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Case Study:
SEO Strategy and Implementation for Industrial Pump Company

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The goal of this Master Thesis was to define the search engine visibility requirements for an industrial pump company in Finland, create a search engine optimization strategy and implement changes to the company´s website and analyse their effect.

The company´s website was transferred from Wordpress to the Joomla! content management system. Google Webmaster Tools and Tag Manager collected the data. Keyword research, Technical optimization, Semantic content optimization (On-page optimization), Usability and Off-page optimization (Links etc.) were made to the company's website. New content pages were built for the important content and keywords.

When analysing the results, search engine visibility has increased with all product and service terms as wished. The tree strategic goals for the search engine optimization: Better visibility, Website traffic and High return on investment and find KPI`s were realized. The company's visibility and indexed page numbers have increased and the tracked keywords ranking has risen in all categories. Before the optimization process Google showed 41 ranked keywords on the first search results page. After optimization the number increased to 60.

The results show that using search engine optimization theories and instruction, it is possible to get better visibility in search results. Optimizing is a continuing process.

It was noticed that in Finland in Finnish language it was easier to get good ranks for keywords than in English speaking countries e.g. USA. In Finland the search volumes are lower. Short one or two words including keyword combinations get easier search visibility in Finnish. The reason is lower competition than in English speaking countries. As a conclusion, return on investment for SEO operations is still high on many business sectors such as industry pumps in Finland. The limit is the quantity of right audience. As far as the companies on the industry pumps sector do not make digital visibility operations, there is plenty of space to grow business.

The complexity of search algorithms will continue to grow. Next questions to solve within the search engine optimization might be the growth of mobile and voice search, semantic search and localization, which will have more influence in future search engine algorithms.

| Keywords | SEO, Search engine optimization, Google, Search engine marketing, Internet marketing, Internet, Marketing, Website usability, Technical SEO, On-page SEO, Off-page SEO, Mobile SEO, Keyword research, Local SEO, SEO strategy |

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SEO	Search Engine Optimization
SERP	Search Engine Query Page
ICT	Information communication and technology
HTML	Hypertext Mark-up Language
XML	Extensible Mark-up Language
SEM	Search Engine Marketing
PPC	Pay per Click
401 Status code	Unauthorized status code for webpage
Adwords	Google´s cost-per-click (CPC) advertising program
AJAX	Asynchronous JavaScript and XML
Analytics tool	Google Analytics, Snoobi etc.
Anchor text	The actual text part of link (usually underlined)
Authority site	A website that has many incoming links from other related authoritative sites.
Backlinks	Inbound links pointing to a web page or site.
Bot	Short of "robot" often referred spider or crawler. Bots find web pages and add them to their indices.
Bounce Rate	The percentage of users who enter a site and then leave without viewing any other page.
Breadcrumbs	Website navigation in a horizontal bar
Click-through rate (CTR)	A measure of the number of clicks received from the number of impressions delivered.
Content management system	A publishing platform intended to make the task of publishing and maintaining a website easier.
Googlebot	The name of the program that Google uses to crawl the web.
Index	A search engine´s database
Internal link	A hypertext link that points to another page within the same website.

Keyword stuffing	Placing excessive amounts of keywords into the page and the html.
KPI	An acronym for key performance indicators
Link Juice	A generic term used to refer to the value of a link.
Meta keywords	A meta tag hidden in the HTML that lists keywords relevant to the page´s content.
Mobile-Friendly	A Phrase used to describe web pages that render in a user-friendly way on smartphones and tablets.
Return on investment (ROI)	The benefit gained in return for the total cost of investing budget into advertising or some other project.
Search engine optimization	The process of increasing the number of visitors to a website by achieving high rank in the search results returned by a search engine.
Search engine results page (SERP)	A page of search results delivered by a search engine.
Sitemap	HTML sitemap is a page or structured group of pages that link to every user-accessible page on a website. An XML sitemap is a file that is not visible to users, but is designed to help search engine spiders to find all of the site´s pages.
URL	Web address, a URL can specify the location of a web page, an email address, or a file on an FTP server, among other things.

Forewords

When I was asking a couple of times about all the new updates of SEO, Rand Fishkin said to me: "Hi Miika - unfortunately, I don't have the bandwidth to answer all these questions, but wish you all the best of luck." I needed that luck and at the end I found some excellent insights for making better indexing websites in Google.

I want to thank my lovely wife Susanna and my daughters Noomi, Neela and Minja and my relatives for the opportunity to use time to do this project. I also wish to thank my co-workers in Media Agency Voitto. Special thanks to Jyri Sihvo, Henri Kaukonen, Teemu Vuorinen, Juha Halmesvaara, Mika Mäki, Susanna Matilainen and Pekko Parikka. I also want to thank Jussi Suomalainen, Jyrki Mattila, Ville Jääskeläinen, Jonita Martelius and my instructor Kari Järvi for a great opportunity to do my Master's Thesis with your kind help.

At the end, it´s important to live doing things you like and with your loved ones. I am a very lucky man having family, relatives, friends and co-workers like you. I will continue to live my dream and dreaming about all the new adventures. "*If you dream about something, there is always a possibility that it could come true sometime!*"

1   Introduction

This master's thesis describes the definition of search engine visibility requirements for an industrial pump company in Finland, introduces the making of a search engine optimization strategy and implementing the changes to the company´s website and analyses the effect of change.

In the beginning of this chapter the background of the study is described. Then the technology problem and the aim of the research are introduced.

1.1   History of Search Engines

The history of search engines is quite a short one. The first search engine WebCrawler came out in 1994. Quite soon Lycos, Infoseek and AltaVista followed in 1994-1995. The Yahoo! web directory was also popular way to find web sites. In 1996 came Netscape which has a search engine built right in a web browser. Netscape used the data of top search engines Yahoo!, Lycos, Infoseek, Excite and Magellan. Google came on the market in 1998 and in two years it has taken a big part of the search engine market. Google gave better search results using its PageRank algorithm. Google´s algorithm deduce site popularity based on how many other sites link to it, and on page authority. Figure 1 shows the History of Search Engines from W3Catalog 1993 to Cloud Kite at 2013.
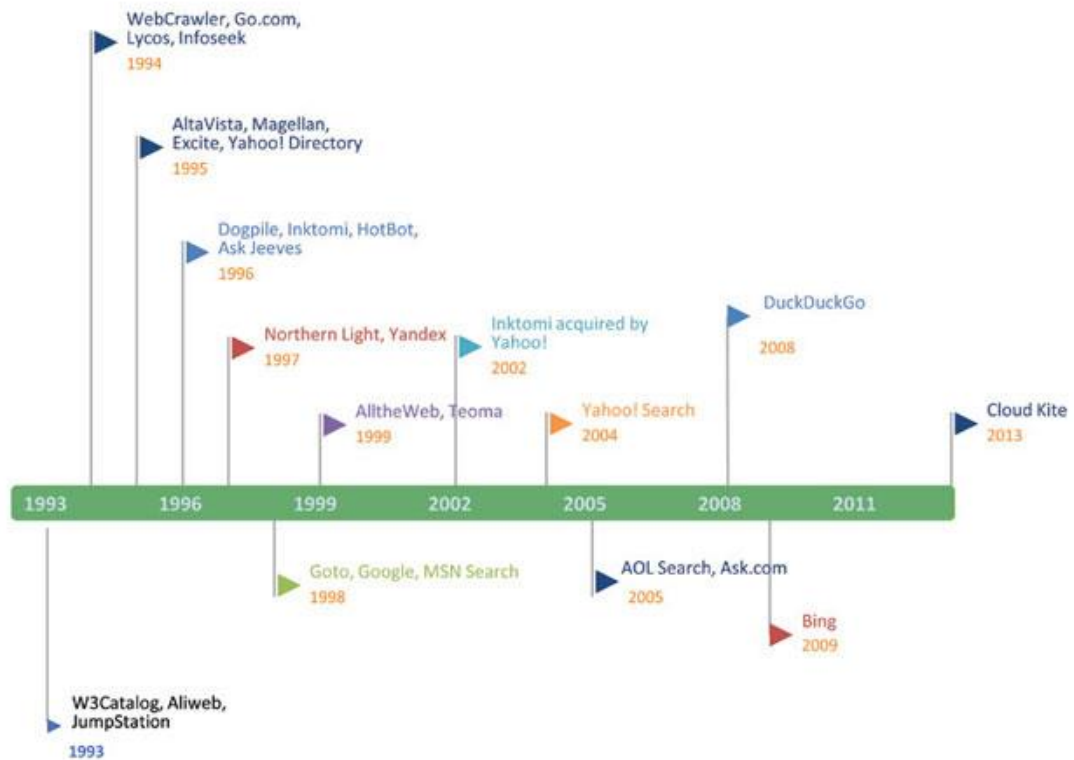
Figure 1: History of Search Engines. (Businessbolts.com 2015)

Microsoft launched MSN Search in 1998 and changed its name in 2009 to Bing. Yahoo! Search came a part of Bing network later that year. After those, DuckDuckGo came on the market in 2008 and Cloud Kite in 2013 (Businessbolts.com 2015). Also worth mentioning are two Finnish search engines. SciNet came on the market in 2011. SciNet predicts the applicant's need for information and visualizes data mining. It expresses the pictorial as a view of what options are available to and from the machine is still in doubt. Another Finnish search engine is Ahmia.fi, which finds information also from deep web and Tor-networks (Hs.fi/Tekniikka 2015). Other significant search engines in the world are Yandex, which is very popular in Russia, and Baidu, which is the most popular search engine in Asia.

Yandex still holds 50 percent of the search engine market in Russia, but Google's share has risen to 42 percent in August 2014 (http://www.neowin.net 2015). In Asia, Baidu is the biggest search engine with about 70 percent of market share. Other significant search engines are Qihoo 360 and Sogou (www.chinaInternetwatch.com/ 2015).

In April 2016 the world's most popular search engine was Google. Google has about 1,100,000,000 monthly visitors. Bing is the second with 350,000,000 visitors and Yahoo!

the third with 300,000,000 visitors (Ebizmba.com 2016). In Finland, Google is the most popular with almost 98 percent of all searches. The second is Bing with 1,5 percent of searches. Google is so massive in the Finnish search engine market that most of the search engine optimization and search engine marketing is made for it.

1.2   Background of Search Engine Optimization

In the early days of Google, it was quite easy to get visibility in Google. Webmasters discovered ways to get visibility for content, which is not even the most relevant for customer's search query. By adding as many keywords as possible into the page, they could get site ranking high for almost any word. In 2003 the first Google update called "Florida" effectively stopped spammers. After this update keyword stuffing was useless. After Florida update, there have been a long history of Google updates. The purpose of updates has been to keep the status of the most relevant search engine to Google. Everyone wants to get visibility in Google and Google tries to find most relevant content for search queries. (Clarke 2015: 11-13)

One significant Google update in 2012 was called "Penguin". The Penguin update punished sites which have a lot of links with exact-matched anchor texts pointing to a page.

In May 2014 came Panda 4.0 update. Matt Cutts, the head of Google´s web spam team, confirmed that this was another major update from Google. It was targeted to large sites and brands, using scraped or copied content. This kind of site visibility was going worse, because of poor user experience and scraped content, duplicated low quality or very light content. (Clarke 2015: 139-140)

Authorship photo drop update was published in June 2014. It took off all author photos and Google+ photos from the search results. Still it is important to authorize your content with your Google+ profile when publishing online. Although photos no longer appear in search results, ranking factors still use this information (Clarke 2015: 141). Pigeon algorithm update in July 2014 gave Google algorithm a way to determine, how and when local listings appears.

HTTPS/SSL update also in 2014 started to use HTTPS as a ranking signal. Google probably wanted to encourage sites to use HTTPS in order to keep everyone safe in the web. (Clarke 2015: 144)

Panda 4.1 in September 2014 continued, where Panda 4.0 ended. Extremely thin or light content, empty content, pages with link stuffed content, keyword stuffed pages or any other very bad user experience sites affected negatively with the update.

Google announced the latest Penguin update, Penguin 3.0 in October 2014. Webmasters over the world reported after Penguin 3.0 that when using only high-quality links, not keyword stuffing, bad quality articles with clerical errors or spam links, the effect of the update is minor.

Doorway Pages update was issued in March 2015. Doorway pages are low quality pages made for increase the visibility in Google. When all of a company pages have own content, Doorway Pages update has no effect on the site.

In April 2015 Google rose Mobile effect in SEO. Sites with solid mobile support got better visibility. By creating a responsive site, using dynamically different content for mobile and desktop users or hosting mobile content on a separate subdomain, the update has no effect on the site.

In May 2015 Phantom 2 update got an effect of in search results for sites with low quality. Update affected negatively, when site was using big aggressive ads, taking majority of the screen, using duplicate content or pages, having thin or light poor quality content or pages with large amount of low-quality spam user submitted comments.

Panda 4.2 on July 2015 was a refresh of the Panda update. Google released this update step by step in several months, so the effect was hard to find out. The effect was for low-quality content.

In May 2016 Google updated the search query page. After update, ads in right side of page were removed and the number of top of page ad places rose from three to four. This had an impact for Google advertising, but also for search engine optimization. Advertising price will rise, when there are less ad places on the page. Four ad places at the top of search result page take more space so the organic visibility became harder to get. (Searchengineland.com 2016)

1.3   Spectrum of Search Engine Optimization

Today Google search algorithm has well over 200 factors. Google estimates how many links are pointing to a site, how trusted these linking sites are, how many mentions a brand gets in social media, how relevant a page is, how old a site is and how fast it loads etc. (Clarke 2015: 14-16) Figure 2 illustrates the components of Google´s Ranking Algorithm.
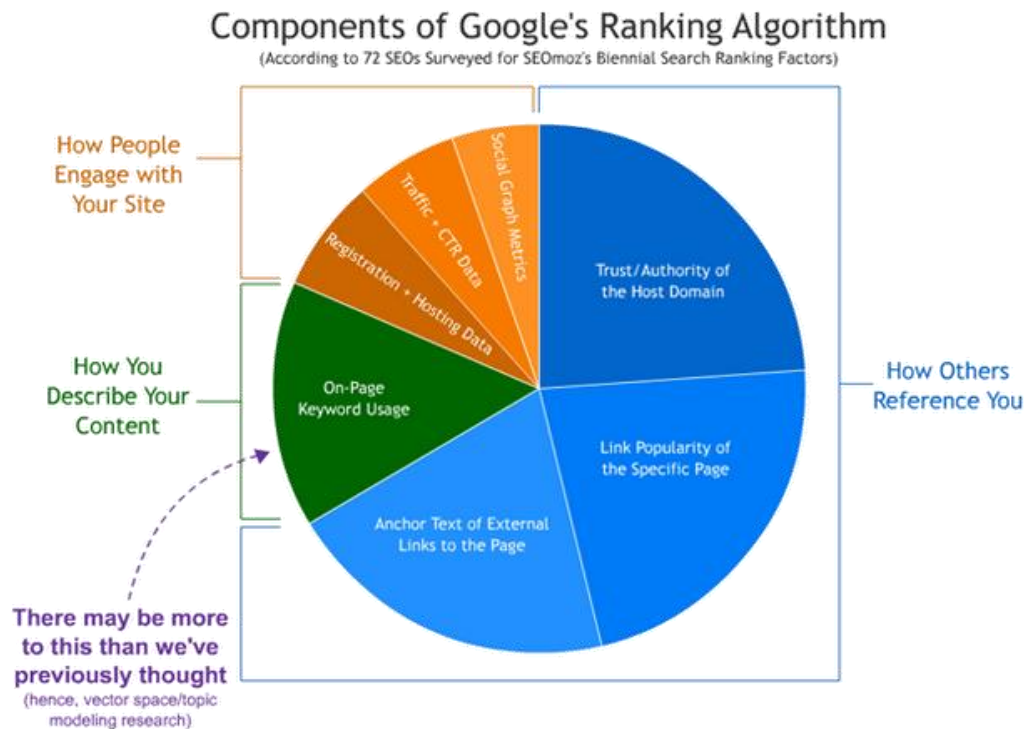

Figure 2: Components of Google´s Ranking Algorithm. (http://somethingdifferentcompanies.com/ 2016)

A website can confirm its reliability in a search engine with many signals. These signals confirm for search engines bots that a site is not a spam. The Trust and Authority of page host domain predict root domains ranking potential in search engines. This is based on an algorithm combination of all link metrics (Moz.com/researchtools 2016). Other main components of Google´s Ranking Algorithm according to Metaseo.com are Link Popularity of the Specific Page, Anchor Text of external Links to the Page, On-Page Keyword Usage, Registration and Hosting Data, Traffic and CTR Data and Social Graph Metrics (Metaseo.com 2012). Figure 3 shows the components of Algorithm with percentages. Domain Authority and Trust of the Host Domain, Specific Page Link popularity and Anchor text of External Links to the Page has the largest parts of Ranking Factors.

Components of Google's Ranking Algorithm

According to 72 SEOs Surveyed for SEOmoz's Biennial Search Ranking Factors

Link Popularity of the Specific Page
22.33%

Trust/Authority of the Host Domain
23.87%

Social Graph Metrics
5.30%

Ancor Text of
External Links to the Page
20.26%

Traffic + CTR Data
6.29%

Registration + Hosting Data
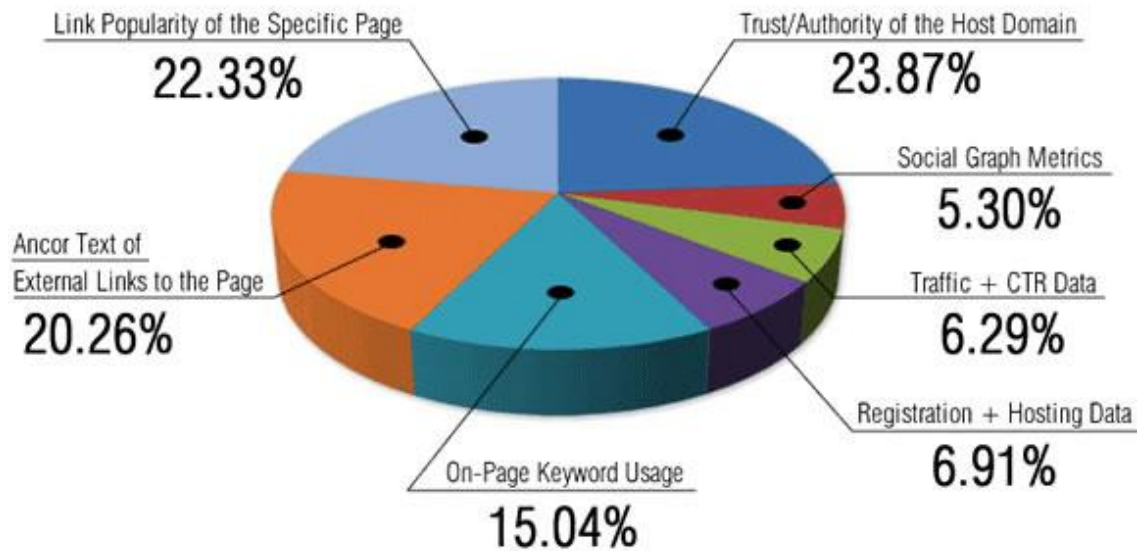6.91%

On-Page Keyword Usage
15.04%

Figure 3: Components of Google´s Ranking Algorithm with percentages. (Metaseo.com 2012)

Figure 4 shows the Search Algorithm in 2016 as more fragmented. Links relevancy has decreased when Fresh content, Mobile responsiveness, User experience has taken the more efficient part of ranking factors.
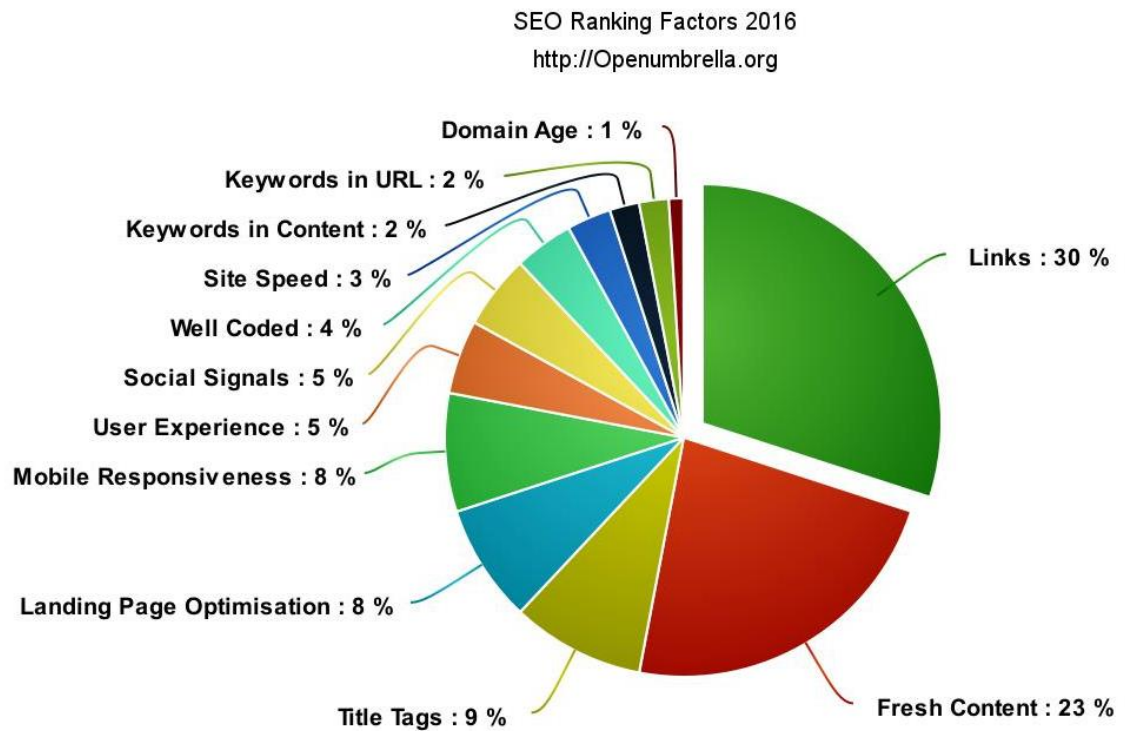
Figure 4: SEO Ranking Factors 2016. (Openumbrella.org 2016)

As can be seen in Figures 3 and 4, ranking factors become more fragmented all the time. Only Google knows exactly what the algorithm includes and it does not publish that information, because it wants to offer good quality search results for customers and does not want that just perfect optimized sites to get the best places on search results.

