Master's Thesis

Digitalising the Brand Resonance Model Through AI & SEO

Investigating the Effect of Utilising Artificial Intelligence Through SEO, for Creating Brand Resonance

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Preface

This is a final master's thesis of the 4th semester in the MSc program Marketing at Aalborg University Business School.

The main theme for this thesis has been chosen based on interests within the subject of AI and SEO. This thesis combines these subjects with marketing in a way that is rarely seen in the academic world today. We came across branding, AI, and SEO through previous work during internships in 3. semester.

We would like to express gratitude towards our supervisor, Waheed Akbar Bhatti, for his knowledge and advice regarding this thesis.

Aalborg, Denmark, 01.06.2022

Statements

By signing this document, both group members justify having participated equally in the thesis. Hence, both members are collectively responsible for the content of the thesis.

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Declaration of authorship

We, Mithushan Vimalenthiran and Søren Vahl Brøndum, solemnly declare that this study is written solely by us. The reference style used in this thesis is APA 7th. Moreover, the objectives are taken indirectly or directly from the sources.

Abstract

Keywords: Branding, Brand Resonance, Brand Awareness, Brand Differentiation, Artificial Intelligence, Search Engine Optimisation, Digitalisation, User Experience, User Behaviour

Digitalisation is an ever-growing aspect of business. Though some businesses are negatively affected by this change, many opportunities also arise for companies to exploit. To investigate the possibilities, the writers looked towards the brand resonance model to see the possibility of digitalising the model. Furthermore, Artificial Intelligence was investigated, to understand the possibilities within AI in a digitalised business world today. Most internet users stumble upon AI when browsing the internet. That is because the world's leading search engine, Google Search, uses AI.

There is much competition between companies and brands to be noticed by online users in the digital world. User experience design and user behaviour have become a top priority for brands to create and maintain the affection and awareness of the users. This user experience design is often closely connected to the world of SEO. Search engine optimisation is a practice that has become popular in recent years and involves the manipulation of websites. This is done both to appear at the top of Google Search but also to optimise the website and make it easy to manage by all users.

This thesis is made within the pragmatist paradigm, as it enables the writers to work with qualitative and quantitative methods during the analysis. This thesis utilises interviews to gain first-hand data from three SEO experts for the qualitative analysis. The interviewees were indirectly asked about the elements of the resonance model. The data is used for comparative analysis.

The quantitative analysis compared the implementations that the interviewees recommended with data from companies that had previously had these types of SEO implemented on their websites. This was done as a validation of their answers. Most of their recommendations could be validated. Based on these validations, a SEO-influenced Brand Resonance Model was created.

Lastly, the findings and how they matched with the brand resonance model were discussed. Most elements of the model contain separate SEO implementations that can be used to optimise

these elements. Judgement could not be validated as there was a lack of data from the implementations that were recommended for this element.

This thesis can be used as a framework for easy communication between SEO specialists and marketing managers in the cooperation between brands and SEO agencies.

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1: Introduction

"The impacts of digitization include large and varied impacts on the economy as a whole, extraordinary opportunities, and significant challenges for businesses. Given digitization's characteristics and impacts, digitalization is no longer a choice but an imperative; for all businesses across all industries and regions the motto is digitalize or drown."

(Schreckling & Steiger, 2016, p. 3)

Digitalisation has become a key topic in the business world. It is crucial to keep up with the new digital trends to survive. Blockbuster was once a very popular and leading company regarding movie rental. However, they were ignorant of digital innovation and did not adapt. This eventually led to their demise, and they went bankrupt in 2010 (Ash, 2020). According to Schreckling & Steiger, digitalisation is no longer a choice, but rather essential.

At the time, the introduction of Netflix, first as a movie rental service and later as a streaming service, met user needs more efficiently than Blockbuster. People did not want to go to a video rental store when they could order it from home. Furthermore, already in 2000, Netflix introduced personalised user recommendations based on a simple AI they had created (Chong, 2020). This introduction of Artificial Intelligence (AI) as a digitalisation and innovation technique led them to become a leading streaming service throughout the 2000s and 2010s.

Digitalisation should be viewed as an opportunity for companies. There are many opportunities to improve the company and gain a competitive advantage or differentiate from the competitors within digitalisation. Some exemplifications of digital opportunities could be AI and Search Engine Optimisation (SEO).

"It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable."

(McCarthy, 2007, p. 2)

AI and SEO have become synonyms for digitalising businesses today. However, as McCarthy notes, AI is a broad term with many meanings, features, and applications. One of the most convoluted AI's today, is the driver behind the world's biggest search engine, Google. This AI provides users with the inquired search results based on both the search query and the users' profile.

Both AI and SEO can be utilised in unison to increase brand resonance, however, many businesses might not be utilising these concepts optimally. One concept found relevant was the brand resonance model by Keller (2001). The writers seek to understand the possibility of digitalising the brand resonance model with the help of SEO.

Through the years, the internet has become better at optimising for user behaviour. However, a side effect of this is that users have become 'picky' when browsing the web. Through SEO, brands can optimise their website; both to be seen by the user, but also to meet their needs while communicating their brand.

2: Field of Investigation

The following section contains the field of investigation of this thesis. This section will review the wonderings of the writers and the main research question that derive from these wonderings. The research question will be explained along with the sub-questions. Davenport et al. said: "*In the future, artificial intelligence (AI) is likely to substantially change both marketing strategies and customer behaviors*." (Davenport T. , Guha, Grewal, & Bressgott, 2020, p. 24). This made the writers think about which aspects of marketing have already changed over the last few years. Another aspect that was found interesting was the brand resonance model by (Keller K. , 2001).

Kevin Keller, the man behind the theory of customer-based brand equity, invented the brand resonance model in 2001 (Keller K. , 2001). While this was only just over 20 years ago, digital inventions have advanced enormously. In June of 2001, only 7.9% of the world's population had access to the internet – today, that number is close to 70% (Internet world stats, 2022). Due to this leap in technological advancements and availability, digitalising businesses has become an integral part of business growth and revenue creation. The brand resonance model has not considered this technological leap, and therefore its usability may be limited in today's market.

Furthermore, new technological inventions within artificial intelligence have created a whole new aspect to the modern firm. AI allows firms to improve and reimagine their processes both externally towards the customer as well as internally within the business. This inspired the writers to the following problem formulation:

Is it possible to apply the brand resonance model to an AI influenced digitalised business today?

This problem formulation aims to find whether the brand resonance model can be applied to digitalised businesses directly, or whether the model needs to be reimagined in order to better fit into today's marketing society.

In order to investigate this problem formulation, some elaborating sub-questions should be formulated. These sub-questions should clarify the aim of the study as well as aid in answering the main problem formulation.

What kind of AI is used by most digitalised businesses today?

This question will be answered through theories and definitions of digitalisation to investigate the digital environment in which businesses operate in today. Every digitalised business should have an online presence for potential customers to gain knowledge of the business and contribute to the business' value proposition. This online presence should be optimised for user interaction, and therefore, theories of User Interface Design are investigated. The concept of AI is vast and should be clarified and defined. This research will describe the different types of AI and how they are used in business practices. Lastly, the AI used by most digitalised businesses today will be described in length, along with theories of utilising this technology.

How can business apply SEO in order to improve their brand resonance?

This sub-question aims to investigate SEO which is a new digital trend that applies AI. Once the possibilities with SEO are identified, this thesis will investigate the possibility of applying the newfound digital trends to a digitalised brand to increase brand resonance.

To which extend can the SEO influenced brand resonance model be applied to a digitalised business?

Once the brand resonance model has been tested and validated in accordance with expert knowledge and real-world data in the analysis, its applicability will be discussed. Can the model be applied directly, or should it be altered to better adapt to a digital business environment?

2.1: Intended contributions

The intended contribution of this thesis is to give the reader a clear understanding of digitalisation and what opportunities there are as well as the implications. Digitalisation provides the business world with a variety of opportunities, some of which are good for differentiation, and others are essential for survival.

A second intended contribution is to hopefully bridge a communication gap between the marketing and sales departments, and SEO specialists. Many SEO specialists do not have an education within marketing or sales, and as such, they might lack the knowledge of marketing models such as the brand resonance model. Hopefully, this thesis contributes to a common understanding of how SEO implementations can be categorised from a marketing perspective.

3: Literature review

The following sections contain the theories and models used in this thesis. This section aims to give the reader a clear understanding of the theories and models used in this thesis.

3.1: The brand resonance model

The relationship that exists between product and customers and how well they can relate to each other is what the brand resonance refers to. The brand resonance model is essential as it is the foundation for the new digitally influenced brand resonance model, which this thesis aims to create. This section focuses on understanding the brand resonance model and its different stages and elements of it. The brand resonance model originates from Keller, who constructed the customer-based brand equity framework (Keller K. L., 2020).

Keller (2020) recognises that the brand resonance model illustrates the relationship between brand and customers. To intrigue customers, the brand must frequently expose themself, to stay top-of-mind. This could shorten their customer journey in the buying process. The resonance refers to the customer's psychological connection with a brand and the ability to recall a specific brand in different situations, such as when purchasing or recommending a brand, which can be done through marketing.

The purpose of the brand resonance model is not solely for existing products but can also be used to launch a new product. Furthermore, it can be applied effectively for declining

companies who struggle with their branding. Keller (2020) points out that brand resonance can reform how customers think and feel towards a brand. It is about generating positive feelings, thoughts, beliefs, opinions, and perceptions of the brand.

The brand resonance model is divided into overall stages, representing different brand development stages. The first stage, which is salience, is about brand equity. The next stage is imagery and performance, which are about the brand meaning, then comes judgments and feelings, which is about the brand response, and at last brand resonance, which is about sustaining resonance. The figure below illustrates the brand resonance model to achieve a graphic overview, and the elements will be further explained below.

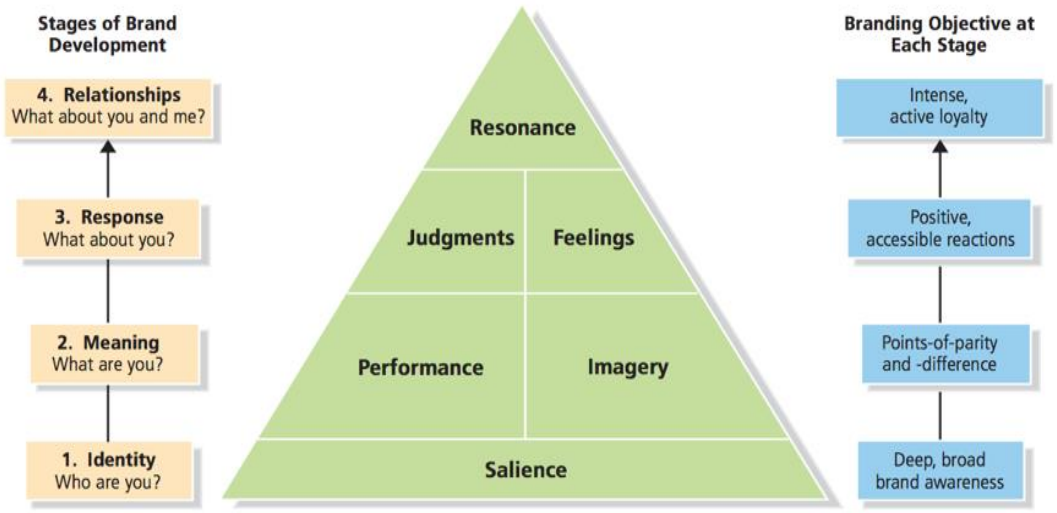

Figure 1 - Brand Resonance Model - (Keller K. L, 2020)

As seen in figure 1, the first element of the brand resonance model is salience. Salience refers to the awareness of the brand and staying top-of-mind in the customers. It is also about their ability to recognise and recall a brand. Salience is all about brands transparency towards the customers. In order to achieve salience in this stage, brand awareness is the main thing to consider. As illustrated in figure 1, this is the 'who are you' stage of the model. Furthermore, no answer is better than good and powerful brand awareness for this stage. To answer, 'who are you' and increase brand awareness, you need to clarify your brand in every detail. Then sustain a solid focus on content and become innovative with communication (Keller K. L., 2020).

The second stage of the model contains two elements: performance and imagery. This element of brand performance focuses on the customer's actual needs, also referred to as the customers' functional needs. At this stage, the marketers could conduct research on the performance of their products. It will also be possible for the marketers to investigate whether they fulfil the customers' needs. The importance of the performance might differ depending on the company's sales strategy. Overall, this level focus on performance and how favourably the brand meets the need of the customers. The element performance is on the second stage of the model, also the 'what are you' stage.

According to Keller, a differentiation analysis is a way to measure efficiency and performance, compared to competitors. The objective of this performance stage is differentiation, which can be done in several ways, such as showcasing positive brand value, adding brand personas, forging memorable experiences, and portraying important brand stories. It supports answering the 'what are you' stage when creating differentiation. At the same time, one must remember that performance is one of two in the second stage of brand resonance (Keller K. L., 2020).

The second element in this stage is imagery. This element focus on the perception customers has of a given brand. Expressed differently, it is about what image a product creates and leaves behind in the mind of the customers. *Brand imagery* could be defined as the customers' social needs and something psychological in the mind of customers. This element focuses on the imagery customers reflect upon when buying, reflecting on their social status the customer gain of the brand. Imagery is not necessarily always about the logo of a given brand but often is. However, it is more essential to consider imagery as the brand image and customer perception.

The brand image involves customer's different emotions toward a brand. Achieving imagery is possible through different means, such as deeper customer analysis. By understanding the audience and their needs, you can better appeal to them. This analysis should divide the audience into segments based on their social needs and target each segment individually and differently hence the marketing would be more effective.

Moving up to the third stage of the model, it also contains two elements, judgment and feelings. The fourth element in the resonance model of Keller is judgment. Based on the previous element performance, the customers would have formed an understanding of the product. In other words, they will judge the product. The judgment will come from the performance and imagery in the previous stage. The customer will make one final judgment of the brand based on that, which entails considering the product's quality, superiority, and credibility.

So, overall judgment is a collection of thoughts by customers and verdicts the customer makes regarding a brand's service or product. Judgment is about the brand's ability to outperform other competitive brands and what the customer feels about the product's ability and quality. The judgment is a part of the 'what about you' stage. To achieve better brand judgment, one must once again look below in the resonance model. Because to influence the judgment positively, the company must find new ways to uniquely amplify your product's quality and performance.

The second element in the third stage is feelings in the resonance model of Keller. This element refers to the customer's feedback and response towards a brand. Feelings refer to how a brand influences the feelings of the customers. Customer's feelings are precious as they provide an exceptional insight for the company, however, they can be difficult to achieve an insight into truly. Feelings concerns the magnitude of attachment a customer feels towards a brand. There are several ways to increase the attachment of the customers through branding. However, Keller finds one particular method to stand out from others: brand experience; offering great brand experience constructs memories, relationships, and positive emotions. There are, of course, different ways for your brand to offer a compelling experience. For example, by offering a much more personalised experience, creating more emotional content, and targeting the different senses.

The sixth and final element of Keller's resonance model is resonance. This element focuses on whether the customer is in sync with the brand. Keller further explains that there are two sorts of resonance for a brand: activity and intensity. The intensity is about extending the psychological bond between brand and customer. The activity concerns the repurchase rate and to what extent the customers seek out our brand and information regarding it. As resonance is the top of the model, it also indicates that each element below is essential for resonance. Each element below is crucial for building a solid foundation between the customer and the brand. As explained, to achieve resonance, one must go through all the elements below and improve them.

The resonance model has four stages. The first stage, salience links up with the question 'who are you?'. Answering this question is a fundamental element in the development of brand awareness within the correct customer segment. The next question is 'what are you?', which is tied to performance and imagery. This focuses on the compatibility and incomparability of the brand. The third question is 'what about you?' which is linked with judgment and feelings. This is about the available positive reactions of customers towards the brand. Lastly comes 'what

about you and me?' which is tied to resonance. This is about the loyalty at the top, where the brand and customers are synchronising.

3.2: Digitalisation

This thesis digs into the topic of digitalisation as this is an ever-growing aspect of business nowadays. Digitalisation is essential for survival and understanding from a marketing perspective. Digitalisation is constantly changing, which is a natural evolution with time. Digitalisation is a broad term and has many different definitions. According to Ross there is also digitisation, which: "[…] *involves standardizing business processes and is associated with cost cutting and operational excellence"* (2017, p. 1). This should not be confused with digitalisation.

One of the many definitions can be derived from Parida, who defines digitalisation as such: "*Digitalization is a fundamental disruptive force triggered by Fourth Industrial Revolution and Internet of Things, which has changed the way we approach and think about business processes and activities*" (2018, p. 23). Parida clearly states that digitalisation changes the way to do business process and activities, as it is an everchanging subject that keeps revolutionising. This thesis works with digitalisation and not digitisation. To understand the difference Parviainen et al. defines digitisation as "*the action or process of digitizing; the conversion of analogue data (esp. in later use images, video, and text) into digital form."* (2017, p. 64).

As brands do not have to be fully digitised to apply AI to their value chain, it does not make sense to look at the degree of digitisation. Another definition comes from Brennen & Kreiss that digitalisation is: "*the adoption or increase in the use of digital or computer technology by an organisation, industry, country, etc."* (2016, p. 556). In addition, they also argue that digitalisation is the expanded amount of digital data available for companies to use, analysing vital elements of customers and other key performance indicators. The digital data can be used in various ways, such as improving the structure and operation of the company leading to competitive advantage and improved key figures of the company (Brennen & Kreiss, 2016).

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structure and operation of the company leading to competitive advantage and improving key figures of the company (Brennen & Kreiss, 2016).

One other definition of digitalisation comes from Coreynen et al. They define it as *"the increasing use of digital technologies for connecting people, systems, companies, products and services"* (2017, p. 44). This explains why companies must adapt digitalisation into the organisation and their daily operation. Furthermore, Ross discloses the term digital as *"To become digital, leaders must articulate a visionary digital value proposition. This value proposition must reassess how digital technologies and information can enhance an organisation's existing assets and capabilities to create new customer value."* (2017, p. 2). The term digitalisation will be used in this study. That leads this thesis to using already existing digital concept; in this case, Artificial Intelligence and SEO, focusing on being customer-oriented to create more awareness.

Today, firms practice being more customer-oriented than previously when they adopted the old-fashioned firm-oriented practice. The customer is the centre of focus, and their perception of value is put before the company's offering. In this case, the customers also judge the value gained according to Cass & NGO (2011). Therefore, it is up to the company to deliver the expected value for customers. However, the customer-centric approach requires more analysis and data. Therefore, companies must achieve a better understanding of their customers and their needs to modify marketing and sales.

The digital solution is an ever-growing factor in the world, and customers become more accustomed to the digital change and adapt; the companies must adapt to digital change as well in order to increase customer awareness. Therefore, it is essential to understand digitalisation and its main application, which is in focus of this thesis. The definition by Brennen & Kreiss is both simple and accurate. As such, when mentioning digitalisation henceforth in the thesis, this definition is adopted by the writers. As part of the digitalisation, AI and SEO are essential parts of this study and will be thoroughly examined.

3.3: User Interface Design and User Experience

For a user to enjoy browsing a website, some developmental prerequisites must be in place, just as is the case with real life. In 1943, Abraham Maslow published a study in which he proposed a model of four basic human needs that must be met before a person can self-actualise

and derive enjoyment and pleasure from life. This model: the hierarchy of needs (Maslow, 1943), visualises these basic needs.

Every person must cover them to be fulfilled as a human being; first, physiological needs for survival are at the bottom. Next, there is the need to feel and be safe, the need for love and belonging, and the need for esteem from yourself and others. When all these base needs are covered, people can start to live their lives happily and find enjoyment – a thing that is virtually impossible if you constantly fear for your life or have no food or water.

Much like Maslow's hierarchy of needs, where all the base needs must be met to reach the stage where a person can self-actualise, a website needs to meet some base requirements for a user to be able to derive pleasure and enjoyment from interacting with it. Drawing inspiration from Maslow, the UX expert Aarron Walter proposed a hierarchy of user needs (2011)(Figure 2). The website needs to be functionable, reliable, and usable, for a user to find a website pleasurable to interact with.

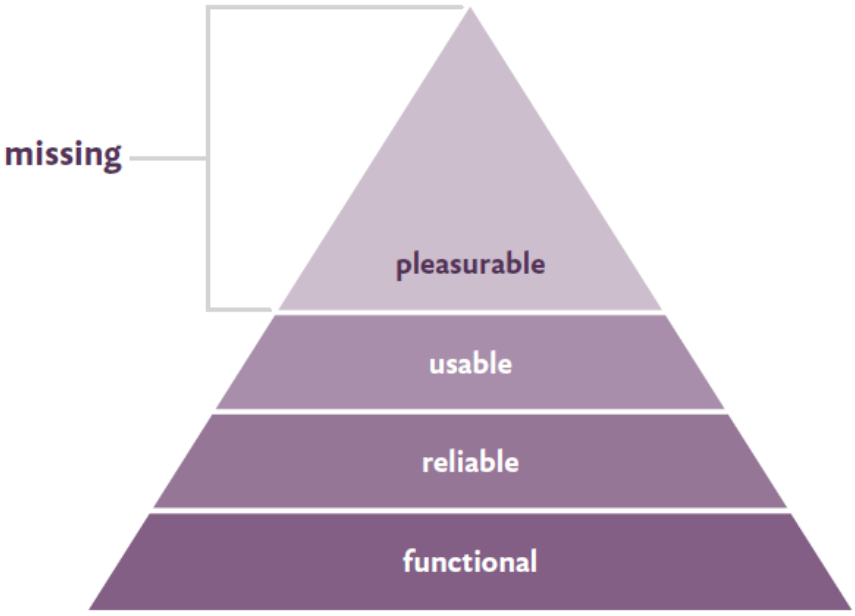

Figure 2 - - Aarron Walters hierarchy of user needs - (Walter, 2011)

A website needs to work to be functional. A web page is not enjoyable if it does not load or constantly crashes. There are some early issues when creating a new website or a new feature for a website. If these issues are not caught and fixed before launch, users may find and experience them, which leads to a lack in the bottom and most fundamental part of the hierarchy of user needs.

A website needs to be functional every time a user uses it, for it to be enjoyable. When SKAT publishes people's annual statements in Denmark, their website becomes overcrowded and quickly crashes if they do not limit the number of users that can enter the site at once. All websites have a maximum capacity that their server can handle, and if this capacity is overextended, the website either crashes or becomes slow and unusable. Low server capacity can often cause a lack in the second stage of the hierarchy of user needs and thereby a bad user experience.

