opportunities in creating and analyzing content with the use of very little resources and that one can create a whole website very quickly with the help of AI. However, they also pointed out that as the future of Google's perception of AI is uncertain, the overuse of AI can have only short-lived successes. Interviewee 5 also noted that a probable trend to change in the future is that of search engine users wanting to have shorter, more concise content in audio and video formats. Future trends in SEO are emphasizing more of expert content communicating first hand expertise on the subject according to Interviewee 1. According to Interviewee 6, list type content is another future trend that has already started to perform better.

Voice search was seen as a growing potential in the future as well. Common consensus was that in markets such as Finland, the use of voice search is still quite small and especially used within younger generation of users but expected to grow in its applicability. However, Interviewee 1 noted that especially in US market, it has a more prevalent presence as voice assistants such as Apple's Siri and Amazon's Alexa are in a larger use, as one can use a voice assistant equipped speaker to even order groceries directly to home. Interviewee 3 pointed out that the whole use of voice search in SEO is highly dependent on the type of business, as according to their experience customers in B2C markets are the ones to use voice search instead of those in B2B. Interviewee 6 expected that within time keywords and sentences written in more spoken language format will begin to show up in FAQ's on SERPs.

# 4.2.3 Best practices of SEO in the future

For off-page and technical SEO the best practices are believed by the interviewees to remain the same as now: the importance of backlinks will remain, and the website needs to load fast and be structured to run smoothly. However, the websites will be even more directed towards mobile friendliness. For the on-page SEO, the future is more revolutionizing. The future seems to hold that the length of content, which is still a benefit in SEO will begin to transform more into a short,

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concise form without extra prattle. According to the interviewees, the content in the future should be less thorough but should include answers to users' questions quickly and comprehensively. However, Interviewee 6 noted that as the content will get shorter, the less the SEO expert can affect how the content will perform.

"...the algorithm is evolving to a direction where the extra blabber in the content will be left out and if it's included, it will be penalized more." (Interviewee 6)

Within content, it was believed by Interviewee 2 that the rich structure data will have more importance than now, which means that the content will give more data that can be accessed within SERPs, such as lists, FAQs and tables. Interviewee 5 on the other hand anticipated that the form of the content might change towards more audio and video form that is already chewed into a more concise structure.

- "...big changes that I'm really excited about is not really recent change, but about a couple years now are the rich structure data to get exactly what you need in a bigger cut instead of the search results page for example." (Interviewee 2)
- "...maybe it relates commonly to this type of TikTok generation, that the demand for already chewed information in audio/video form is preferred. I think it can affect search engine marketing and optimization as well." (Interviewee 5)

# 4.2.4 Artificial intelligence's part in the future of search engine optimization

Artificial intelligence was considered to be the most revolutionizing new thing of the past years in technology by Interviewee 5. The use of AI in SEO work was considered to be of utmost importance to keep up with the competition and a topic that cannot be ignored, however, it was said to not to become too reliant on it as it is "a good servant but a poor master" (Interviewee 1). Artificial intelligence, especially Chat GPT was said to be an excellent tool in coming up with ideas for optimized headlines, concise meta descriptions, alt-texts, and overall content ideas. Other use cases for AI were summarizing content and lifting the main points of the text. The use of AI can therefore save a lot of time doing simple, but time-consuming tasks, but the overall content itself is best to be done by a professional.

The role of AI was described to be a tool amongst others and not a shortcut of doing one's work. In certain industries, the content creators are bound by law to explain certain topics and include all the necessary information about their products. Interviewee 5 pointed out that if one cannot cut corners within these types of industries by using Chat GPT, as the content must be thoroughly reviewed and proofread before it can be posted online. In this case, the use of AI does not bring a revolutionizing way of working for everyone, as they must take

local laws into consideration, which the AI cannot fully comprehend. Other challenges of using Chat GPT in content creation was stated to be the unreliability when it comes to the information it gives out. This was explained by Interviewee 1 as Chat GPT utilizes data it was uploaded in the past, and when it gives answers, it always portrays them as facts.