Trust, authority and relevance of a website content are main principles to get visibility in Google nowadays. (Clarke 2015: 14)

Figure 5 shows the main parts of SEO.
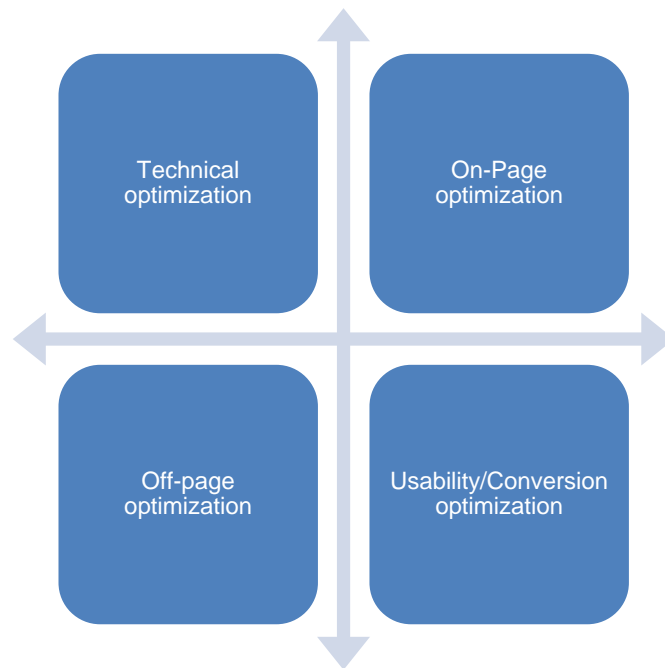
Figure 5: Main parts of SEO by Mika Mäki (2016)

The four main parts of SEO are: Technical optimization, Semantic content optimization (On-page optimization), Usability/Conversion optimization and Off-page optimization (Links etc.). (Mika Mäki 2016)

SEO process includes Technical Analysis of website, Keyword Search or Research, Competitive Analysis, Benchmarking, On Page Optimization, Online Promotions, Report and Refining according to Seopros.biz. (http://www.seopros.biz/services.html 2016)

Figure 6 shows the definition of the SEO process as a circle from Technical Analysis to Ongoing Consulting.

Figure 6: Definition of SEO Process. (http://www.seopros.biz/services.html 2016)

The SEO Process can be defined as a continuing circle, like Coolerinsights defines it (see Figure 7) The circle includes technical and non-technical areas of search engine optimization. (Coolerinsights.com 2015).

Figure 7: SEO Process as a Continuing Circle. (Coolerinsights.com 2015)

The SEO Process Circle shows that the Website and Competitive analysis, and Keyword research are first most important parts of SEO circle. Those phases limit the process to right themes and keywords. The number of back links still has a significant effect for SEO visibility. Optimizing is a continuing circle and different phases can perform simultaneously from different SEO parts shown in Figures 5,6 and 7.

1.4   Research Problem

Search Engine visibility is made up of many different parts, and it is a complex entity. It also has different focus and content, depending on which kind of site is in review and what are the aims.

The focus of the present study is finding the search engine visibility requirements and make a SEO strategy and implementation for an industrial pump company in Finland. The company operates on industry field maintenance and selling industry pumps and other industrial products.

The goal is to increase the visibility of the company´s website in search engines. The means to achieve the goal can be found in search engine optimization strategy, content strategy, marketing strategy and web analytics methods. The SEO strategic plan for the company should include steps how to get increased visibility in search engines, implement changes and analyse results.

1.5   SEO Strategy

The search Engine optimization (SEO) strategy is a road map to SEO. It has to be defined so that the SEO process has guidelines and goals, where to go and what kind of goals are wanted. Strategic goals are better visibility (branding), website traffic or high return on investment (ROI). (Enge et al 2015: 135)

Every SEO strategy must be customized. It is important for the SEO strategy to be included in the website content and design as early as possible. It affects the entire site development strategy, content management system (CMS), site architecture and site content. There are differences between best practices, depending on your goals. (Enge et al 2015: 136)

1.6 Aim of Research

The aim of the research is ensuring the industry pump company´s search engine visibility and drawing up the search engine visibility strategy.

Search engine optimization strategy in not separate from the company´s strategy and business planning. SEO strategy is actually a part of company strategy. It includes content planning, marketing planning, web-analytics and business analytics as well. (Mäki 2016) and (Enge et al 2015: 137)

Figure 8 below shows the role of Search Engine Optimizations role part of Business Strategy. SEO Strategy, Content Strategy and Marketing Strategy are a part of company´s Business Strategy. Business Analytics include company data from CRM and other sources. Web Analytics tells about traffic on company website and can give important information about users and website usability.
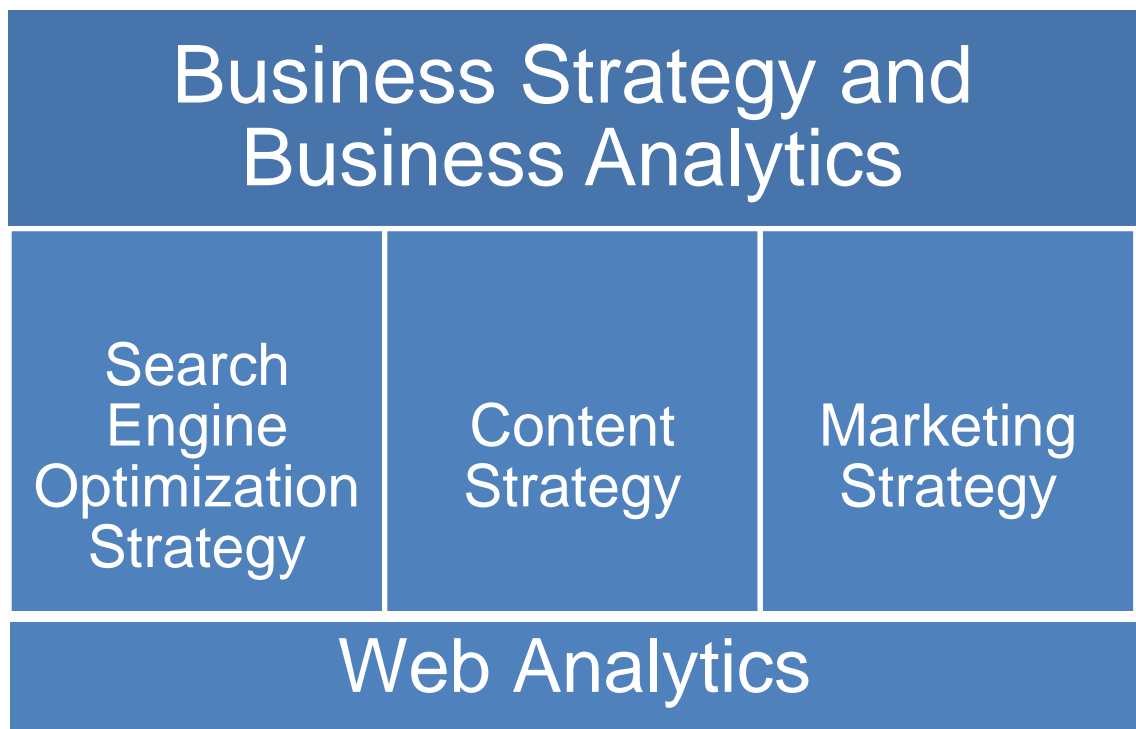
Figure 8: Parts of Company Strategy

The aim of the Research is to define the Search Engine Optimization strategy. The Search Engine Optimization Strategy is on a same level as Content Strategy and Marketing Strategy. This Search Engine Optimization Strategy includes suggestions and best practices for content planning, marketing planning, web analytics and business analytics as well. The focus in the present study is on defining and drawing up Search Engine Optimization strategy for a small and medium size B2B company in the industry pump field.

1.7   Research Method – Case Study

Case study research design, a Qualitative research method, is used the study at hand. In addition, interviews and literature are used as sources. (Metsämuuronen 2008: 16)

Basically, a case study is an in depth study of a particular situation rather than a sweeping statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic. Whilst it will not answer a question completely, it will give some indications and allow further elaboration and hypothesis creation on a subject.

The goal of the research is to answer the question how a B2B pump industry field company can grow its business by using search engine to get better visibility and engage customers. This research used a qualitative approach and adopted the case study methodology. (Koivula et al 1999: 38, 42-46)

1.8   Scope of Research

The study focuses on a B2B business in the industry pump field. The company in question engages in the pumps as well as machinery maintenance and repair. In addition, the company engages in electric and automation installations, manufacturing of spare parts and accessories and spare parts trade according the Kaupparekisteri in Kauppalehti. (Kauppalehti.fi 2016)

The company has 4 employers and the turnover of 0,8 million euros. The company´s registered office is located in Kotka and another place of business is located in Tampere. The company type is a Limited Liability Company (Ltd.)

1.9   Contribution

The contribution of the research is a search engine optimization (SEO) strategy, which includes suggestions for content planning, marketing planning, web analytics and business analytics as well. The company can use the search engine optimization strategy when planning website development, content strategy, marketing strategy, web-analytics and business analytics.

1.10 Contents

The Thesis is divided into seven chapters. Chapter 1 presents the area and history of search engines. Chapter 2 presents the newest knowledge from literature, SEO blogs and Search engine optimization experts. Information is organized logically according to the SEO process.

Chapter 3 defines the research method as qualitative research and case study. Interviews and literature are also used as a sources.

Chapter 4, Baseline of SEO Process, presents the overview of the findings, including a baseline of the SEO process and auditing results at the start point.

Chapter 5, Creating SEO Strategy, tells what strategic goals and key performance indicators there are to the company involved, introduces the keyword research plan, On-Page SEO, Technical SEO, Off-site SEO and content recommendations.

Chapter 6, Overview of the Findings - SEO Results Analysis aims to connect the results of the search engine optimization process and changes on website.

Chapter 7, Discussion and Conclusions, concludes the study by presenting the main objectives and findings and their implications and suggestions about the B2B company search engine optimization work.

2   Related Literature and Theoretical Focus

SEO books, SEO blogs, company sites, people who work with SEO and social media channels have a lot of information about SEO. The challenge is to find relevant information and knowledge from the information flood. After reading all the most relevant and latest books about search engine optimization, the latest knowledge was acquired from the experts who are highly considered SEO Gurus by Forbes. (Appendix 1; http://www.forbes.com 2015)

2.1   Survey to SEO Experts

The newest SEO literature, SEO blogs and other channels tell the big picture of SEO. Certain SEO gurus were contacted through LinkedIn. Appendix 1 shows the list of questions presented to them. Answers were provided by five of them, with whom contact was continued in LinkedIn.

The persons contacted are the fifteen most talented SEO experts through LinkedIn Recruitment profile.

1. Matt Cutts, head of Google Webspam.
2. Rand Fishkin, Co-authored the book called The Art of SEO and co-founded Inbound.org, and Moz.
3. Aaron Wall, the founder of SEOBook.
4. Danny Sullivan Editor-in-Chief of SearchEngineLand.
5. Barry Schwartz, the owner and the current President of RustyBrick, Inc., founder of Search Engine Roundtable, News Editor at Search Engine Land and author of MarketingLand.
6. Andy Beal, the founder and CEO at Trackur, Founding Editor of Marketing Pilgrim.
7. Adam Heitzman, Managing Partner of HigherVisibility.
8. Dave Naylor, the founder of the Bronco.
9. Eric Ward, President of EricWard.com, columnist at ClickZ, SearchEngineWatch, and SearchEngineLand.
10. Neil Patel, Co-founder of Crazy Egg, KISSmetrics and QuickSprout.
11. Bill Slawski, President of SEO by the Sea.

12. Bruce Clay, Founder and President of Bruce Clay, Inc.
13. Vanessa Fox, the CEO at Keylime Toolbox, author of Marketing in the Age of Google: Your Online Strategy Is Your Business Strategy.
14. Lee Oden EO and Co-founder of Top Rank Blog, Executive editor of Online Marketing Blog.
15. Eric Enge, the CEO at Stone Temple Consulting and the author of The Art of SEO. (http://www.forbes.com 2015)

They were asked what new they had found in Google´s algorithm recently, their opinion about the future of SEO and the most important SEO things for a B2B company such as SEO strategy, landing pages, incoming links, content and social media effect for SEO. They were also asked about tools and methods they prefer for keyword searching, local SEO and good SEO content in web. (Appendix 1)

Answers were received from five SEO experts: Andy Beal, Eric Enge, Aaron Wall, Rand Fishkin and Eric Ward with whom further discussion took place. I also continued my research with them.

The information received from the five SEO experts is structured here as follows: SEO Strategy, Keyword Research, On-page SEO, Link Building, Social media effect to SEO, Local SEO and SEO for mobile. Also some future considerations are presented at the end of the chapter.

2.2   SEO Strategy

Search Engine optimization (SEO) strategy is a road map for SEO. The process defines guidelines and goals where to go and what kind of goals are wanted. Strategic goals could be better visibility (branding), website traffic or high return on investment (ROI). (Enge et al 2015: 135)

Every SEO strategy is good to be customized. There are components which works universal, like best practices or some goals, but business and website-specific SEO parts must be made case by case. Search landscape is changing all the time, so the process needs SEO knowledge and business knowledge to recognize what are the important signals, and how to use SEO to get better business, more prospects and revenue. (Enge et al 2015: 135)

SEO strategy is important to be built in as early as possible. It has effect to the entire site development strategy, content management system (CMS), site architecture and site content. There are differences between best practices depending on websites goals.

Search engines drive a lot of highly targeted traffic to website. Business can earn huge revenues by leveraging the quality and relevance of this traffic. Revenues can be direct sales, customer acquisition, brand awareness etc. Visibility in search engines makes endorsement effect. Visibility associates quality, relevance and trustworthiness with site that rank highly in search queries.

Consumers looks information from Internet before buying all kind of products and services e.g. cars, computers and health and wellness services (Enge et al 2015: 135). Getting visibility in search engine with all the relevant keywords can increase the number of visitors on a company´s website and cause a huge growth in sales in online and in store.

Factors to consider when developing a SEO strategy for a B2B company are:

- Service, product or content, which the organization is trying to promote
- Company´s target audience
- Brand, including copy text and messaging
- Website structure (Site architecture, navigational elements, file/URL naming conventions)
- Current site content assets (includes images, videos, pdf files, white papers, case studies, articles)
- Plan of which content can be modified (involves the CMS and web development teams)
- Editorial resources and calendar of content development (what content is developed, by whom, and on what timeline)
- Competitive landscape.

Specific business market learning is very important. It is also important to notice who are the competitors, what they do and when they have published their websites, made their site search engine optimization implementation and find the weak points.

2.2.1 Business Factors to Impact SEO Strategy

There are several business factors which have an impact on the SEO strategy. These six factors below are important to know and use for company strategy and all SEO operations.

1. Revenue and business models
   What is the purpose of the site, to sell products, sell advertising, to obtain leads or get membership signup?
2. Target customers
   Who is the customer? Who is tried to be reached? Age group, gender group or a specific group or interest group.
3. Competitors
   One has to know competitive landscape in the business strategy.
4. Branding goals
   Are there search terms which are critical for the business?
5. Content development
   Good content is in a central role. Creating and optimizing high quality content for the users.
6. How people search for products
   Understanding what customers do when they are searching for products or services. Mapping actual search queries. (Mika Mäki 2016; Enge et al 2015:138-146, 156)

After careful defining these business factors it is considerably easier to do well the SEO.

2.2.2 Strategic Goals

It´s important to define strategic goals for a company website. These goals are the main metrics to measure the number and quality of website traffic and get information to make better website and serve customers better.

Better Visibility

Many people assume that top placements in search query page is a guarantee of quality of brand. So it is very important to have the visibility with brand terms, but also with non-branded search terms that are specific to the core business. (Enge et al 2015: 136)

Better visibility contains a couple of important metrics. The number of indexed web pages tells how many pages are found by search engine. Another important thing is search engine ranking which tells how high those sites are ranked in search engine.

Website Traffic

Search environment is highly competitive. With good organic visibility a company can bring new prospects to website, even people who are not aware of the company´s business or products. A company needs to take care of being indexed with all the relevant keywords to get targeted high quality organic traffic to its website. People use different kinds of search queries, so keyword research is a very important part of any SEO work and involved in the SEO strategy. The SEO process involves developing a site architecture strategy and a content development and editorial strategy. (Enge et al 2015: 137.)

High Return on Investment and Right Key Performance Indicators (KPI)

The first big steps to get success with SEO are increasing online visibility and driving targeted traffic to the site. The next step is to measure the performance of the generated traffic continuously. Goals are typically defined to make more sales, leads or advertising revenue. Other goals are newsletter signups, promoting a particular message, consuming, sharing or creating specific types of content. An important component of SEO is to get not just a traffic, but targeted potential to convert traffic to these actions. (Enge et al 2015: 137.)

2.3   Customer Journey (Purchase Funnel)

One way to examine customers' journey is from Strangers to Promoter in purchase funnel. In step one right keywords, blog text or social publishing attract Strangers to come to the company´s website. In the second step Visitors make conversions when coming to the landing page, filling the form or clicking some call-to-action. The third step leads are closing the deal and becoming Customers. Customers need to be delighted somehow and then they start to be Promoters for the company. (Hubspot.com 2016)

Figure 9 illustrates the customer journey steps. This is one possible way to define customer journey.

Figure 9: The Inbound Methodology. (Hubspot.com 2016)

All steps need to have goals to ensure to growth and measurable performance of website.