For a website to be usable, it needs to be intuitive, and it should be easy to learn to navigate the site and perform the tasks that the website was intended for. An unintuitive website is often frustrating to interact with. The user might give up on their search before having completed their goal, if it is challenging to navigate the website's menus. Some websites might only be optimised for one device and be challenging to navigate around on other devices. Many older websites are primarily optimised for desktop devices and can be challenging to interact with on mobile devices.

Failing to meet one or more of these three basic user needs makes the user incapable of genuinely finding the website visit pleasurable. The user will become frustrated and have a negative user experience if the website is not functional, reliable, and usable. While this interaction with a website has led to a negative experience for the user, it can also negatively affect the brand behind the website. When people undergo emotional events - both negative and positive, the amygdala, which is the ‘fear centre’ of the brain, releases dopamine, and these interactions are stored in the brain.

The prefrontal cortex stores and remembers this surge of dopamine and the event linked to it. This is a fundamental animalistic survival instinct; if a person eats a berry and becomes sick, this memory will be stored in the brain, so the person does not eat that berry again in the future *(Medina, 2008)*. Following this principle, a user who experiences a negative emotional interaction with a website will have this interaction stored in the brain and remember it for a long time. Tammy Everts *(2012)* has found that slow websites can negatively affect overall brand health, both for brands that users have little to no affinity and brands that a user regard.

3.3.1: Interaction Cost

To a certain extent, whether a page is usable can be inferred by measuring the interaction cost of achieving the goal that creates profit for the website and success for the user. Every interaction that a user has with a website comes with a little cost. This cost can either be in time or cognitive effort (Budiu, 2013). The interaction cost that the user pays when interacting with a website starts as soon as the user has clicked the link that directs them to a web page. These costs come from:

- Waiting for page loads
- Reading
- Scrolling
- Information seeking
- Typing
- Comprehending
- The overall memory load that these costs incur in total.

If a user accesses a website to find and book a train ticket, there are usually a lot of cost-incurring steps that the user must go through to reach the end goal. Finding the start and end station, entering the number of people, deciding if a seat ticket might be necessary, and deciding departure times. First, the user can reach the page where the available trains are shown. Then the user must figure out times of departure, travel time, and price. When the user has finally decided on a specific departure, they must go through the booking and paying process. On top of these steps comes the interaction cost of load times, comprehension, and typing.

The expected benefits should outweigh the expected interaction cost for a page to be usable. Users might give up on their goal and leave the website altogether if the cost becomes higher than the expected benefits.

3.3.2: Principles of User Interface Design

In the hierarchy of user needs, the bottom two levels, functionality and reliability, are pretty basic. A website can be functional or not functional. A website can be reliable, not reliable, or reliable some of the time – and if it is only reliable some of the time, it is not reliable at all. Usability is a much broader concept; a website can be anywhere from minimally usable to the best website in the world. A website on this spectrum primarily depends on the interaction cost

relative to the perceived benefits. Apart from load speed, all cost interactions can be lowered by following the five basic principles of User Interface Design: Scale, Visual Hierarchy, Balance, Contrast, and Gestalt principles (Poulin, 2018), (Lupton, 2008).

The scale principle refers to the relative size of a web page's elements. A significant element is more likely to be noticed than a minor element, and as such, scale infers a sort of hierarchical system on a webpage. A website can benefit by making essential elements bigger than less essential elements. If users search for new shoes on a website, they might encounter a large image of a newly released shoe that the company wants them to see (and buy). It might also be an image for ‘sale’ or product menus sorted by gender or item type. Significant elements are attention gripping and should be used to attract the user's attention to elements that will guide them further on their buying journey.

Much like the principle of scale, the principle of visual hierarchy refers to an inferred hierarchy between elements on a web page. Visual hierarchy, however, is not only apparent through the size of elements. It can refer to the spacing between elements, colour, and placement.

When reading a news article, text elements are generally three or more different sizes. The first thing a reader notice is a headline in a large text size. The headline is largest and used to attract the attention of the reader. Secondly comes the caption in a smaller text size; here, the reader can read all of the most critical information from the article. Last comes the body of the text, which is in a small text size to not grab the reader's unnecessary attention. If the user is interested in the text from the caption, they might want to read the body of the text. There might also be some secondary headings in some longer articles so the reader can quickly find their way to the part of the article that interests them the most. Visual hierarchy can be implemented in an article by the background colour behind the article or its placement among the other articles.

The principle of balance refers to the balance between elements on a webpage. There needs to be a visual balance between the weight of elements on the page, for a webpage to be visually pleasing to users. The balance can be either symmetrical relative to an axis that goes through the middle of the screen or radial outwards from a point somewhere on the screen. The most commonly used balance on websites is symmetrical balance with a vertical line through the middle of the screen.

The principle of contrast refers to the colour contrast between text and the background and the contrast in colour, font, and size between similar and dissimilar elements on a webpage. When

a user is looking at a website, the colour of the page's text elements should have high contrast to the background to be easy to find and read. A bad example of colour contrast can be found on the main page of Aalborg University's website (see Figure 3). Here the white logo has a lousy contrast with the background making it difficult to find and read.

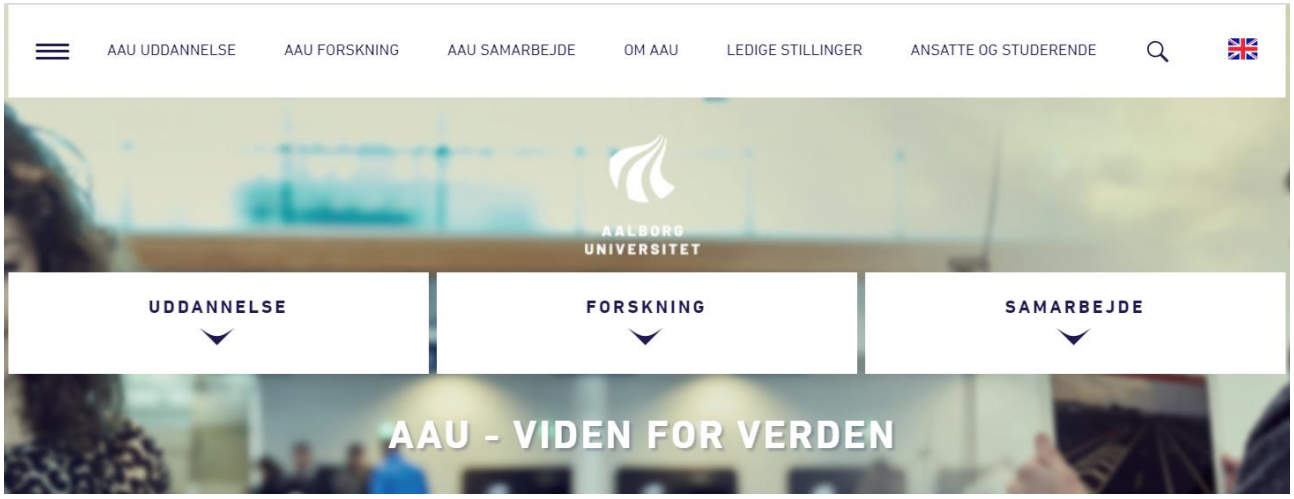

Figure 3 - Aalborg University's website – (Aalborg Universitet – retrieved Feb. 20, 2022)

The *gestalt* principle refers to how humans tend to simplify and organise pictures or elements and create relations where there are no apparent relations. This is done subconsciously by organising parts into a system that transforms elements or lack of elements into a whole picture. This could be based on distance, colour, shape, size, or similarity. This principle contains multiple gestalt principles and can therefore be utilised various ways. For user interface design, proximity is the most important of the principles – people tend to create innate connections between elements that are close to each other.

Following each of these principles can lead to better website usability. However, they can be challenging to comprehend and actualise. Therefore, many people have tried to make them more comprehendible through design guides. Perhaps the most recognised of all is Jakob Nielsen, who created a guide with ten principles based on the five principles mentioned above (Enhancing the explanatory power of usability heuristics, 1994) and later (Nielsen, 10 Usability Heuristics for User Interface Design, 2020). This guide explains ways of best utilising the principles and is still held in high regard by UI developers today.

When Google reviews the accessibility of a website, it does so with people with disabilities in mind (Kearney M. G., 2019). The accessibility guidelines that Google has implemented are based on the proposed web content accessibility guidelines by the World Wide Web Consortium (W3C, 2008). These guidelines for web development are based on visual, physical, and cognitive disabilities that many people suffer from. Among the most important of the guidelines is the importance of clear contrast and gestalt proximity.

3.3.3: Pleasure

Once the degree of usability on a website is high enough that the page is usable, some pleasure can be derived from using it. However, pleasure is not just one thing, and it can be derived in multiple ways. This research will categorise pleasure into two different categories: surface pleasure and deep pleasure. Some degree of pleasure and enjoyment can still be derived from a website if it has some good features, even if a website is only minimally usable, and the interaction cost is higher than the perceived benefits (Fessenden, 2017).

Even if a site is slow and difficult to navigate, it can have a pleasurable layout with fun or aesthetically pleasing animations and beautiful images with a high resolution. Some surface pleasure can still be derived from interacting with the site, even though a user might become frustrated from using it. Other websites might utilise humour, slang, sound, or predictive algorithms to delight the user and redeem their website to a certain extent. However, these types of surface pleasure deriving features will never give the user any deep pleasure or enjoyment of the site is not usable. Still, it is never a bad idea to have a beautifully designed website, assuming it does not compromise the site's utility.

Deep pleasure comes from genuine usability. Once a website is functional, reliable, and usable, the user can navigate it with minimal interaction cost and no frustration-generating factors. When interacting with a highly usable site, users can enter a state of 'flow' and become immersed and undistracted (Csikszentmihalyi, 1990). At this point, the user can complete their intended goal in the shortest possible amount of time and with no distraction, it should be the ultimate goal for any website. Users that have experienced this state of delight on a website are more likely to recommend it to friends (Reichheld, 2003). Furthermore, high website usability on a brand website is linked with higher customer-based brand equity (Mishra, Dash, & Cyr, 2014).

3.4: Artificial Intelligence

Digitalisation contains many different variants of technological evolution, but this thesis focuses on the Artificial intelligence (AI) part of digitalisation. AI is arguably one of the most used digital tools of the digital revolution, the market size of AI is not only enormous but expanding rapidly. According to Statista (Artificial Intelligence (AI), 2021) the market size of AI was $10,1 billion in 2018. This accelerated with a growth of 500% to $51,27 billion in 2022. Furthermore, it is expected to be about $126 billion in 2025. On the contrary, the expansion of the market size can be explained by the funding of AI. The funding of AI has rapidly grown over the years. In 2014 the funding for AI was just below $5 billion. This number multiplied over the years, with funding above $35 billion in 2021. AI can be utilised for many purposes, and each market segment has its market revenue as well. The AI software market had a revenue of $250 billion in 2020. Other less used markets with AI, such as service and hardware, produced $19,7 and $14,2 billion in 2020 (Artificial Intelligence (AI), 2021).

AI is a well-used digital tool nowadays, but what is it exactly? An AI is a machine that can think for itself, also known as machine learning. It allows machines to think like humans and adapt to situations like humans and personalise their experiences towards individuals. The capabilities of AI can match human intelligence, but not only that, it can even surpass the capabilities of human intelligence. AI can collect data on a level humans cannot compete with. Also, AI creates and uses algorithms from which it operates within. Based on algorithms and the data gathered, it will learn the most beneficial outcome in each situation (Ma & Sun, 2020).

One of the often-referred definitions of AI comes from Siau & Yang as they mention "*Artificial intelligence (AI) refers to human intelligence exhibited by machines*" (Siau & Yang, 2017, p. 1). Siau & Yang also further explain that AI contains two classifications: strong and weak AI (Siau & Yang, 2017). Another very commonly used definition comes from Russel & Norvig who define AI as "*intelligence that uses sensors to perceive and effectors to react to the environment*" (Russel & Norvig, 2003, p. 31).

The algorithms are created based on the data the machine encounters. To elaborate further on the data, it can be anything as search history, commonly watched, and other habits of individuals. From a marketing perspective, AI can create personalised content for an individual with the help of algorithms. Although it might seem like AI targets one specific individual, it does not. AI puts individuals into similar groups, which it then targets with the same content

based on data and algorithms. All this happens even before the customer is aware of their needs, the AI can predict the need of the customers (Ma & Sun, 2020).

Another aspect of AI comes from Greengard, who mentions that AI can perform the same job as humans do in the same way (Greengard, 2019). AI has been in gradual development since it was introduced in the 1950s. In the early years, AI was used for character recognition and was a whole new way of using technology. Nevertheless, it is very common presently, but not everyone is aware of it. With technology and digitalisation growing, the capabilities of AI expand as well. Some of the capabilities identified by Greengard is recognition, robotics, processing natural language, analytics tools in real-time, and another intelligent system (Greengard, 2019). In addition, AI can be used to analyse large quantities of data and deliver very specific personalised content for the customers (Metha, Detroja, & Agashe, 2018).

3.4.1: Levels of Artificial Intelligence

As mentioned above, the work that AI can do is vast, but each type of AI related work can be categorised into "levels" of AI according to (Escott, 2017). He recognises the highest level of AI as Artificial Super Intelligence. Then comes Artificial General Intelligence, and at last, the lowest form of AI is Narrow Artificial Intelligence. Starting from the bottom is the Narrow AI, also referred to as the weak AI. AI in this level is very restricted in terms of operations and performance. Narrow AI cannot duplicate human intelligence, but it looks upon human behaviour. Narrow AI mainly consists of voice recognition such as SIRI on iPhone and Alexa.

The next level of AI is Artificial General Intelligence, which is referred to as strong and deep AI. This level of AI provides moderate performance as well as value creation. Artificial General Intelligence is a combination of human behaviour and human intelligence and can act, think, and understand things in a way that humans cannot. Artificial Super Intelligence is one step better than Artificial General intelligence, as it is super strong in value creation and human performance. This level of AI can completely understand human behaviour and human intelligence. It is also able to aggravate the emotions, desires, needs, and beliefs of individual human beings (Escott, 2017). Another study supplementing Escott comes from Haefner et al. as they also find that AI has many different levels of complexity, and the complexity level decides how broad and complex tasks the AI can help with (Haefner, Wincent, Parida, & Gassmann, 2021).

Conick (2017) argues that AI can help a company in multiple areas. This includes marketing as well when reaching customers. AIs can personalise content and target specific customers based on habits, search history, and algorithms. Based on the retrieved data and the algorithm, the AI will learn the needs of the customer in very detailed and target customers individually. Conick clearly states that it is essential to remember that even though the content seems very specific and targeted towards one individual, it is not. AI targets a larger group of people simultaneously, but it might seem very specific for the user. That is also one of the most significant advantages of AI, as it can target a more significant number of customers simultaneously, than humans are normally capable of (Conick, 2017).

According to Escott (2017), there are few levels of AI as mentioned before. However, different sorts of AI can be found within each level according to Davenport et al. (2020). Davenport identifies that AI can be practiced in different industries and content. Some of the AI identified by Davenport is AI in driverless cars, Fashion-related AI, Emotional support AI, online retailing AI, Customer service robots, Customer screening AI, In-car AI, Sales AI Business process AI, Spiritual support AI, Security AI, Retail store AI, and companion robot AI (Davenport T. , Guha, Grewal, & Bressgott, 2020).

Another thorough article written by Toorajipour et at. (2021) they examine different AI techniques through articles available and identify frequently used AI techniques. According to Toorajipour et al., different AI techniques can be used in different situations and at different aspects of a company. They also vary in how comprehensive and structurally complex they are, depending on the type/technique of AI. One of the articles mentioned is Chen et al. (2008) who identified different AI techniques. Chen et al. identify several AI techniques such as rule-based systems, artificial neural networks, genetic algorithms, cellular automata, fuzzy systems, multi-agent systems, swarm intelligence, reinforcement learning, and hybrid systems.

3.4.2: Artificial Neural Network

Through the work of Chen et al. (2008) and Min (2010), Toorajipour et al. (2021) discover that the most frequent AI technique used is an artificial neural network (ANN). A reason why ANN is so widely used is that Google use it in Google Search (Nayak, 2021). According to Guresen & Kayakutlu (2011) there are not many good and clear definition of ANN. However, they refer to one specific definition by Haykin. Haykin defines ANN as a massively parallel combination of simple processing units that can acquire knowledge from the environment through a learning

process and store it in its connections (Haykin, 1999). According to De Bruyn et al. (2020), ANN can solve very predictive and complex tasks. Also, they mention that most AI usage in business areas refers to the deep ANN. Within ANN, De Bruyn et al. have identified the three most commonly used types of ANN. Those are Multi-Layer Perception (MLP), Convolutional Neural Networks (CNN) and Recurrent Neural Network (RNN) (De Bruyn, Viswanathan, Beh, Brock, & Wangenheim, 2020).

MLP is also called the predictive machine, often used for stock price prediction. The MPL is the most straightforward form of a feedforward neural network. MLP consists of multiple layers of neurons. Each of the layers consists of neurons that are connected to the other neurons in the other layers. Also, they further explain that deep learning also refers to the figures of hidden layers in a neural network. New programs can consist of hundred or more layers of neurons, allowing the neural network to comprehend the extremely complex relationship between outputs and inputs (Egrioglu, Aladag , & Gunay, 2008).

CNN is typically a deep-learning, feedforward neural network containing at least one convolutional layer, whereas MPL does not have any convolutional layers. Convolutional layers are more capable of automatically identifying a pattern in images and allowing the neural network to identify complex patterns through data. One of the strengths of convolutional layers is recognising patterns in data regardless of their position. MLP and CNN have one main limitation: their input needs to be stable and fixed. This, on the other hand, is not a limitation for RNN. This is also where the natural language process comes in. The natural language process is very well known to be used in Google.

3.4.3: Pitfalls of Artificial Intelligence

AI can be looking very promising, hence the reason for why it is so popular. De Bruyn et al. (2020) also identify that the strength of AI is the algorithms as they can expose hidden patterns in the data received. Also, they believe that one of the strengths of AI is to create higher-degree constructs from unprocessed data autonomously. This can be done with very little human intervention or none at all. They explain that AI can complete a predictive task that is too complex for humans. The opportunity and advantage of AIs is not to make mistake of. AI is still a very new concept, which is becoming more involved in the business world. AI can be used to gain some great advantages in the business world. However, AI could potentially have

negative consequences. De Bryun et al. (2020) have identified some AI's pitfalls and dangers about AI.

The first pitfall of AI they describe is the lack of common sense. They recognise that it is pretty much emotionless and cannot recognise the emotions in humans. Emotional intelligence refers to detecting happiness in faces, recognising lies by facial expression, text analysis, voice analysis, and much more. Although the AI can recognise emotions through emotional intelligence, it does not mean it can understand emotions (De Bruyn, Viswanathan, Beh, Brock, & Wangenheim, 2020).

The second pitfall identified is objective functions. The writer describes objective functions as something that specifies the set of rewards that the AI algorithm will try to exploit over time. De Bruyn and the others describe that AI is not bounded by common sense and thereby not restricted by a predefined set of features or model specifications from which to operate from (De Bruyn, Viswanathan, Beh, Brock, & Wangenheim, 2020).

The third pitfall pitfall mentioned is a *Safe and Realistic Learning Environment*. They describe that AI will learn through many trials and errors. However, the number of trials could vary between thousands and millions. De Bruyn et al. wonder in what sort of environment can the trials and errors take place, as it could otherwise be very negative.

The fourth pitfall identified is called *Biased Artificial Intelligence*. This pitfall is explained by an example of the AI-driven software called Correctional Offender Management Profiling for Alternative Sanction (COMPAS). However, based on the data, COMPAS tends to be more racially biased when making decisions. COMPAS usually favored white defendants with a conviction rate of 23,5 %, whereas African Americans tend to be convicted 44,9% of the time incorrectly.

The fifth pitfall identified in the article is *Explainable Artificial Intelligence*. One example of artificial neural network which was tasked to differentiate between a dog and a wolf from a picture the AI tend to analyse the background rather than the animal. The AI learned the environment in which the two animals usually feature: grass for dogs and snow for wolves. The correlation can be explained by the data gained and learning that happens before the decision-making process. Nevertheless, the accuracy is excellent, however the goal is different, and the AI does not achieve the goal set for it.

The sixth pitfall comes from AI used in platforms such as Uber. The researchers found one pitfall here, which they call *Controllable Artificial Intelligence*. The example tells us that during a terrorist attack in London, the AI in the Uber apps algorithms increased the prices as the demand for rides during evacuation skyrocketed. The workers did not make the price increase of the Uber platform but rather the algorithms of Uber. Technically it did the right thing; that is how demand and supply works. However, it might not always be the most ethical thing to do. The incident forever left a stain on the reputation of Uber.

There are some outcomes of AI from a market size of 51,27 billion dollars to an expected market size of 126 billion in 2025 (Statista, 2021). All that even though some uncertainty of the implementation exists. Despite that, some of the outcomes identified by De Bruyn et al. is marketing productivity, customer value growth (growth, acquisition, and retention), operational excellence, customer perceived value creation, customer experience, and customer satisfaction (De Bruyn, Viswanathan, Beh, Brock, & Wangenheim, 2020).

3.5: Google Search

Every time a search on Google is conducted, there could be thousands or even millions of pages with relevant content. However, Google will narrow the options down and present the best possible content. This process begins even before you start typing. Before starting the search, Google organises the information from web pages in the search index. The search index is like a library, just larger than all the existing libraries. In a fraction of a second, Google looks through billions of websites with the help of algorithms (Google, 2022).

To help the user find what they are looking for as quickly as possible, Google delivers as many results as possible in the best possible formats. Google can, for example, show maps with directions, videos, pictures, stories and keeps working on new ways of presenting them. Google Search consists of two parts. Google Ads and search results. Advertisers can pay Google to have their ads shown in Google. However, it is impossible to buy your way up in the search results. Google is well aware that searching can also be optimised. For that reason, technicians in Google works every day to test Google Search and optimise it. Hence, Google has developed a few AI systems over the years (Google, 2022).