"...the content it produces, it doesn't give facts, but it talks about the things how it experiences them or based on the information it was loaded with. These things shouldn't be presented as facts if one has not researched the topic themselves." (Interviewee 1)

# 5 DISCUSSION AND CONCLUSIONS

### 5.1 Discussion

This research examined the current best practices and the future of search engine optimization. While there exists a great deal of research into search engine optimization and the factors affecting it, there was no pre-existing extensive academic research about SEO's best practices including all its dimensions. As search engines and especially Google improves their algorithms constantly, the previous research about search engine optimization's best practices may have either become outdated or deficient. In addition, as during the writing of this research the generative AI programs such as Chat GPT had recently surfaced and become widely used, the future of search engine optimization seemed uncertain. This research strived to create an understanding of how experts in SEO perceived the future for SEO and what they considered to be the possibilities and challenges within it. The conclusions of this research contrasted to its two main research questions are presented below.

### 5.1.1 Current state and best practices of search engine optimization

The first research question for this paper was what are the current best practices the professionals follow when executing search engine optimization? Examined through academic research, expert platforms, and the expert interviews it can be concluded that while the information acquired from the interviewees aligned with the academic research, it went deeper than just explaining individual actions for better success in search engine optimization. For on-page SEO, clear consensus between the interviewees was to produce content that is helpful to the searcher and matches their search intention. This aligns on the broad, but vague guidelines from Google presented in the chapter 2.5.2, where it was mentioned that Google ranks the pages based on the relevancy and expertise of the content

(Google, 2023e) among other aspects. This can be perceived to be the current overall best practice of doing on-page SEO. Other, smaller actions the research found were the ones also mentioned in academic sources within the theory chapter of this paper. These actions were focusing on keyword research (Sheffield, 2020; Killoran, 2013) before writing the content, including the keywords in titles and headlines (Sheffield, 2020; Killoran, 2013), alt-texts and names of images (Ziakis et al., 2019; Somosi, 2022; Patel, 2022), in meta descriptions (Sheffield, 2020; Somosi, 2022), in URLs (Matoševic et al., 2021; Gregurec & Grd, 2012), and within the text (Sheffield, 2020). These actions were considered as the very basic things to do, that everyone in SEO does, but focusing on content and the search intention of the internet user was the separating factor for successful ranking. This clearly indicates that following the best practices for more technical content creation is not the way to proceed with SEO nowadays, but these actions are to be used as a part within a quality, thought-out piece of content. This also hints that committing to SEO with the more traditional best practices such as proper keyword placement is not a guaranteed success, but the content writer themselves must be able to produce the content for the audiences needs with an understanding of the audience.

While off-page SEO was described by the interviewees as well as Matoševic et al. (2021) as out of reach of the optimizer, multiple suggestions for executing it were introduced. To gain backlinks, it was suggested to start from the inner circle of the company, meaning the company's partners. Other suggested method was to do co-op marketing with influencers to have them link to the web pages. While this method may not work if the influencer is paid, a co-op campaign benefitting both parties can result to relevant links without the need of adding sponsored tags to them. The optimizers should also be aware of what people are talking about on the internet and approach those websites that have discussions about the products or the company itself. This way, the optimizer can gain relevant backlinks by simply asking the pages to link to the main source – that being the company's own websites. Main thing when committing to off-page SEO is to focus on reliability and relevance of the sources for the backlinks, as if they come from an irrelevant source, they do not benefit.