2.4 Keyword Research

A keyword is any phrase would like rank site in search engine. Single word keywords are more competitive and difficult to rank highly for in search results. Keyword research is one of the most important parts of SEO planning. There are two reasons for that. If site ranks highly for the wrong keywords, it uses a lot of time and effort to receive any traffic. The second reason is that if the competitiveness of keywords haven´t been investigated, it can take time and effort for keywords which are too competitive to rank even on the first page. (Clarke 2015: 21)

One type of keywords are industry field general terms. These are one or two word terms like "pumppuhuolto" or "uppopumput", which are very popular. Then there are long-tail keywords, which are not so popular, but the number is huge. Long-tail keywords include three or more words e.g. "prominent sigma 2 annostelupumppu".

Navigational keywords are used to locate a particular brand or website. For example, "Suptek Oy LinkedIn" is a navigational keyword. Informational keywords are used to discover on a particular topic. These keywords start with "how to" or "what are the best". Transactional keywords are entered into Google when a customer wants to complete a commercial action such as "buy industrial pumps".

Keywords can be divided into four categories; brand terms, need, demand and problem terms, industry field general search terms and problem solution terms (see Figure 10). (Clarke 2015: 22-24; Enge et al 2015: 195-204)
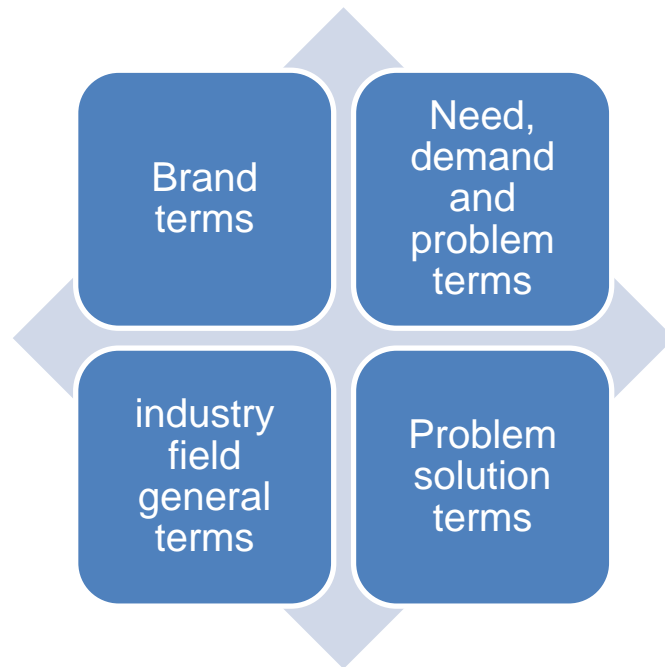

Figure 10: Four categories of keywords.

Keyword categories

Google´s Hummingbird update in September 2013 was a major change in its search algorithm. After Hummingbird Google has not released any more official documentation on this update. This update changes algorithm more to focus on what users want, not just the keywords they search for. This helps also mobile searches, in which people do not write so exact search queries or even do voice searches. (Clarke 2015: 136)

Using popular short keywords, a company can have thousands of searches per day. These popular search terms may comprise less than 30% of the overall searches made on the web. Seventy percent of searches are commonly called "long tail" keyword queries. This means, that the tail contains hundreds of millions unique searches that might be used only a few times per day.

Keyword searches are increasingly moving toward long-tail searches, because natural language search is becoming more popular and pervasive, especially with the momentum of mobile technology and search. (Jayson DeMers advancedwebranking.com 2013)

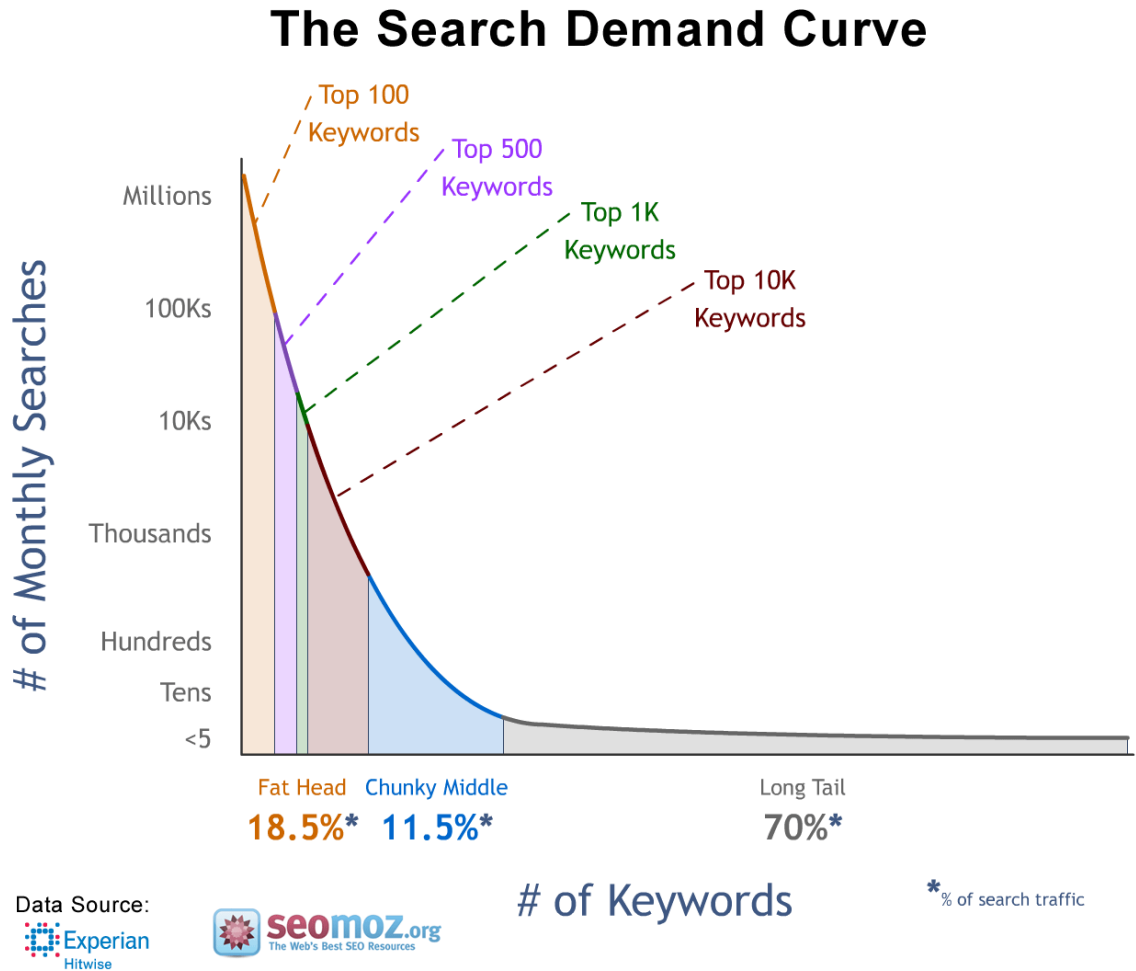Figure 11 shows the search demand curve.

The Search Demand Curve

Figure 11: The Search Demand Curve by Jayson DeMers advancedwebranking.com 2013

A good tool for keyword research is to get keywords from organic search queries from Google Webmaster Tools and used marketing search queries from Google Adwords. Other good tools are Google Trends, Google Keyword Planner, Search Metrics and WordStream. SEMrush has also tools for keyword research (Enge et al 2015:240). One problem with these programs is the Finnish language. It seems that these tools work better in English than Finnish.

An easy analysis tool is Übersuggest. It is free to use and gives keyword suggestions around given search term. A free visual tool Visuwords provides a dynamic graphical

interface of words and concepts related to the search term you enter. (Enge et al 2015:243)

2.5 Four Main parts of SEO

The four main parts of SEO are technical optimization, semantic content optimization (On-page optimization), usability/conversion optimization and Off-page optimization (Links etc.) like Mika Mäki told in Chapter 1 (Mika Mäki 2016) and also seen in Figure 5.

2.5.1 Technical Optimization

Site content must be indexed to rank well in search engines. Images are hard to be identified for search engines. It is important to name image file name, title and attributes with descriptive text. Another important thing is to build the internal link structure so that spiders and SEO bots can crawl easily. Direct crawled, internal links have to point to every page on site. Submit forms or Javascript using in links can make harm for site crawling. (Enge et al 2015)

XML sitemaps help site crawling, also XML sitemap verification or registration indicates positive trust and authority of site. Sitemap registered in Google Search Console helps to give some extra analytical insights. Matt Cutts, head of Google´s Webspam Team has recommended sitemap use although Google does not guarantee that it crawls every page just like sitemap tells. (Enge et al 2015)

Mobile, video and image sitemaps can help to get your content crawled better in Google. (Google Search Console 2016)

It is important to make redirects using 301 redirects for URLs that are not canonical. Canonical links are another good way to mark which content is duplicated and which one is the root site. It is recommended to define a *canonical URL* for content (or equivalent content) available through multiple URLs. Code element (rel="canonical") indicates the preferred URL. (Google Search Console Help 2016)

Search engine friendly URLs are one important SEO aspect. Keyword targeted site URL like "uppopumput.html" is much better than some uncommon character string like

"jkl45728fhsdl.html". The site architecture is good to build with familiar standards and intuitive link structure and usability. Structured sites help customers to navigate on site and bots and spiders to scroll on site (Enge et al 2015). MOZ said that domain-level keyword usage includes exact-match keyword domains and partial-keyword matches.

Domain name length, Top Level Domains (TLD) extensions like government or university URL (".gov" or ".edu" etc.) and SSL certifications, which are small data files that digitally bind a cryptographic key to an organization's details, have an effect for SEO (Moz.com Search engine ranking factors 2015).

Site load speed is one effective feature for SEO. Optimizing image size, video size and some Javascript content, which are on website, can help site to work faster and get much better SEO rank. If site load time is an average, improving the loading time, could made 7% positive effect for conversion percentage for each second on loading time. (Clarke 2015: 41)

Title tag, h1 heading and meta description fields in pages are important. Also using im-age Alt text is important for sites SEO visibility. Other good places for keywords are meta description, meta title tags, navigation anchor text, navigation anchor title tags, headings, h1-h4 tags, content text, bolded and italic text, internal links in content, image filename, image alt text, image title tag, video filename, video title. (Enge et al 2015: 307-310)

Right length for Title tag is 70 characters and for meta description 155 characters for Google. (google.com/webmasters 2016)

2.5.2   Semantic/Content Optimization (On-page Optimization)

On-page SEO is the process of ensuring that the site is readable and findable to search engines. There are three main points. The first is to make sure that site content is visible to search engines, the second is to make sure the site is not blocking search engines and the third is to make sure search engines find the keywords you want. An important file to allow access for bots and search spiders is robots.txt file. (Clarke 2015; Rand Fishkin 2016)

Keywords are becoming a less effective factor in internal or external links or domain names. Increasing numbers of high ranking URLs are not using the corresponding keyword in the body or description. Keywords are an organic part of good content, but relevant rich content is most important. (Searchmetrics.com 2015)

Fresh readable content is good for SEO. Scheduling new content for website is necessary, because too often same old content stays on site even it´s not relevant anymore. Use Latent Semantic Indexing keywords (synonyms) also 2-3 times each on site. Including keyword in ingress text and in last chapter works good for SEO (Clarke 2015: 33-35). You need to make content around the important keywords. Write important keyword on your site 2-4 times when you have over 500 words on one webpage (Enge et al 2015: 307-310).

It is important not to do keyword "stuffing" where you put an important keyword too many times in a text without a real need. Another not good habit for SEO is having too many ads on site. (Enge 2016: 38)

Content role in SEO has grown in the last years. It is important to write good quality content for readers. Content needs to be made for readers and users and after that you can optimize content for search engines. Google knows if a site is badly written and has spelling and grammar mistakes. (https://www.telxweb.com/ 2016)

Content strategy and plan is the first step, when making content and choosing which topics to write about. The significance of page edits is a SEO factor and web crawlers visit on the site more often when there is fresh content regularly. (https://www.telxweb.com/ 2016)

Relevant, good quality, holistic content is more important than earlier (Searchmetrics.com 2015). Content needs to have some value. Enge et al 2015 and Clarke 2015 tell that a website which triggered an emotional reaction might get backlinks from readers to your site. B2B company can try to answer customer's problems or tell something new about their subject to readers. There is synergy between publishing good content and social media. One strategy is to publish your content on your blog or site and share it on social media feeds. People may read the article and like or link it to social media feeds. (Enge 2015: 446; Clarke 2015: 49)

Content has to be customized for the customers. There are many different types of content that can be used. It is important to make content for users. Also search engines like to use versatile content. Making blog posts, posts on third party sites (pump factory etc.), videos, images, pdf files, presentations, infographics, researching data might be relevant. (Enge et al 2015: 450; Moz.com Search engine ranking factors 2015)

2.5.3   Usability/Conversion Optimization

User experience is more important and also mobile friendly responsive web design has a good effect on rankings. (Searchmetrics.com 2015)

Flat site architecture gives all the content with minimal number of clicks. Deep sites create long paths of links required to see all content. Every site under 10 000 pages should be accessible through a maximum of four clicks from the home page. (Enge et al 2015)

Site internal navigation is important to be search friendly. Simple navigation works well with menu running down the left-hand side or the top of site. Industry standards following with site element placement make easier for visitors and search engines to understand your site. W3C is organization which make guidelines for HTML construction. (Steve Krug 2006:107)

One reason why this has effect for SEO, is Bounce rate. If a customer comes to a site and leaves it immediately, Google thinks that the content may not be so interesting or relevant for that search. Matt Cutts from Google has said that "Poorly researched and misspelled content will rank poorly, and clarity should be your focus." (Clarke 2015: 52)

Usability with mobile phones, iPads and laptops is very important, Google has a "mobile Friendly" tool, which can be used to check the site usability. Google Webmaster Tools crawl errors tell about 404 errors which means links to empty pages. (google.com/webmasters 2016)

Good advice to get the highest visibility is make new content in to all social media channels immediately and post it again after a couple days. This way the site gets the audience reached better. (Clarke 2015: 79)

Engagement & Traffic/Query Data includes Data SERP engagement metrics, click-stream data, visitor traffic and usage signals like bounce rate. Quantity, diversity and CTR (Click through rate) of queries both on the domain and page level are included. (Moz.com Search engine ranking factors 2015)

2.5.4   Off-Page Optimization

Links are such a strong SEO factor, so it is important to have backlinks to the site from good authority, relevant, high-quality sites. Linking strategy is important for the site, but the truth is, that there is no single best practice for links. It is important to acquire links naturally and evenly over time. It is not recommended to change links or spam in the articles and messages with low quality content. (Wall 2016; Clarke 2015: 58)

Anchor texts were one of the strongest factors for top rankings but Google´s Penguin update changed the SEO rules with this. Anchor text means that text is contained in a link name. The best way to make anchor text is make it as natural as possible. (Clarke 2015: 61)

Moz appreciates Domain-level link features as the most important SEO theme. It includes link metrics and citation metrics such as the quantity of links, trust and domain-level PageRank.

Page-level link features include PageRank, trust metrics, quantity of linking root domains, links, anchor text distribution, and quality of linking sources. (Moz.com Search engine ranking factors 2015)

For a simple Link Building Strategy for smaller sites it is possible to use manual link building. Some parts of it are directory links and good quality business directories, link requests for the company´s customers and quality sites to get backlinks to website.

Backlinks have still quite a high correlation with rankings but unnatural link building is over. Links effectiveness is less than earlier in general level too. (Searchmetrics.com 2015)

It is recommended to use 10-20% of the whole link amount in the content directory link. Use relevant links for a company´s business area. Backlinks pointing to the site are most

important links. In some cases, it is possible to check which backlinks the competitors use and try to get same high quality links, too. (Enge et al 2015: 446-452)

2.6   Social Media Effect on SEO

Social media optimization is a part of Off-page optimization. It has an effect on the SEO although Google does not highlight it. Social signals are not directly rise ranking, but it somehow has effect giving better brand awareness and help to drive organic traffic to top ranking sites. (Searchmetrics.com 2015)

Video link building helps with search engine visibility. Youtube is world's biggest video platform and video search engine is one good place to post videos and get better SEO visibility with that (Joost de Valk 2015). Also Facebook links and videos are significant for SEO.

Best practice to get social media effect to SEO is according Joost de Valk: "Make how to guides, industry news updates, instructional videos and simple, interesting content in social media channels, infographics, which the target group want to read and share. Use social media channels, make big promos to your content and make your content sharing with easy with buttons." (Joost de Valk 2015)

Eric Enge, Stephan Spencer, Jessie C. Stricchiola and Rand Fishkin mention in their book The Art of SEO the following techniques to get higher SEO visibility with social media: Use and ask social mentions, make Twitter account and put your company information in website and bio fields. It is possible to buy relevant sites and make high authority links from site to site. Google+ which is Google's social network, shares are very important for SEO. Other important channels are Facebook, Instagram, Periscope, LinkedIn, Twitter, Snapchat and Pinterest. (Enge et al 2015: 556-569)

All social media channels have a good effect on SEO visibility but with limited resources the most important are Facebook, Google +, Twitter and LinkedIn (Enge et al 2015: 600). Quantity and quality of tweeted links, Facebook shares, Google+ shares to the page including page-level social metrics. (Moz.com Search engine ranking factors 2015)

Social media visibility can be tracked using the Sproutsocial.com media analytics tool. Meltwater is another tool for monitoring social media visibility and media visibility, articles

and news. Google Analytics has also Social tracking tools which can be implemented to site analytics. (Sproutsocial.com 2016; https://developers.google.com 2016)

2.7   Local SEO

Optimizing a web site for local search is important, because customers want to find information about local services. Four to five consumers use search engines to find local information like store address, business hours, product availability and directions. People use smartphones a lot when making local searches. This is important information when making SEO for website. This is done for instance by making sure that the address, phone number, and business hours are easy to find from web and search engines. Local searchers take action more likely, come to your store, lead to more purchases than non-local searchers and prefer and act on location based ads. Make your content good and if you use Paid search, make local ads for local search campaigns.

Applications such as Google My Business (GMB) and Bing Places for Business provide company information for customers.

It is important to fill all information fields to get all the benefit for search engine visibility. Fields such as business name, address, phone number, website and categories are important information tells Enge et al 2015. Local visibility with rich description gives better click through rates (CTR) and conversions. Google My Business gives also a visibility in Google Search, Google Maps and Google My business and Google+ profile page. (Enge et al 2015)

2.8   SEO for Mobile

Mobile-friendliness is an important SEO element. Lauri Putkinen from Google tells that in Finland in some industry areas mobile searches are already more common than desktop searches. Trend charts tell that mobile searches are getting higher than desktop searches during autumn 2016. At the summertime mobile searches are higher also be-

cause people are on holiday and use more smartphones and tablets than desktop computer. Figure 12 illustrates how mobile searches became more popular than desktop searches in Finland.
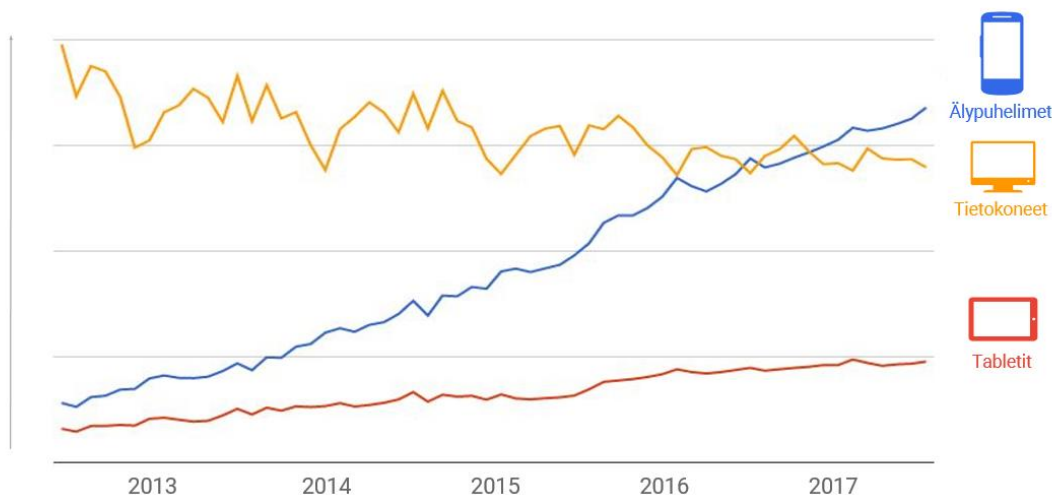

Figure 12: Mobile Search vs. Desktop Search in Google. (Putkinen, Google 2016)

Smart phones have smaller screens so available space is different than laptop/desktop device. Using Smart phone there is no mouse available so menu items must be "touch screen" and need more space between links on screen. The connection bandwidth could be lower, so web pages might load slowly. Quicker loading times come even more important with smart phones. If a site's load is average, improving the load speed is an opportunity for an easy SEO fix. Adam Clarke tells in his book SEO 2016 that faster load speed gives higher rankings in Google but also extensive industry reports have shown that every second taken off a site load time increases of 7% to the site conversion rate (Clarke 2015: 41). Figure 13 clearly shows how smartphone users in Finland has grown from 2014 to 2015.