AI is a huge part of Google Search. The role of AI and machine learning keeps expanding each day. Google introduced AI into Google Search in 2015, and the AI system was called RankBrain. Since the introduction of the AI system RankBrain, Google has kept developing in

the field of AI in order to improve search results. This eventually led to the development of Neural Matching in 2018. Quickly after, in 2019, Google introduced AI breakthrough called Bidirectional Encoder Representation from Transformers (BERT). Soon after, Google introduced a further advanced AI system called Multitask Unified Model (MUM) in 2021 (Schwarts, 2022).

Upon release, BERT was breath-taking and state of the art. However, with MUM, Google managed to upgrade it with new algorithms. MUM is said to be more complex and much more efficient in solving the user's request. The author explains the capabilities of MUM as: "*MUM has the potential to transform how Google helps you with complex tasks. MUM uses the T5 text-to-text framework and is 1,000 times more powerful than BERT"* (Nayak, 2021).

According to Google themselves, MUM is 1000 times more powerful than BERT and 1000 times more efficient. Not only that, MUM is also capable of handling diverse media types as MUM is multimodal. That means MUM can understand audio, video, and images with the search algorithms. This enables the user to combine both image input and text input. Also, MUM can handle more complex search queries. One significant improvement is that MUM is now overcoming language barriers with new and improved ANN.

Google MUM is an artificial neural network (ANN), meaning that it, to some extent, works much like the human brain and has many of the same deep learning capabilities. Google MUM seeks to understand both the content of the websites it contains and the users that utilise the search engine (Sullivan, 2021). This takes a massively powerful search engine, as Google Search has billions of web pages and billions of users. Through BERT, Google was able to connect simple questions to simple answers.

For example, if a person typed "best restaurant in Aalborg", it would be able to come up with a list of restaurants sorted by reviews, price, location, etc. However, with the newly implemented ANN, MUM update, which is 1000x more powerful, Google hopes to be able to answer in a more complex fashion and give the user a more personalised answer based on previous searches, the user's profile, and the content of the available restaurants (Hucker, 2022). Suppose the user had previously searched for Indian recipes or Indian restaurants in other locations. In that case, Google might find an Indian restaurant within a price range that typically matches the restaurants the user visits.

Besides being a more powerful ANN, MUM also has an updated Natural Language Processing (NPL) aspect. While it is most fluent in text input, MUM has also been trained in understanding

audio files, images, and even videos (Wali, 2022). Rather than just reading text, the goal is that MUM should be able to understand it, summarise a given text, and answer complex questions about it. MUM is also multilingual and is fluent in 75 languages (Nayak, 2021). Previously, the user has been limited to being given answers to their query in the same language; if you search in English, you will only receive English results.

However, what if the best answer to your question is located on an Italian website. With MUM's NLP, it can search sites in multiple languages and translate the webpages, so users can receive answers to their questions on websites that use other languages. MUM's NLP is based on the T5, Text-To-Text Transfer Transformer (Robert, 2020). This framework is incredibly powerful, and with 11 billion model parameters it is currently one of the most complex NLPs in the world. Before launch, it has been pretrained on large datasets, but it will most likely only become more complex and sophisticated as it is trained by real users using it.

3.6: Search Engine Optimisation

As AI have become better throughout the years; more complex and more powerful, marketing through AI have become possible. Dwivedi et al.: *"AI technologies have been incorporated into marketing and retail where big data analytics are used to develop personalised profiles of customers and their predicted purchasing habits. Understanding and predicting consumer demand via integrated supply chains is more critical than ever and AI technology is likely to be a critical integral element"* (Dwivedi, et al., 2021, p. 7).

These personalised user profiles allow for increasingly precise customer segmentation and personalised user-directed marketing. These types of AIs seek to predict future user behaviour based on previous and even current user activity. The more data an AI has about the previous behaviours of a user, the better it will be at predicting future behaviour. This type of marketing behaviour allows brands to reach a broader and more precise audience much more cost-effectively than they previously could.

These types of marketing AI's can be an AI such as Heap (Heap.io, 2022) that a company utilises for customer segmentation of marketing insights. However, a marketing AI can also be an AI, such as the one behind Google Search. According to Gijs Overgoor et al. a marketing AI such as Google can be defined as: *"[…] the development of artificial agents that, given the information they have about consumers, competitors, and the focal company, suggest and/or*

take marketing actions to achieve the best marketing outcome" (Overgoor, Chica, Rand , & Weishampel, 2019, p. 157).

This type of marketing AI does not prioritise any specific brand over another, but rather it should judge their websites and show the user what is deemed the most relevant result based on the user's query and their previous online behaviour. An AI-driven search engine such as Google Search has a series of guidelines that dictate what a website should contain (and not contain) to be eligible to appear on Google Search's search engine result page (SERP). For Google Search, these guidelines are called the Webmaster guidelines (Google Developers, 2022). If these guidelines are followed, the website will become eligible to rank[1] on the SERP and be shown when a user types in a query that relates to the website.

These guidelines should be followed as closely as possible when developing or optimising a website for that website to achieve a high rank on Google Search. This SEO industry is a billion-dollar industry with a high growth rate as it is still an emerging market. In a Global Market Report for SEO agencies, The Business Research Company revealed that the global market worth of SEO agencies services was worth 40.92 billion dollars in 2021, and that the worth of the market is predicted to reach 83.7 billion dollars in 2025 with a compound annual growth rate of 19.6% (2021).

As explained in the previous section, Google Search has one of the most powerful and complex AIs in the world driving it, and as such, it is also the most interesting for this study. However, besides having a powerful AI, it is also by far the most popular search engine in the world. Whether you are accessing the internet through the Google Chrome browser, Mozilla Firefox, Safari, Edge, Opera, or any other browser, chances are that you are using Google Search for your queries. Currently, Google Search has more than 92% of the worlds search engine market share (Statcounter, 2022). The second most used browser is Bing, with a 2.96% global market share.

When assessing the possibilities of applying SEO on a website, most of these assessments are done based on the website's performance on mobile devices. There are three reasons for doing this; the first is that websites load much slower on mobile devices, as these devices generally have worse processers, less computing power, and slower internet connections than desktop devices (Haapala, 2018). Secondly, websites are often optimised primarily for desktop devices,

[1] *Ranking* refers to the placement that a website has on the SERP. A nr. 1 rank means that the website is the first to be shown on the SERP, when a user types the query that you rank nr. 1 on.

so mobile versions of websites often have the most general flaws, error codes, and scaling issues (Zakas, 2013).

Thirdly, mobile devices generate the highest percentage of the world's internet traffic. Globally, mobile devices have over 56% of the devise market share. Desktop devices are responsible for 41.52%, and tablet devices have 2.43% of the market share (Statcounter, 2022). Mobile devices are accountable for an even higher percentage of the website traffic for the internet browser Google Chrome, as most android devices have Google Chrome preinstalled as their default internet browser. In March 2020, 74.3% of Google Chrome users accessed the internet from mobile devices (Bucko, 2020).

The following sections contain a collection of theories for organically growing the userbase for a website. Organic search engine optimisation is also called organic SEO, and it is, essentially, free to do for any website owner. Google has provided a lengthy list of tools for website assessment, analysis, overview, and planning. While there are many SEO tools that people can buy or subscribe to, the Google-provided tools are essentially all that is needed to optimise a website for the Google Search engine. The list of tools includes Google Analytics, Google Search Console, Google Ads, Keyword Planner, Google Business Profile, Lighthouse, and Pagespeed Insights. These tools provide an aspect of website insight essential for SEO optimising a website and achieving a good rank on Google Search.

3.6.1 User traffic

There is not a single type of business with a decent website that could not potentially benefit from users visiting this website. No matter if this business is a local coffee shop, an online marketplace, an info page, or any other page type. However, to benefit optimally from having users visit your website, you need the correct type of user traffic. Therefore, before SEO optimising a site, the brand should consider what type of traffic they want and optimise their site for that type of user traffic. There are six types of recognised user traffic that a website can receive (Enge, Spencer, & Stricchiola, 2015):

- Raw traffic
- Ecommerce sales
- Mindshare and branding
- Lead generation and direct marketing

- Reputation management
- Ideological influence

Optimising raw traffic is beneficial when a brand can monetise on user traffic alone. In this case, the website does not necessarily have other agendas than attracting many users. Typically, this type of website generates profit from hosting ads. This type of traffic could be useful for free news outlets that write many articles and generate profit from having banner ads on their website. The brand is not necessarily looking for specific users; here, quantity is more important than quality. This type of traffic can either be achieved by writing quality content that people actively seek out for information or short articles with 'clickbait' titles that lures users in.

Optimising for eCommerce sales is very different from raw traffic. Optimising for eCommerce can be difficult, as it is perhaps the area of traffic with the most competition. However, the user traffic is also some of the best traffic there is. If a user finds a specific website, it is often because they searched for a specific brand or product available on that website. These searches are often the closest to end purchase and are therefore very valuable. The eCommerce traffic that a brand wants to attract is mostly users who are already interested in that specific brand and their product, so when optimising for this, writing about the specific products is often the most important. It is commonly seen that some users want to read about the product's benefits before they buy, so the more engaging specs and content the brand can create, the better.

Optimising for mind share and branding is when a brand wants more people to know about them and their message. It can be a prerequisite to eCommerce sales or lead generation and is essential for advancing any brand as it creates brand value and generates a user base.

Optimising for lead generation and direct marketing is much like optimising for eCommerce sales, but for brands that do not sell their products on the website. This could be brands that sell glasses, which require a lot of measuring and personalisation, which cannot be done online. Often this type of optimisation includes exciting and informative content descriptions and FAQ pages. Making it accessible for the user to find the closest store is also a significant feature.

Optimising for reputation management can be particularly tricky. This practice is all about improving the reputation of a specific brand, product, or person. Reputation managing content can be difficult, because people do not search for positive results in these cases. They are either not searching for them at all, or they are searching for them based on negative associations.

Optimising for reputation management can either be done by optimising social profiles or generating quality positive content that outranks other harmful content.

Optimising for ideological influence is all about swaying the opinions of the individual users. This content can be made either for people who already believe in a specific brand or person's ideology or for people who believe in something else. Often, this traffic time comes from generating pages that rank on specific keywords that people seeking information about the topic would search.

Type of traffic:	When to employ:	What keywords to use:	Content to optimise:
Raw traffic	When traffic = monetisation.	Broad keywords, long-tail queries[2],	Lots of quality inlinks (mentions on other websites), titles, page-structure.
Ecommerce sales	When there are products for sale on the website.	Brand and product specific keywords.	Engaging product specific content, brand specific content.
Mindshare and branding	Branding and communication messages.	Long tail keywords that focus on the wants of the user.	Site should be available for crawlers, easily navigable by users.
Lead generation and direct marketing	When a brand wants to attract traffic to their physical stores.	Brand and product specific keywords.	Product specific content, local search.
Reputation management	When the reputation of a brand/product/person need to be improved.	Often the main keyword is the one which reputation needs management.	Social profiles, quality inlinks, positive content, outranking negative content.
Ideological influence	For swaying opinions.	Topic related keywords and long-tailed queries. Both con and pro keywords.	Quality inlinks, positive content, informative content.

Table 1 – Types of User Traffic

[2] A long-tail query is a keyword phrase that consists of multiple keywords. They are typically three to five words and are more specific than single keywords.

3.6.2: Search Intent: how people search

As stated in the previous section, it is crucial to know what type of traffic a brand wants to attract to their website. Depending on the type of traffic a brand wants, different types of SEO should be prioritised for the website. However, when generating content for a website, it is also essential to consider the query types that might lead users to the website. Depending on the content of a specific webpage[3], different query types will generate traffic to the page. Within the world of SEO, there are three types of queries that are important for establishing the user's search intent (Enge, Spencer, & Stricchiola, 2015), (Kang, 2005), (Gabbert, 2021):

- Navigational queries
- Informational queries
- Transactional queries

Navigational queries are keywords or phrases that illustrates that the user is searching for a specific location. This could be specific websites or web pages. If users wanted to access Facebook, they might just type "Facebook" into Google Search. This is a navigational query indicating that the user wants to go there. It could also be local searches such as "restaurants near me" or the location of a specific store in a city.

Informational queries are what a user typically types in when they want to retrieve more information about a product or a topic. This type of query often has a broad search intent, and the user most likely does not have a specific website in mind for information on the topic. Examples could be "world's biggest moustache", "how do I remove a bad tattoo", or "world's best beer", however it could also be a brand or product comparison.

Transactional queries are searches with the intent of purchase. These types of searches are product specific and can also accommodate specific brand names. In some cases, they also contain words like buy, sale, or purchase, yet these words are often implied. Most often, if users search for a specific product such as "Nespresso VertuoPlus", they have already made up their mind that this is the coffee maker they want – perhaps they have already made some informational queries.

[3] This paper differentiates between *websites* and *webpages*. A webpage is a single URL, while the website is a collection of URLs. For example, the frontpage of aau.dk is a webpage, while aau.dk as a whole is a website.

3.6.3: How Google Search works

When search engine optimising a website, it is crucial to understand how that search engine works; how it sees the pages on a website, how it understands them, and how it ranks them. According to internetlivestats there are currently more than 1.9 billion accessible websites on the internet, so for Googles AI to search through them all takes a complex AI and a lot of processing power (internetlivestats, 2022). There are three steps to the Google Search website ranking process (Google Developers, 2022):

- Crawling
- Indexing
- Ranking

Google Search is constantly crawling all the websites in the world using their Googlebot (Google Developers, 2022). Googlebot is a web-crawler that exclusively crawl web pages; Googlebot can simulate a desktop or a mobile device. However, as previously mentioned, mobile traffic has the most significant market share, so Googlebot often simulates a mobile device when crawling websites. When Googlebot visits or crawls a webpage, it loads the webpage and reads the content on the page – or rather, it reads the code behind the page.

Every website contains a certain number of web pages; for some, it is just one, and for other, it might be millions of pages. When a brand has created a website, they must enter the web pages that they want to be shown on Google Search into a sitemap. Once Googlebot finds the brand's website, it looks at the sitemap and prioritises crawling the webpages that are listed there. The primary reason that Googlebot crawls websites is to see if webpages actually work or if they show errors. When creating a sitemap, it is important only to include pages that work and that are accessible by Googlebot. Having your website crawled by a Googlebot is a good thing, as it is the first and primary step to achieving a high ranking on Google Search.

While Googlebot crawls a website, it is also indexes it (Google Developers, 2022). Indexing means categorising the webpage, much like books are indexed in a library, so they are easy to locate when somebody searches for a specific piece of information. Googlebot tries to index the page as precisely as possible based on the page's content. The indexation is made based on the title of the webpage, the headings, the content, and the language in which the content is written. While Googlebot is capable of understanding pictures and videos to a certain extent, it is still better at apprehending text.

The title of the page and the headers are what carry the most weight when indexing. However, the text's contents and length also play vital role in indexing (Google Developers, 2022). The indexation decides what types of queries the page ranks on, but not how it ranks. Hence, writing meaningful headlines and a short and precise title is very important when creating or optimising web pages. If a brand wants reputation managing user traffic, they must be clear about who or what they are writing about and what keywords they want to be associated with them. If the content does not match the search intent, that their target audience use, there is a chance that the users will never discover the page.

Once Googlebot has indexed a webpage, it then judges how the page will rank among other pages with a similar indexation. Hundreds of factors affect the ranking of a webpage, and these factors are often altering or developing as the AI behind Google Search becomes smarter (Google Developer, 2022). Until now, in this thesis, the main category of SEO has been content SEO. However, when ranking a page, there are other types of SEO that also play a part in Googlebot's ranking decision.

Two factors that play a major part in the ranking-decision are *page load speed* and *accessibility*. When Googlebot checks a webpage for its load speed, it does so based on a variety of user-centric performance metrics (Walton, 2019). These types of loading can be frustrating for the user if they are slow, and pleasing is they are fast. For example, it is annoying if there is a long time with just a white screen as the page loads, because the user might be unaware of whether the page is genuinely loading or if there is an error.

Accessibility is another category that is pivotal for page ranking. The process of ranking based on accessibility is important for making useful websites easily findable and interactable for everyone (Kearney, Gash, Boxhall, & Dodson, 2019). Many of the reasons why accessibility is necessary and some of the most pressing metrics within this category have already been thoroughly explained in the user interface design part of this thesis.

4: Methodology

The following section contains the methodological thoughts and understandings that lay the foundation for the analysis section of the study. The best-fitting methods for this research will be found through methodological theories and discussion. This section follows the four levels of methodological understanding as proposed by John Kauda (2012, p. 58). The first two steps

review some ontological paradigms relevant to this thesis and their underlying epistemological research methods. Then the approach of this research is discussed in regard to the paradigms. Ultimately, the choice of methods and research influx is discussed as well as their implications in the remaining part of the study. The four steps are visually represented in figure 4 below.

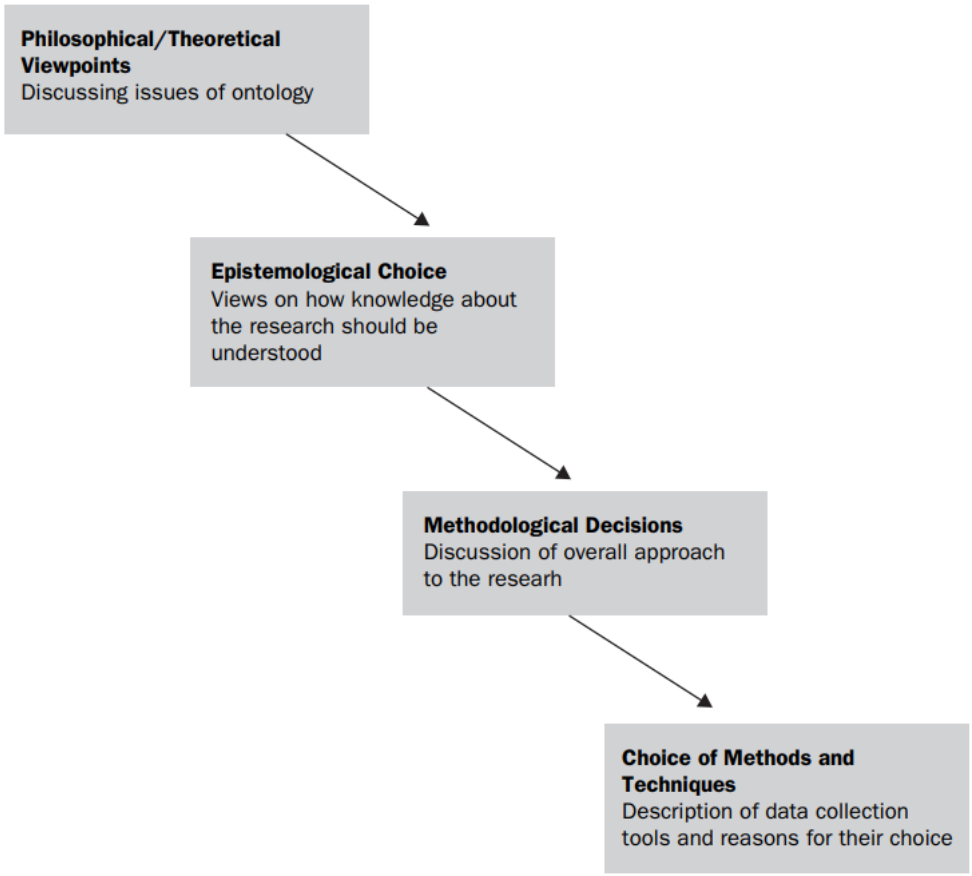

Figure 4 - Kuada's four levels of methodological understanding - (Kauda, 2012)

4.1: Ontology

The first level in Kuada's four levels of research design is ontology, the philosophical viewpoints related to research. The underlying ontology behind a research study can explain the frame of reality and the set of fundamental rules and beliefs that the researcher or researchers are operating under, thereby explaining their choice of research method and design (Hofweber, 2004). This research will delve into three of the most commonly used ontologies by researchers: *post-positivism*, *constructivism*, and *pragmatism* (Creswell, 2014). As ontology

is, in essence, a philosophical study of world view, it is essential to note that there are many other world views than the ones described in this research; however, these three viewpoints are the most prevalent for this study.

4.1.1: Post Positivism

The post-positivist worldview is also the scientific worldview or the empiric worldview, as it is rooted in the objective, measurable, and numeric approach to science and research. Causes determine effects, and everything can be numerically measured. Pressure changes cause the wind, experiences form opinions, solids turn into fluids which then turn into gas at certain fixed temperatures (Ryan, 2006).

Post positivists believe that an objective reality exists that cannot be denied. In theory, this objective reality can be uncovered through scientific experiments. Everything, both individuals and objects, can be studied through numeric measures, and nothing is immeasurable. When all effects are uncovered, and all causes for these effects are determined, objective reality is uncovered, and everything in the world (and universe) is explained. Research should be done in clinical environments where the subject of research is isolated from outside stimuli or other interfering effects (Creswell, 2014).

In reality, the post positivistic worldview denied that the 'absolute truth' can ever be found because experiments are never perfect and fallible. As such, objective reality can only ever be hypothesised (Phillips & Burbules, 2000). As a hypothesis can never be truly proven, post positivist always seeks to disprove hypothesis. Truth is found through failure to reject hypothesis.

4.1.2: Constructivism

The constructivist worldview is, in many ways, the opposite of post-positivism. Individuals seek to understand the world they live in, and the truth is subjective in the eyes of the individual. There is no reason to look for an objective truth for constructivists, as there are no collectively shared meanings across all individuals. Instead, people generate subjective meanings based on their previous experiences. These subjective meanings determine how they feel and react to their world. As the meanings of individuals are genuinely subjective and no two individuals

are identical, it does not make sense to seek an objective truth or to try to categorise or put a numeric value to these meanings (Creswell, 2014).

The constructivist approach to research is through open-ended interviews and questionnaires in which individuals can express their opinions and meaning toward a subject. These meanings are often put into the researcher's sociological, historical, or cultural perspective. Researchers seek to find the reason behind shared or diverse meanings between individuals based on knowledge of the individuals' past experiences and social settings. The subjectivity of the researcher is also a big topic in constructivism; as the researcher is also an individual with their own set of subjective opinions, their research is always guided or interpreted in some way by their own subjective meanings (Crotty, 1998).

4.1.3: Pragmatism

While post positivists believe in an objective truth and constructivists believe in subjective truths, the pragmatist believes in using the best research approach to explain their problem. The pragmatist does not concern themselves with whether the world's truth is subjective or objective. This worldview is focused on the problem at hand rather than overarching truths (Cherryholmes, 1992).