For technical SEO, it was recommended to do routine check-ups on figuring out if issues exist within a website. Whereas Tomič and Šupín (2019) mentioned one audit, the interviewees raised a point of having constant check-ups on how the website is performing technically. The point of maintaining the website was seen in both the academic literature (Drivas et al., 2020; Gregurec & Grd, 2012) as well as in interviews as making it possible for the users to spend time on the website and navigate throughout the different pages. Whereas Lopesoza et al. (2020) considered technical SEO to be the most important of the SEO dimensions, it wasn't highlighted as much in the interviews. Instead, having a fully functional website, that also runs smoothly on mobile devices was considered as a standard within the interviews. Individual factors in technical SEO that were raised within the interviews were the maintaining of functional links within the website, maintaining page speed, and making sure the usability of the website is high on mobile platforms. As stated in chapter 2.3.3, according to Pol (2023) technical SEO

is firstly a combination of improving and maintaining a website for search engines but includes a perspective of enhancing the usability of the website for human users. However, the interviewees perceived it more towards user experience, rather than with a search engine directed perspective. Current search engine optimization best practices based on the gathered data are presented below in Table 3.

TABLE 3 Current best practices of search engine optimization based on the gathered data.

On-page SEO	Off-page SEO	Technical SEO
Conduct keyword research	Utilize partners for backlinks	Do routine check-ups to analyze
		the functionality of the website
		- Make sure the pages are in-
		dexed properly
		- Redirect broken links if
Has been alie to die at 1 2 /2	Commit on an analystic o	found  Maintain page speed by
Use keyword in headlines 1, 2 (3 not necessary, but can help)	Commit co-op marketing campaigns	Maintain page speed by analyzing whether some
not necessary, but can neip)	campaigns	elements are causing the page to
		run slow
		- Evaluate the need of complex
		elements, such as chatbot
		- Compress images for smaller
		sizes to make them load
		faster
Optimize image names and alt-	Be aware what people talk -	Ensure mobile usability of the
texts with keywords	approach relevant sources for	website
	linking to the website	- Design the website to be re-
		sponsive regardless of the
Has become and in HDLs	Eagus an malayyan ay an d maliability	platform the user is using Use SEO tools to check on the
Use keywords in URLs	Focus on relevancy and reliability of the source	content, that it's done by the book
	of the source	- Make sure the titles and
		headlines are of proper
		length
		- Make sure the images have
		alt-texts
		- Make sure the meta descrip-
		tions are of proper length
Optimize meta descriptions		Have a support function that has
		technical knowhow on the
		website
		- Include the IT team to main- tain the website
		- If possible, include a consult-
		ant specialized for technical
		SEO
Write with a sense of urgency,		
giving answers quickly		
Include keywords within the		
content, but only when		
applicable. Do not spam them		
Write cohesive content, do not		
write extra fluff		
Write with search intention in		
mind		

When it comes to black-hat techniques in search engine optimization, it can be notified that they are not as prevalent nowadays as they were before. Google's algorithm updates have successfully rooted the use of black-hat techniques out and the risk of penalties has made the use of them less appealing. While these techniques used to be more widely used, not everyone interviewed for this research paper knew of them. This further supports, that if one who has worked in search engine optimization for a couple of years doesn't know of the techniques, they are not of relevance anymore. However, the data collected for this research indicates that there are black-hat techniques that still seem to work in smaller markets, such as purchasing backlinks and keyword spamming. While the potential risk of penalties are involved with using them even in smaller market areas, the algorithm is not perceived to be as evolved as in English speaking markets. When it comes to researching the best practices of search engine optimization, this revelation of black-hat techniques of becoming obsolete can be considered as one of the largest acknowledgments of this research. Based on the results of this research the black-hat techniques are not worth it not just because of potential penalties, but also for the sure way of getting penalized if using them.

### 5.1.2 The future of search engine optimization

The second research question of this study was *how do the professionals perceive the future of SEO?* The future of search engine optimization is changing rapidly, with expectations of artificial intelligence becoming a large part of how companies commit to SEO. The increased use of AI in content production is expected to force Google to change its algorithms to limit the use of AI generated content made solely for ranking in SERP. It seems that search engine optimization is facing a risk for its future as it is, because AI is able to manufacture a lot of the on-page SEO that people have been creating until now. However, if the AI generated content is allowed to rank, it's expected for the search engine to become filled with AI generated content instead of content written by an expert in the field.