Smartphone Users in Finland Who Have a 4G LTE Subscription, May 2014 & June 2015
% of respondents

45%

14%

May 2014   June 2015

Note: ages 18-75 who have access to a smartphone
Source: Deloitte, "Global Mobile Consumer Survey 2015: The Finnish Perspective" conducted by Ipsos MORI, Oct 14, 2015

199208   www.**eMarketer**.com
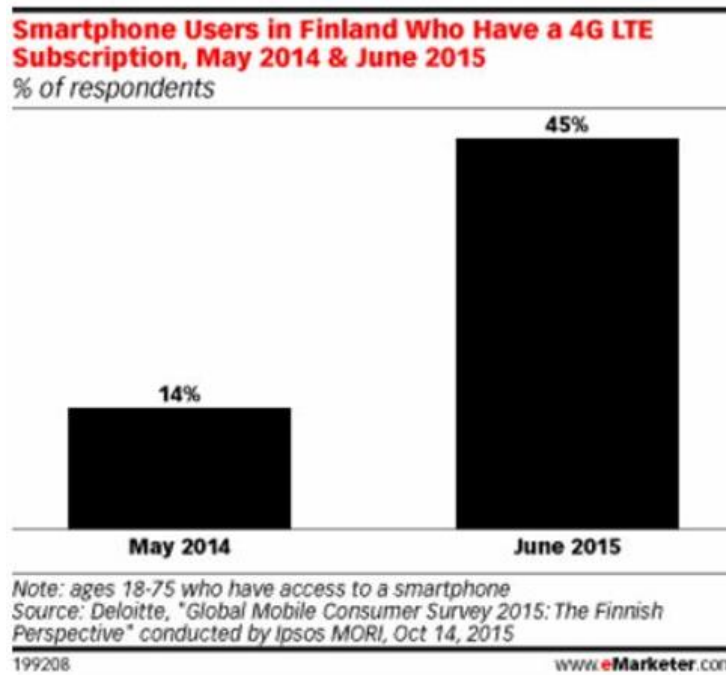
Figure 13: Smartphone users in Finland who have a 4G LTE Subscription. (emarketer.com 2016)

Emarketer.com site tells that the number of smartphone users in Finland who have a 4G LTE connection has risen from 14% to 45% from 2014 to 2015. It is easy to check site speed with Google's Page Speed Insights tool or with Pingdom Tools. Both are free and good tools for checking how well the site loads (https://developers.google.com/speed/pagespeed/ 2016). Figure 14 indicates the influence of Google´s algorithm by Moz.
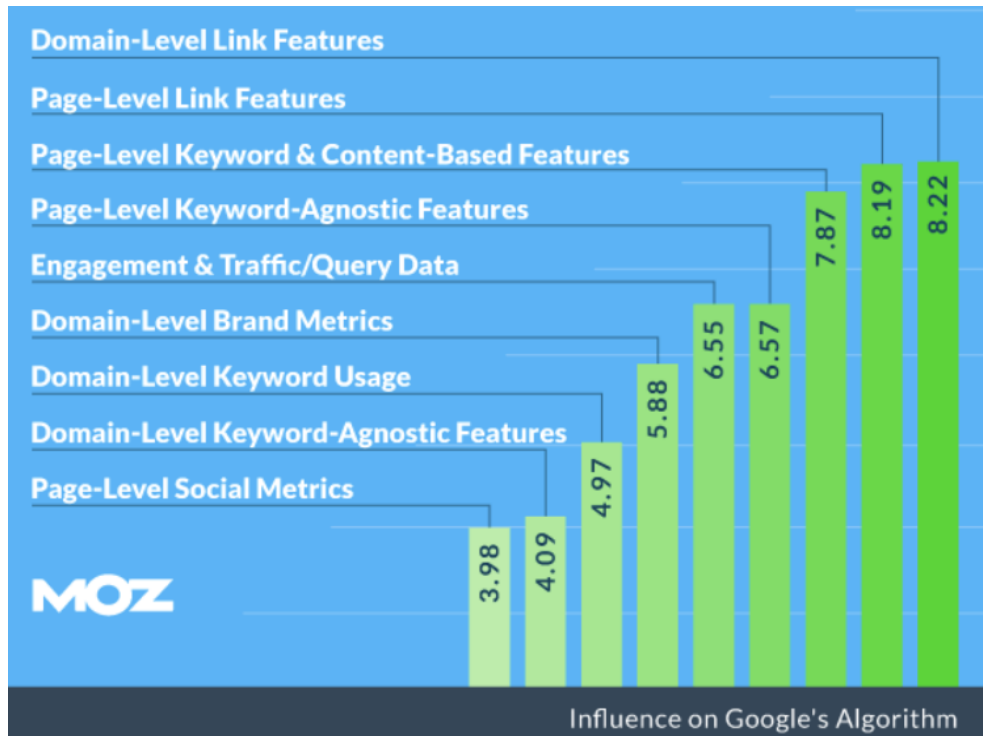
Figure 14: Influence of Google´s algorithm (moz.com Search-ranking-factors 2015)

2.9   Conclusion from Literature and SEO Professionals' Views

All the literature tells that unique, quality content is more and more relevant for SEO. Content needs to be published regularly. Social media has a big role in how much visibility content gets and how likely one gets backlinks to the site. Content shares, mobile friendly and responsive web design are important factors for SEO. User experience means a lot for SEO. Broken links, outdated elements which indicates old content are bad and site loading speed needs to be fast (40% of people will find another option if it takes more than 3 seconds to load site).

"Google is going to continue to improve the quality of their search results, and fights again spammers. This means that it will become critical to use a holistic approach to SEO", said Eric Ward, when asked about future of SEO. (Ward 2016)

Reputable backlinks are important. It is better to have a few high quality links than lots of ads and low quality backlinks. Branded backlinks give more "link juice" and links should be relevant to the content linking to. Technical SEO needs to be the basis. Website architecture refers to page titles, meta descriptions, h1 tags, alt text, clean URLs etc.

Location markers are important. Address and Business ID on a website tells to Google and customers that it is a real company's site. Google+ local results places often above the "normal" organic SERP. (SERP= search engine result page).

Using keywords to identify the topic of the page and using it also in the URL, title and anchor text links get better visibility and usability. Google uses keyword density to determine the topic of the page. Google trusts on brand names and rewards them in search results and give better authority and trust results. Google uses several factors for brand quality like domain age, outgoing links and reviews. (https://www.telxweb.com/ 2016)

SEO has an effect on engineering, web development, marketing, public relations, user experience, design, copywriting, content strategy, social media, sales and management. SEO is a significant component and all these other functions need to know basics of SEO for a long-term success.

"The complexity of search will continue to grow. The future of SEO will consist continue rapid expansion of mobile search and voice search. Semantic search allows to get directly answer for more complicated questions", said Aaron Wall. Aaron also thinks that mobile will be the most important for some search queries, user-focused search and ads as SERPs will be one big thing in the future. Google has made tests with video ads on search query page. (Wall 2016)

Google continues to make major investments in showing rich answers or direct answers above the regular search results. That means giving answers for search query without going on a website. Google is using an automated process to optimize its use of featured snippets. It tests different featured snippets on a rapid basis in order to find the best possible result for their SERPs. (stonetemple.com; Enge 2016)

Growth in social search will continue. People search interesting content and solutions to their problems from their friends using Facebook and other social media channels.

Better multimedia indexation gives more content for search engines. Images, video and audio and better understanding of these types of content will give new content for search results. Search engines will understand better also Javascript and AJAX-based content in the future. (Enge et al 2015: 926)

Localization in search will increase as will also expanded personalization capabilities in search results. (Searchmetrics.com 2015; Enge et al 2015: 926)

RankBrain is a big new algorithm for Google and its primary function is in better understanding user queries and matching them with appropriate content. A better understanding of a given query may cause a different algorithm to be selected by Google. RankBrain is not taking over any core ranking algorithms. It's helping Google to understand better content and pages on the web to improve relevance matching," tells Eric Enge in his article. (Stonetemple.com, Eric Enge 31.3.2016)

3   Methodology

The present study is based on qualitative research methods, more specifically on Case Study. Interviews and literature are also used. Qualitative research is a method of inquiry employed in many different academic disciplines, including in the social sciences and natural sciences, but also in non-academic contexts including market research, business, and service demonstrations by non-profits. Most important Qualitative research methods are case study, phenomenology, ethnography, phenomenography, grounded theory -method, action research and discourse analysis. (Metsämuuronen 2008: 16)

According to Kuhn (1996) paradigms are accepted models or patterns that have been proved to offer more successful solutions to certain problems than their competitors. However, for a paradigm to take effect, a mere subject matter is not enough, but a group of practitioners or a scientific community is needed. SEO research is a good example of this kind of research where the history of scientific research is a cyclical adjustment to new evidence. (Kuhn, T.S. 1996)

Paradigm is what people share and what promotes the consensus among them and it is passed on to the students and future professionals through scientific education and literature. Moreover, paradigms are further studied and developed by the scientific community. No rules or standard explanation are needed for a paradigm to exist and even to guide research. (Kuhn, T.S. 1996)

Definition of Case study is quite wide as Metsämuuronen writes:
"The case study can be defined as empirical research, which is versatile and knowledge acquired in many ways using will examine the current transaction or the people acting in a particular environment." (Metsämuuronen 2008: 16)

"On the other hand a research is defined as a case study also simply be operational incident investigation. The nature of the case study includes the fact that the case under examination seeks to bring together a wide range of information, and in many ways. The aim is to understand the phenomenon in greater depth." (Syrjälä 1994: 11-12)

3.1   Goal of Research
The research goal is to answer the question of how a B2B pump industry field company can grow the business using search engine to get better visibility and engage customers.

The research used a qualitative approach and adopted the case study methodology. This chapter provides a description of the methods used in this study and describes the research design and data collection methods.

The case study approach is used in qualitative studies to answer questions such as "why" or "how". This approach is suitable for studies involving a small number of respondents. It is an empirical inquiry that investigates a phenomenon in depth in order to understand the underlying patterns and causes. (Yin RK 1983)

The case study methodology was chosen for the research because a deeper understanding of the chosen case company was desired. A case study is presented as a representative case, which captures the circumstances and conditions of small businesses using search engine visibility to successfully grow their business (Yin RK 1983). The assumptions and the lessons learned and on the basis of from the case are assumed to be informative about the practices of an average small business that has experienced growth through good Search engine visibility. (Yin RK 1983)

The researcher can discover the good strategies as well as the perceived opportunities and challenges of using search engine optimization for company website and visibility in Internet. A deeper understanding can also be achieved through the analysis of the small business company website visibility in search engine. Such an analysis can address the questions of what messages the business is sending to customers on their website and how their website offers answers for customers.

Case studies require multiple sources of evidence because findings are likely to be more accurate, if they are based on several different sources of information (Yin RK 1983). The study relies on the following sources of evidence: interviews, documentation, proven existing information from multiple data sources and literature. Both thematic analysis and content analysis are used to identify themes and meanings from the data.

3.2 Progress of Research

This case study started by determining and defining the research questions. It was quite an easy part, even though the subject and research question changed once during the process.

The second step was selecting the cases and determine data gathering and analysis techniques. In this project interviews, documentation, proven existing information from multiple data sources and literature for data sources were used.

Preparing to collect the data included a lot of work. A challenge was how to generate a large amount of the data from multiple sources. For this categorized and sorted folders for different data prepared to analysis were used. It is important not to lose sight of the original research purpose and questions (Ischool.utexas.edu 1997). Collecting data in the field takes some time, there is a lot of information about search engine optimization in the Internet, but not so many new literature sources. Search engine optimization is constantly changing so it is important to use the present moment data sources from high quality authors.

Evaluating and analysing the data is an important segment of case study research. The researcher examines raw data using many interpretations in order to find linkages between the research object and the outcomes with reference to the original research questions. Throughout the evaluation and analysis process, the researcher remains open to new opportunities and insights. The case study method, with its use of multiple data collection methods and analysis techniques, provides researchers with opportunities to triangulate data in order to strengthen the research findings and conclusions.

Case study report must structure and tell the data in a way that transforms a complex issue into understood way. That is rather complicated because data and scores are often very complexing.

4   Baseline of SEO project

The first version of the company´s website was built with Kotisivukone.fi and changed to use Wordpress in 2015. The site is responsible, so it also has support for mobile users. The site is connected to Google Analytics and uses Google Adwords paid search engine marketing for supporting visibility.

In this Master's thesis Moz Pro SEO tools (https://moz.com/products/pro 2016) was used to analyse the site's current search engine visibility. Moz Pro is one of the most common SEO tools and the founder of Moz Pro is Rand Fishkin who is ranked in top 15 SEO experts in the world. (http://www.forbes.com 2015)

4.1   Baseline of SEO and Auditing Results

The company´s site has quite a low organic search visibility. Keywords which are brand keywords, pump industry and pump brand keywords get a 1,99% visibility in organic search. There are approximately 200 keywords tracked and 60 of those are ranked in the top 50. Figure 15 shows the keywords rankings and Company´s website visibility in relation to competitors.
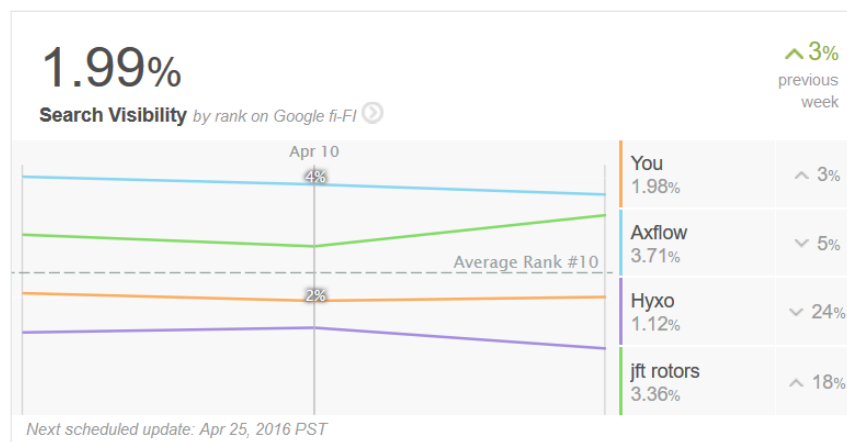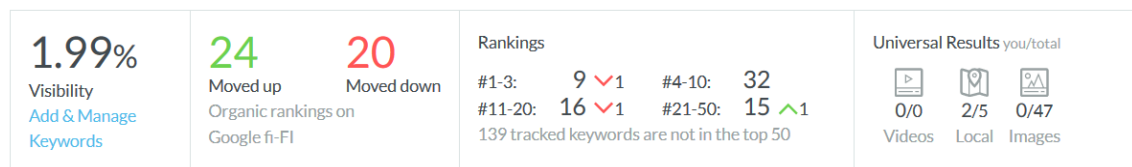
Figure 15: Company's website visibility in May 2016 with important keywords.

As seen in Figure 15, there are only 41 keywords in top 10 visibility on organic search. Most of the keywords are ranked more than 51 in organic search. Figure 16 illustrates the Search visibility and total visits on site.
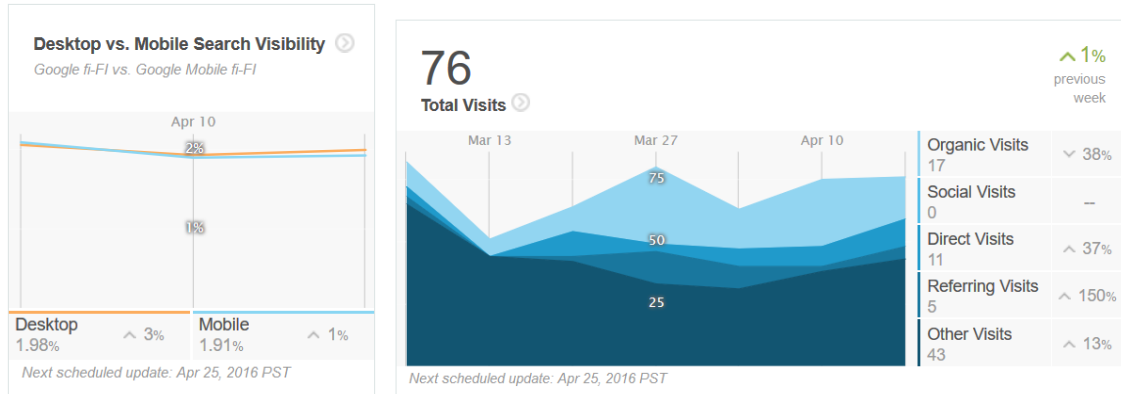
Figure 16: Search visibility and total visits on site in May 2016

As seen in Figure 16 desktop and mobile visibility are at the same level. The number of total visits, 76 in one week is not high, but more important is to know if visitors are potential or current customers and what they do on the site. Figure 17 shows the Domain Authority in relation to competitors.
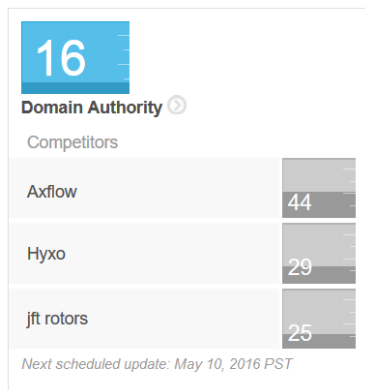
Figure 17: Domain Authority in May 2016

Domain Authority tells about how good quality and domain authority the search engines give to the website; how good the site is. As seen in Figure 17, competitors have higher domain authority at the start level of process. Figure 18, on the other hand, shows the

factors amount of external links and amount of keywords ranked in top ten positions which indicates better Domain Authority level.
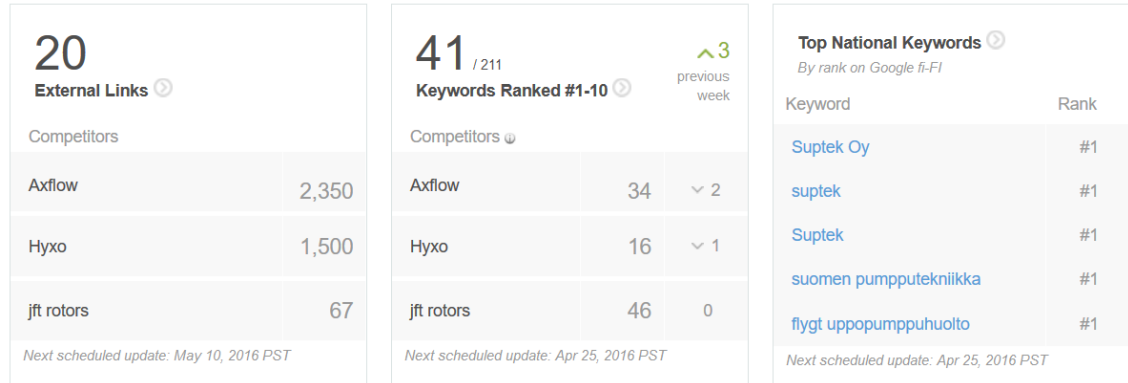
Figure 18: External links and keywords ranked #1-10 in May 2016.