Following this approach, science pragmatists can use both qualitative and quantitative research methods to illuminate their research. This research design is called mixed methods. The individual researcher has the freedom to choose the research method that best meet their needs at the time. They look at each problem as an individual problem and determine how it is best examined. As such, two different researchers can have different opinions as to how a problem is best examined (Creswell, 2014).

A pragmatist researcher is a subject of opinions, meanings, and experiences. Even though they use a quantitative research design, they can still acknowledge that their results or initial research might be affected by the subjective opinions of the researcher. While qualitative data is subjective, it can still provide good answers to a problem or function as a foundation for quantitative data collection. At the same time, quantitative data can be a reasonable basis for qualitative interviews (Morgan, 2007).

4.2: Research design

The researchers must choose between three methods to conduct the study during the study. These are qualitative, quantitative, or mixed-methods. The research design is a variety of inquiries within quantitative, qualitative, and mixed-method approaches. Each approach provides distinct directions for the procedure of a research design (Creswell, 2014). What typically distinguishes qualitative from quantitative is numerical and non-numerical data (Darmer, Jordansen, Madsen, & Thomsen, Paradigmer i Praksis, 2010). The use of one of these in a study is usually determined by the paradigm of the thesis, the goal, and the problem statement of the thesis.

4.2.1: Quantitative

When working with quantitative data, it is about numerical data. The data can be second-hand data gathered through all means and freely available online. There is also a possibility to gather first-hand data through various analysis techniques. This can be done with the help of observations and questionnaires. When working with the quantitative method, the goal is to test hypotheses and develop theoretical supporting explanations for the work.

According to Darmer and Nygaard, the qualitative method is very popular and ideal to use when working with the paradigm of realism (Darmer, Jordansen, Madsen, & Thomsen, Paradigmer i Praksis, 2010). According to Creswell, post-positivism is the paradigm associated with the quantitative method. He also refers to two non-experimental quantitative research casual-comparative and correlation designs. Correlation design is when researchers use correlation statistics to measure and describe variables. Casual comparative is when researchers compare two independent variables (Creswell, 2014).

4.2.2: Qualitative

The quantitative method lets the researcher understand and study unique phenomena and comprehend them. The goal is to achieve first-hand knowledge about the people in the field of research and acquire an understanding of the world around them. The quantitative method works with interpretations techniques that aim to describe and understand meanings rather than working with frequency, statistics, and numbers.

This method is usually used within the paradigm of realism and constructivism. Within the qualitative method, there also exist a few ways of gathering first-hand data. This can be done through interviews, observations, and focus group interviews. Interviewing is especially suitable when working with an in-depth examination of complex processes or in studies where knowledge and interpretations are in focus (Darmer, Jordansen, Madsen, & Thomsen, Paradigmer i Praksis, 2010).

4.2.3: Mixed method

The skills to use quantitative and qualitative methods differs. Earlier researchers argued that both methods could not be mixed but now more people argue that they can and that they are equals. More and more use both methods to supplement each other in research, and hence comes the term "*mixed method*". However, Darmer et al. clearly state that it is essential to know how to connect both to ensure consistency in the investigation (Darmer, Jordansen, Madsen, & Thomsen, 2010).

For a researcher working within the realism paradigm, the quantitative method has some advantages, as they can apply those methods with greater confidence and live up to the requirements of the paradigm to create good science. On the other hand, the qualitative method can help achieve better coverage of the phenomenon being studied. Overall, the mixed method seeks to combine quantitative and qualitative in a research study (Darmer, Jordansen, Madsen, & Thomsen, Paradigmer i Praksis, 2010). It was also believed that all methods had their own weaknesses and bias regardless of what. Hence using both quantitative and qualitative methods at once reduced the bias and the weakness associated with using one method alone (Jick, 1979).

Quantitative	**Qualitative**	**Mixed-Method**
• Experimental designs • Nonexperimental designs, such as surveys	• Narrative research • Phenomenology • Grounded theory • Ethnographies • Case studies	• Convergent • Explanatory sequential • Transformative, embedded, or multiphase

Table 2 – The different paradigms and their features

4.3: Methodological decisions

The worldview chosen for this thesis is pragmatism, as this paradigm's ontology is the best fit to illuminate the problems in this research. Pragmatism is not as concerned with either subjective or objective truths as the other two worldviews. Instead, it is focused on the specific problem and how it can best be solved. This study investigates whether the brand resonance model can be applied in a digital and AI-influenced setting. This problem could be investigated both from a post positivistic worldview through data from companies that have applied AI and SEO into their value chain. However, in this case, fitting specific areas of SEO with the steps of the resonance model would most likely be grounded in guesswork and theoretic comparisons.

This problem could also be investigated through the constructivist worldview, where SEO experts and companies were asked about how they used SEO to generate brand resonance. However, in this case, the actual effect of the SEO implementations would ultimately be speculative without data to support the experts' statements. In this research, the researchers can both receive the advice of SEO experts and obtain data from businesses that have applied SEO to their value chain. This mix of quantitative and qualitative methods is only possible through the pragmatist paradigm, and therefore this is the paradigm chosen by the researchers.

As explained above, this thesis work with the paradigm of pragmatism. That allows the writer to work with the mixed method, combining quantitative and qualitative methods. The qualitative data in this thesis will be extracted through the interviews conducted by the writers. The quantitative data will be retrieved after the interviews have been conducted. The interviews will indicate in what area data is required in.

For this purpose, data will be retrieved from the SEO agency, which has access to data from companies in Denmark through Google analytics. With the help of qualitative data, data which is expert knowledge with a hint of subjectivity in it is acquired. With the help of quantitative data, factual and objective data is analysed. Both quantitative and qualitative method has their own strengths and weaknesses and can work fine alone. However, when utilising both at once, it eliminates the weaknesses of each other as they can complement each other very well when used correctly. During so, the work becomes much more reliable as qualitative and quantitative data back up the work.

4.4: Qualitative method – research interview

As stated above, this research will use both quantitative and qualitative methods to answer this thesis 's problem thesis. To work quantitively, this thesis uses the means of research interviews. This is the chosen technique to acquire primary data. The primary data collected is to be used with the model brand resonance. The interview will be conducted with the managing director of a major Danish SEO agency. Also, interviews will be conducted with a senior SEO manager and a SEO manager.

The focus of the interview lies within the brand resonance model, intending to understand if there might be some SEO techniques that can aid the brand resonance model and update it with the new marketing trend, SEO. The focus of the questions is on how SEO can aid in creating brand awareness and salience. How SEO can aid differentiation of image and performance. Next is how SEO can aid emotional reaction, judgment, and feelings. The interviews are structured around the resonance model; however, it is only semi-structured.

The questions will be open but within a theme. Hence, giving the respondent free space to cover a topic without restriction while giving us valuable first-hand data. For that reason, the questions to be asked will be preprepared and sent to the respondents before the interview, allowing them to think about their answers. Furthermore, the interviewer will be active during the interview and ask follow-up questions (Darmer, Jordansen, Madsen, & Thomsen, Paradigmer i Praksis, 2010). By asking follow-up questions, the result will be more in-depth and precise. Also, if the questions are not preprepared, the data will most likely be useless, as the interview might have gotten off track.

4.4.1: Interview guide

To improve the quality of the interview Kvale & Brinkmann has developed an approach to secure the best structure (Kvale & Brinkmann, 2015). There are several ways to conduct an interview, and Kvale & Brinkmans suggestions are not a usual procedure, but this will give a structure to the interview. Their approach has five phases: thematisation, design, analysis, verification, and reporting. Thematisation refers to the process prior to the interview, where the writers collect knowledge and reflect upon the interview's goals. Next comes the phase design, which deals with the five phases and how they will be used in this thesis. The design intends that proper knowledge is obtained, but also ethically and morally. The next phase is analysis.

This phase clarifies how the interview data will be used in this research with the chosen methodology pragmatism and the problem thesis "*Is it possible to apply the brand resonance model to an AI influenced digitalised business today"* as they both control how the analysis will be executed. After that comes the phase verification, which is about verifying data acquired through interviews. The attention here lies within the quality of the interview and the reliability of the data and result. The last phase is reporting, which refers to the interview result must be examined and reviewed to see if the interview fulfils and meets the scientific criteria, problem thesis, and ethical aspect of the thesis.

4.5: Interview design

The interview guide is not a checklist for the interview but rather a guideline. The first phase was like Kvale & Brinkmans five phases, thematisation, which was considering how the interviews should take form. The aim was to acquire some suggestions from SEO experts on which SEO techniques can be used to create brand resonance. Nevertheless, before the interviews, the writers decided to make the interview question and send them ahead so that the SEO expert would come prepared, and the outcome would be more ideal. The transcription part of the interview has been well discussed.

The interviews will be conducted in Danish, as it is the SEO experts' native language. Quotes that are essential to the analysis are then translated into English. Both authors are fluent in English with a CEFR efficiency level of C1 or higher (Cambridge University, 2022). During the transcription of the interview, the essence of the quotes has been maintained to the highest possible extent.

The audio file of the interview will be uploaded as an attachment as well. As in Kvale & Brinkmans five phases, the data must be verified. The quality, validity, and reliability must be considered, which will be done in the section validity and reliability section further down.

4.5.1: Quantitative research – data collection

Based on the interviews, some specific areas of SEO have been suggested as affecting the different parts of the brand resonance model. However, to test the validity of the knowledge of the SEO experts, some data from these applied SEO techniques need to be collected and held up against their proposed effect.

This thesis utilises data from actual companies that are either currently customers of an undisclosed company or have previously been. Consequently, all the companies in this study have been anonymised, as the data is highly confidential. To distinguish the companies, they will each be given a letter. To protect the company, they will be anonymous too. The data from the company websites are collected from both pre and post SEO applications to monitor whether the applications meet their intended purpose. The specific SEO applications that are monitored and used in the analysis will be described in detail as they become prevalent in the analysis.

As most SEO is applied through the Google Search Engine, monitoring the internal part of the website is done through Google provided tools. These are tools like Google Analytics (2022) and Google Search Console (2022). Google Analytics measures user data such as bounce rate, average time on page, average time on site, entrance pages, exit pages, campaigns effectiveness, new users, traffic origin, KPI's and much more. It measures data from a company's website but can also measure data from a companies' Google Business Profile(s). This is the information that shows up when a user searches for a store, restaurant, or brand on Google Maps.

While Google Analytics measures user data, Google Search Console measures more technical aspects of the website. From there, it is possible to find data regarding webpages on the website's sitemap that are faulty and leads to error pages, or if Googlebot suspects some pages to be faulty or conflicting with Google guidelines. It also measures the clicks and impressions that a website receives from Google Search.
Website load speed performance is measured through Google Lighthouse and monitored through a dashboard in which the performance is then visualised.

The data that is gathered through the abovementioned tools and used in the analysis is raw data and has not been manipulated in any way by either the researchers, the SEO agency or the company behind the website. Furthermore, using raw data removes some of the subjectivity of the data interpretation, as the researchers are not able to manipulate the data results to their advantage, as it can be done through p-hacking when meta-analysing data (Head, Holman, Lanfear, Kahn, & Jennions, 2015).

Because it is raw website data, there is no 'immediate improvement correlated with SEO application' menu. However, the researchers know the time when a type of SEO was applied to the website. Based on this knowledge, the SEO implementation's website metrics should

improve, are monitored for changes. Some SEO applications are visible almost immediately, while others take some time. The interpretation of this data can, consequently, be affected by a subjective element, as it is never 100% sure that any positive or negative effects can be directly attributed to the SEP application.

Typically, companies have multiple types of SEO applied at once. Consequently, it can be difficult to isolate different specific applications. Therefore, it can be advantageous to have data from multiple sources. For example, suppose they have all been affected positively or negatively in the same way. In that case, it is reasonable to conclude that the effect is caused by the specific type of SEO application in question.

4.5.2: Validity & reliability

During an interview, Madsen & Darmer (2010) discuss their understanding of validity and reliability. They mention that it may differ based on the purpose of the interview and the data collected based on the scientific approach chosen in this thesis. This thesis aims to identify SEO techniques that can be used to create brand awareness. therefore, the approach during the interview will reflect and be within the chosen method of pragmatism. Working with pragmatism enables the writer to be subjective and objective; this plays a role when assessing whether the interview result is reliable and credible.

Reliability in a research address to which extent the techniques of data collection and the process while analysing will be generating homogenous findings. To create reliability in work, Saunders et al. (2019) has three questions which need to be looked upon to establish high degree of reliability. Those are:

- Will the measures yield the same results on other occasions?
- Will other observers reach similar observations?
- Is there transparency in how sense was made from the raw data?

Validity call attention to whether the measurement of the thesis construct measures the desired construct. Also, validity refers to the correctness of the result as well as its accuracy of it. Testing validity can be done in a few ways, such as discriminant validity and convergent validity. To test convergent validity is when testing to see if two related measures, in fact, are related. This will be done by collecting data from more companies to test if the outcomes are derived from a specific SEO technique or just coincidence (Bell, Bryman, & Harley, 2019).

5: Analysis

The following section contains a two-part analysis with qualitative data and quantitative data. The first part will be a comparative analysis of a Senior SEO manager, SEO manager, and SEO director. A draft of a SEO-based brand resonance model will be illustrated based on the interviews. In the second part of the analysis, quantitative data will validate this.

5.1: Qualitative analysis

The following section seeks to compare the answers given in the interviews with the SEO experts. The SEO specialists work at the SEO agency which this project collaborates with. As the interviews were semi-structured, the questions aimed to understand how SEO can be used to generate brand resonance. Thereby it will be plausible to make a comparative analysis of each stage of the resonance model.

5.1.1: Salience

When asked about how SEO could aid the salience aspect of the resonance model, they were all pointing towards one specific SEO technique when it comes to directly influencing salience. That is Search Engine Results Pages, also known as SERP SEO. When a Google user has a query for Google and types in a question or anything, SERP is the "answers" Google provides for your inquiry. In other words, when you search for something on Google, what you see in the result is the SEO term SERP.

SERP is anything from the paid ads on Google to organic results popping up, photos and videos. When talking about SERP, there are also many different sorts of SEO work that can be done. All three respondents pointed out that in order to create awareness, titles & descriptions (T&D) are a crucial point. A title is that little text that describes a website's content on Google. The description is a more in-depth description of the content of the website. Companies can write their own T&D, if not, Google will accomplish it based on the website's content.

First of all, the senior SEO manager conveys that "*you have to think about the limited characters you have in relation to your title and meta*", which means that it should be well written (11:00). Then, the SEO manager refers directly to the title and says: "*With star markings, excellent title, schema markup or pictures on its results, that's how you create*

awareness in the search results" (00:44). She also mentioned that "*it's probably not so much about the technical (SEO), but more the written language, with a certain tone of voice all the way through - also in the titles and meta*", so T&D is important as well as the tone of voice in it (02:20).

When asked about how to create brand awareness, the SEO director quickly pointed at SERP CEO and said that "*sometimes something as simple as changing a single word in the title could make much difference*" (01:09). He further explains that he previously experienced working with big brands where the only change they did was to change the title a bit to be more user-friendly and based on keyword analysis. The slight change in the title made the traffic explode (1:28).

When asking the SEO manager about creating awareness, she refers to that SERP as awareness. She mentions that photos, Schema markup, and the excellent title is good to create awareness (00:44). She also mentions that the website's content should match the SERP the user receive they were promised. Overall, all the three SEO specialists pointed towards T&D as the first tool in the SERP to be aware of and something one should consider working on in order to create awareness directly. The next tool they quickly mention to create awareness in the SERP is images. However, only the SEO manager mentioned this. The SEO Manager states that something graphic would be suitable for awareness. According to the SEO Manager, "*photos and videos would be suitable for creating attention not too much text on the SERP but moderate*" (04:22).

The following subject is Schema Markup. Scheme markup is a code placed by the website owner to help the search engine to be able to present the searcher with informative results. In other words, the website's content becomes indexed by the search engine and then organised by the search engine like a library so that the right content can be retrieved at the right time. A part of this schema markups indexing is also Google Q&A. Q&A in Google is when you, for example, search cheese in Google. Google will then show you a section of "people also ask about", and then Google provides a list of often asked questions that you can click on. Google will also provide the best solution to the questions based on the previously mentioned indexing code.

The SEO manager points out that reasonable schema markup is good at creating awareness (00:44). As mentioned in the user traffic section of the analysis, the goal of a website may

differ. At times the goal might be to have raw traffic based on Q&A. However, the SEO manager also states, "*Even though ratings, reviews, and Q&A show up in search results, there has been a huge discussion about whether it actually affects the ranking*" (9:28).

Another aspect of this is ratings on Google. Ratings refer to how many stars a restaurant has or a recipe or even the rating of a webshop. Good reviews and ratings attract customers. On the other hand, according to the SEO manager, there are also different types of reviews. For example, there are the Google reviews and Trustpilot (09:00). Good ratings are beneficial and can be plastered in many places, such as websites (09:23).

According to the SEO manager, the last aspect of SERP SEO that can be used to create awareness is the so-called Local 3-pack. Local 3-pack is Google's top-three pick when a Google user makes a query based on location. For example, "Chinese restaurant" and Google will dispense the best three Chinese restaurants nearby your location, based on various things such as reviews. The SEO manager is very keen that being among the local 3-pack is good as you would be visible as the first thing and create awareness. They state that "*local 3-pack is good for awareness. That you are visible in the rich snippets, I think it will give a lot (of awareness)*" (01:03).

The previously stated points are all part of the SERP SEO, the first thing you see when doing a Google Search. All three SEO experts point towards SERP as the primary SEO tool to work with, when the goal is to create brand awareness directly. They do point at different specific SEO techniques within SERP to work with when creating brand awareness sometimes; other times, they agree.

The next SEO tool the expert points at is not part of SERP. However, it is still a tool that is also directly influential. That is specialised and well-written content. According to the experts, simple and well-written content is vital, as the indexation process also values the quality of the content on the website as a ranking metric. The SEO manager states that "*SEO is not only very technical but also about the written language. It is about the tone of voice used consistently*" (02:20). According to her, excellent content will differentiate a website from the competitors, and Google Search indexing will provide a user with the best possible content that answers the user's query; hence good content is critical (03:40).

The SEO director also agrees that good content is essential, but it must be consistent throughout all the sides of a website. He also mentioned that the owner should not assume that everyone

knows about the brand, and there should be quality content about the brand no matter what (4:00). According to the SEO manager, good content answers the customers' query. She states that "*if you write some really really good content that just answer the question of the user*" then they will be able to differentiate from the competitors (03:40). Overall, the SEO manager and SEO director point towards quality content as a tool when working with SEO to create awareness. The good content of the website leads directly to a better ranking in Google Search. Hence the website is visible at the top of Google.

All three SEO experts also pointed out some indirect factors which can affect salience. Salience is about being top of mind and the ability to recognise and recall a brand. One way to do so is a good customer experience on the website. Although the elements they mentioned also fit the performance stage of resonance, it does fit in salience too. All three SEO experts referred to internal website issues as a substantial factor in wanting a customer to recall a brand. Specifically, they mention that page load speed could be an issue, along with faulty pages and server issues. Those are just factors that could indirectly affect the customer's perception of a brand. Those factors will be thoroughly reviewed in the performance section.

The second step in the brand resonance model is the performance and imagery step – often referred to as the 'what are you?' step in the model. As explained in the literature review, this step is about what the brand can do and how the brand portrays itself. This step is divided into two parts: performance and imagery. As such, the comparative analysis of what SEO elements fit into this step is also divided into two sections.

5.1.2: Performance

Performance regards the capabilities of the brand, and in a SEO context, this would translate to the capabilities of the brand's online platforms. The interviewees' answers consistently reflected the importance of having a technically optimised website to achieve a good brand performance and be able to differentiate from close competitors. Topics such as UX, flow, and usability emerged in both interview with the senior SEO manager: "*I wrote about the same in my own master's thesis – how to unite UX and SEO, and this seem to be where this is leading*" (12:00 & again at 14:43) as well as in the SEO director interview (07:52).

As a fundamental and preliminary rule, the SEO Director mentioned that the site should work properly: "*you have to be good at figuring out where the things go wrong or where there are challenges. It could be on a server or in a code setup.*" (05:23). If there are server malfunctions

or coding issues, these should be dealt with, so the website can function correctly. As some webpages on a website can sometimes experience issues, being efficient at diagnosing and dealing with these issues can be a way to differentiate from competitors.

As a UX feature that is especially important for performance, page speed was mentioned by both the SEO manager (03:17) and the SEO director. The website must load fast and consistently on all devices and on all types of internet connections. According to the SEO director: "*[…] if you are in a bus and the site loads badly then it is a bad user experience and not at all memorable… maybe the opposite of memorable*" (07:27). The user is not always operating on a laptop with a fast and wired internet connection or on a smartphone with a fast 4G connection, so websites must be optimised for slower connections as well.

Both the SEO manager and the SEO director (07:10) also mentioned the importance of website structure for an excellent, memorable user experience. The SEO manager said that: *"a website should be well structured, and it should always be easy to manage through the menus"* (04:45). In addition, no matter where the user is located on the website, it should be easy for them to take the next step in their journey or start over.

All three interviewees mentioned the importance of analysing user trends and creating content based on these trends. The SEO manager mentions trend analysis to discover users' brand related queries in Google Search (05:47). The senior SEO manager mentions trend analysis combined with keyword analysis (16:25), and the SEO director mentions user behaviour and search pattern analysis (09:50). All of these are different ways of finding popular themes, terms, or queries from which new content can be created or existing content can be alternated. When creating or altering content, the title and description that is visible in Google Search must match the content that is on the page. *"What is shown on the website should also match what is promised in the SERP"* (senior SEO manager, 11:00 & 12:32).

Lastly, both the SEO manager and the Senior SEO manager mention that exploiting competitor weaknesses can be a key feature in differentiation. These weaknesses can either be found through site audits of competitor sites: *"That depends on what issues the competitors have and what they are struggling with"* (SEO manager, 03:05) or by examining their online reviews, as the senior SEO manager suggests (18:10). For example, competitors might have sitemap issues that lead to bad indexations, bad product content, a lack of specialised content, a confusing

website structure, or slow load speed. If competitors generally have slow-loading websites, having a fast website could be very beneficial when Googlebot is indexing and ranking pages.

5.1.3: Imagery

As performance regards the technical aspects of the digital platforms, imagery concerns the visual aspects of the digital platform. However, as the overall visual identity of the website does not directly affect indexation and ranking, this is not an area that will be discussed in the analysis, and neither was it mentioned in the interviews.