The other anticipated change for SEO in the future is how well search engines are able to continue as the platforms where people are searching for information. It was noted that a shift in search behavior has already started to happen, where people are searching for information on other platforms such as TikTok or directly by asking a generative AI such as Chat GPT. This change can have a large impact on how SEO will change in the future, as producing optimized content onto websites is not sufficient enough, but one needs to also consider of using other platforms to include optimized content. While it is not a new thing to have social media posts optimized, this kind of shift in user behavior may force the optimization to be done on these platforms more than before, depending on the industry the optimizer and their business is working in.

Continuous increase in competition is also a large changing factor for SEO. It seems that there is a clear shift from before, when anyone could show up as number one in organic search with their properly optimized content, to current

days it becoming much more difficult due to large brands becoming too prevalent in search. The increasing competition will drive the change even further, making SEO a more difficult channel to compete in. Google has also been taking their own space within their own SERPs, as it has begun to show more content within SERPs, limiting the need for users to click on web pages, as they can sometimes get the information given to them directly in SERP. If a trend like this continues, it's as if websites are becoming information sources for Google rather than for users.

With implementation of AI in search engines, SEO is facing a challenge of a possibility for another search engine besides Google becoming the largest used search engine in the future. While it does not seem to be the case as of yet, a possibility exists that Bing or another search engine may take Google's place as the most used search engine if they can get their AI assisted search engine to become a better platform for information search. This could change SEO, as then the SEO specialists would need to learn how that exact search engine forms its results.

### 5.1.3 Summarization of this research's contributions

This research provides a thorough list of current best practices for search engine optimization and a clear perspective on the future of SEO. Within these best practices, each of SEO's dimensions are considered and the practices have been reasoned with the data gathered from experts in search engine optimization. The summarized main findings of this research are: the nature of current on-page optimization, how the content needs to be written in an urgent, clear format that matches the search intentions of the users searching for it; how black-hat techniques have become almost obsolete; and how the future of search engine optimization involves the potential of using other platforms besides Google to reach the target audiences searching for information, as well as a careful use of AI as a tool for executing SEO. The findings of this research applies to both the practical work of search engine optimization professionals, as well as the future research carried out in the field of SEO.

# 5.2 Managerial implications

While search engine optimization is going through a change, it remains an important way to reach target audiences. As AI tools such as Chat GPT can make the content creation and optimization easier, it may be the case that the search engines such as Google will limit the AI generated content to rank. With the increased competition, it makes ranking even more difficult than before, which results in a heightened need for companies to hire experts in SEO who have a 360 perception of how to optimize websites for companies. Moreover, as other platforms are emerging as ways to find information, the companies should carefully analyze what are the correct platforms their target audiences utilize and

begin to produce content within the platforms they use instead of just relying on SEO for organic performance.

When creating content towards the target audience, the companies should evaluate the key messages they wish to communicate to them and optimize the content with these messages in mind. To effectively optimize the content, they should write it in a manner that matches the search intentions of their customers. To increase the authority of their website, the companies should also reach out to their partnering organizations, if they exist and are of relevance to their business and ask them to share their content and link to their website. Moreover, when choosing the right keywords to optimize the content for, smaller companies should evaluate whether they should target the less competitive ones to build their presence in organic search before trying to compete with the more searched and difficult keywords.

To ensure the proper functioning of the website, companies should hire a qualified person who can maintain the website and commit the needed actions within technical SEO to enable better organic performance. To enable better insights into the website's issues, a company should also invest in a SEO tool that allows the person in charge of the website to properly analyze the website. In addition, as stated in Table 3, a company should hire a consultant specialized in technical SEO to gain more insights of the website's potential issues.