External links tell how many sites have links to the site in question. In May 2016 there were 20 external links, which is less than the competitors' link quantity. The company has 41 keywords ranked on first search page (1-10 ranked). Top national keywords are the company´s name and some pump brand names and service names such as "Flygt uppopumppuhuolto". Figure 19 illustrates the Site Crawl issues and notices in May 2016.
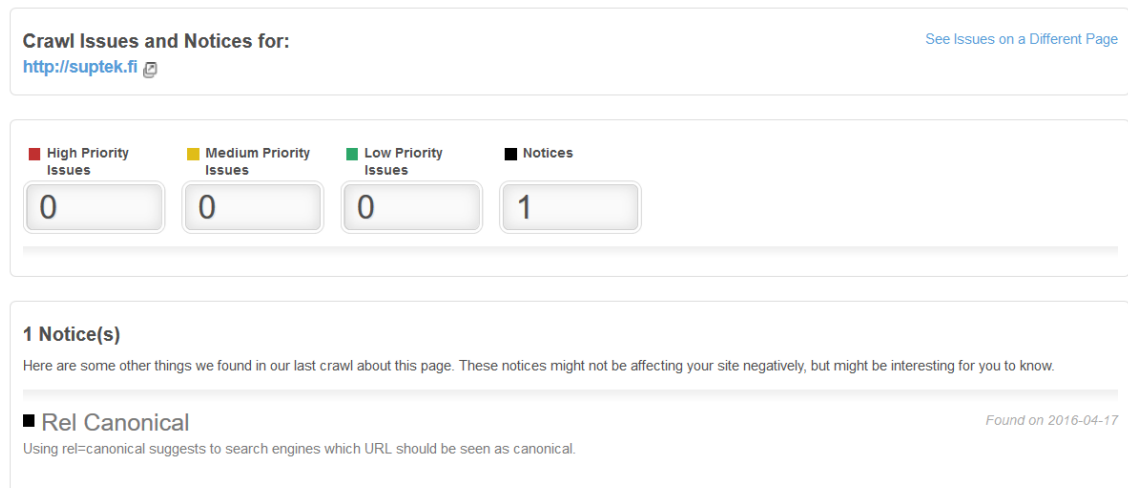
Figure 19: Site Crawl issues and notices in May 2016

Site crawl tells that suptek.fi website is in good condition in technical SEO. There is just one notice is about Canonical links.

4.2 Company Owner´s Goals for Company´s Website Organic Visibility

The company wants to get high visibility on organic search with critical business keywords. It is important to get visibility with pump brand names and service keywords such as "pumppuhuolto" and "epäkeskoruuvipumput huolto".

Organic search visibility is free for any company and has higher reliability than paid visibility in search engines. It is important to get visibility when potential customers look for information about industry pumps, pumps maintenance, services and spare parts.

With SEO strategy, content and marketing strategy it is possible to get a significant position in the maintenance and spare parts for submersible pumps and screw pumps, other pumps and actuators, industrial maintenance and installation services in search engines.

Suptek represents Grundfors and Allweiler pumps in Finland. Service, supply of spare parts and selling new industry pumps are areas where the company wants to get visibility with it´s website. The company´s facilities are located in Kotka and Tampere area, but the area of operation is the whole of southern Finland.

5   Creating SEO and SEO Strategy for Company

The company´s website layout was one-page format. It means that all the content is located in one very long page. Navigation works with links, but still all the content was in one page. All meta data was also for one page, so technical SEO optimization with meta data was limited. The Wordpress publishing platform is for blogs and quite simplified site structures and it has limited possibilities for SEO optimization.

For better site structure manageability and SEO optimization we changed the company site to use Joomla! Content management system and platform. Joomla! is an open source solution which included all needed online applications and extensions also for SEO optimization use.

For efficient SEO work and Search engine marketing it is important to have all the information about website traffic and keywords. It is recommended is to install Webmaster Tools to website. Google Analytics, Google Adwords and Webmaster Tools is recommended to be linked each other. These changes were made before starting other search engine optimization work.

5.1   Customer Journey (Purchase Funnel)

It is important to define the strategic aims and key performance indicators of the company network visibility.

The aim of a B2B company website is to share information, get visibility in network and search engines, share contact information, get new prospects and sell products and services. (Mäki 2016)

The aim of the website is also to serve its target groups as well as possible in different stages of the buying process or purchase funnel (ordering pump maintenance or the purchase of the pump). The following factors and Key Performance Indicators in defining objectives in following stages of the buying process in Figure 20.
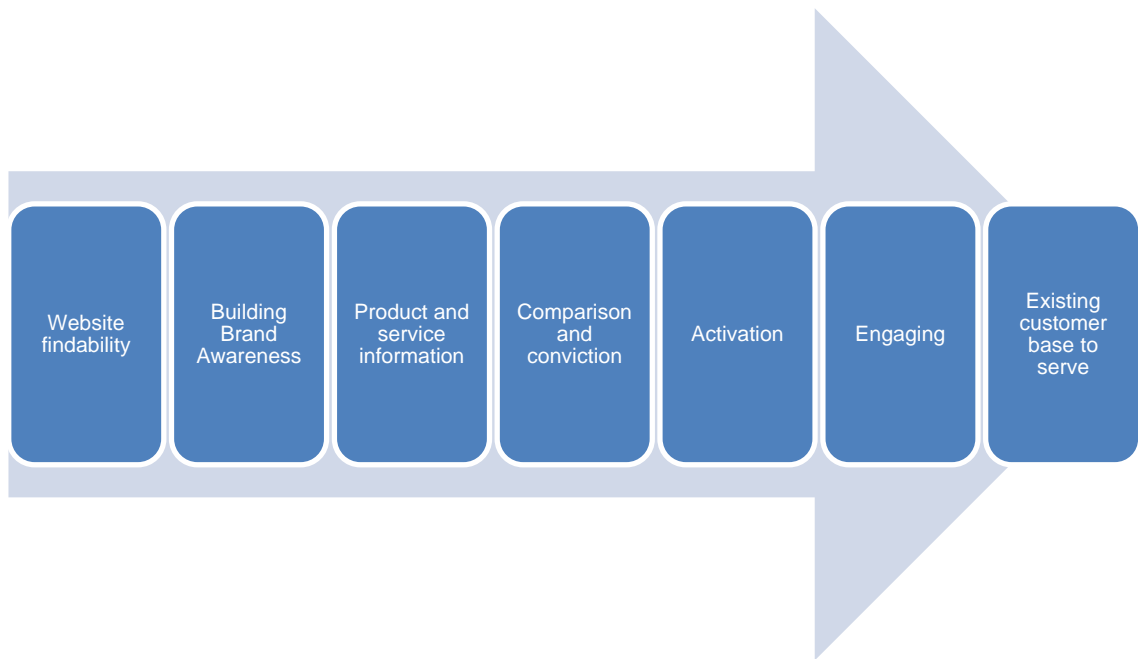
Figure 20: Stages of the buying process.

In Figure 20 buying process is divided in seven parts and starts with Website findability and ends to Existing customer base to serve. In this chapter define metrics and key performance indicators to most important parts of these.

5.1.1   Website Findability

Website findability from search engines with important keywords is absolutely essential. Investing in organic visibility (natural visibility) reduces need of advertising the website and makes search engine advertising more economical. (Mäki 2016)

Metrics for site findability can be e.g. proportion and amount of incoming organic traffic from search engines. Keywords used in search engines tell which brand, product and subject keywords get the visibility at the moment. If the site is not getting traffic with important keywords with high search volume, site contents needs to be developed. Good findability with words, which describe needs like "pumppuhuolto" or "uppopumppu kor-jaaja" is essential.

Website findability - metrics and KPIs
-   Website traffic
-   Share of organic traffic (%) of incoming traffic (% of visits)

- Index term keywords (%) share of all traffic (% of visits)
- Brand keywords (%) share of all traffic (% of visits)
- TOP 10 other than the brand themed keywords.

These website findability metrics and KPIs is viewed from Google Analytics and Google Webmaster Tools.

5.1.2   Creating Awareness

A new brand is unknown and visitors arrive at the site often seeking a solution to a problem. The content about services, as well as company information helps giving the brand and access growing awareness. As the awareness of the brand grows, the website traffic with brand keywords rises. (Mäki 2016)

Brand related traffic can be directly arrived at the site, e.g. address written in the URL field (Direct traffic) or organic traffic from the search engine with brand, product and service names or related keywords. If more visibility is needed in SERP page with high competitive keywords, Google Adwords paid search engine advertises (Paid traffic) can give visibility fast. (Mäki 2016; Enge et al 2015)

Creating Awareness - metrics and KPIs
- Visits in the product and service content
- Visits in blog texts and press releases content
- New visitor share (% of visits)
- Downloading content (pdf etc.).

These metrics and KPIs is viewed from Google Analytics and Google Webmaster Tools.

5.1.3   Product and Service-Specific Information and Current Customer Service

When a visitor who already is familiar with the brand arrives to a site, it is important that he finds the desired product or service information. Product and service webpages should contain enough versatile content (text, image, pdf files, white papers, video) information about company´s products and services. (Mäki 2016)

Product and service-specific information and the current customer service - metrics and KPIs

- Product and service page (visits)
- Downloading content (pdf etc.)
- Contacts to company with contact form.

The metrics and KPIs are viewed from Google Analytics and Google Webmaster Tools.

5.1.4   Activating / Engaging Customers

When a visitor gets the necessary information about the service the next aim is to engage and activate customer. Good indicators about activating are form filling, phone number or other contact information looking or offer request sending (Mäki 2016). These are the most important actions to monitor to get new customers.

Activating / Engaging customers - metrics and KPIs

- Sending a Contact request / invitation to tender
- Contact the company (e-mail, clicks, contact form broadcasts)
- Contact page (visits).

These metrics and KPIs are viewed from Google Analytics and Google Webmaster Tools. Forms and contact page buttons need to track with Google Tag Manager which send the data to Google Analytics.

5.2   Keywords Research

With Google Search console´s (Webmaster Tools) organic search data it is possible to know quite good used search terms, and analyse the company's site performance on Google Search. By filtering and comparing site results, it is possible to get better understanding on users' search patterns (Enge et al 2015). SERP analysis tells that there are plenty of opportunities to increase visibility in the Google search engine with tracked keywords. In this example the keyword "teollisuuspumput" visibility in Finland and Finnish search index in Google is shown. Volume ranges show how often a term or phrase is searched for in Google each month. Most of the terms (284 pcs) are searched 1-10 times per month as seen in Figure 21.

Figure 21: SERP Analysis of keyword "teollisuuspumput"

Moz Pro SERP Analysis tell about all the SERP Features on the site. Difficulty estimates how difficult it is for one to rank higher than current competitors on the first page of search

results. The result shows that this keyword is not high competitive. There are very popular keywords like "pumppuhuolto", which are much harder to compete.

Opportunity chart in Figures 21 and 22 estimate a score from 0 (low) to 100 (high) the relative (CTR) click-through-rate of organic web results (the first ten blue links) for the keyword. When other SERP features (ads, verticals, etc.) compete for searcher attention, this score is lower. At this case 253 keywords have good chance to get higher visibility. Only five keywords have very low opportunity. Example of keyword volume sheet is shown in Figure 22.

	Keyword	Volume	Difficulty	Opportunity	Importance	Potential	Analyze/Search
	+ruuvipumppu +varaosat finland			Gathering Metrics			
	seepex pumput 012 12 md 110 4440 finland			Gathering Metrics			
	Grundfos finland	11k-30k	18	26	3	71	Analyzed 5/13/2016
	flowserve finland	11k-30k	31	16	3	62	Analyzed 5/13/2016
	Flygt finland	851-1k	22	64	3	65	Analyzed 5/13/2016
	netzsch finland	851-1k	38	43	3	58	Analyzed 5/13/2016
	Seepex finland	501-850	27	22	3	51	Analyzed 5/13/2016
	jrf finland	501-850	41	100	3	64	Analyzed 5/13/2016
	netch finland	501-850	47	88	3	61	Analyzed 5/13/2016
	lowara finland	201-500	17	60	3	59	Analyzed 5/13/2016

317 Keywords 433 of 750 keywords available   move selected to   copy selected to   refresh   Add Keywords   Export CSV

Figure 22: Example of keywords and search volumes (https://moz.com/ keywords 2016)

Search terms "Grundfors", "Flowserve", "Flygt" and "Netzch" have the highest search volumes based on this Moz Pro chart. When making analyses for search terms from Google Search Console I found a couple important issues. The company site analysed got views and clicks with themes "laserlinjaus, moottorin linjaus and pumpunlinjaus" even if it did not contain enough content for these themes.

Another important theme is "pumppaamot" and "pumput ja pumppaamot", which need their own content and landing page in the company´s website.

Search terms "pumpun mitoitus" and "pumpun rakenne" are used by customers who make searches in Google as seen in Figure 23. It tells that customers need more information about industry pumps. This content may help to get more customers on site and serve better existing customers.

Kyselyt	Klikkau	Näyttökerrat	Klikkausprosent	Sijainti
[illegible]		266	33,46 %	3,9
[illegible]		53	33,96 %	1
[illegible]		18	33,33 %	1,1
[illegible]		111	4,5 %	8,4
[illegible]		65	4,62 %	8,3
[illegible]		48	4,17 %	19
[illegible]		84	2,38 %	8,6
[illegible]		13	15,38 %	67
laserlinjaus		18	11,11 %	7,9
[illegible]		113	0,88 %	6,9
[illegible]		17	5,88 %	8,7
[illegible]		23	4,35 %	10
[illegible]		3	33,33 %	27
[illegible]		6	16,67 %	5,8
[illegible]		6	0A %	31
pumput ja pumppaamot		3	0A %	47
[illegible]		19	0A %	31
[illegible]		50	0A %	7,2
keskipakopumpun rakenne		1	0A %	45
[illegible]		1	0A %	9
[illegible]		1	0A %	5
[illegible]		10	0A %	9,5
[illegible]		38	0A %	6,6
[illegible]		1	0A %	70
[illegible]		4	0A %	31
moottorin linjaus		6	0A %	14
[illegible]		1	0A %	7
[illegible]		1	0A %	20
[illegible]		122	0A %	9,5
[illegible]		11	0A %	13
[illegible]		7	0A %	11
[illegible]		1	0A %	26
pumpunlinjaus		5	0A %	5,6
[illegible]		31	0A %	10
[illegible]		1	0A %	49
[illegible]		4	0A %	8,5
[illegible]		1	0A %	50
[illegible]		10	0A %	28
[illegible]		3	0A %	40
grundfos pumpun mitoitus		1	0A %	21
[illegible]		4	0A %	30
[illegible]		3	0A %	11
[illegible]		1	0A %	32
[illegible]		1	0A %	31
[illegible]		1	0A %	1
[illegible]		6	0A %	8,5
[illegible]		1	0A %	9
[illegible]		2	0A %	11
[illegible]		1	0A %	39
pumpun kytkimen linjaus		3	0A %	9,7

Figure 23: Important keywords which do not have a good landing page

Figure 23 tells about content and keywords, which need their own landing pages and

more content in company website. It is important to get good ad position with these terms. These new contents have made for company site in this project.

5.3 Technical Optimization and Using Metadata

Important metadata fields and other SEO elements were made with Joomla SEO Extensions like ARTIO JoomSEF, SEO Boss, Sitemap Generator and JCE Editor. Figure 24 shows the joomla! components and layout.
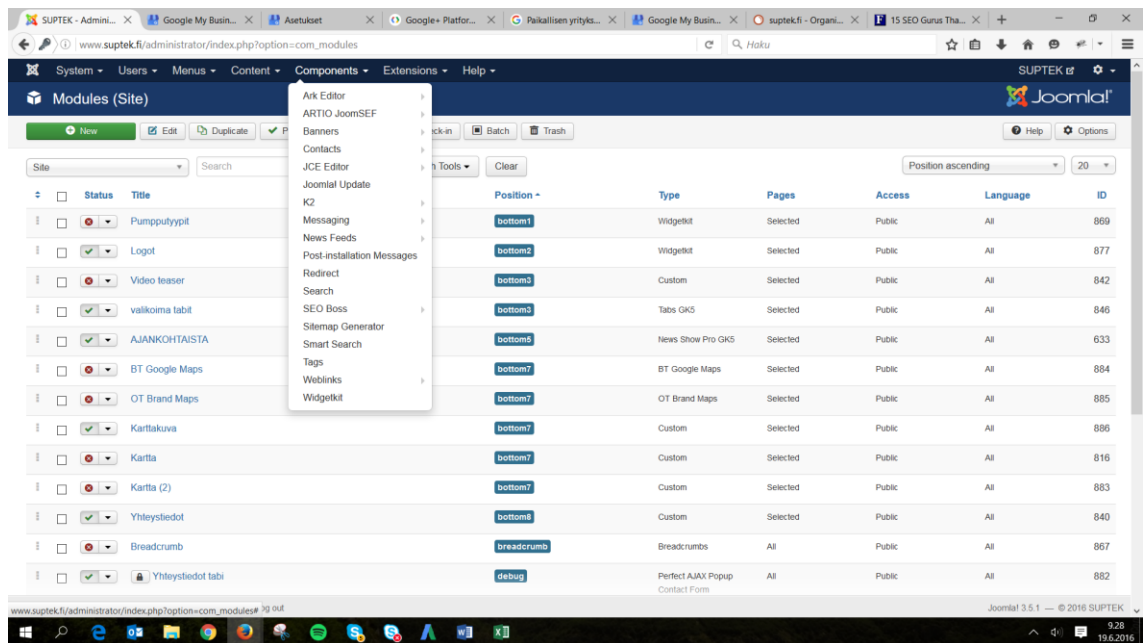
Figure 24: Joomla! Components and Layout

Metadata fields were quite easy to fill with SEO Boss extension. For making all the changes in a documented and controlled way, a table in Microsoft Excel was made and all the data was filled in there first. After that the filled fields were copied to Joomla SEO Boss extension. Table 1 shows the example how to fill all the important metadata fields first in Excel file and install all at once on the website.

Table 1.   Meta Data filling file in Excel-format.

