Complete Website Development with a Client

Masters Project

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Abstract:
The report explores a possible solution for a client's two businesses, with a target group of other companies, with the expected outcome of attracting more customers in the current modern era of digitalization.
Based on research around the different possible solutions' pros and cons, the client's needs and the resources given for the project. It was determined that a business website was the best solution, in comparison to alternatives such as online advertisements.
Therefor, a business website with high performance, high usability and high Google search ranking in mind was designed. To evaluate the user-experience (UX) of the website a usability test was performed by sending out a survey to 4 participants along with user behaviour tracking using heatmaps and session recordings. For evaluation of Google Page Ranking, manual searches with search queries were performed.
It was found that the site has great UX, however, the page rankings for search queries related to auto-electrical services and emergency services were bad, while the search queries related to the business' name was good, and the remaining were acceptable but could be improved.

Contents

1 Introduction

In a world that is becoming increasingly more digital, it has become more important for businesses to get online to reach a potential wider audience to be able to gain customers that they might never have got if they were to remain offline only. This project will revolve around an auto-electrical company named 'B og R Teknik' who wants to market their 2 businesses in the digital space in order to attract more customers.

The rest of the paper will be as follows: Starting out with background research on the businesses and target group analysis, and possible solutions to solve the business' problem. This is followed up by exploring interaction design theories related to the chosen solution, such as the Gestalt Principles. Next is the design and implementation of the website. Afterwards, the testing methodology and procedure are discussed, followed by discussion of the results. Then areas of improvements or changes are discussed in the 'discussion' section. Lastly, the conclusion section sums up the report.

2 Research

This section will cover the research into the business, the services that are provided, it's target group / customers, design theory, and requirements for the solution.

2.1 The Business

The business, 'B og R Teknik' (herafter referred to as "the business" and "the client") is a one-person auto-electrical company that provides services to companies and governmental institutions such as hospitals, police, fire stations etc.. The services provided are, but not limited to:

- Repairing cars for police, fire stations, hospitals and so on
- Mounting of auto-electronic equipment in vehicles
- Servicing of vehicles

The client also has a separate, but related, company named "Tavlevogns Beredskab" (Boardcart Emergency) that is only about driving boardcart in case of emergencies and road closures. The main business, B og R Teknik, offers everything else related to boardcarts such as servicing, repairing boardcarts, installing new electrical components etc.

2.1.1 The Problem

The client would like to market their business in the digital space to attract more customers without relying solely on mouth-to-mouth marketing.

2.2 Target Group

The target group of the website are companies located everywhere in Denmark, incl. Greenland and Faroe Islands, ranging from governmental e.g. police and hospitals, to normal businesses who owns company cars etc. But it is not everybody in e.g. the police. It is aimed towards the people booking / requesting the service. In this case, there is not a single job role, such as a secretary, who performs the job of finding someone who provides what is needed. It could be the secretary or assistant, but it could also be a manager or even one of the drivers.
But there is a one trait they share in common, that is they do the researching / booking during work hours, and most likely on a computer. This means that the website needs to prioritize the design for computers over mobile phones.
Furthermore, since businesses are adopting the usage of soft-phones (software that allows for making phone calls from the PC) due to increased productivity and reduced costs [O'Dea, 2020][Sacke, 2006], it can be assumed that larger organizations such as the police and hospitals uses soft-phones to carry out business related calls. Therefor it would be a good idea to add a button that calls the business from the computer.

2.3 Possible Solutions

Since the problem can be solved in multiple ways that are able to co-exist this section will cover some of them.

2.3.1 Social Media Accounts

Social media accounts is one way to get a better outreach in the digital space. It is possible to schedule posts to be posted at a certain date and time with tools, therefor the necessity to remember to post is not a big problem. However, to create the posts and find content requires a lot of work if consistent posts are desired.
The client already has Facebook pages for both businesses with occasional updates (roughly 1 post per month).

2.3.2 Digital Adverts

Another possibility would be advertisements. Depending on the type of advertisement, it can cost a decent bit of money or time to produce. Furthermore, new advertisements will need to be produced regularly. Banner advertisements would be the best option as they are easy and cheap to make, in comparison to video adverts, which could then be spread around using Google AdSense, Facebook Ads and similar.

2.3.3 Business Website

A website that shows information about the businesses and the services provided. Furthermore, with the popularity of using Google and other search engines to find information, a website with good SEO would make it more discover-able in comparison to Facebook search. A website can also be made low maintenance as they can be a "one-and-done" thing with minimal to no updates required. However, the downside it can cost a decent sum of money upfront. Furthermore, if changes do need to made they can be costly as well - depending on the size of the changes.

2.3.4 Email Marketing

Sending emails to previous clients about that the business is currently offering their services for a small discount, could incentives old customers to use the business' services again or recommend the services to other people who might need them.
This requires some effort in figuring out the emails of previous customers, setup a mailing service, figure out how much the discount can be without resulting in a loss. But after it is done, it can be repeated regularly if it works.

2.4 Chosen Solution

Due to limited resources, it is not possible to make all these solutions in the given time-frame. Therefor, by weighing the pros and cons for each solution and the client's circumstances and budget, the chosen solution to proceed with will be a business website. This is due to it being a 'one-and-done' solution, that requires minimal maintenance. Furthermore, a website can still help attract new customers due to the ability of it being discovered through search engines.

2.5 Designing for Interaction

This section will cover theory on how to design for the user interaction loop that will aid in "bridging" the gulfs of execution and evaluation.