A central part of imagery that was mentioned by both the SEO manager (04:22) and the SEO director is images and video – especially on content pages. The SEO director states: *"The user experience is, to a high degree, marked by the pictures on a site and that the site is performing. If you are in a bus and a site is loading badly, it's a bad user experience and that is not memorable – maybe the opposite of memorable"* (07:27 & 07:52). Images and video material can effectively guide the user and explain complicated matters more effectively. When answering another question, the senior SEO manager mentioned that the optimal way for hardware stores such as Silvan and STARK to create specialist content is through video guides on how to best use their products: *"[…] it would be some videos or some guides or how-to's […] maybe some shopping lists"* (07:50). As the AI behind Googlebot becomes more sophisticated, it will become even better at translating the contents of both images and video, and it might become an even more critical part of the indexing process.

Product-related content can also be important to imaging, according to the interviewees. Having structured text on product pages, that describes the product, that the user is currently watching can be very beneficial to the user in the purchasing decision- or information-gathering process: *"[…] there are ways in which we can work structured with content that is directed towards people who are information seeking"* (senior SEO manager, 18:41). The length of the text is a subject of much debate in the SEO community. Content pages with much content can help in the indexation process as it allows the writer to be precise and descriptive in the description of the product. It also allows for better indexation on broader searches, as more text makes room for more keywords. The senior SEO manager talks about the brand and profession-related keywords (17:25). Others swear to shorter texts as it allows for a fast and efficient overview of the product and its features (SEO manager, 04:22).

An indirect imagery factor is usability following this thought of short and efficient text. There is an imagery aspect to usability, as choices that affect usability also affect the visual aspect of web pages. Optimised text and menu structure which optimises performance, also has a visual aspect. The visual overview is essential for website manageability if you want to give the users what they want as efficiently as possible. According to the SEO Director:" *a memorable experience is getting what you want! You get the information or the opportunity to do what you want"* (SEO director, 07:10).

The third step in the brand resonance model is emotional reactions, also known as the 'what about you?' step. This step focuses on the user's emotional reactions, and it is divided into two parts – judgment and feelings.

5.1.4: Judgment

Judgment refers to the emotional journey a user undergoes when dealing with the brand's product or service. In a SEO setting, this step is about satisfying both the user and future users before, during, and after the purchase. The first SEO implementation that affects judgment is reviews (SEO manager, 9:00 & SEO director, 14:40). Reviews can be done through many channels, both through popular channels such as Trustpilot, Google, and Facebook but also internally through questionnaires distributed through emails. Reviews allow people to express their feelings towards a product or service post-purchase, but it also allows people to take previous reviews into their decision-making process pre-purchase. The SEO director underlines the importance of showcasing reviews on the channels where the userbase is most active: *"There are a lot (of people) who talk about having a good Trustpilot score, but if all of your users are on Facebook it doesn't help"* (15:26).

Q&A or questions and answers can also be effective ways of improving judgment. For example, in a Q&A section, users can ask a store or brand questions, and the store can then answer these questions. A chatbot is also a type of Q&A implementation. The SEO manager mentions the importance of Q&A for emotional reactions and how it can also indirectly affect SERP rankings if done correctly (09:28). According to the SEO director: *"*The way we rate stores is typically the same as how *we would talk about them with our friends. And it is the same when you have a question, you also want to ask it the same way you would in a store"* (14:40). As such, it can also be a way of showing professional knowledge and service.

This specialist knowledge can also indirectly affect judgment. Writing specialist content, which was a feature that could improve salience, can also improve judgment. Proving that a brand is a specialist within its field can ease the purchasing decision: *"[…] if people become used to a specific brand being specialists within their field, then that's where the users will return"* (senior SEO manager, 19:40). People want the same experience when they visit a website as they want when visiting a store (SEO director, 14:04). This includes being able to ask the staff questions or finding readily available knowledge regarding the store products.

5.1.5: Feelings

Feelings regard users' emotional reactions towards the brand rather than the products. Feelings towards a brand can be challenging to discover through SEO implementations. However, through site audits, a brand can see the user behaviour of their users. The pages in the sitemap are split into content groups depending on what part of the purchasing funnel they are made for. It is then possible to look at user behaviour in the top-, middle-, and bottom funnel and see what issues the users might have in the different steps: *"know who you produce content for. You can make keyword analysis and research, and when you know, you can content-groups and look at top, middle, and bottom funnel, and find the problems that users have in the different stages"* (senior SEO manager, 21:37). For example, if there is a bounce-rate issue at the top of the funnel, the brand might want to improve its guide or specialist pages (senior SEO manager, 25:31 & SEO manager, 13:34).

Following the same logic, UX through user behaviour is an indirect SEO strategy for improving users' feelings towards the brand. A common mistake is believing that people always enter a website through the front page. Brands make it easy to navigate from the front-page front page through the menus and to the products (senior SEO manager, 23:40). However, according to the senior SEO manager: *"it might only be 25-30% of your traffic that starts on the frontpage, but that also means that 75% of your traffic doesn't start on your frontpage – and they should also have an easy time manoeuvring the site"* (24:15). Therefore, it should be just as easy to navigate to the next step from a product page or guide.

Exit pages are also important because they reveal where people stopped their buying journey. *"Does the bouncerate look awful you can start to understand the behaviour – where does it go wrong? Is it because they cannot find what they are searching for, or are they getting lost... or is a button not working?"* (SEO manager, 13:34). No matter what page a user is currently

located on, it should always be easy to take the next step and move on in their customer journey. (SEO manager, 11:24 & senior SEO manager, 24:40). If you are in a supermarket and you cannot find the isle that you are looking for, then the chances are that you end up exiting the supermarket without making a purchase (SEO director, 12:50). Therefore, website structure is significant for the users' feelings towards a brand – if a user has a good experience with a website, they will have had a positive, memorable experience with the brand (SEO manager, 11:40).

The fourth stage of the resonance model is the 'what about you and me?' step of the model. This step focuses on brand loyalty and maintaining relationships with customers.

5.1.6: Resonance

The last element of the brand resonance model is resonance, in which there will be looked upon whether the customer and the brand are in sync. This part of the model is not intended as a tool to create brand resonance necessarily rather, the elements below will come together and create brand resonance. It could be said that the SEO techniques pointed out in the salience, performance, imagery, feelings, and judgment all comes together and creates brand resonance. The experts also argued that there is no SEO answer to this. First, the SEO manager refers to SEO as not being an outgoing form of marketing. She clearly states that by saying "*SEO is not outgoing part of marketing*" (00:30).

She believes that if it is a more prominent brand, they should consider using mail campaigns (29:00). Constant reminders of the brand through mail can be good to maintain relations with customers. However, it is worth mentioning that email marketing is not SEO and is push marketing. Also, if a company has run out of stock a given product, brands have applied a "*click here and receive mail, when product is in stock*" feature (30:40). This will make customers happier as they would feel a relation to a brand and care about achieving their goals.

Another option for smaller companies is social media. Social media marketing efforts could be having a contest, making people like and share a post (29:31). This is once again not SEO but push marketing. Nevertheless, when looking upon resonance, one must investigate push marketing rather than pull marketing such as SEO.

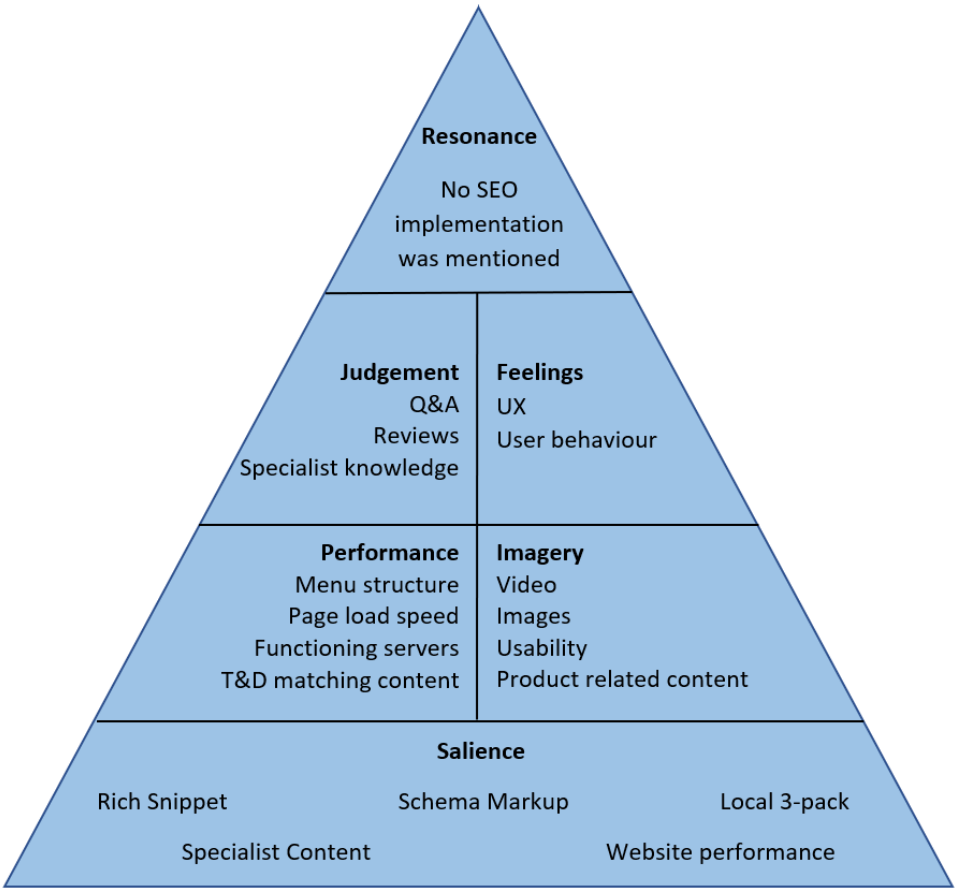

Figure 5 – 1st draft of SEO influenced brand resonance model

5.2: Quantitative analysis

The following section contains an analysis of the data gathered. This data will be used to validate the statements of the SEO experts on whether it can be used to create brand resonance.

5.2.1: Salience

When talking about awareness in an SEO context, it is simple as there are few specific data to look upon. However, those data can also be misleading, as the SEO workers can apply more than one sort of SEO work. The datapoint should be looked upon to confirm or deny whether the point the SEO experts recommended is total clicks, total impressions, average CTR, and average position. Total clicks are the number of times an URL in Google is being clicked on. total impressions are how many times a Google user is exposed to an URL when searching for something.

CTR is also known as Click Through Rate. Average CTR indicates the percentage of people exposed to the link that actually click on the link. Total impressions divided by total clicks

calculate the CTR. The last data that can be looked at is the average position in Google, also known as ranking. The reason for choosing those data points is that they link very well with SERP SEO. SERP SEO is, as mentioned, those results that appear on the screen when making a query on Google. Shortly many of the answers by the expert were part of SERP SEO, such as T&D, specialised content, schema markup, etc. Optimising on such things will impact Google Search as it would be indexed differently and ranked accordingly. Updating those things could directly lead to better ranking, and better ranking means that you are visible to the users, which is awareness.

As mentioned in the method, companies have been anonymised. The first data set we see is from 'Company A'. As seen in Appendix 1, data from 19/12/2020 till 31/01/2021 is represented by the dotted lines. There is also data to compare to after the implementation, which we will return to. The none dotted line represents the data from 19/12/2021 till 31/01/2022. Company A was chosen in this case because they had made an adjustment that the SEO expert also suggested during the interviews.

The SEO director and SEO manager suggest that specialised and well-written content is vital for Google Search's ranking system, as explained in the first section of the analysis. The company implemented specialised content by updating some new recipes for their website. The figure shows that they went from 4,7k clicks to 19,8k clicks over a year. In addition, they went from 211k impressions to a staggering 509k impressions, which means that the new specialised content has doubled the company's exposure and awareness. The average click-through rate is also grown from 2,3% to 3,9%, which is better than earlier, with impressions and clicks growing significantly. On the other hand, the average position has fallen slightly from 7,6 to 8,4. The new work takes some time to show improvements in ranking.

At company B, some SEO implementation has happened. They used terrible content regarding holiday tickets. However, the data seen in Appendix 2 is not just the impact of new optimised content. In this case, there has been worked with T&D, Schema markup, Images, and generally optimising on the rich snippet. T&D is something all three interviewees mentioned a straightforward and effective SEO tool during the interview. Company C had optimised some content as well as optimising T&D. The number of impressions has decreased, even though clicks have risen. Their average position has improved, and their overall SERP features have been improved, as seen in Appendix 3. Even though fewer people see the website out on the SERP, then there are more who visits.

Also, it is worth to mentions it is all new data, so a comparison from year to year is impossible and only for the previous three months and last three months. The clicks only went from 1,09M to 1,17M clicks, while the total impression fell from 12,4M to 11,6M. Hence, the CTR has risen, even though fever people have seen the link. However, as it might not seems to be that good, T&D has made some improvement. It is worth mentioning that when working with something externally like T&D, then it is only possible to improve clicks as T&D never improves things such as impressions or ranking.

You need to look more internally like content and web performance to do that. T&D alone only affects clicks. To improve impressions and ranking, other SEO implementations are needed. The data point is way too new, and there is not much to compare to, as it is only compared to six months in total, SEO implementation usually takes time to show results. To further investigate this, data from company D is used. At company D, the only SEO implementation that has been done is T&D. Then the data is also clear, as the only impact that happens is purely based on changing T&D.

As seen in Appendix 4, total clicks have advanced from 1,63K to 2,08k clicks. CTR has improved slightly again with improved clicks and decreased impression, and ranking is decreasing a bit as expected because no internal work has been done here. The last case is also a webpage with the only thing accomplished is T&D on the sales-generating pages. As observed in Appendix 5, the data of company E the key figures are rather identical, Clicks have improved from 536k to 553k, and the impression has dropped from 3,26M to 3,03M with improved CTR from 16,4% to 18,3%.

Another component pointed out by the SEO expert is schema markup. Two companies were chosen to see the impact of schema markup, where it was the only implementation. As seen in Appendix 6, after company E implements schema markup, the aim is to become better indexed and be shown in the "what other people ask". If a schema markup is successful, your content would be better ranked hence more impressions. As seen from the data in Appendix 6, the impression rose from 204k to a staggering 380K impressions, indicating a successful schema markup implementation. Also, the average position went from 12,5 to 9,8. Total clicks did improve a bit from 6,52k to 8,46k.

The CTR dropped, but that would be anticipated with the steep climb of the impressions. Another reason for a bad CTR could also be that you answer the searcher question "too well" in the SERP, and they have no further reason to click through to the webpage and read more.

The data gathered in this section derives from the same company at the same time but is taken from different pages. The data in Appendix 5 derives from their general website, whereas the data in Appendix 6 is from their inspiration page.

Another data set was found from company F, which only implemented schema markup on a set of specialist pages. The alteration of the data is very similar to company E, as seen in Appendix 07. After implementing schema markup, company F moved from ranking 28,5 to 17, which is a giant leap. This ranking leads to an increase in impressions from 63,6k to 173k. However, the clicks did not improve too much, just from 1,79k to 1,85k, explaining the deteriorated CTR from 2,9% to 1,1%.

5.2.2: Performance & Imagery

Company A has changed its server host and the order in which the script behind their webpages is loaded. This optimisation is purely script-based and does not affect the visual aspect of the website other than during the loading process. This change has optimised the load speed of their website, which has brought many of the web pages from the mediocre load speed category to the excellent category (Appendix 8). In addition, this optimisation has a positive effect on indexation and has improved the impressions that the optimised webpages receive (appendix 9).

Company G has improved its load speed between February 19th and September 14th, 2021 (appendix 10). Unfortunately, due to a tracking error, the SEO company has very few data points in that period. Company G handles the optimisation of website load speed internally, so it is unknown to the researchers what precise improvements the company has made during this period.

When inspecting the average ranking of the website (Appendix 11), the ranking decreases between February and June, but during June, the ranking changes and starts improving. As company G has made no other significant website changes during this period, this increase is most likely due to the load speed improvements that would have been implemented at the beginning of June.

Like in the previous case with company G, company D has also gone through a period with lowered page speed (appendix 12). This sudden increase in load time was caused by adopting some new third-party script. The company both implemented new JavaScript for some new

stylesheets and some scripts for tracking user data. These third-party scripts had a negative effect on multiple load speed metrics. For example, when examining user data of people that entered the website through Google Search (organic users), both the users (Appendix 13) and the sessions (appendix 14) decreased in the period between October 2021 and January 2022, where company D had decreased load speed.

The users and sessions decrease slowly rather than doing it quickly as soon as the load speed worsens because Googlebot does not index a website badly immediately after it has registered slower than average load speed in one crawl. When the load speed has consistently worsened throughout multiple crawls, Googlebot begins to decrease the website's indexation, which leads to it appearing in fewer and fewer searches. When the Load speed issues are fixed in January, Google indexes the website as it previously did before the load speed issues. As a result, both users, sessions, and the percentage of new sessions (appendix 15) return to normal quite speedily throughout January and February.

This phenomenon can also be observed in Google Search Console, where the increase in both impressions and clicks after January is quite apparent (appendix 16). Company H has implemented a new menu structure. The implementation was implemented at the end of January 2022. The graph (appendix 17) shows a year over year improvement in the user data from organic users, and it is very apparent that company H has experienced an increase in eCommerce conversion rate, transactions, per session value, and revenue in a three-month duration of 2022 compared to the same time period in 2021.

This change in menu structure has had no direct effect on ranking or any other features in the SERP. The data supports this as both users and new users are similar in the two years. It is, however, apparent that pages per session have lowered a little bit, and session duration has improved. This is most likely because users have an easier time finding what they are searching for. It is important to note that there have been made other SEO improvements to the website during the year, so the improvements are not necessarily only due to the implementation of the new website structure.

The company I have also implemented a new menu structure at the beginning of January 2022. This investment was because a user analysis revealed that users got lost on the website and could not find what they were searching for. Most users entered the site, spent much time on the site, and had a high number of pages per session, but the number of transactions was relatively low compared to the number of users on the site. The graph (appendix 18) reveals an

immediate change in per session value and a considerable increase in Ecommerce Conversion Rate, transactions, and revenue compared to the previous year from organic users. The goal of the implementation was to make it easier for users to find what they are searching for.

The decrease in average session duration and pages per session could be caused by users being able to find what they search for more effectively, so the goal was reached. Unfortunately, this new menu structure was accompanied by a series of unsuccessful tv commercials and paper ads, which caused the bounce rate to increase drastically.

Company J has improved its page speed on smartphone and desktop devices (appendix 19). Previously the company has had a website with many load speed issues, and most of the web pages have been judged to be poor performers in this metric by Googlebot. This improvement has caused many of their websites to go from poor to mediocre or excellent, which should positively affect their ranking. However, when inspecting the website's average rank on Google Search Console (Appendix 20), there appear to be no improvements in either average rank or CTR.

This is because company J started experiencing sitemap issues simultaneously as the page speed improvements took place (appendix 21). The company is a marketplace for cars, and they stated emitting specific products on the sitemap. This meant that when a car was sold, and the product page was deleted, there was a webpage in the sitemap with a 500-error. Googlebot does not like sitemaps with error pages, and these pages can have a negative effect on the indexation of the entire website. As such, the sitemap issues negated the improvement in page speed. However, when analysing user behaviour in Google Analytics, it is apparent that improved page load speed has positively affected user behaviour (appendix 22). Bounce rate, sessions, and pages per session have all improved for organic users. The decline in avg. session duration is most likely due to users being able to navigate the site more intuitively.

Company K, L, M, and B are comparable cases of companies that optimised their product content. The companies' websites do not contain any products, but rather the websites generate store-leading traffic. Previously, the companies only had very shallow content regarding their stores, events, and store information, and the pages were of little use to users. Furthermore, the pages generally ranked poorly, as they contained few indexable qualities. Company K had tried to make some content, but it was not SEO optimised. These product pages were optimised with better text containing more keywords and matched the intended users better. Pictures and layout were also optimised for a better user experience.

Company K experienced a slight improvement in users and an improvement in average session duration from organic users compared to the previous year (Appendix 23). Company L experienced significant improvements in all user metrics (Appendix 24), with both more users and better traffic that stayed longer and viewed more pages. Company M achieved the best overall improvement in organic user metrics as they went from 176 organic users in the first three months of 2021 to 14,065 organic users in the same period of 2022 (appendix 25). They also greatly improved all the other user metrics. Company B likewise experienced tremendous improvements in all its metrics from organic users (Appendix 26). Above all, the four companies experienced an increase in both amount and quality of traffic from improving their product pages.

5.2.3: Judgement

Based on the answers of the SEO experts, judgment is best improved through the implementation of reviews and Q&A. A way to test this hypothesis would be to look at the revenue, returning users, calls, and appointments made before and after implementing a Trustpilot review score on a company's website. Unfortunately, none of the corporations that are customers of the SEO agency where this article receives its data have made this implementation in the past years. Another way in which the hypothesis could be tested is to examine whether there is a difference in in-store visits and appointments between location-specific stores with good and bad reviews. This data, however, is not available to the SEO agency either, as they only have access to online user data and data from online platforms.

Schema markup is a sort of Q&A. Based on company E and F data, schema markup in the SERP can be good for awareness. Company E and F are both companies that derive their revenue from physical store sales, so it is not possible to access data on whether this type of Q&A influences conversions. Other Q&As like chatbots are not an implementation that this SEO agency has much history with, so, unfortunately, data from this type of Q&A is not available either. A last type of Q&A that could influence online sales in a way that could be tracked online is the implementation of pages with 'frequently asked questions.

This could be in relation to return policies, terms & conditions, shipping, warranties, or other purchase-related questions that a user might have. As most of the corporations that are customers at the SEO agency where this article receives its data are companies that have been around for years, they already have these types of pages. While a SEO specialist might, in some

cases, recommend that these pages are improved, it is not something that a SEO agency handles. This is because these pages should not aim to achieve a high rank on Google Search but rather be as precise and informative as possible. The SEO agency has no records of when these pages are improved, and therefore, it is almost impossible to track the direct effect of the improvement.

5.2.4: Feelings

The brand resonance model is a structure that is connected from bottom to top. The element feelings are the feelings generated through the previous element's performance and imagery. In other words, the experience a customer goes through in the previous stage is the result of feelings. A couple of figures can be looked at when determining the users' feelings at this stage through SEO data. One of the data that explains good feelings is bounce rate which indicates that the users tend to stay on the website more as they are satisfied with the content and have positive feelings. Another key figure that can be examined is the number of sessions, the number of pages clicked through in a session, or the average session duration. This is a sign of the positive impact of the site, as the user might find the content interesting. Furthermore, the web user will usually also do some transactions when they are happy with the website's content, so a rise in transactions indicates the user's feelings.