Sivun URL	Meta Title Tag (50-60 merkkiä)	merkkimä	Meta Description (150-160 merkkiä)	merkkimäi	Meta Keyword	H1	merkkimäärä
suptek.fi	Teollisuuden pumppuhuolto ja pumppumyynti - Suptek Oy	53	Teollisuuden pumppuhuolto ja pumppumyynti. Uppopumput, epäkeskoruuvipumput, pumppujen varaosat, automaatio ja sähkötyöt pumppuihin - Suptek Oy	142	pumppujen varaosat, teollisuuspumput, uppopumput, epäkeskoruuvipumput, ruuvipumput, keskipakopumput, annostelupumput, letkupumput, sivukanavapumput, potkuripumput, maseraattorit ja monijaksopumput. Allweiler, Flygt, Grundfos, Lowara, Prominent. Suptek, Suomen pumpputekniikka.	Teollisuuden pumppuhuolto ja pumppumyynti - Suptek Oy	53
http://suptek.fi/uppopumput/valikoima/uppopumpu	Uppopumput - Grundfos, Flygt, Lowara, ABS / Sulzer, Grindex ja Homa	67	Uppopumppu huolto, myynti ja varaosat. Edustamiamme merkkejä Grundfos, Flygt sekä Lowara. Huollamme myös ABS / Sulzer, Grindex ja Homa - Suptek Oy	146	varaosat. Edustamiamme merkkejä Grundfos, Flygt sekä Lowara. Huollamme myös ABS / Sulzer, Grindex ja Homa. Suptek Oy	Uppopumppu huolto, myynti ja varaosat - Suptek Oy	49
Paineenkorotus- ja syöttövesipumput	Paineenkorotuspumput ja syöttövesipumput – huolto, myynti ja varaosat	70	Paineenkorotuspumput ja syöttövesipumput - Tarjoamme paineenkorotus sekä monijaksopumppuihin huollon, myynnin, mitoituksen sekä varaosat - Suptek Oy	148	syöttövesipumput - Tarjoamme paineenkorotus sekä monijaksopumppuihin huollon, myynnin, mitoituksen sekä varaosat - Suptek Oy	Paineenkorotuspumput ja syöttövesipumput – Suptek Oy	53
http://suptek.fi/keskipako/valikoima/keskipakopump	Keskipakopumput - Keskipakopumppu huolto, varaosat, laserlinjaus	64	Keskipakopumppu huolto, varaosat, laserlinjaukset ja uudet pumput, kuten moottori ja taajuusmuuttaja suoraan pumpussa kiinni oleva Grundfos NBE - Suptek Oy	155	Keskipakopumppu huolto, varaosat, laserlinjaukset ja uudet pumput, kuten moottori ja taajuusmuuttaja suoraan pumpussa kiinni oleva Grundfos NBE - Suptek Oy	Keskipakopumppu huolto, myynti ja varaosat - Suptek Oy	54
Ruuvipumput	Ruuvipumput ja epäkeskoruuvipumput - Allweiler huolto, myynti ja varaosat	73	Ruuvipumput ja epäkeskoruuvipumput - huolto, myynti ja varaosat. Edustamme merkkiä Allweiler. Huollamme ja toimitamme myös varaosia Seepex, Mono ja Netzche pumppuihin.	167	Epäkeskoruuvipumppujen huolto. Nopea, ammattitaitoinen palvelu oli sitten kyseessä huolto, myynti tai varaosien toimitus. Huollamme niin pienet annosteluruuvipumput kuin isot siirto ruuvipumput. Käytämme ALKUPERÄISIÄ valmistajien varaosia. Staattori materiaaleja tarkastamalla nykyisiin materiaaleihin, voidaan saavuttaa 3 kertainen staattori ja roottori kesto. Huollamme ja toimitamme myös varaosia Seepex, Mono ja Netzche pumppuihin.	Ruuvipumput ja epäkeskoruuvipumput huolto, myynti ja varaosat - Suptek Oy	73
Annostelupumput	Annostelupumput - Annostelupumppujen myynti, huolto varaosat ja mitoitus.	73	Annostelupumppujen myynti, huolto varaosat sekä mitoitus. Prominent: Alpha C, Beta, Gamma X, Gamma L, Delta sekä Grundfos Smart Digital: DDC, DDA, DDE	150	Myynti, huolto varaosat sekä mitoitus. Huollossa pumput aina koeajetaan sekä säädetään. Yleisimmin huollettuja pumppuja ovat Prominent: Alpha C, Beta, Gamma X, Gamma L, Delta sekä Grundfos Smart Digital: DDC, DDA, DDE - Suptek Oy	Annostelupumput - myynti, huolto varaosat ja mitoitus - Suptek Oy	65

Sitemap is an important part of SEO. SEO bots read this sitemap file and scroll site. The sitemap for the company site was made with Sitemap generator and downloaded to the company's site. Figure 25 shows an example of sitemap generated with Sitemap Generator.

```xml
<?xml version="1.0" encoding="utf-8"?>
<!--Created using XmlSitemapGenerator.org - Free HTML, RSS and
XML sitemap generator-->
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.sitemaps.org/schemas/sitemap/0.9
http://www.sitemaps.org/schemas/sitemap/0.9/sitemap.xsd">
  <url>
    <loc>http://suptek.fi/</loc>
  </url>
  <url>
    <loc>http://suptek.fi/component/k2/item/332-jaelleenmyynti-
ja-huoltosopimus-prominent-tuotemerkin-kanssa</loc>
  </url>
  <url>
    <loc>http://suptek.fi/ruuvipumput/valikoima/ruuvipumput</loc>
  </url>
  <url>
    <loc>
http://suptek.fi/keskipako/valikoima/keskipakopumput</loc>
  </url>
  <url>
    <loc>http://suptek.fi/your-profile/forgot-password</loc>
  </url>
  <url>
    <loc>http://suptek.fi/your-profile/forgot-username</loc>
  </url>
  <url>
    <loc>http://suptek.fi/component/k2/item/326-jaelleenmyynti-
ja-huoltosopimus-flygt-lowara-ja-vogen-pumpen</loc>
```

Figure 25: Example of sitemap from Sitemap Generator

Figure 26 illustrates how Google Search Console and Webmaster Tools see the Sitemaps.
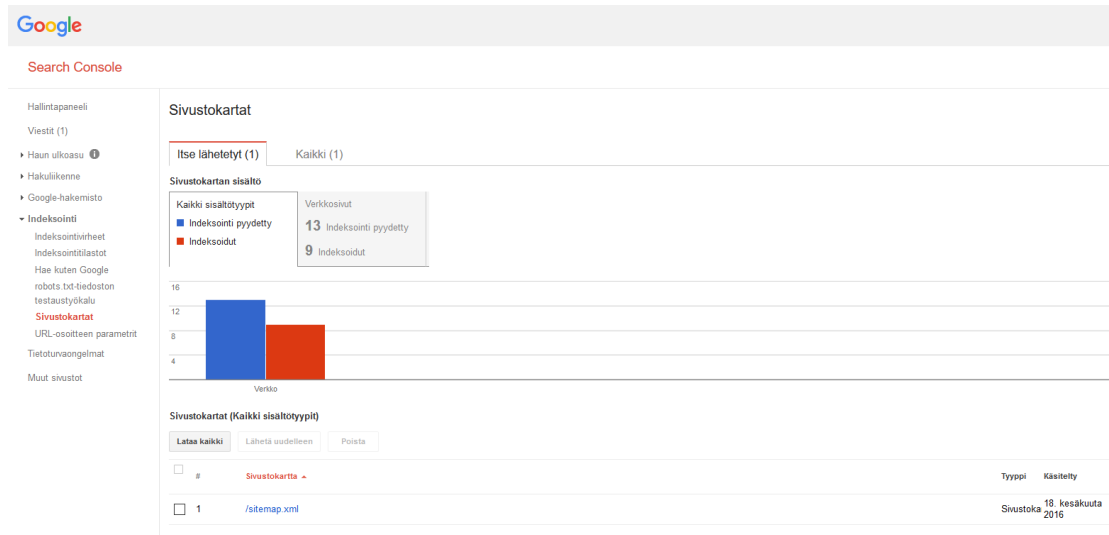

Figure 26: Google Search Console Sitemaps page

It is important to test the sitemap with Google Search Console tools. It tells how the sitemap is seen by bots, and can make an indexing request to Google search engine robots indexed all the pages which allowed it. In Search Console it is also possible to test robot.txt file and check that it works as wanted. Google bots has made indexing for Company site on 18.6.2016 in Figure 26.

Technical recommendations for company´s Joomla! based website are shown in Appendix 2.

SEF URLs and URL Rewriting was activated in Joomla! Global Configuration set first with the "Search engine friendly URLs" and "Use URL Rewriting" options. After couple tests this option rejected, because it causes problems to make links from new pages and articles to menu or other pages. It will be better to control web URLs than use automatic option at this case.

Another solution, which works better, was decreasing website loading time by doing three main things: Leveraging browser caching, enabling Gzip compression and compressing your images. (Atkinson 2012)

5.4 Semantic Content Optimization (On-Page Optimization)

Semantic content optimization and On-page SEO includes all the operations on website and new content creating to website. Product and service webpages should contain enough comprehensive (text, image, pdf white papers, video) information about products and services. New content was created and planned to be added regularly to website. At the moment the company´s website pages do not have enough text content. So more content needs to be created. Approximately 500 words per page is minimum. It is good to have also pages with 1000 words per page. (Enge et al 2015)

Important keywords for a page need to be included in the header, sub header, ingress text and conclusion part of text 2-4 times per page if there is 500 words or more on page. (Enge et al 2015)

For business use the company´s own blog posts, posts on third party sites (pump factory etc.), videos, images, pdf files, presentations, infographics, research data might be relevant content.

5.5 Usability and Conversion Optimization

The company website has a good looking layout on first page, but it does not tell all the information needed. As Steve Krug says in his book "Don't Make Me Think - A Common Sense Approach to Web Usability" user Always need to know three things:

1. What content and topic the page and site is about.
2. Where in the site hierarchy you are.
3. What you can do next (Call to Action) (Krug 2006:59,74)

Figure 27 shows the draft of the company's site.
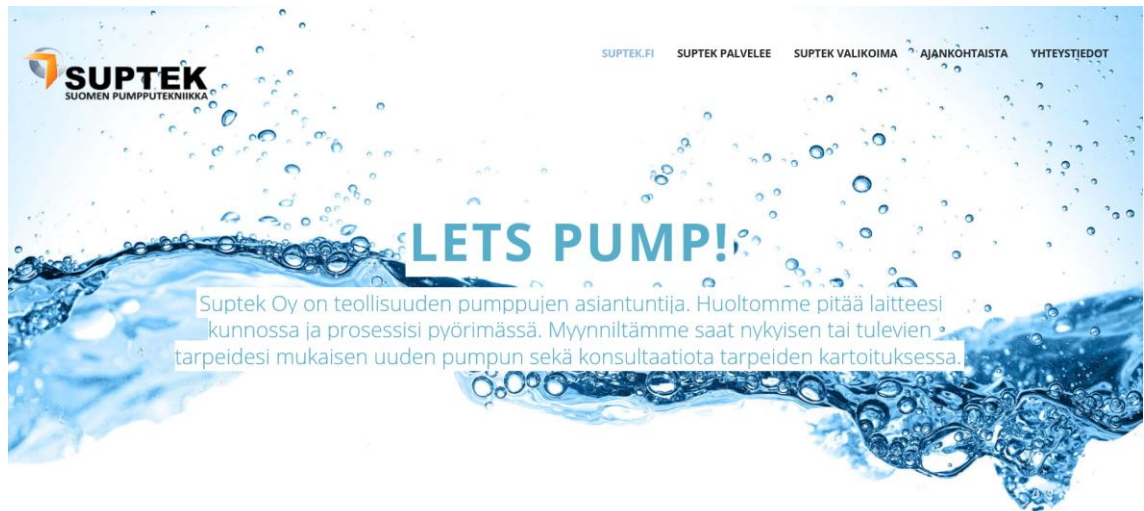
Figure 27: Rough draft of the company's site.

The New compact layout with contact form and Call to Action element of Company´s website can be seen in Figure 28 below.
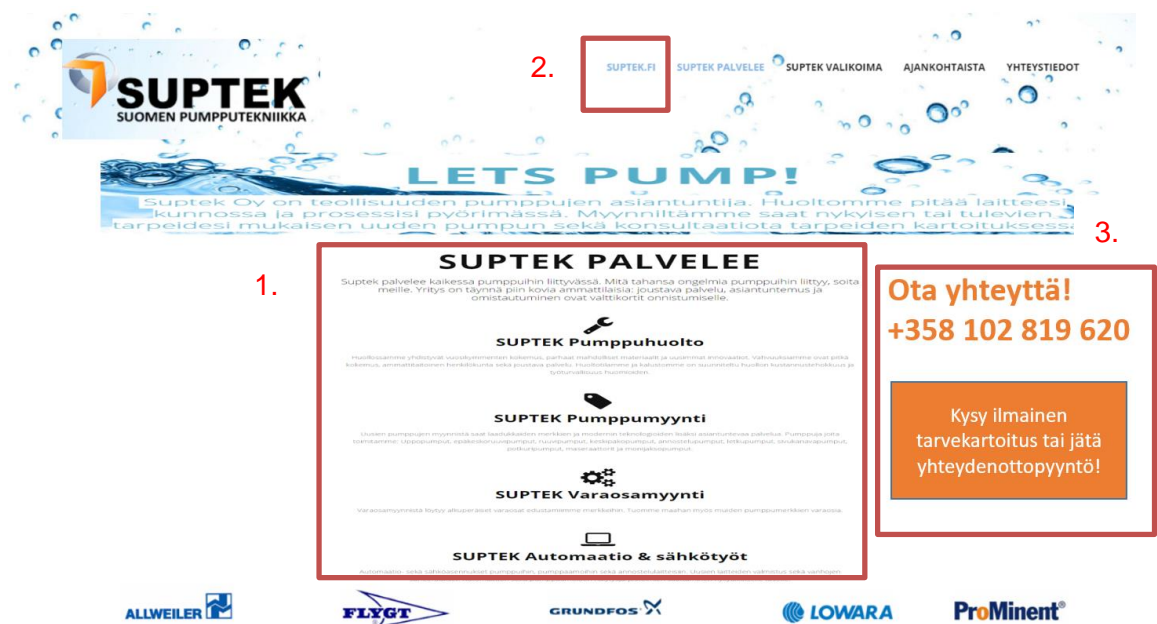
Figure 28: Rough draft of the company's site with new elements.

Draft of company's site shows with the information of what content and topic the page and site is about (1). Where in the site hierarchy you are (2)? What you can do next (Call to Action) (3).

After modifications the website looked as follows (Figure 29).

Figure 29: The company's site with new elements

In every page, there is a possibility to check the company's phone number or to fill in a contact form. Another possibility is to order a brochure to email. Also by giving the email address, the company can send messages to a customer. It gives the possibility to contact potential customers and build up a potential customer register. The layout of the site is still waiting for some improvements, as seen in Figure 29. Figure 30 shows the company website´s "Load a brochure" -element where customer need to give email address to get the brochure.
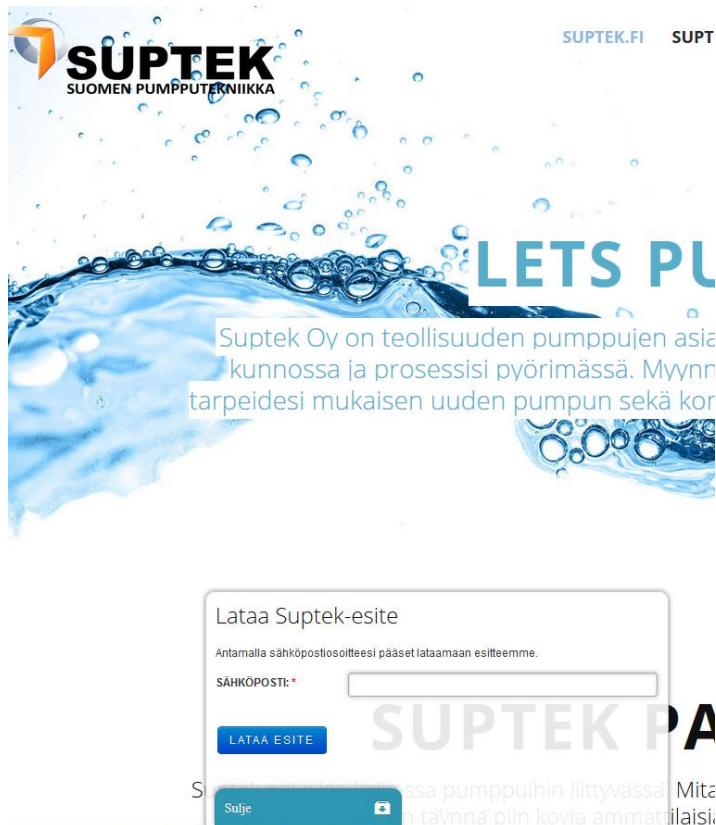
Figure 30: The company website´s "Load a brochure" element.

Usability of website is important and need to test after modifications are complete. Like told in theory part every page needs to be logically connection together and own function. Sometimes is better have less pages with better content than all the pages in own pages. This is difficult because for SEO is important to make page with all the relevant topics.

5.6   Off-Page Optimization and Link Building

Links or backlinks from relevant sources to the company's site are important. Industry pumps manufacturers such as Grundfors (fi.grundfors.com/), Allweiler (http://www.all-weiler.de/) or Lowara (http://lowara.com/) are great backlinks to have, if possible.

Kauppalehti.fi, Taloussanomat.fi and Asiakastieto.fi have good quality links for any company site, also as seen from Moz Pro.

Also fairs and events are good backlinks for site. One example is Alihankintamessut (http://www.amt.fi) as seen in Figure 31.

Figure 31: Suptek inbound link from Alihankintamessut 2015.

Good link sources are also Vesiopas (http://vesiopas.kuntatekniikka.fi/vesiopas/uimahal-lit-ja-kylpylat) or VVY Vesilaitosyhdistys (http://vvy.fi/jasenet/yhteistoimintajasenet).

One possible way to get backlinks is to send Press releases about the company's news to local newspapers and industry magazines. It may give important backlinks for the company site. It is important to remember that links should be relevant to the content. It is better to have a few high quality links than lots of ads and bad quality backlinks.

5.7   Social Media

Social media visibility for a pump field industry company is challenging. Probably LinkedIn is the best option to get visibility and reach right customers for B2B company on industry field. It is good to share the company's blog content also in LinkedIn and make advertising in LinkedIn. Advertising will not get SEO visibility, but new traffic to site is always good. Google+ account is good for SEO. It is important to have and get better authority and trust estimate from Google.

5.8 Local SEO

Google My Business is important to have for local SEO purposes as also for customers. It is possible to share the company's locations and visiting hours easily and get better visibility and more space from the right side in SERP (Search engine result page) as seen in Figure 32.
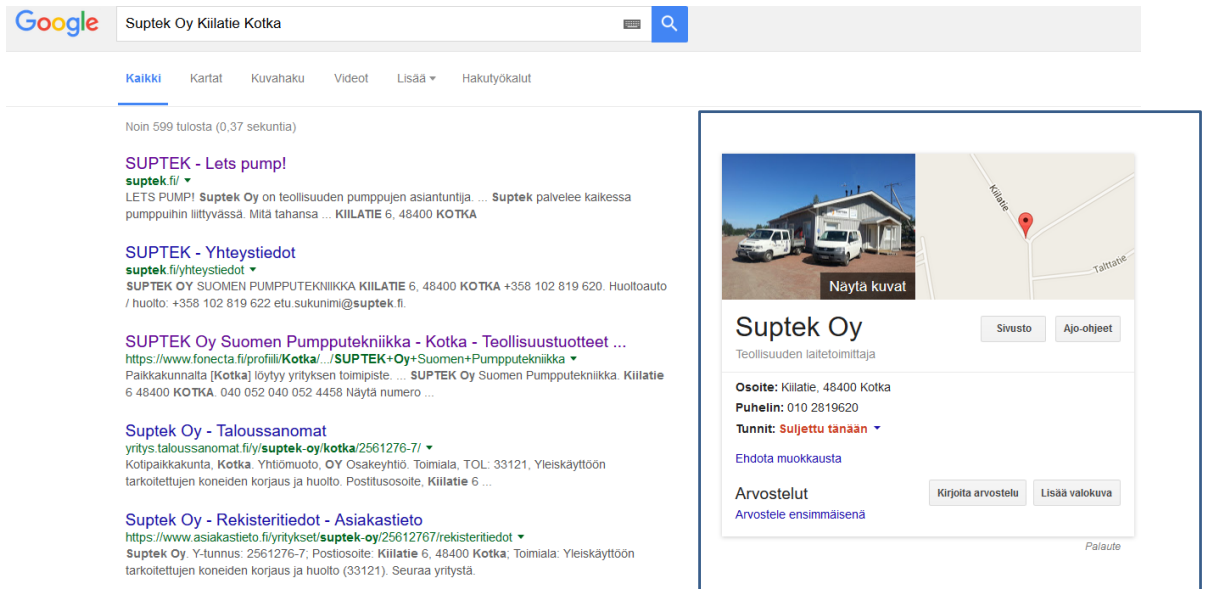
Figure 32: Search result page with Google My Business element.

To make local SEO optimization "Contact Us" page is needed with all the company information like company name, address and phone numbers.

5.9 Mobile SEO

Company website on Joomla works responsively and mobile friendly. The website works well with mobile phones and all the content is viewable with mobile phone. There is still a project going with mobile layout, as can be seen in Figure 33, the sites layout still needs editing.