### **5.3** Trustworthiness of the research

Within qualitative research, it has been stated by (Tuomi & Sarajärvi, 2018) that the terms reliability and validity of the research do not apply, as they refer more to research done through quantitative method. Instead, Guba and Lincoln (1982) list out another, more suitable terms to prove the trustworthiness of qualitative research: transferability, dependability, confirmability, and credibility.

Credibility refers to how the relationship between the gathered and presented data within the research (Guba & Lincoln, 1982). In other words, the research is credible when it reports the findings from the data in accordance with how the data sources gave the information. Guba and Lincoln (1982) suggest that to make the data credible, the researcher can ask further questions from the interviewees about whether the data gathered aligns with what they meant when providing the data within their replies. Within this research, the interviewees were asked clarifying questions if their replies seemed contradictory or unclear. Their replies were also reported as they intended, without taking them from the context or shaping them to align with each other more. Based on this, it can be said this research to be credible.

According to Guba and Lincoln (1982) transferability evaluates whether the sample used in data collection represents properly the population it was used to generalize. They suggest different methods to validate the transferability with one being a purposive sampling of the data sources. According to Korstjens and Moser (2018), to enable the research to be transferable, the researcher has to

describe the participants in the research in a manner that gives a clear picture of the types of people who were interviewed within the research. This research gathered data from six experts in search engine optimization, whose replies to questions aligned greatly. In addition, the interviewees were selected based on purposive sampling by searching through the researcher's network, and the interviewees were given the interview questions, and information about the purpose of the research before the interviews so they could evaluate whether they applied to the research. Moreover, within this research, the background information of the interviewees was provided as their industries and work-life experiences in search engine optimization were reported. Based on this, it can be proven that the interviewed group of people represented search engine optimization experts accordingly and the research is transferable.

Dependability refers to the way the analysis of the data is aligned with the accepted standards of research (Korstjens & Moser, 2018). On the other hand, according to Guba and Lincoln (1982), dependability refers to the research's ability to be repeated in a similar setting in the future without getting contradictory results to the original research. Proving this research's dependability is difficult, as while the research questions narrowed the topic down, other interviewees could have focused more on other aspects of the best practices within SEO, for example giving only the textbook answers, such as where to place the keywords in headlines properly, or whether to include keywords in URLs or not. It is believed, that if the research was repeated with a similar group of interviewees, the results would align with this. However, if this research would be repeated in a few years, the best practices of search engine optimization could have changed greatly due to the evolution of Google's algorithms. In addition, as this research strived to create an understanding of how the experts perceived SEO's future to be, within a few years the future aspects could have changed and the results of this research could have already become the basis of search engine optimization's current state in that time.

Confirmability refers to how the data is interpreted and presented in the research. The research is confirmable when the results are presented from the data without subjective preferences and bias of the researcher. (Guba & Lincoln, 1982; Korstjens & Moser, 2018.) Within the interview process, the interviewer took the role of a listener, who asked questions instead of entering the conversation. Clarifying questions were only asked in a manner of "Could you explain this better?" instead of "Did you mean this?". This enabled the interviewees to tell and explain their replies in a manner of their own, without having the researcher affect their responses. When the findings of the research were presented, direct quotes of the interviewees were included, so the data could be presented as transparently as possible.

# 5.4 Limitations and Proposals for Further Study

The limitation for this research can be considered as that each of the interviewees were operating in wholly different areas of business and some of them focused solely on their own industries when answering the questions. While search engine optimization exists the same across industries, also examining the parts of the SEO that apply to other industries besides those of interviewee's own could have given even more thorough data. However, as search engine optimization is a wide concept, it is justified as an interviewee to only focus on the industry relevant to oneself. Another limitation for the research was that it was intentionally specified to target current best practices and the future of search engine optimization within Google. SEO also exists within each social media platform and other search engines and this research did not strive to find the best practices on how to increase the organic visibility within those platforms. To form a concise picture of search engine optimization as a whole, one would need to take in consideration of including other platforms within it as well. However, this would increase the amount of content and make the research paper much lengthier, almost forming it into a form of a printable book.