To validate feelings, the companies with SEO implementation during the performance and imagery section will be reviewed to see if the suggestions in those two elements affects feelings. For example, company H did only improve on the menu structure of their website. Company H has increased sessions by 1,6 %, which means additional clicks. However, pages per session decreased by 3,16 %. This might seem like a bad thing, but the reason for this could be a better-structured website so that the user needs to click less around and become lost. This is basically the bounce rate, which has decreased by 2,67 %. It is worth mentioning that a lower bounce rate is better. Even though pages per session have fallen, the average time spent on a whole duration has increased, which is good, as it means that the user is happy with the content and might even prepare to purchase. That leads to increased transactions which company H got with 25,35 % (appendix 17).

The following example is slightly different as they wanted to cut down on those key figures. As mentioned earlier, the goal of the company I was to optimise the menu structure, which should decrease pages per session, average session duration, and bounce rate. Moreover, this

is precisely what they achieved. The bounce rate decreased from 60,23 % to 18,03 %, which can be explained by pages per session and average session duration. They have a decrease of 12,36 % and 34,54 %, respectively. Furthermore, all that was the goal for the company I, to update the structure, which would lead to happy users, as we can see with the increase in transactions. The transaction has gone from 179 to 366, an increase of 104,47 % (appendix 18).

The next is company K which seems to have improved well around the key figures that indicate happy users. This happened due to update on their product sites, as the product content gets updated. Session has increased by 18,28 %, and the bounce rate has fallen by 3,34 %. Pages per session have a slight decrease from 2,43 to 2,42. On the other hand, the average session duration increased by 79,98 % (appendix 23).

The last data set there will be looked at is company L. Company L did the same updates as company K. The data gathered here is very positive as well, and it seems like the users have good feelings towards the brand. Sessions went up from 4191 to 9209, an increase of 119,73 %. The bounce rate also went down from 89,12 % to 44,42 %. Page session also grew by 79,46 %, and average session duration went drastically up by 813, 06 % (appendix 24). The data gathered shows much of the same things; hence, it is not chosen to describe them further and can instead be found in the appendix 24.

6: Discussion & Findings

The qualitative analysis concluded with a first draft of the SEO influenced brand resonance model. This model contained all the possible SEO implementations that the three specialists had mentioned during their interviews. The quantitative analysis sought to validate each of the implementations, to conclude whether they affected the element of the model that they were proposed to affect. The result is the SEO influenced brand resonance model, which is illustrated in figure 6. Most of the SEO implementations could be validated to some extent, however there were some limitations to the analysis and verification process. The findings will be discussed in the coming section.

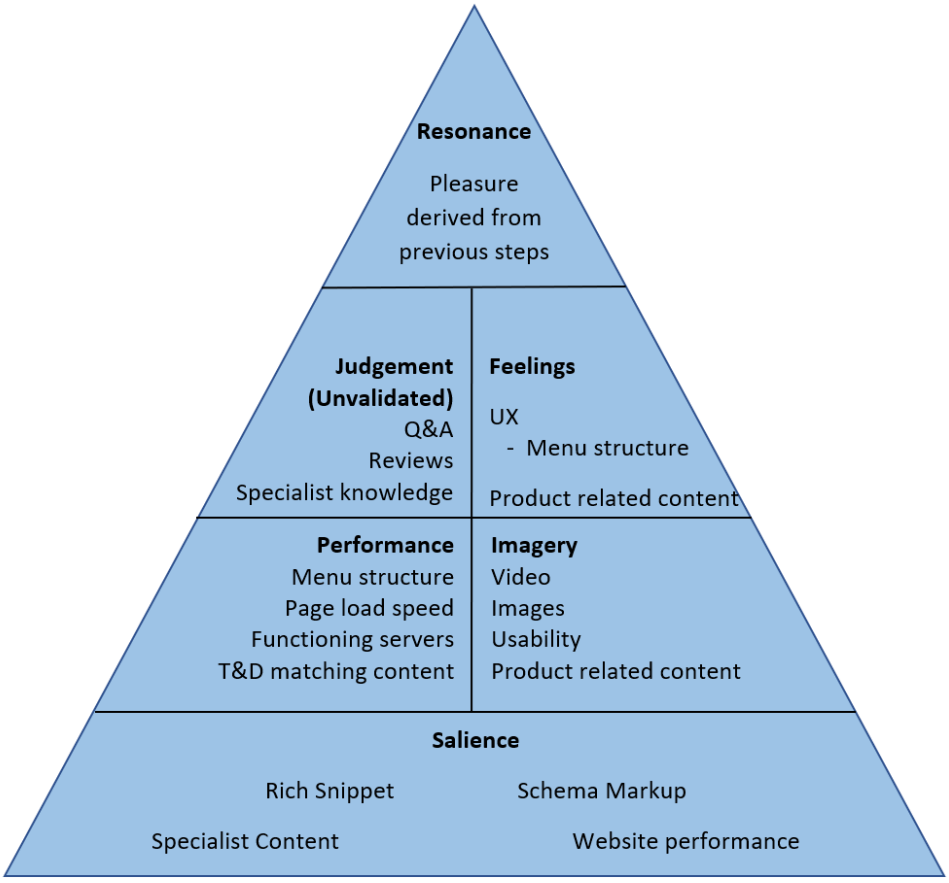

Figure 6 – The SEO Influenced Brand Resonance Model

6.1: Salience

Overall, when talking about the salience, the thought that comes in mind for all three SEO experts is SERP SEO. Specifically, there are more than a few specific implementations they point at. They commonly mention some of them; one specific expert might just mention other things. However, that does not mean it is not valid or invalid; the interviewee might just not have thought of it, as the interview question was semi-open. The first SERP SEO tool they pointed towards is T&D. This tool all three experts mentioned. This alone seems like a good indicator that there might be something about it that can create awareness. There is also a possibility that they mention it because they work for the same bureau and the office culture affects their way of working and works the same way.

To validate T&D, some data was found in which some companies changed T&D, which tells us whether it will work and create awareness. The companies in which T&D was changed was company C, D, and E (appendix 3, 4 & 5). Changing the T&D shows a slight improvement in both companies, clicks, CTR has improved moderately, and impression falls slightly. Hence, T&D does make a bit of a difference, mainly for clicks. However, this indicates that alone T&D

is not enough, and other internal things should be done, to increase the website's performance. However, it was clearly stated by one of the experts that he experienced changing the T&D for a larger well-known, company and it went well. However, some of the data here are new. After the implementation, the data to be looked at must be compared between two years and not just 6 months, as the implementation takes time to show results.

All three SEO expert points towards SERP as the primary SEO tool to work with when the goal is to create brand awareness directly. There are a few SEO techniques to use, such as images, video, ratings, and local 3-pack. Nevertheless, not all the suggestions of the SEO manager could be adequately validated. There was no data from the SEO company where those techniques were implemented alone. Not only that, but it is not possible to validate the difference those implementations could make. This will be further explained in limitations & future research.

Another SEO implementation mentioned by the SEO director and SEO manager is specialised and well-written content. To validate this, company A & B is chosen (appendix 1 & 2). Both companies achieve a considerable boost in terms of clicks and total impression, which grows phenomenally. Both companies also achieve better CTR; however, average ranking differs as company A receives a slightly lower ranking, while company B acquires a much better ranking. This can, however, be explained by the number of works there has been done. Company A only worked with optimising the content and are more accurate in terms of what output could be expected the most. On the other hand, Company B had implemented new T&D, images, schema markup, and more general rich snippet things. Furthermore, it is also proof that working with more than one SEO implementation is more beneficial.

Another SEO implementation mentioned was schema markup, which the manager only mentioned. As explained earlier, it does not mean that it is incorrect, but rather that the others did not think of it. We quickly see that the SEO manager had a point when validating this. Companies E and F (appendix 6 & 7) are much similar in many ways apart from clicks. Both companies see a significant rise in total impression, naturally, CTR drops a bit for both. The reason is that they need to consider some other CEO implementations to increase clicks. That could be better T&D; as mentioned, SEO works best with more than one SEO implementation. The rise in the impression is that both websites gain a better ranking in Google Search because of schema markup.

Overall, some of the suggestions the experts came with could be validated by data, and it seems like they were accurate. It is also clear that SEO implementation should not consist of one implementation but more in the stage. Together brings out the best result, and the result will not come overnight either.

6.2: Performance

The overarching theme for optimising performance on a website is fixing UX issues. Performance is centred around meeting user needs in the original brand resonance model. Enhancing the user experience and meeting user needs are two very similar concepts, so it makes sense to have UX optimisation as a central focus in this part of the model.

Page load speed was mentioned as a vital feature for differentiation and performance. From a UX perspective, page speed affected users and sessions; more people visited the site and looked at more pages when they were there. However, the change in page load speed that appeared in the analysis was minor, so the effects were also minor. Had there been more significant effects, there might have been more effective on a metric such as bounce rate. From a Googlebot indexation perspective, page load speed affects ranking because a slow website is indexed worse than a fast website.

As mentioned, many metrics affect indexation, so a slow site with brilliant content could still be indexed better than a fast site with poor or no content. In the case of company F, the faulty web pages in the company's sitemap negated the positive effect an improvement in page load speed would have had on the indexation and ranking of the website. While there were no direct implications between a faulty sitemap and user experience, it affects differentiation, as proposed by the SEO manager, by negatively affecting ranking. A 'good' website experiencing negative effects from a decrease in average ranking could be bad for UX. Therefore, users may experience difficulties when searching for a specific website on Google Search.

Having functioning servers was also mentioned as affecting performance. Server issues are often closely related to page load speed, as server issues often result in difficulties when a webpage retrieves content from the server. Furthermore, server issues are most often identified when auditing for load speed issues. Therefore, improving server issues often have the same effects as page load speed optimisations.

Having a good menu structure was proven to have a rather significant effect on user experience. Guiding the user to the next step, no matter what page they enter the website from, and thereby

streamlining the customer journey, proved to have a substantial effect on both the different usability metrics as well as the conversion metrics. The two cases with menu structure optimisation proved that a good structure could help users streamline their customer journey and make them view more or better-suited items and thereby buy more.

The effect of having T&D match webpage content is an implementation that was not investigated in the quantitative part of the analysis. This is partly because having T&D match content is a metric that is difficult to test as it is very subjective. However, it is also because of the setting in which this data was retrieved. The SEO agency is a reputable agency that prides itself on contributing helpful content to its customers. As clickbait titles that do not match the content of the webpage are only truly of use to companies that monetise solely from raw traffic, these are rarely the titles that the SEO agency provides. The companies used in this analysis are either Ecommerce or lead-generating sites, the T&D, along with any content that the SEO agency has provided, will reflect the queries that draw valuable traffic to these types of websites. Therefore, most of the pages on the websites in this analysis will have T&D's that match the content.

6.3: Imagery

In the context of the brand resonance model, imagery traditionally refers to how users perceive a brand. The answers given by the interviewees centred around communicating messages efficiently to the user. Although there are many similarities between these two approaches, within the aspects of SEO, this part of the model is more limited as SEO is only pull marketing. If a user has a bad perception of a brand, they are unlikely to visit its website. SEO can be used to reflect how a brand wants to be perceived through its online platforms.

Images and videos can be challenging to measure as these are not implementations that will ever be implemented alone. Instead, the SEO expert will advise which pages should be accompanied by pictures or videos when optimizing content or specialist pages. Sometimes, a company creates a video and asks a SEO agency to build up a webpage around it with content that matches the video. This could be a grocery list, some specific measurements, or a deeper explanation of some of the video's main points. Therefore, the effect of images and videos is part of the total effect of new or optimised pages. Images and videos can have an excellent explanatory effect and provide good usability and UX potential to a webpage.

Product-related content can have significant effects on usability and brand perception. It allows the brand to communicate its products to the customer in their own words. As proven by companies B, K, L, and M in the quantitative analysis section, optimising content pages can positively affect user metrics, with major improvements to all metrics. Improved content can positively influence ranking and improve impressions and other metrics such as bounce rate, sessions, average time on page, and pages per session.

Considering everything, performance and imagery seem to be about lowering interaction costs in the customer journey and helping the user find the website and manage it as efficiently as possible while also convincing them to buy the website's product.

6.4: Judgements

In the traditional brand resonance model, judgment regards the thoughts and opinions that a user has toward a brand's product or service. Based on the interviewees' answers, the SEO-influenced judgment step is about the brand proving that they are professional and knowledgeable about their profession and showing that other people have previously judged the product or service to be good.

This could be achieved by implementing reviews and Q&A across the brand's platforms. These implementations should focus primarily on platforms where the most significant potential userbase is active. These implementations could potentially showcase the brand's profession knowledge and prove that they provide quality products or services. These implementations should be accompanied by specialist content pages that further prove the professionality of the brand.

Unfortunately, for reasons explained in the quantitative analysis section, no data could be gathered for this step in the model. Therefore, there is no way to validate the statements of the SEO experts properly. Nevertheless, as the SEO experts have provided answers and insight that could be validated in the other steps of the model, it is reasonable to assume that there is some validity to these implementations as influencing judgment. However, this thesis cannot truly confirm or deny it.

6.5: Feelings

When discussing feelings, the SEO experts pointed toward user behaviour. Depending on which stage the user is in the purchasing funnel. This stage focus on the feelings of the customers and how well they are connected through all stages of the purchasing funnel. The customers' feelings are, as explained before, based on the stages below in the resonance model. Hence, it is not possible to mention a new SEO implementation for this section to be implemented to make the customers feel happy. However, the SEO technique regarding better load speed, better servers, and other internal website issues, which is part of the element performance in the resonance mode, is vital to gain positive feelings towards a brand.

Some of the mentioned SEO work that can be done is a better-structured website, according to the senior SEO manager. In addition, the SEO manager mentioned it is crucial to look at the exit rate of and website as it indicates that they are unhappy with something. Hence, the reason to investigate the bounce rate.

As seen through the data at company H (appendix 17), they updated the website structure, which led to an increase in sessions and decreased pages per session, which is not necessarily bad as the transaction rose by 25,35%. Furthermore, the bounce rate also fell. Those key figures are essential to look upon when identifying the users' feelings. The data around companies K and L is very similar to company H. They all achieve much of the same results, indicating that the customers feel good about a website and the brand.

6.6: Brand resonance

As mentioned earlier, brand resonance is created when the element below in the brand resonance model is positive. It is very similar to the hierarchy of user needs. The users need to feel the pleasure of using a website in terms of usability, load speed, valuable content, and ease of finding. The element resonance in this model results from the five elements below. Hence, in order to have brand resonance and create the best possible relations with the customers.

As previously mentioned, some SEO implementation can help create better relationships with customers in the element of the brand resonance model. However, as the SEO manager refers to SEO as pull-marketing and not push-marketing, there is no specific SEO implementation to apply here. There is, of course, some push-marketing to work with, such as mail campaigns & SoMe. Therefore, creating resonance directly through SEO is impossible, but all the elements below create resonance.

7: Conclusion

In order to answer the first questions in the problem statement, this research has identified several forms of AI were discovered, each with its own purpose and benefits. AI is comprehensive and can be used independently to achieve many things. One sort of AI is NLP which Google Search uses. Google crawls websites and indexes and ranks those accordingly. However, to understand the content of a website, Google needs good AI that can understand the context of the website flawlessly, regardless of its language. NLP is very capable of understanding several languages perfectly. There are a few ways of understanding the AI and gaining some advantages in Google for a company. The way to manipulate Google is SEO, a new kind of AI that can and is used in digital business nowadays. Google is one big AI machine that can be manipulated through SEO. That can give a business some digital advantages and better conform to the users' needs.

The second question in the problem statement was about how businesses can apply SEO to improve their brand resonance. To answer this question, three professional SEO specialists were questioned individually regarding the SEO implementations they would utilise to improve the different steps of the brand resonance model. The SEO specialists had clear ideas for implementations for the first three steps of the model. The answers varied but were not conflicting with the answers of the other specialists. For the last part of the model, they could not develop any direct applications. One specialist pointed out that SEO is pull and not push marketing, so once a user has left the online platform, there is no way to reach them through SEO alone.

In order to answer the third question in the problem statement, first, the SEO implication needed to be validated so their effect could be proven. Once they were validated, it was discussed whether they could be applied to a brand's online platforms to improve brand resonance. The effect of most of the applications in the first two steps of the brand resonance model could be verified through the quantitative analysis. In the third step of the brand resonance model, the SEO implementations that affect feelings could also be verified to an extent. However, the proposed SEO implementations to affect judgment could not be verified due to a lack of valuable data. As such, Judgement has yet to be verified or disproved. Finally, no specific SEO implementations were proposed to directly affect the last step of the resonance model, resonance. As such, no SEO implementations could be validated for this step.

This thesis's last and overall objective is to observe the possibility of applying any new digital business trend, such as AI, into the brand resonance model to create brand awareness. It was then found that SEO is a possibility to apply for the brand resonance model. The SEO experts had several suggestions on SEO techniques that can be used at different model levels. However, they did not suggest SEO techniques to all levels, as they mentioned that SEO is pull marketing. Some elements such as judgment and resonance cannot be affected through SEO, as push marketing is needed here. When validating the experts' suggestions, their answers seem reasonable based on the data. Thereby, it is, to an extent, possible to apply the brand resonance model to an AI-influenced digitalised business today with SEO.

7.1: Contributions

Digitalisation is a considerable part of the business now a day. As stated at the beginning of this thesis, digitalisation is essential for survival. Blockbuster was a leading company that failed to adapt to the new digital trends and went bankrupt. Not only is digitalisation essential for survival, but it is also an excellent opportunity to differentiate from your competitors and possibly create new ventures and a new source of income.

Throughout the literature review, many traditional marketing applications for AI were examined. Most of these are about using simpler AIs for process automation, segmentation analysis, or other simple marketing processes. AI has been used as a tool for optimising already existing tasks. The manipulation of an ANN AI through SEO provides an alternate perspective on how AIs can be helpful to brands in a new and innovative way.

This thesis categorised several SEO implications into the different steps of the brand resonance model. For example, when SEO experts consult the marketing department for a brand, and this department wants to increase brand awareness or differentiate themself from a competitor, this thesis could function as a framework for what SEO implications would be the best fit for the task.

7.2: Managerial implications

The SEO-influenced model is a readily available and free-to-use tool that is easy to comprehend and implement. The model can be used by SEO specialists and marketing managers in the consultation process to create a common framework to understand both the SEO implementations and the marketing processes. Hopefully, the successful implementation

of this model will lead to better and more effective communication between managers and specialists. This could lead to better SEO implementations and better brand resonance. It could potentially have financial benefits for the brand, as they would not end up with SEO implementations that did not have the intended purpose.

The implementation of the model requires that both parties in the consultation process adapt it. There is a minimal amount of knowledge that both parties should understand before the model can be successfully utilised. There is some theoretical groundwork from the marketing world that must be understood. These are the three theories that the original brand resonance model consists of: brand awareness, brand differentiation, emotional reactions, and brand attachments. However, only a fundamental familiarity with these theories is required. Therefore, the time and effort that needs to be invested before utilising this model are minimal.

This thesis provides the necessary knowledge for SEO and marketing workers to work with the SEO-influenced resonance model without having prior knowledge of push marketing or vice versa. The knowledge needed to understand and use the model is provided in this thesis.

7.3: Limitation & Future research

1st limitation

One limitation of this thesis has been the accessibility to data and experts. This thesis is done in collaboration with a SEO agency, which has graciously provided SEO experts for interviews and access to all of their customer data. This collaboration has allowed this thesis to base the new SEO-influenced brand resonance model on knowledge from professional SEO specialists and data for verification. This access has made the new model concrete rather than a theoretical framework.

However, it can still be considered a limitation that this thesis only had access to one SEO agency. The culture, best practices, and knowledge could potentially vary between agencies. As there is no SEO education in Denmark, new hires inherit much of their knowledge from their superiors. We saw many congruencies in the answers from the three specialists. This could either be because the answers they gave are universal truths or because of the knowledge shared between co-workers.

The answers might have been different if the interviews were conducted at another SEO agency. Based on the data analysis, most of their statements proved to have the intended effect,

however, other SEO implementations might have had similar effects. Future research studies could expand on the knowledge from this study by interviewing other SEO experts from other agencies and cross-examining data sets from clients of different agencies. This was not done in this research because of a lack of resources. Most SEO agencies are pretty private concerning their best practices. At the same time, client data is very confidential and not something that they would likely share with outsiders.

2nd limitation

Some of the SEO implications that were assessed in the qualitative analysis could not be isolated, and therefore, their effect could not be isolated. For example, certain aspects of SERP SEO, images, and video, are rarely implemented without other SEO implementations. Furthermore, in some cases, multiple SEO implementations are implemented at once. This can make it difficult to isolate the effect of a single SEO implementation in practice. However, as this thesis utilised real-world data, there was no way to avoid this, which is how this SEO agency operates.

This is not seen as a strict limitation for this thesis. On the contrary, it allowed for a more holistic and realistic approach to the implementations and their effects on indexation and users. However, in order to determine the specific effects of every implementation, a more clinical approach should be taken. In such a case, researchers could cooperate with businesses that would allow them to test individual SEO improvements on their online platforms. This would allow for a more individualised look at the effect of having images shown in the SERP. However, isolation would not be 100% possible even in this case. It would still depend on whether competitors made improvements or if another part of the company's marketing efforts changed its website activity.

3rd limitation

The SEO implementations that the SEO experts in this thesis mentioned are only a fraction of the SEO implementations that are available to a SEO specialist. The SEO implementations mentioned by the interviewees have been verified and categorised, however, there are still many other SEO applications to verify and categorise. Future research could provide a list of SEO specialists' concurrent SEO implementations. This thesis provides a framework and a theoretical foundation for future research on which other SEO implementations can be categorised and verified. This would provide an overview of all of the SEO possibilities that a brand has for optimising their website towards a specific step of the brand resonance model.

Furthermore, it might help in the communication between the marketing team on the side of the brand and the SEO expert.

4th limitation

This project aims to create a SEO updated brand resonance model. In order to achieve the best possible outcome taking the limitations into account was to use the suggestions by SEO experts and then later validated the statements by data. Then a new brand resonance model is created, as illustrated at the end of the discussion. However, this final draft of SEO infused brand model is backed up by SEO experts and data has not been tested in the real world, which means that there are not enough pages or time left to take this new brand resonance model out to some companies and test to see if it works as intended too. On the other hand, this is also an opportunity for future work.