Figure 33: Suptek website screenshot in Apple iPhone 5

When testing with Pingdom Website Speed Test the company site loads in 2,04 seconds and gets quite a good grade 70/100, as seen in Figure 34. (Pingdom.com 2016)
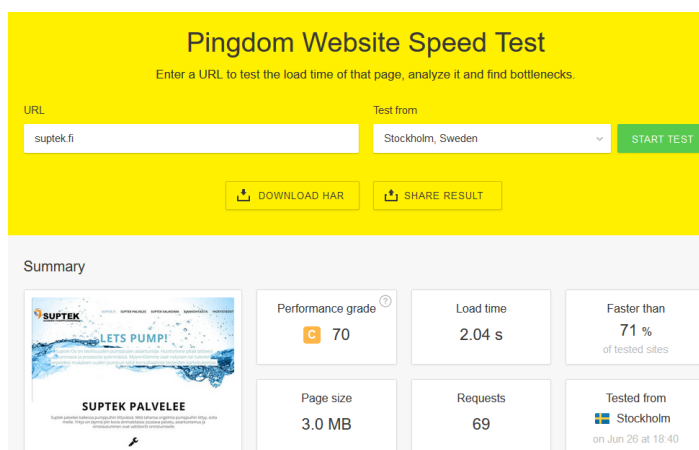
Figure 34: Pingdom Website Speed Test results 2016. (Pingdom.com 2016)

Like Pingdom Website Speedtest shows load time of site is 2 seconds which is quite fast. There is still something to optimize because page size is only 3,0Mb. This is important, because Google appreciate faster websites with better Google Ranks.

6   Overview of Findings - SEO Results Analysis

There are three strategic goals for search engine optimization, as mentioned in Chapter 2.3.1: Better visibility, Website traffic and High return on investment. There are more metrics under these main themes. Unfortunately, it takes time to see all Search Engine Optimization results. After one month, it is possible to see some metrics, when SEO spiders have crawled the pages. Getting all the effects of SEO takes more time. In this case the results are preliminary, because the new site was launched just a month ago.

6.1   Better Visibility

Better visibility contains a couple important metrics. The number of indexed web pages tells how many pages are found by a search engine. Another important metric is Search engine ranking, which tells how high those sites ranked in search engine. Figure 35 and 36 show the company's visibility by Moz in May 2015 and July 2016 respectively.
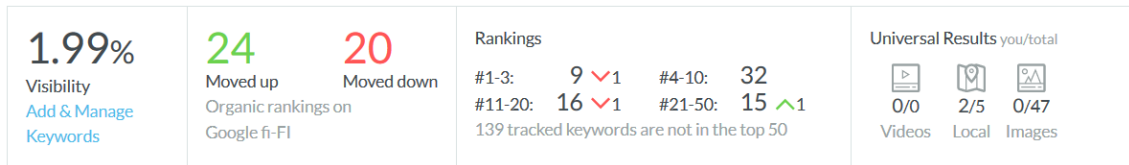
Figure 35: Company´s visibility by Moz in May 2016.
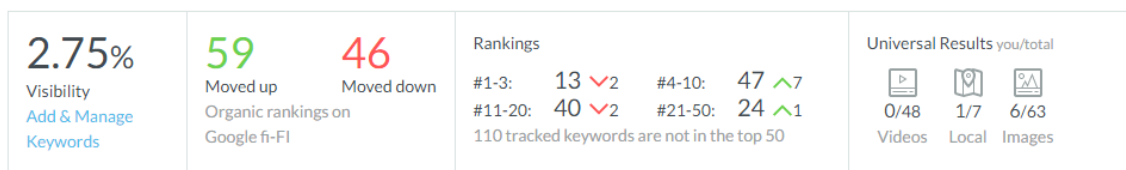
Figure 36: Company´s visibility by Moz in July 2016.

Figure 37 shows the Company´s website desktop and mobile visibility in April 2016 and in July 2016. Visibility has risen from April to July 2016.
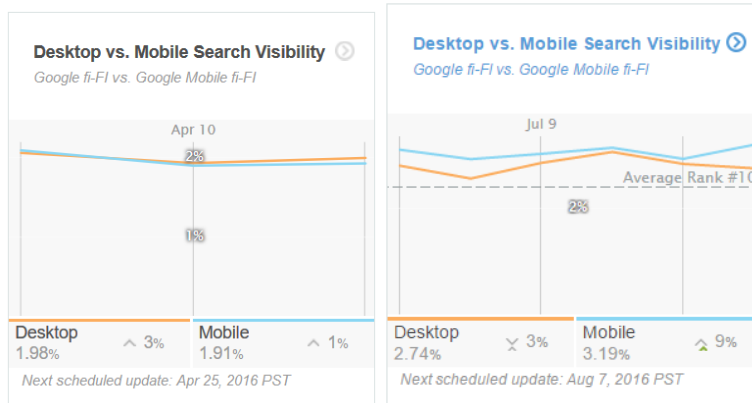
Figure 37: Company´s website desktop and mobile visibility in April 2016 and in July 2016.

As seen in the charts, the company´s desktop search visibility has risen from 1,98% to 2,74% and Mobile search visibility from 1,91% to 3,19%.

6.1.1   Indexed Web Pages

Company's visibility in Google has increased from 1,99% to 2,75% in two months. The indexed pages number has increased from 14 to 46 pages from 28th of June in 2015 to 19th of June in 2016 (see Figure 38).
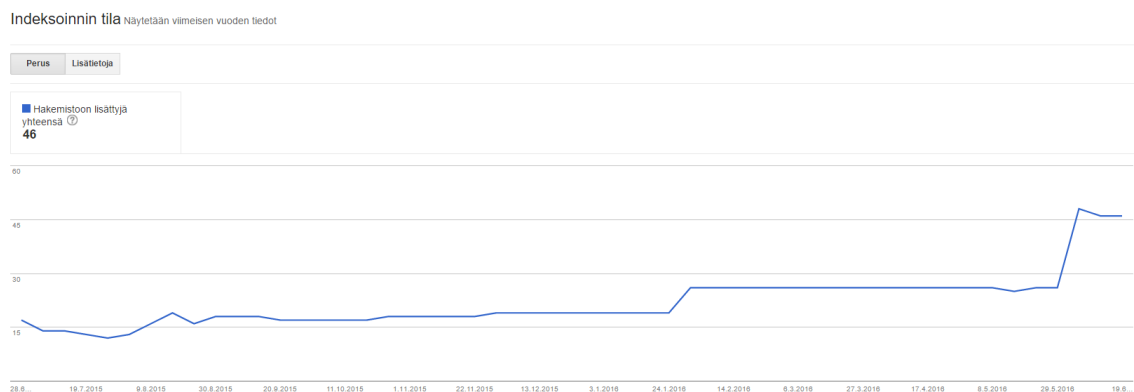

Figure 38: Google Search Console data. Timescale is one year (from 28th of June in 2015 to 19th of June in 2016)

New webpages and content has increased the indexed pages amount. Other important thing is quality of new pages. Longer session duration and decreased bounce rate are good metrics for page quality.

6.1.2   Search Engine Ranking

Tracked keywords search engine ranking has risen in all categories. Rank 1-3 results have risen from 9 keywords to 13. Rank 4-10 has risen from 32 keywords to 47. There are 60 keywords on the first search page in Google, whereas in May, there were 41 keywords on first page (in the 1st -10th positions). See Figure 39 below for details.

Ranking	May 2016	July 2016	Change
#1-3	9	13	4
#4-10	32	47	15
#11-20	16	40	24
#21-50	15	24	9
not in 50	139	110	-29

Figure 39: Keyword rankings comparison

Ranks 11-20 have risen from 16 keywords to 40, and rank 21-50 from 15 keywords to 24. The non-indexed keywords have decreased from 139 to 110.

6.2   Website Traffic

Website traffic and good organic visibility can bring new prospects to a company´s web-site. It is important to get right audience (customers) to the website. In this case the results are preliminary, because the new site was launched just a month ago. Another matter affecting the traffic figures is summertime, which usually is a low season for B2B companies. Figure 40 shows the website traffic before and after launching new website.
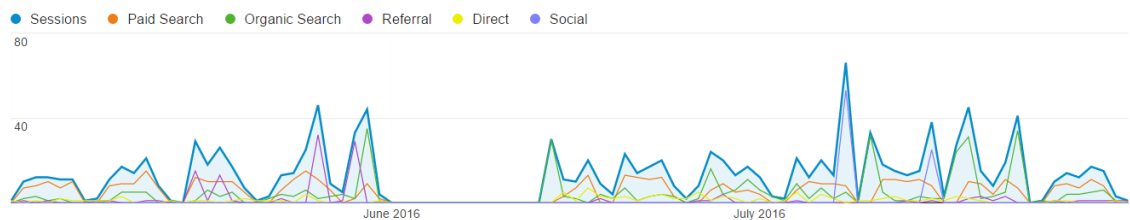
Figure 40: Google Analytics data. Website traffic before and after launching new website.

Amount of organic traffic has increased slightly even July is a low-season for B2B pump industry companies.
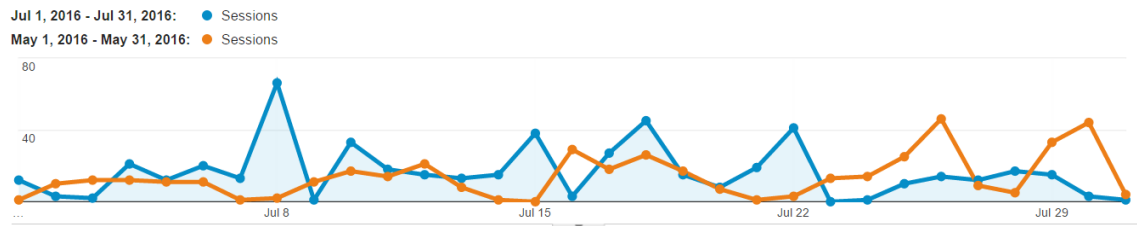

Figure 41: Google Analytics Session data.

The chart in Figure 41 shows that in July there has been slightly more traffic than in May. One month is too short a period to make any decisions about change of quantity of sessions.

6.3   High Return on Investment and KPI Data (Key Performance Indicators)

The first big steps are increasing online visibility and driving targeted traffic to site, as discussed in Chapter 2.3.1. The next step is website traffic performance measuring. The goals are the number of filled contact forms, times of downloading the company´s brochure etc. There is not enough data to analyse these results at the moment. Figure 42 shows the Google Analytics data comparing from May 2016 to July 2016. Sessions, Page views and Session duration has increased. Bounce Rate is the only metrics which has weakened during this time period. Sometimes when all the needed information is on one page the higher Bounce Rate is not a mark about low quality site. Blog texts are good example about this kind of content.
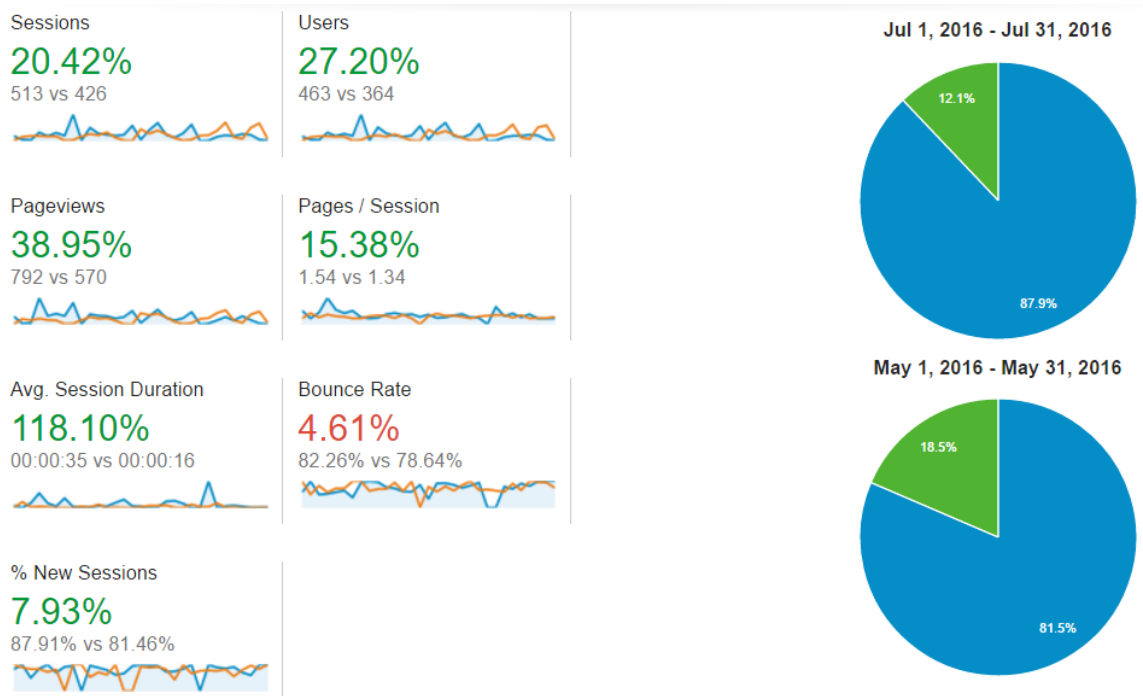
Figure 42: Google Analytics data comparing May 2016 to July 2016

From the new website some metrics can be already seen. Sessions have risen from 426 to 513 (20,42%) and Page views have risen 38,95%. Average Session duration has risen 118,10% and Pages per session has risen 15,38%. Bounce Rate has increased 4,61%, which means that more people have checked just one page before leaving the site. Figure 43 shows the organic search results in July.

Figure 43: Organic search results in July 2016

Organic traffic search results in Figure 43 tell that the traffic has increased from May to July 2016 and that it is also more qualified. Figure 44 illustrates the visits from organic search where Google is the most common search engine.

Visits from Organic Search

The number of organic search visits each week.
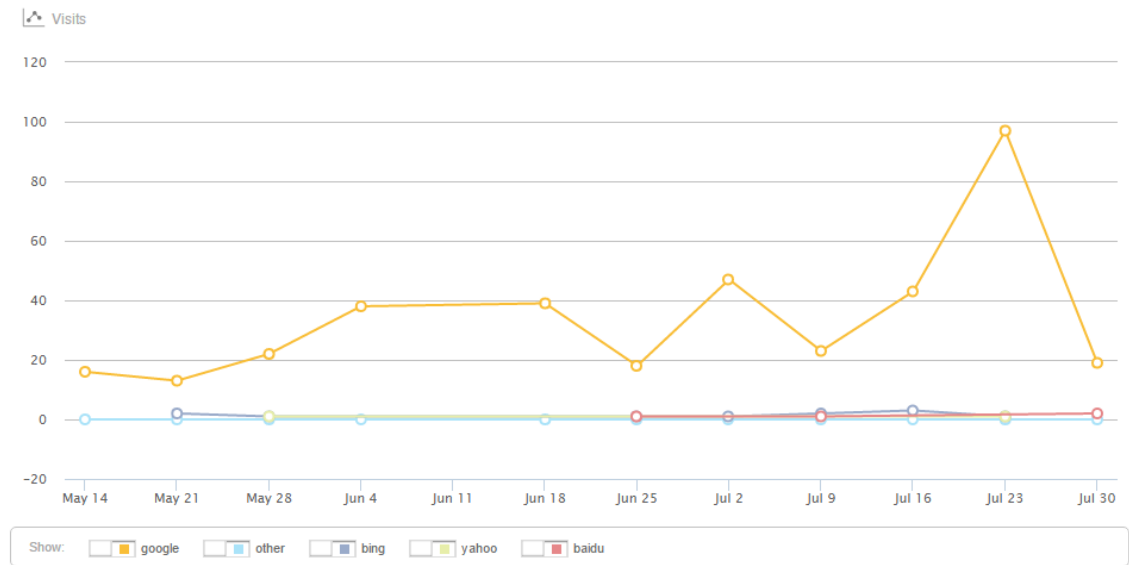
Figure 44: Visits from organic search from May to July 2016

Visits from organic search tell that Google is the most common search engine in Finland, as told in the theory part. There are a couple of visits to site from Bing, Yahoo and Baidu as seen in Figure 44. Figure 45 shows the search visibility change from June 2016 to July 2016.

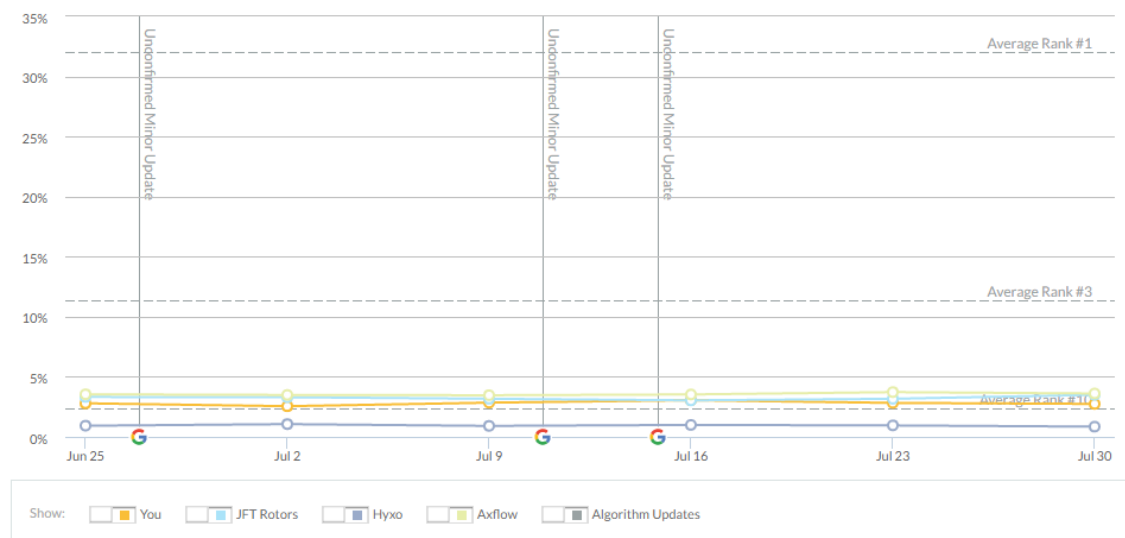**Search Visibility**

Estimated percentage of clicks based on your keyword rankings [i]

Figure 45: Company's and competitors Search Visibility in July

Although the results are better, there is still a lot of work to do with search visibility. Competitors are almost at the same level of search visibility with selected keywords, as seen in Figure 45.

Figure 46 shows that the "Ruuvipumppu huolto" keyword is on rank #3 and it was even on rank #2 which is better than competitor ranks.