As it was stated within the interviews, it has been noticed that users have started to use other platforms besides search engines as tools to search for information. This shift in user behavior creates a very timely chance to gain insight on this phenomenon. This shift could be studied from either on the perspective of how companies are preparing or have started to utilize this shift, or then by conducting research of different age groups on how they search for information and which topics are better to be searched from a platform such as TikTok rather than Google.

Another interesting theme for a further study is researching how many companies have started to produce the content on their websites with AI such as Chat GPT. In this research, the professionals interviewed were asked whether they had started to use it in their work, and the replies said that it works more as a tool among the others, than the way to write the content. However, it can be hypothesized that at least some companies have started to generate and publish the content as it is. This could provide important information of how the new AI tool has changed the field of content creation and the effects it has on on-page SEO.

As search engine optimization evolves constantly as the search algorithms are updated, it is needed to continue the research about SEO and its best practices. The research that was conducted in this research paper could be redone for example after five years to get an understanding on how SEO has changed and whether the best practices presented in this research are still valid.

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### **APPENDICES**

Appendix 1: Interview questions in English

### **Background information:**

- What is your current employer's area of business?
- What is your job title?
- How many years have you been on the job?

# **Search Engine Optimization expertise:**

- How would you describe search engine optimization?
- What is your background in Search Engine Optimization?
- How many years have you worked with Search Engine Optimization?
- What is your role in Search Engine Optimization, do you produce content, administer a website, or do something else?
- Do you target a global audience in English or use local languages in Search Engine Optimization?
- What tools do you use in your work with Search Engine Optimization?
- What kind of results have you achieved with Search Engine Optimization?

### SEARCH ENGINE OPTIMIZATION IN PRESENT DAYS

# Perception of Search Engine Optimization as a marketing function:

- What is your perception of Search Engine Optimization's importance as a marketing function?
- What is your perception of how companies use Search Engine Optimization overall? Do companies, such as your competitors seem to have an understanding of utilizing Search Engine Optimization as a marketing tool?
  - o How do they use Search Engine Optimization for their benefit?

### **Executing Search Engine Optimization:**

- What are the factors that affect the organic ranking of a web page in Google?
- What are the identifiable challenges in executing Search Engine Optimization?
- Are you familiar with "black-hat" Search Engine Optimization tactics?
  - Are there some tactics that shouldn't be used? How do you perceive them?
  - Are some "unethical" tactics profitable to use, even though Google might not approve it?
- Are you familiar with the division of Search Engine Optimization into different dimensions: on-page, off-page, and technical SEO?

- o Are you more hands-on with some of them than the others?
- Is one of these dimensions more important than the other in your opinion? If is, why?

# **Best practices of Search Engine Optimization:**

- What are the "best practices" to use in Search Engine Optimization when optimizing content for a web page or a blog post?
  - What are the things to consider when producing content with Search Engine Optimization in mind? Why?
- How important do you perceive off-page SEO (gaining backlinks)?
  - For off-page SEO, what are the types of best practices you follow to gain backlinks?
- How do you monitor your website health and technical SEO?
  - What are the things to look for in ensuring the website's proper functioning?

# **Measuring Search Engine Optimization Performance:**

- What are the metrics you follow when measuring performance in SEO?
- Do you constantly follow how the page ranks in search engines?
  - Do you make changes to the content of the web page to further advance the ranking in search engines based on the perceived success in rankings?

### SEARCH ENGINE OPTIMIZATION'S FUTURE

### **Future of Search Engine Optimization:**

- How do you perceive Search Engine Optimization to change in the future?
  - o Can it already be seen somehow how SEO is changing? If so, how?
  - How should people doing SEO work prepare for the changes?
  - How should companies prepare themselves for the future in Search Engine Optimization?
  - Has your way of executing Search Engine Optimization changed in the recent past? How?
  - What kind of challenges does Search Engine Optimization involve in the near future?
  - What kind of opportunities does Search Engine Optimization involve in the near future?
  - What kind of trends will be prevalent in the future of Search Engine Optimization?
- As ranking factors for content change within time, how do you stay up to date what matters and how the factors change?
- How do you perceive Search Engine Optimization's relevance in the future?
- How do you think the best practices will change in the future?