5th limitation

One of the limitations of the brand resonance model is at the top of the model. No SEO implementation can be implemented during this stage, as SEO is pull marketing and this resonance element requires more push marketing. As much as it was a limitation for this thesis to gather data or suggest SEO implementation, it is also an opportunity for future research. A possibility is to combine the work of push marketing with SEO. For example, investigating the marketing and sales funnel (buying funnel) and seeing how SEO can aid the whole buying process. Alternatively, maybe just investigate what kind of push strategy is best suited for accompanying the SEO in the different steps of the brand resonance model or even other AI that can aid SEO.

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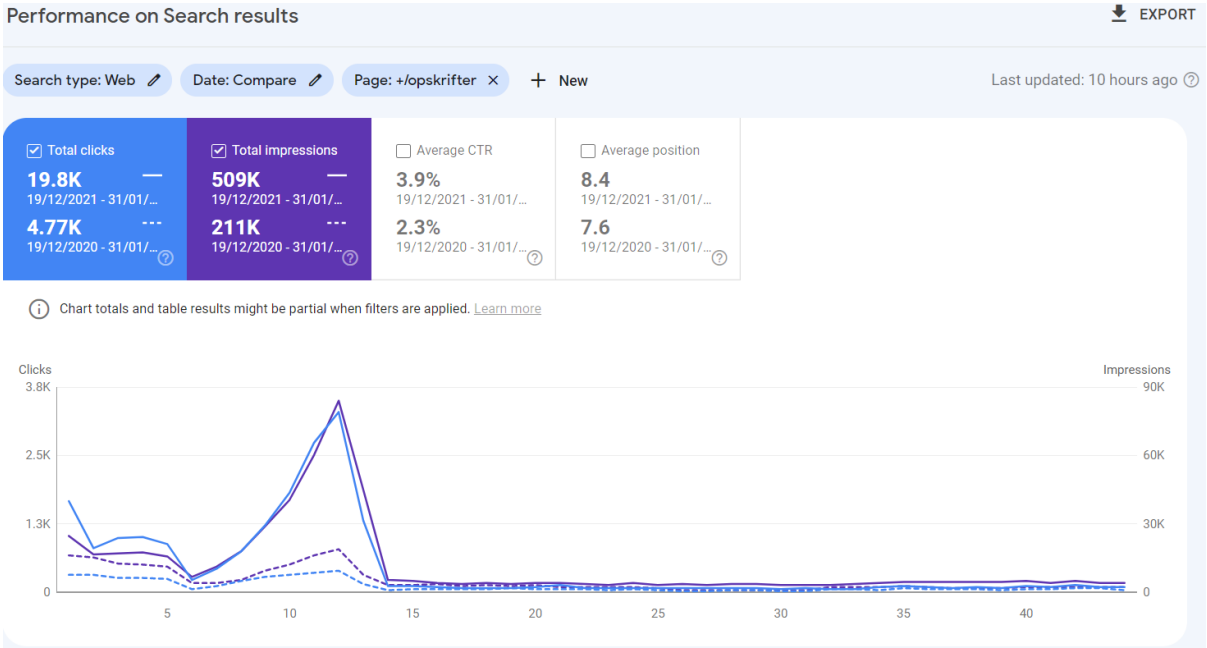
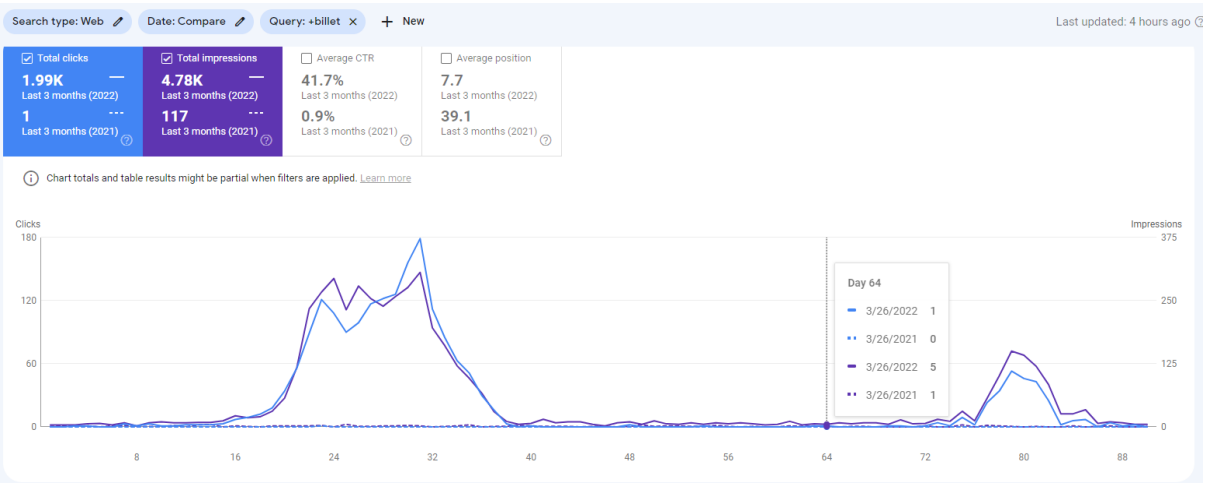
9: Appendix



Appendix: 1



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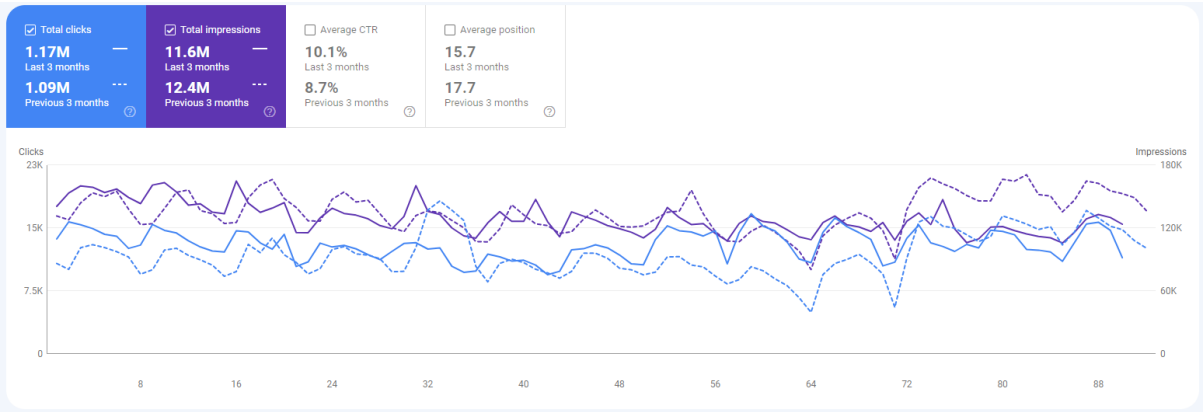
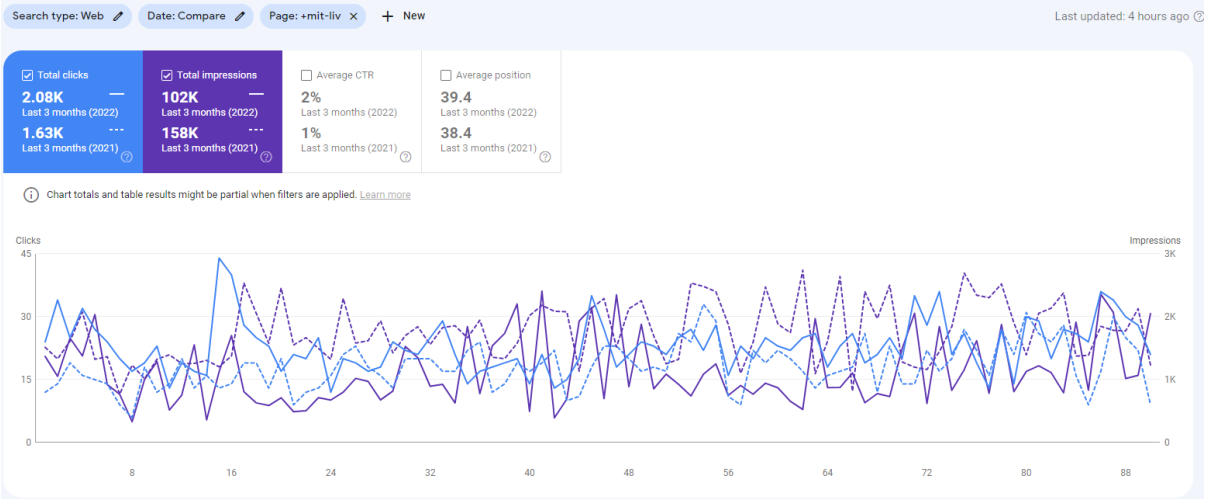
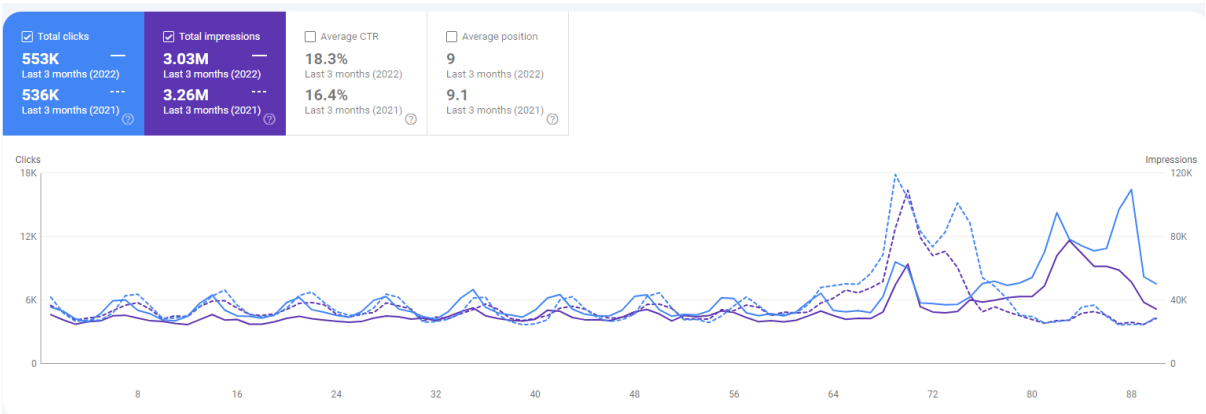


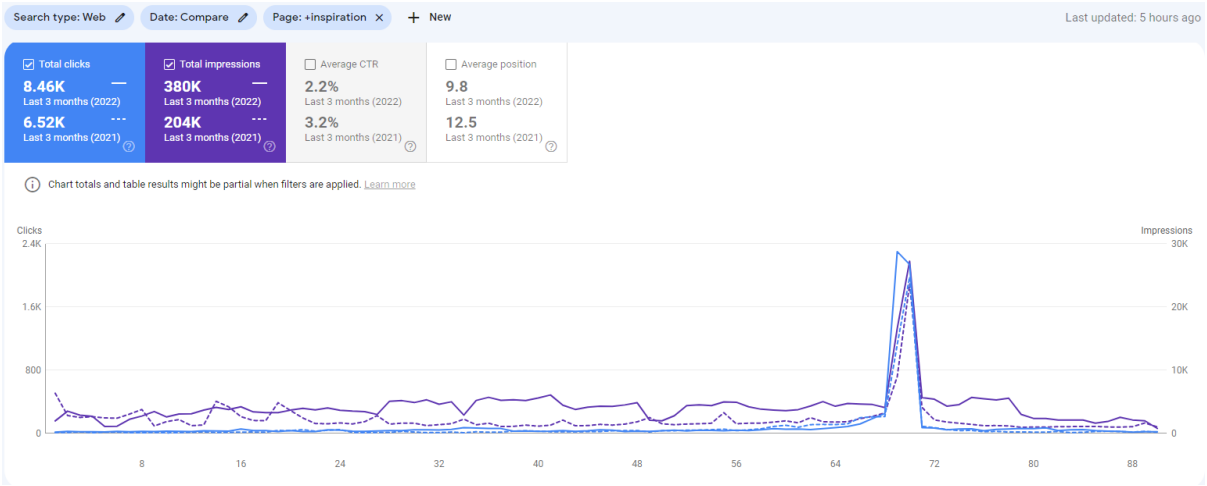
Appendix: 3



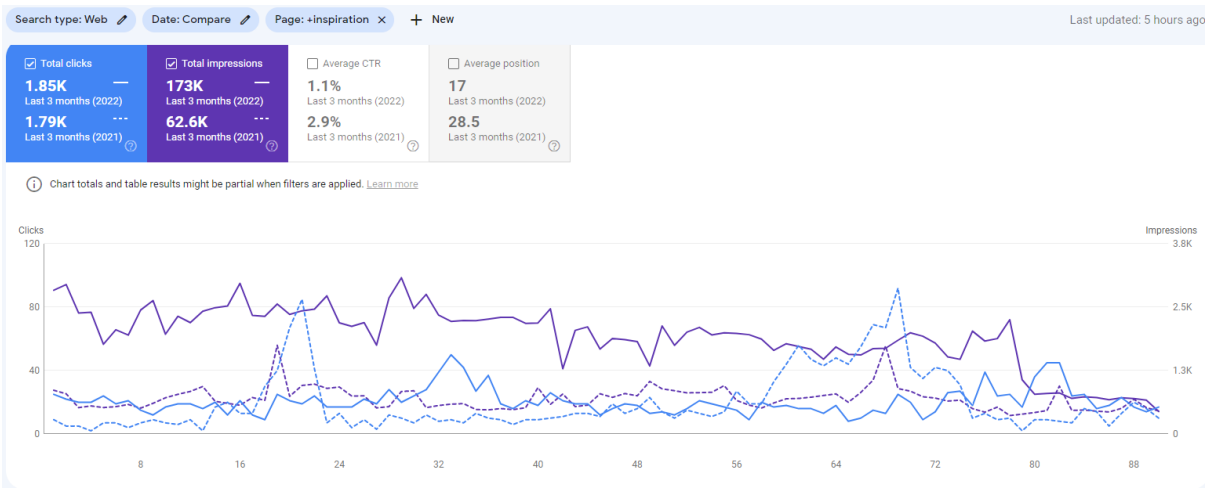
Appendix: 4



Appendix: 5



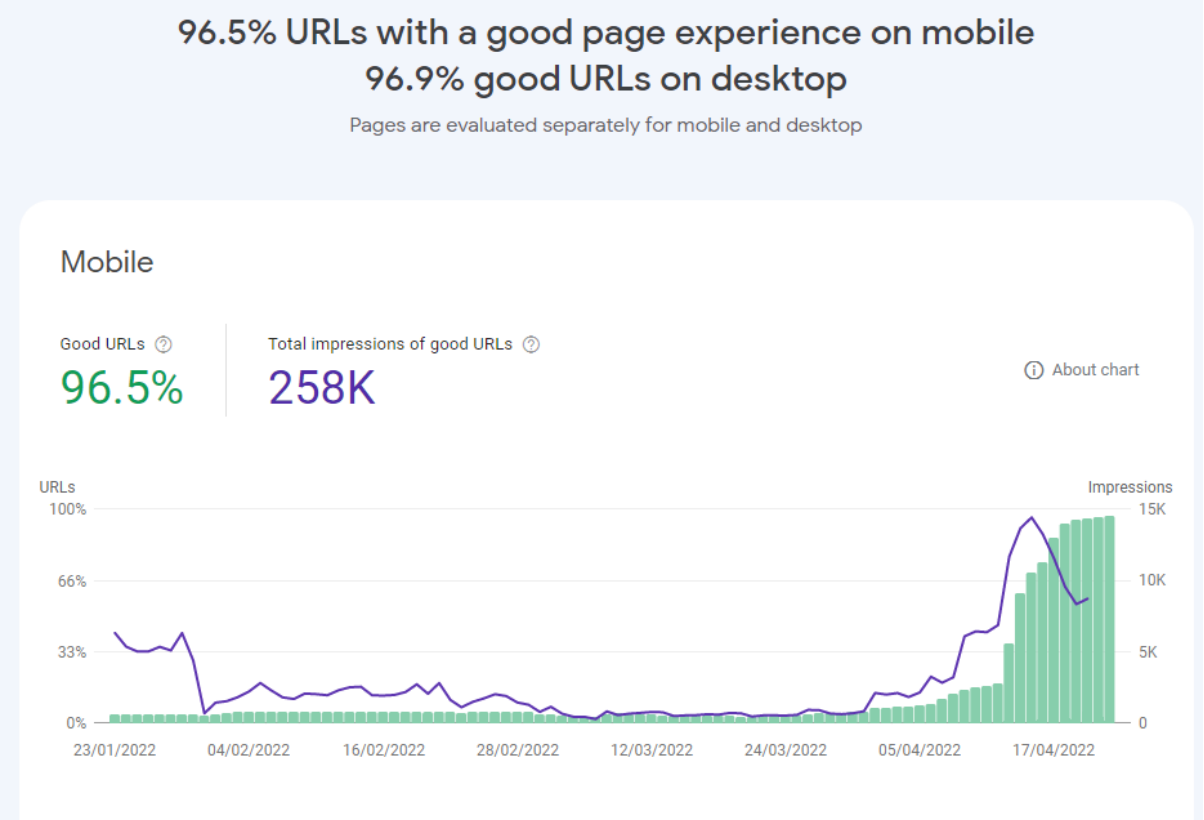
Appendix: 6



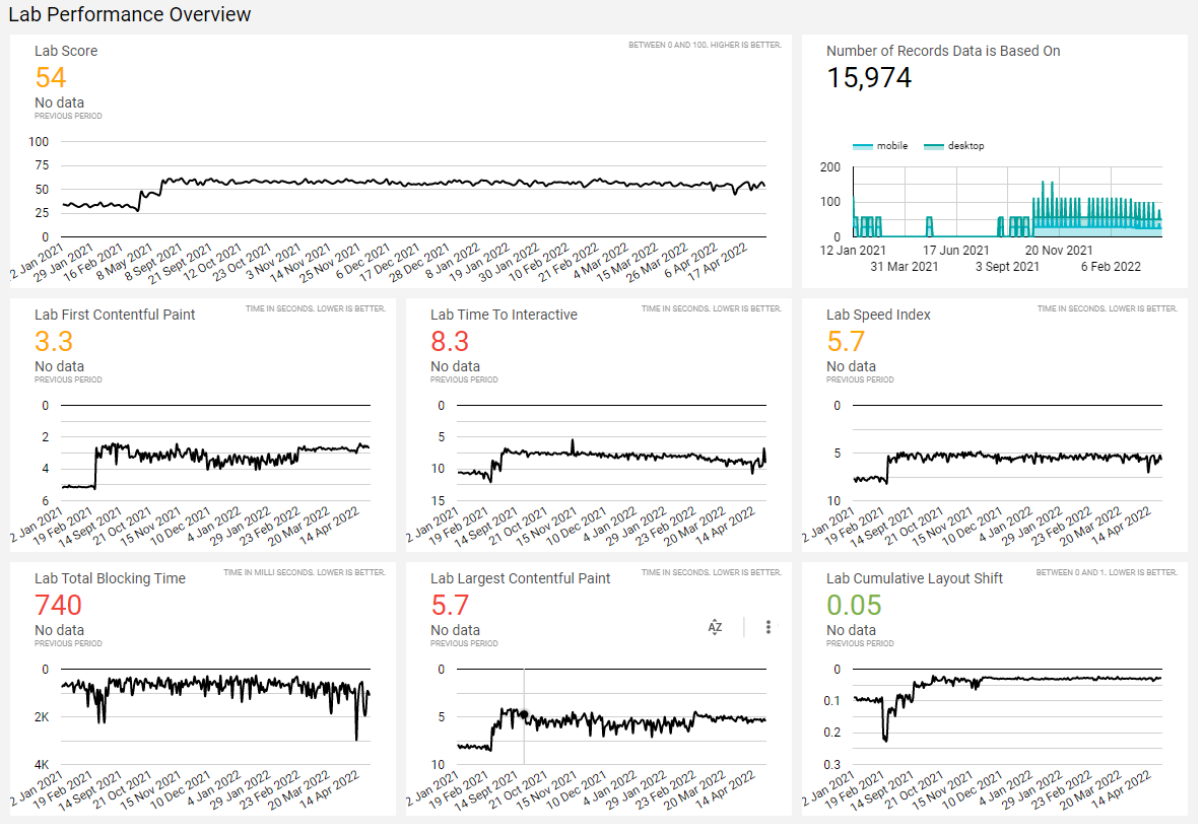
Appendix: 7


Mobile
OPEN REPORT
0 poor URLs
10 URLs need improvement
1,017 good URLs
1.2K
800
400
0
23/01/2022
03/02/2022
14/02/2022
25/02/2022
08/03/2022
20/03/2022
31/03/2022
11/04/2022
Desktop
OPEN REPORT
0 poor URLs
33 URLs need improvement
983 good URLs
1.2K
800
400
0
23/01/2022
03/02/2022
14/02/2022
25/02/2022
08/03/2022
20/03/2022
31/03/2022
11/04/2022

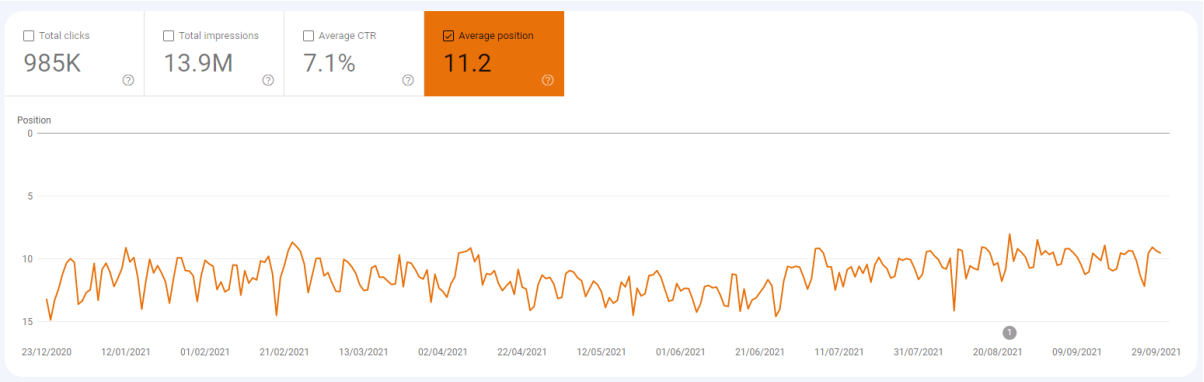
Appendix: 8


96.5% URLs with a good page experience on mobile
96.9% good URLs on desktop
Pages are evaluated separately for mobile and desktop
Mobile
Good URLs
96.5%
Total impressions of good URLs
258K
About chart
URLs
100%
66%
33%
0%
Impressions
15K
10K
5K
0
23/01/2022
04/02/2022
16/02/2022
28/02/2022
12/03/2022
24/03/2022
05/04/2022
17/04/2022