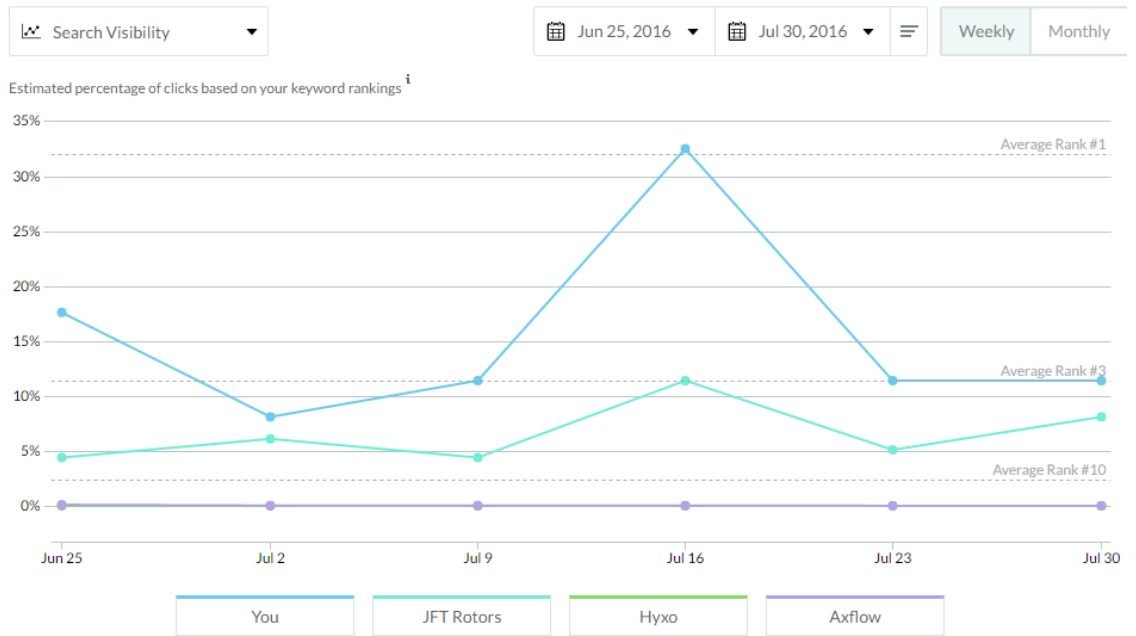| Keyword ↓ ☑ Show Labels	Location ⁱ ↓	You ↑	⌄⌃↓	JFT Rotors ↓	⌄⌃↓	Hyxo ↓	⌄⌃↓	Axflow ↓	⌄⌃↓
Mono pumppuhuolto	National	#3		#1		#51+		#51+	
ruuvipumppu huolto	National	#3	⌄1	#4	⌃2	#51+		#43	⌄14
alpha annostelupumppu	National	#3 ⊠	⌄1	#51+ ⊠		#51+ ⊠		#51+ ⊠	
ruuvipumppu varaosat	National	#4	⌄1	#1		#51+		#9	

Figure 46: "Ruuvipumppu huolto" keyword on rank #3.

One important keyword is "ruuvipumppu huolto". As seen in Figure 46 the company re-searched has the current ranking position #3. Figure 47 shows the tracked keywords Rank for the landing page Suptek.fi.

Figure 47: Landing Page Suptek.fi with tracked keywords

The Landing Pages report shows which tracked keywords are likely to send organic traffic to the company's page. When checking suptek.fi landing page, it is seen that the company's brand name "Suptek" has the ranking position #1, "Flygt uppopumppuhuolto" has the ranking position #6. A webpage can be optimized for more than one keyword. For different themes it is good to have their own web pages, so that metadata and content optimizing can be done. It is a good to have a greater number of web pages with detailed personal content. Figure 48 shows the Technical SEO Issues on website.
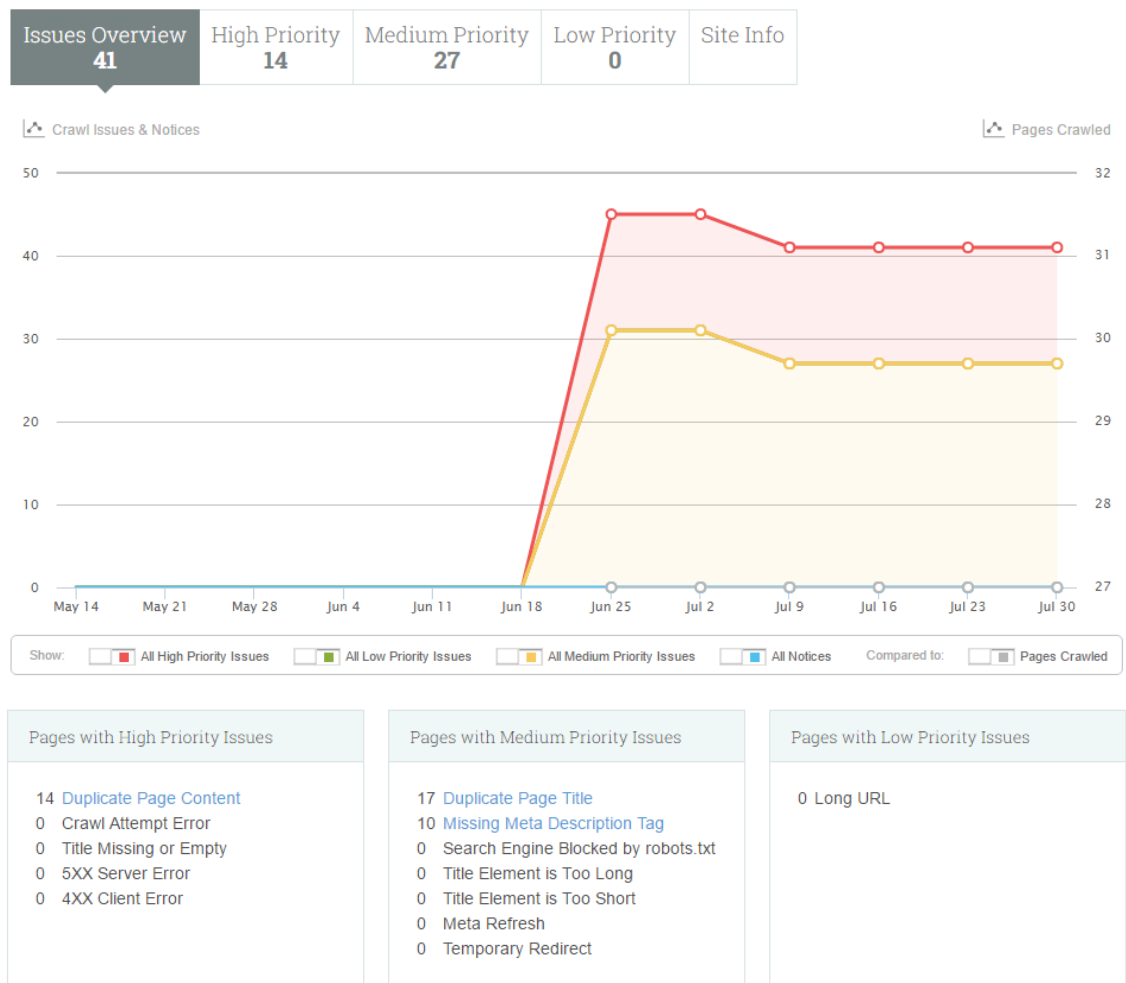

Figure 48: Technical SEO Issues

Although the quality of the site has improved, there is still issues to be fixed. Somehow Joomla! made two versions for each page, which is not good for SEO. This error occurs

on page14, where the page's content has been duplicated. On page 17 the page title has been duplicated. Figures 49 and 50 illustrate the problem like Moz shows it.

Figure 49: Duplicate Page Content

Figure 50: Duplicate Page Title

One thing that still needs to be fixed are ten old blog webpages without Meta Description Tag. All the content has to be fixed all in order to get the best results. One good way to fix this problem is to use Canonicalization (Moz, The Web Developer´s SEO Cheat Sheet 2015). This correction is going on. Figure 51 gives the company´s link metrics comparison to competitor websites.

Compare Your Link Metrics to Your Competitors

Show: Root domain metrics ▾

Metric	suptek.fi	www.axflow.com	www.hyxo.fi	www.jft-rotors.com
〽 External Followed Links	42	1.8k	2k ✓	40
〽 Followed Linking Root Domains	4	265 ✓	40	9
〽 Domain MozRank	3.47	5.25	4.05	6.45 ✓
〽 Domain MozTrust	3.44	5.04 ✓	4.06	3.28
〽 Total External Links	42	1.9k	2k ✓	40
〽 Total Linking Root Domains	4	299 ✓	40	9
〽 Total Links	125	519k ✓	85k	76
Followed vs. NoFollowed Links	90% 10%	98% 2%	100% 0%	100% 0%
Followed Linking Root Domains vs. NoFollowed Linking Root Domains	100% 0%	89% 11%	100% 0%	100% 0%

Figure 51: Link Metrics

Link Metrics comparing to competitors tell that next important moves are to make a network with pump brands and to get more quality links to the site. Using social media is also a good way to get these backlinks. A LinkedIn profile for the company is the way to do this.

7   Discussion and Conclusions

After making the Search Engine Optimization changes, the results of the study are pre-
sented and discussed keeping in mind the context of the study and the earlier literature,
it can be said that positive changes can be achieved by these methods.

The sight of the effects of search engine optimization takes time and quick profits are not
attainable. This frame of reference in mind, it can be said that the results are promising
for the company website visibility.

Search engine optimization is a process which has to be noticed especially when making
content, layout or any other technical maintenance for a website. Google´s goal is to
serve customers with better website content and more relevant search results. Google
has increased the content importance in search algorithm. That is why nowadays content
is one main theme in search engine optimizing also. Another perspective for same theme
is website usability. Right content is not useful, if customers do not find it or cannot use
it right.

In Finland it is much easier to make search engine optimization that in the USA or other
English speaking countries. We have our own language and just five million people to
use it, so there is much more space in the Internet in Finnish than in other languages'
search results. Still SEO must be made right to get visibility in a search engine.

The company in question wanted higher visibility on organic search with critical business
keywords. The goal is to sell pumps and pumps maintenance, so it is important to get
visibility when potential customers look for information about industry pumps, pumps
maintenance, services and spare parts.

The most important keywords were found using keyword research. Company´s Desktop
search visibility has risen from 1,98% to 2,74% and Mobile search visibility from 1,91%
to 3,19% in two months. Indexed pages' number has increased from 14 to 46 pages.

Tracked keywords search engine ranking has risen in all categories. Rank 1-3 results
have risen from 9 keywords to 13. Rank 4-10 has risen from 32 keywords to 47. There
are 60 keywords on first search page in Google, when in May there were 41 keywords
on first page (1-10 positions).

SEO strategy implementing is still going on and the results presented here are after one month. This frame of reference in mind, it can be said that the results are promising for the company website visibility.

It is possible to get a significant position in the pump industry's search visibility in Finland with the organized SEO, content and marketing strategy. SEO is not just something what webmasters do. It is everywhere. Content, marketing material, business data, blog texts, pictures, website layout, business partners, customers, people who like the content and make backlinks to it include in SEO. Everything has a connection to SEO. SEO strategy is a road map for the future, how a website usability will improve, the content gives answers for the customers and the website gets visibility from first search result page.

The study indicates that in Finland with the Finnish language it is much easier to get good ranks for keywords than in English speaking countries such as United Kingdom or USA. Here in Finland the search volumes are lower. Short one or two words including keyword combinations get easier search visibility in Finnish. The reason is lower competition than in English speaking countries. As a conclusion, return on investment for SEO operations is still high on many business sectors e.g. industry pumps in Finland. The limit is the quantity of right audience. As far as the companies in the industry pumps sector do not make digital visibility operations there is plenty of space to grow business.

The company studied here started using Joomla! Content management system in the implementation phase. Joomla! was a good choice for the company´s website and positive impact is seen already after one month. There is still issues to fix, such as canonical tags for some pages and some layout modifications.

Technical optimization, Semantic content optimization (On-page optimization), Usability and Off-page optimization (links etc.) were made to the company's website.

New content pages were made for the important content and keywords. New content e.g. text, images, video, pdf files and so on were made and planned to the site. The strategy for incoming links (backlinks) was compiled and website usability, contact forms, contact information, and mobile-friendly were made.

When analysing the results, search engine visibility has increased with all product and service terms as was the objective. Strategic goals; better visibility, increase of website traffic and high return on investment and key performance indicators have shown the first marks of realizing.

7.1   Recommendations for Company

Google changes its algorithms all the time, but it is important to know what Google´s goal is. Google wants to serve better content to customers and relevant search results for search queries. So it is obvious that unique high quality content is important for Google. People use Internet more and more with mobile devices, so it is important to have content which is mobile friendly. User experience is an important element of search engine optimization.

High authority and trust are important elements to get search engine visibility. It is important to use the brand, get high quality backlinks and make good quality outgoing links and good quality content for readers. Good quality backlinks indicate how high quality the site is. Using reviews and other extensions gives more interactions with customers and better authority and trust. Keywords are important to use in page URL, title, anchor text links and h1 heading.

Google does not use social media indicators in determining how useful the site is, but it might be in the future algorithm updates. Nowadays the website gets more visitors if it becomes popular in social media and that is an indicator which Google takes into account.

With local service for customers it is possible to get extra local SEO visibility with Google My Business, Google+ or Google Maps.

Choosing right metrics and KPIs to measure things makes the business better. It is not that important to have all the KPIs than have just the right or a couple, which indicate the business status and give the information for decision making.

Details in Search engine optimizing are important, but it is also important not just stop on that level. It is easy to find more and more information about SEO or the business and not to make any progress with a project or goals. So what is important, is optimizing the

site just that well that it beats the competitors, ells more products and grows the business.

7.2 Suggestions for Further Development

Search engine optimization is a popular topic in Internet, but search algorithm change all the time. Up to date literature is difficult to find and all the material in Internet tells many different truths about search engine optimization. It is not always easy to find trusted material. It is important to follow news from the United States but one must remember that Finland is a little different also in search engines, because our own language.

Social search, better multimedia indexation, Javascript and AJAX-based content and localization in search will take a bigger part of future search engine optimization and there are many topics to research.

8 Summary

The main goal of this Master Thesis was to define search engine visibility requirements for a pump industry company in Finland, make a search engine optimization strategy, make changes to the company´s website and to prove the effect of the changes. The company's focus is to maintenance and sell industry pumps, so search queries in the industry pumps and pump maintenance area were important.

The sight of the effects of search engine optimization takes time and quick profits are not attainable. This frame of reference in mind, it can be said that the results are promising for the company website visibility.

Literature and the Internet have a lot of different strategies and instructions for search engine optimization. In the present study the focus was on the newest literature and the world´s best professionals to get their SEO knowledge and latest information. It was great to get answers from Eric Enge, Aaron Wall and Rand Fishkin as well as support to SEO from Jyri Sihvo, Pekko Parikka and Mika Mäki.

The SEO strategy plan for the company includes steps how to get increase visibility in search engines, guidelines for the company´s content and marketing strategy and web analytics methods and key performance indicators for the company.

In the implementation phase the company´s website was transferred from Wordpress to Joomla! content management system, because of better manageability of website. Google Webmaster Tools and Tag Manager implementations and keyword research were next steps. Technical optimization, Semantic content optimization (On-page opti-mization), Usability and Off-page optimization (Links etc.) were made to the company's website and also new content pages were built for the important content and keywords.

New content pages were made for the important content and keywords. New content such as text, images, video, pdf files and so on were made and planned to site. A strategy for incoming links (backlinks) was created and website usability, contact forms, contact information, and mobile-friendly were made.

When analysing the results, search engine visibility has increased with all product and service terms as was the original aim. Strategic goals: better visibility, increase of website

traffic and high return on investment and key performance indicators have shown the first marks to realizing.

The company´s search visibility has risen and in two months and indexed pages' number has increased and tracked keywords search engine ranking has risen in all categories.

Optimizing is a continuing process and t a lot of continuous operations can be done. It is important to remember that it is enough to optimize the site just that well that it beats the competitors' site, sells more products and grows the business. So search engine optimization is part of this continuous business process.

The complexity of search will continue to grow. The next questions to solve in search engine optimization might be related to the continuous rapid expansion of mobile search and voice search, semantic search with direct answers for more complicated questions.

Social search, better multimedia indexation, Javascript and AJAX-based content and localization in search will have a more significant role in the future search engine optimization.

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Appendix 1: Letter, Survey to SEO Experts

Dear xxx,

How are you? I find your name from list of world most talented SEO experts.

My name is Miika Kivistö and I am Finnish SEM/SEO Planner and student in Helsinki University of applied sciences, information Technology. I´m making my Master Thesis on Search engine optimization. The topic is how to make SEO strategy for a medium size Finnish pump industry company.

I would like to ask you couple questions about Search engine optimization. I would be grateful if you have couple minutes to answer the questions.

Questions

1. What new SEO rules you have founded from Google´s algorithm?
2. Your opinion of question what is the future of SEO?
3. What are the most important SEO things for B2B company?
4. Your opinion how to make efficiency SEO strategy for a company?
5. Your opinion how to make strategy how many landing page I need?
6. Your opinion how to use incoming links, good content and social media channels to make better SEO?
7. Which tools and methods you prefer for keyword searching?
8. How you have used local SEO?
9. Do you know some link to good blogs or articles about SEO?

Best Regards,

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http://www.forbes.com/sites/johnrampton/2014/12/15/15-seo-gurus-that-you-should-know-for-2015/#44acb4621df4

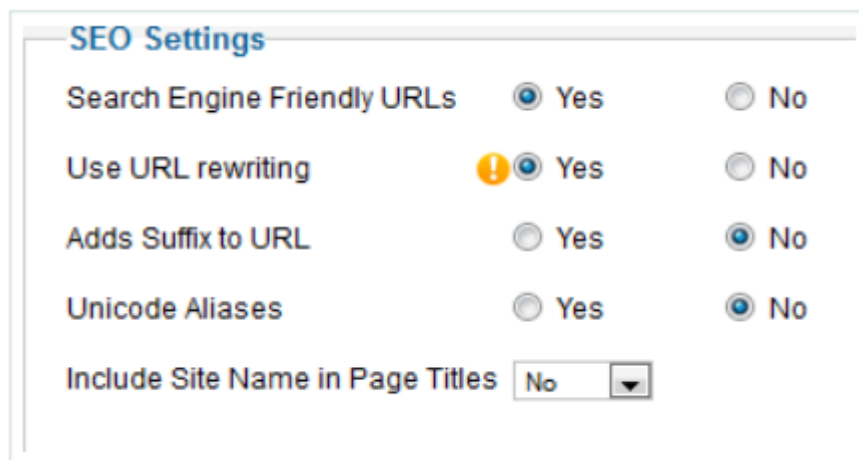Appendix 2: Technical recommendations for company´s Joomla! based website

It is recommended to get your Joomla! site set up on an Apache server with mod_rewrite installed. Follow the following guidelines.

Rename htaccess.txt to .htaccess

It´s important to enable URL rewriting to make those URLs a whole lot more attractive than they start out, you are going to need to rename the htaccess.txt file to .htaccess - which is the version used by Joomla! and mod_rewrite.

Enable SEF URLs and URL Rewriting

In Joomla! Global Configuration set the "Search engine friendly URLs" and "Use URL Rewriting" options to "Yes". It´s important because Search engine friendly URL is the setting that removes all the dynamically generated stuff from URL and replaced it with the alias of the menu item that you´re using on the page. URL Rewriting is the setting that removes the /index.php/ from the URL. For this to be enabled must have mod_rewrite enabled and must have a .htaccess file.

SEO Settings for Joomla!

Remove "/images/" from your Robots.txt file

In the automatically generated robots.txt file that is created on installation, Joomla! includes a disallow rule for the images directory, instructing the search engines not to search or index your images folder.

Choose www. or non-www. and Redirect

Joomla! unlike Wordpress, doesn't automatically redirect your website to either the www. or non-www. version. This obviously poses a canonical problem, which you need to correct manually via your .htaccess file.

To redirect from non-www. to www. add the following code to your .htaccess file:

```
RewriteEngine On
RewriteCond %{HTTP_HOST} !^www\.
RewriteRule ^(.*)$ http://www.%{HTTP_HOST}/$1 [R=301,L]
```

Alternatively, you can redirect to non-www. by adding this code instead:

```
RewriteEngine On
RewriteCond %{HTTP_HOST} www.yourwebsitehere.com
RewriteRule (.*) http://yourwebsitehere.com/$1 [R=301,L]
```

Be Consistent When Linking Internally

When it comes to CMS websites (especially Joomla! ones) duplicate content can become a bit of a problem. The key to combating this is to ensure that you link consistently to internal content.

Great links to either the www. or non-www. version that you chose above, only linking to pages using a trailing slash or no trailing slash, or pages with a suffix (.html) or no suffix. Only link to a single version of a page, ever.

Remember, it's not duplicate content if nothing is linking to it for Google to find it.

You can't really control the way others link to you, but you can set an example. If people are linking to you incorrectly, you can add further redirect rules to 301 redirect to the correct links.

Website speed

In Joomla! You can speed things up significantly by doing three main things: Leveraging browser caching, enabling Gzip compression and compressing your images. (Atkinson 2012)