- How do you perceive voice search optimization's relevance in search engines?
  - How do you perceive voice search optimization's relevance in the future?
- What is your perception of Artificial Intelligence in Search Engine Optimization?
  - Have you started to use AI tools in your work in SEO?
  - How will AI such as ChatGPT influence Search Engine Optimizations future in your opinion?
  - What kind of opportunities do the use of artificial intelligence bring in executing SEO?
  - Whit kind of challenges do the use of artificial intelligence bring in executing SEO?
- How do you perceive the metrics to measure performance in SEO to change in the future?

# Appendix 2: Interview questions in Finnish:

# Taustakysymykset:

- Millä toimialalla tämänhetkinen työpaikkasi toimii?
- Mikä on tämänhetkinen työnimikkeesi?
- Kuinka monta vuotta olet työskennellyt tehtävässäsi?

### Hakukoneoptimoinnin asiantuntijuus:

- Miten kuvailisit hakukoneoptimointia yleisesti?
- Mikä on taustasi hakukoneoptimoinnin parissa?
- Kuinka monta vuotta olet työskennellyt hakukoneoptimoinnin parissa?
- Mikä on roolisi hakukoneoptimoinnin parissa, tuotatko sisältöä, hallinnoitko verkkosivuja vai teetkö jotain muuta?
- Tuotatko sisältöä globaalille yleisölle englanniksi vai paikallisilla kielillä, esimerkiksi suomeksi suomalaisille?
- Millaisia työkaluja hyödynnät toteuttaessasi hakukoneoptimointia?
- Millaisia tuloksia olet saavuttanut hakukoneoptimoinnilla?

### HAKUKONEOPTIMOINNIN NYKYTILA

# Näkemykset hakukoneoptimoinnista markkinointifunktiona:

- Mikä on näkemyksesi hakukoneoptimoinnin merkityksestä markkinointifunktiona?
- Mikä on näkemyksesi, kuinka yritykset yleisesti ottaen hyödyntävät hakukoneoptimointia? Mikä on näkemyksesi esimerkiksi kilpailijoidenne ymmärryksestä hakukoneoptimoinnin hyödyntämisen suhteen?
  - o Kuinka ne hyödyntävät hakukoneoptimointia toiminnassaan?

### Hakukoneoptimoinnin toteuttaminen:

- Mitkä ovat kokemuksesi mukaan tekijöitä, jotka vaikuttavat verkkosivun orgaaniseen sijoitukseen Googlessa?
- Mitkä ovat kokemuksesi mukaan huomattavissa olevia haasteita haku-koneoptimoinnin toteuttamisessa tällä hetkellä?
- Oletko tietoinen epäeettisistä "black-hat" taktiikoista hakukoneoptimoinnissa?
  - Onko olemassa joitain toimintatapoja, joita ei tulisi käyttää hakukoneoptimoinnissa? Mikä on näkemyksesi niistä?
  - Onko joitain epäeettisiä menetelmiä hyödyllisiä toteuttaa, vaikkei Google hyväksy niitä? Miksi?
- Onko hakukoneoptimoinnin jaottelu eri osa-alueisiin: sivun sisäinen, sivun ulkoinen ja tekninen hakukoneoptimointi tuttu sinulle?
  - Työskenteletkö enemmän jonkin näistä osa-alueista parissa enemmän kuin toisten?
  - Onko jokin näistä osa-alueista merkityksellisempi kuin toinen sinun mielestäsi? Jos on, miksi?