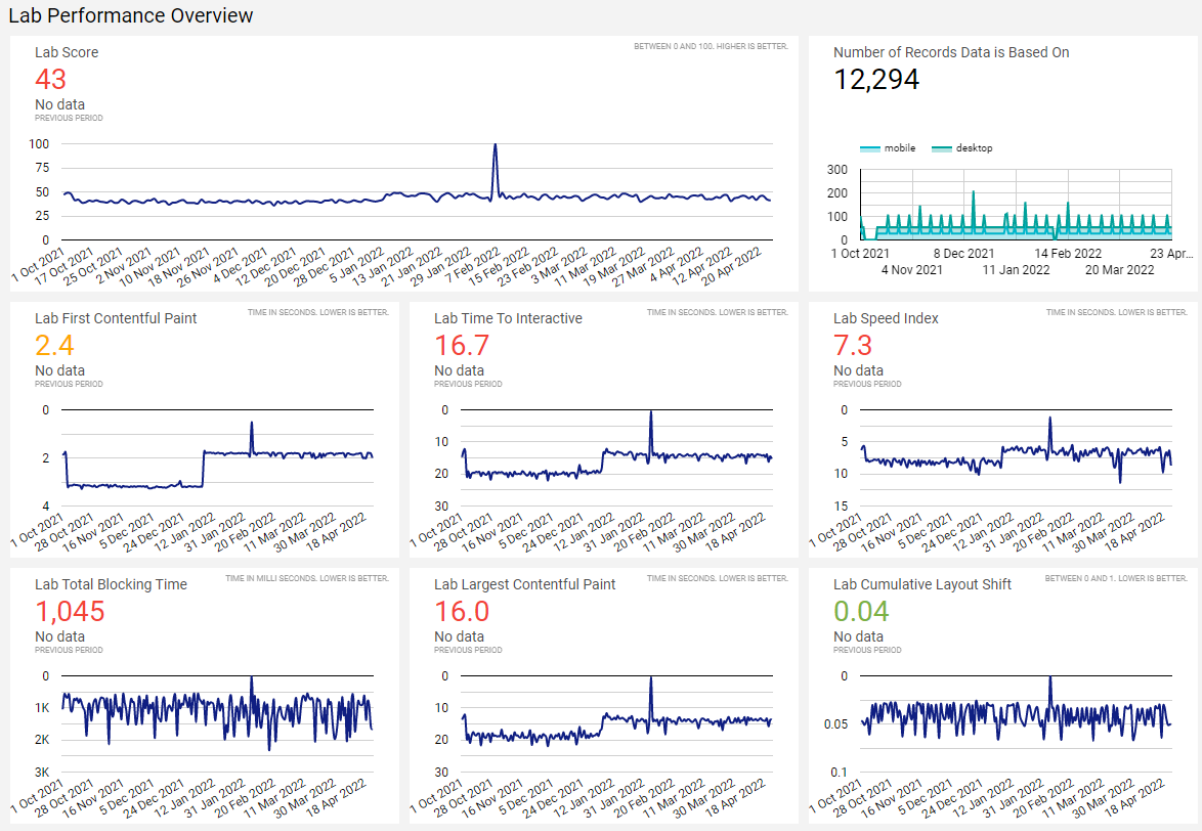
Appendix: 9



Appendix: 10



Appendix: 11



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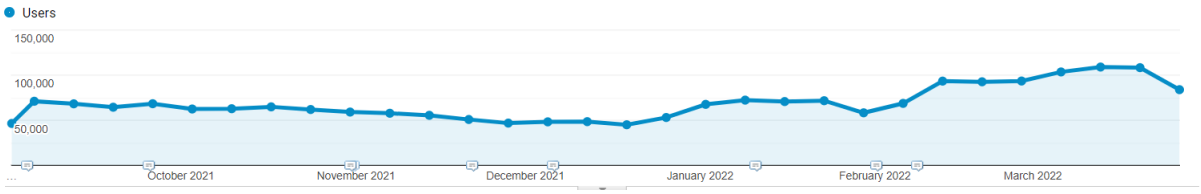
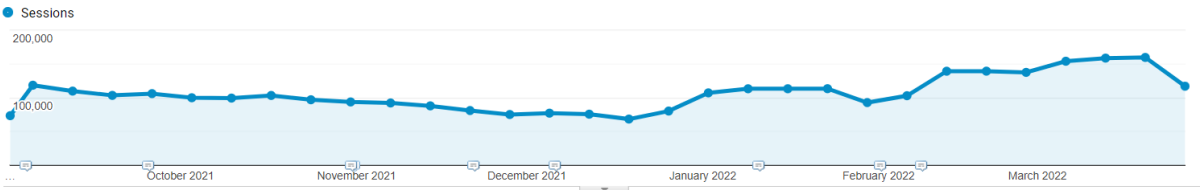
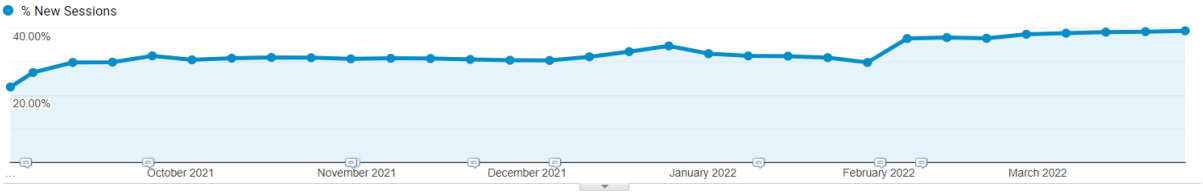


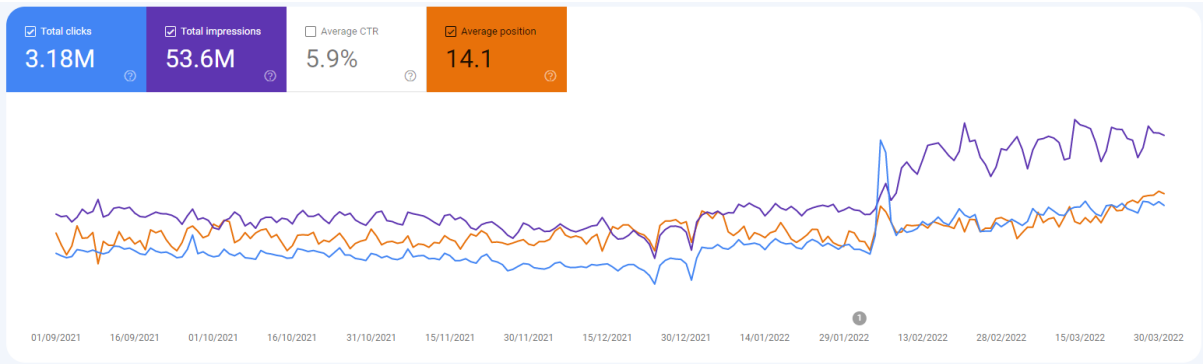
Appendix: 13



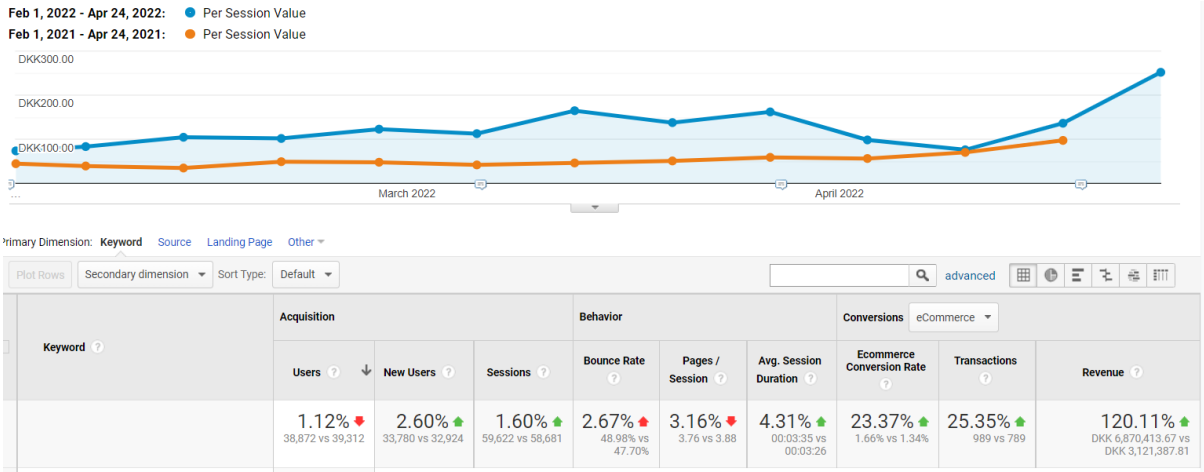
Appendix: 14



Appendix: 15



Appendix: 1615



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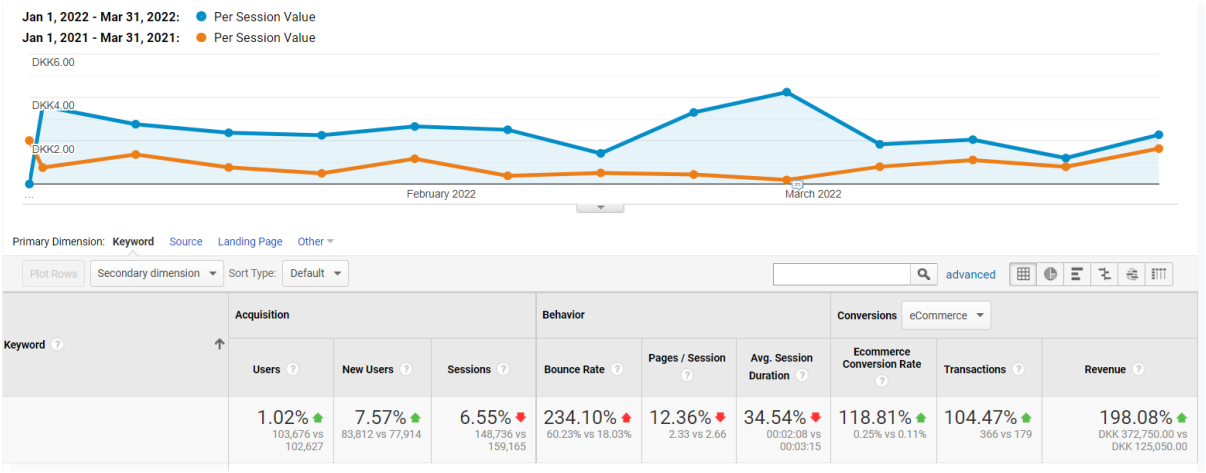
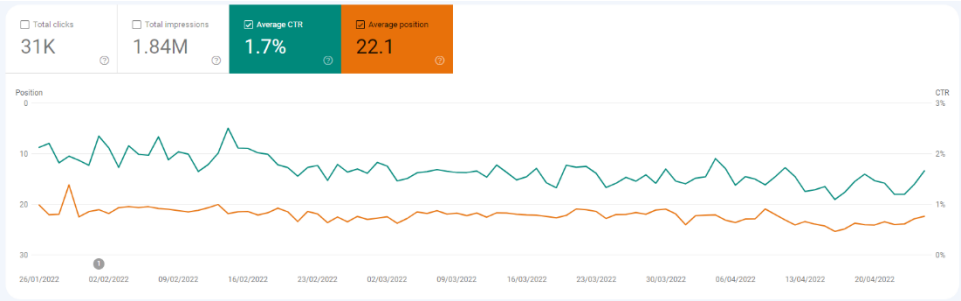
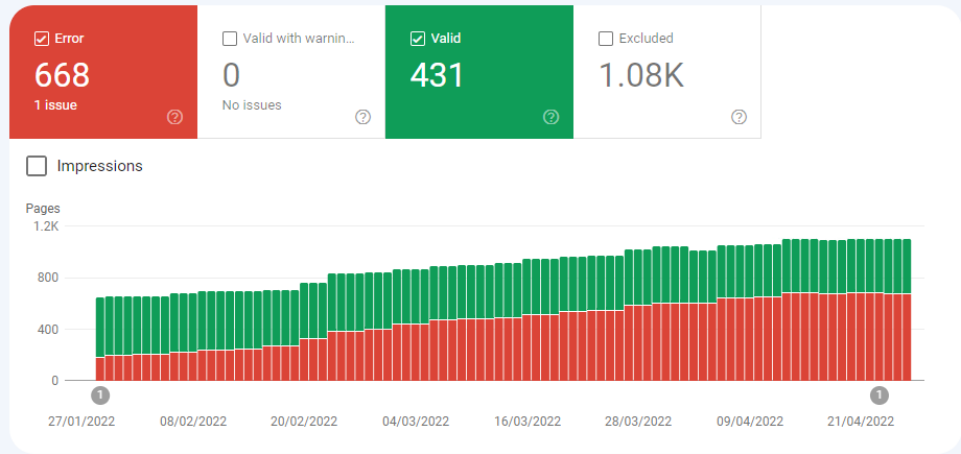


Appendix: 1816

Appendix: 19



Appendix: 20



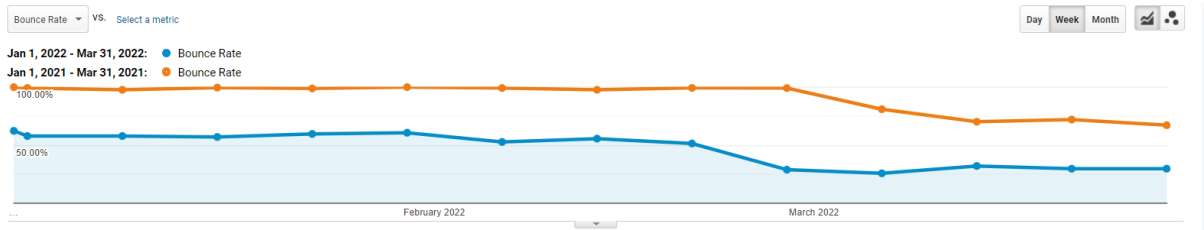
Appendix: 2171

Source	Acquisition			Behavior		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration
	18.54% 14,192 vs 11,972	21.62% 11,626 vs 9,559	17.41% 19,678 vs 16,760	2.62% 35.56% vs 36.52%	6.70% 4.13 vs 3.87	15.81% 00:02:22 vs 00:02:48
1. google						
Feb 27, 2022 - Apr 27, 2022	**14,192** (100.00%)	11,626 (100.00%)	19,678 (100.00%)	35.56%	4.13	00:02:22
Feb 27, 2021 - Apr 27, 2021	**11,972** (100.00%)	9,559 (100.00%)	16,760 (100.00%)	36.52%	3.87	00:02:48
% Change	**18.54%**	**21.62%**	**17.41%**	**-2.62%**	**6.70%**	**-15.81%**

Appendix: 2182

Source	Acquisition			Behavior			Conversions: Goal 1: +2 min på siden	
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	+2 min på siden (Goal 1 Conversion Rate)	+2 min på siden (Goal 1 Completions)
	6.21% 33,608 vs 31,643	1.38% 29,569 vs 29,167	18.28% 48,313 vs 40,848	3.34% 46.30% vs 44.80%	0.51% 2.42 vs 2.43	79.98% 00:01:49 vs 00:01:00	75.72% 16.21% vs 9.22%	107.83% 7,831 vs 3,768
1. google								
Jan 1, 2022 - Apr 24, 2022	**33,608** (100.00%)	29,569 (100.00%)	48,313 (100.00%)	46.30%	2.42	00:01:49	16.21%	7,831 (100.00%)
Jan 1, 2021 - Apr 24, 2021	**31,643** (100.00%)	29,167 (100.00%)	40,848 (100.00%)	44.80%	2.43	00:01:00	9.22%	3,768 (100.00%)
% Change	**6.21%**	**1.38%**	**18.28%**	**3.34%**	**-0.51%**	**79.98%**	**75.72%**	**107.83%**

Appendix: 2193

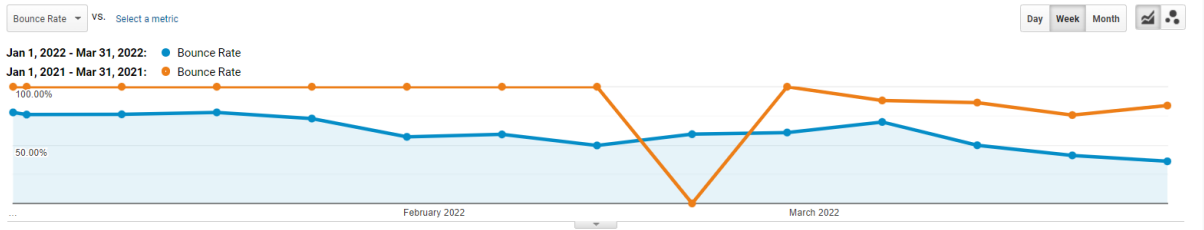


Primary Dimension: Source Other

Plot Rows | Secondary dimension | Sort Type: Default | advanced

Source	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
	78.02% 7,119 vs 3,999	64.57% 6,451 vs 3,920	119.73% 9,209 vs 4,191	50.15% 44.42% vs 89.12%	79.46% 2.13 vs 1.19	813.06% 00:01:38 vs 00:00:11	0.00% 0.00% vs 0.00%	0.00% 0 vs 0	0.00% $0.00 vs $0.00

Appendix: 2204

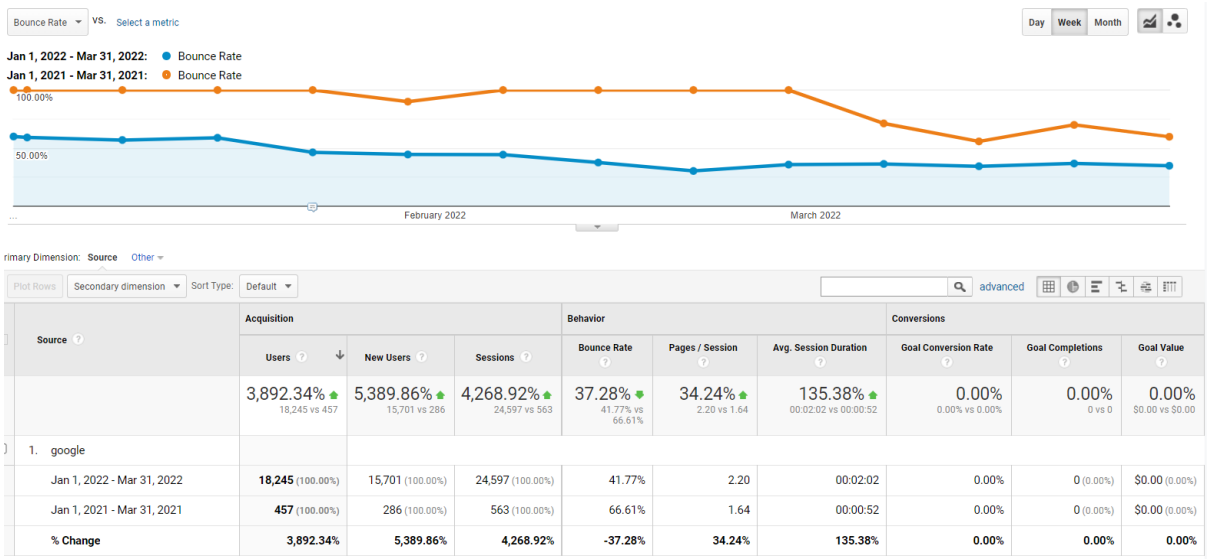


Primary Dimension: Source Other

Plot Rows | Secondary dimension | Sort Type: Default | advanced

Source	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
	7,891.48% 14,065 vs 176	9,389.39% 12,526 vs 132	10,054.31% 20,004 vs 197	20.76% 66.37% vs 83.76%	32.39% 1.63 vs 1.23	420.00% 00:01:02 vs 00:00:12	0.00% 0.00% vs 0.00%	0.00% 0 vs 0	0.00% $0.00 vs $0.00
1. google									
Jan 1, 2022 - Mar 31, 2022	**14,065** (100.00%)	12,526 (100.00%)	20,004 (100.00%)	66.37%	1.63	00:01:02	0.00%	0 (0.00%)	$0.00 (0.00%)
Jan 1, 2021 - Mar 31, 2021	**176** (100.00%)	132 (100.00%)	197 (100.00%)	83.76%	1.23	00:00:12	0.00%	0 (0.00%)	$0.00 (0.00%)
% Change	**7,891.48%**	**9,389.39%**	**10,054.31%**	**-20.76%**	**32.39%**	**420.00%**	**0.00%**	**0.00%**	**0.00%**

Appendix: 2215



rimary Dimension: **Source** Other

Plot Rows | Secondary dimension | Sort Type: Default | advanced

Source	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
	3,892.34% ▲ 18,245 vs 457	5,389.86% ▲ 15,701 vs 286	4,268.92% ▲ 24,597 vs 563	37.28% ▼ 41.77% vs 66.61%	34.24% ▲ 2.20 vs 1.64	135.38% ▲ 00:02:02 vs 00:00:52	0.00% 0.00% vs 0.00%	0.00% 0 vs 0	0.00% $0.00 vs $0.00
1. google									
Jan 1, 2022 - Mar 31, 2022	**18,245** (100.00%)	15,701 (100.00%)	24,597 (100.00%)	41.77%	2.20	00:02:02	0.00%	0 (0.00%)	$0.00 (0.00%)
Jan 1, 2021 - Mar 31, 2021	**457** (100.00%)	286 (100.00%)	563 (100.00%)	66.61%	1.64	00:00:52	0.00%	0 (0.00%)	$0.00 (0.00%)
% Change	**3,892.34%**	**5,389.86%**	**4,268.92%**	**-37.28%**	**34.24%**	**135.38%**	**0.00%**	**0.00%**	**0.00%**

Appendix: 2226