# Hakukoneoptimoinnin "parhaat käytänteet":

- Mitkä koet parhaiksi käytänteiksi optimoidessasi sisältöä verkkosivuille tai blogiteksteihin?
  - o Mitkä ovat asioita, jotka tulisi ottaa huomioon tuottaessa sisältöä sivuston sisäisessä hakukoneoptimointimielessä? Miksi?
- Kuinka tärkeänä pidät sivun ulkopuolista hakukoneoptimointia (sivun ulkopuolisten linkkien hankkimista)?
  - o Mitkä koet parhaiksi käytänteiksi Sivun ulkopuolisessa hakukoneoptimoinnissa (sivun ulkopuolisten linkkien hankinnassa)?
- Kuinka seuraat sivustonne yleistä terveyttä ja teknistä hakukoneoptimointia?
  - Mitkä ovat tekijöitä, joita tarkastella varmistaakseen hyvä verkkosivuston toimiminen?

### Hakukoneoptimoinnin tulosten mittaaminen:

- Mitkä ovat mittareita, joita seuraat mitatessasi hakukoneoptimoinnin tuloksia?
- Kuinka seuraat sivujesi orgaanisia sijoituksia hakukoneissa?
  - Toteutatko muokkauksia optimoituun sisältöön saavuttaaksesi paremman sijoituksen hakukoneissa? Jos toteutat, millaisia?

### HAKUKONEOPTIMOINNIN TULEVAISUUS

### Hakukoneoptimoinnin tulevaisuus:

- Miten koet hakukoneoptimoinnin muuttuvan tulevaisuudessa?
  - o Voiko hakukoneoptimoinnin havaita jo muuttuvan? Jos voi, miten?
  - o Kuinka hakukoneoptimoinnin parissa työskentelevien tulisi valmistautua hakukoneoptimoinnin muutoksiin tulevaisuudessa?
  - Kuinka yritysten tulisi varautua hakukoneoptimoinnin toteuttamiseen tulevaisuudessa?
  - Onko sinun työskentelysi hakukoneoptimoinnin parissa muuttunut jotenkin viime aikoina? Miten?
  - Millaisia haasteita hakukoneoptimoinnin toteuttamiseen liittyy lähitulevaisuudessa sinun mielestäsi?
  - Millaisia mahdollisuuksia hakukoneoptimoinnin toteuttamiseen liittyy lähitulevaisuudessa sinun mielestäsi?
  - Minkälaiset trendit tulevat olemaan esillä tulevaisuudessa hakukoneoptimoinnissa sinun mielestäsi?
- Kuinka pysyt ajan tasalla hakukoneoptimoinnin muutoksissa ja uusien sijoituksiin liittyvien päivityksiin liittyen?
- Millaisena koet hakukoneoptimoinnin merkityksen tulevaisuudessa?
- Miten koet hakukoneoptimoinnin "parhaiden käytänteiden" muuttuvan tulevaisuudessa?
- Miten koet puhehaun optimoinnin merkityksen hakukoneissa?
  - o Kuinka koet puhehaun merkityksen muuttuvan tulevaisuudessa?

- Mikä on näkemyksesi tekoälyn hyödyntämisestä hakukoneoptimoinnissa?
  - Oletko itse alkanut hyödyntämään tekoälypohjaisia ohjelmia työssäsi? Jos olet, niin mitä?
  - Kuinka tekoälypohjaiset ohjelmat, kuten ChatGPT tulevat vaikuttamaan hakukoneoptimointiin tulevaisuudessa sinun mielestäsi?
  - Millaisia mahdollisuuksia tekoälyn hyödyntäminen tuo mukanaan hakukoneoptimoinnin toteuttamisessa tulevaisuudessa sinun mielestäsi?
  - Millaisia haasteita tekoälyn hyödyntäminen tuo mukanaan hakukoneoptimoinnin toteuttamisessa tulevaisuudessa sinun mielestäsi?
- Mikä on näkemyksesi, kuinka hakukoneoptimoinnin menestyksen mittarit tulevat muuttumaan tulevaisuudessa?