2.5.1 User-Centered Approach

The user-centered approach is the thought process of that the user knows best, and it is the designer's job to put the user's needs, goals and feedback into a design solution[Rogers, 2015].
It is important to include the users into the process for several reasons, such as to get a continued feedback and better understanding of the users' goals and needs, expectation management to ensure the users do not end up believing that they get something they will not be getting. Lastly, user involvement also leads to a feeling of ownership because they have had an influence on how the final product has become[Rogers, 2015].
In 1985, Gould and Lewis came up with the following 3 principles that they believed would lead to a good and intuitive human-computer system[Rogers, 2015].

2.5.1.1 Early Focus on Users and Tasks

An early focus on the users and their tasks, makes it easier to design a product that meets the users' needs and goals[Rogers, 2015].

2.5.1.2 Empirical Measurement

By establishing clear usability and user-experience goals at the beginning of the project, it is possible to empirically evaluate the product at regular stages throughout the development[Rogers, 2015].

2.5.1.3 Iterative Design

It is crucial to iterate on the design based on the feedback given from users. This is because the first design is rarely perfect, and iteration based on feedback makes it possible to refine the design which leads to a better final product for the end users.

2.5.2 User Interaction Loop

It is important to know how users interact with interfaces. The user interaction loop can be explained using the *Seven Stages of Action Cycle* model by Don Norman[Norman, 2013], as seen in figure 1.

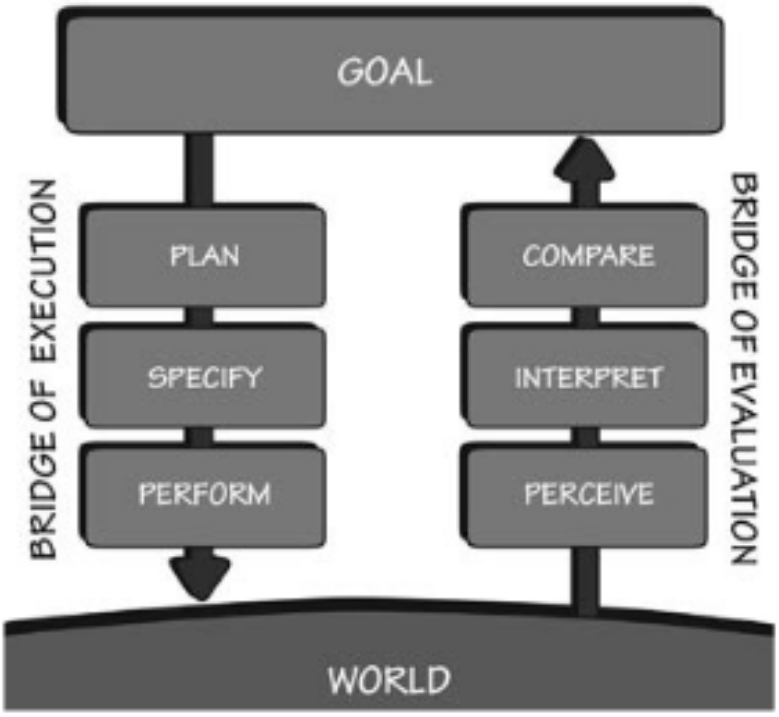

Figure 1: The seven stages of the action cycle by Norman [Norman, 2013].

The left side of the diagram in figure 1 is the Gulf of Execution, where people need to figure out how things operate in order to be able to 'bridge' the gulf. While the other side of the diagram in figure 1 is the Gulf of Evaluation, where people need to figure out what happened in order to be able to 'bridge' the gulf[Norman, 2013].
When a user starts an interaction it starts with a goal, what they want to achieve. Let us say the user wants to close the curtains because they want to sleep. This is followed by figuring out a plan, should they close the curtain manually or ask someone else to do it? When the user has decided on a plan, they will still need to "specify" how this plan needs to be carried out such as do the curtains needs to be pulled with on its cord, pulled down on a handle etc.? Lastly, they need to perform the action they have decided on e.g. pulling on the strap of the curtains. The user 'perceives' that the room has become darker as they are pulling on the cord, and therefor "interprets" the action as making the room darker. Lastly, the user "compares" it to his goal of "close the curtains". Since the actions are not required to be performed in sequential order, this action cycle could theoretically be repeated by going through the evaluation stages directly to the "perform" stage until the goal, being fully closing the curtains, has been achieved[Norman, 2013].
The stages of actions might be subconscious for a person who is skilled / experienced in the given task e.g. riding a bike is subconscious for most people[Norman, 2013].
Knowing the seven stages of action, it is important to make it clear to the user what actions they can and can not do, in order to 'bridge' the gulfs of execution and evaluation easily. This can be

achieved using knowledge about affordances and signifiers.

2.5.3 Affordances and Signifiers

There are 4 types of affordance categories, which indicates or don't indicate if an action is or is not possible to performed with the given object[Rogers, 2015].
Affordances uses signifiers, being properties of the object such as form, color, texture etc. to represent what action is possible to be performed with the object and how, e.g if a door has handle it is presumed it can be pulled, while a flat surface indicates it is pushable[Rogers, 2015].
Here are the 4 categories of affordances

1. Perceived affordances are the actions that looks possible to do with an object given the signifiers, for example a button invites the user to click it[Rogers, 2015].
2. Hidden affordances, being affordances that exists but not able to be recoqnized due to no signifiers existing on the object[Rogers, 2015].
3. False affordances are perceived affordances that misleads a user into believing they can perform an action when in reality they can not e.g. a door handle that can only be pushed[Rogers, 2015].
4. Correct rejection is when there are no signifiers and also no affordances[Rogers, 2015].

2.6 Gestalt Principles

In everyday life we view many complex scenes that are composed of many groups of objects, which may be composed of smaller objects, on a background. In order to make sense of how we are able to achieve this feat of perceiving extremely complex scenes, the Gestalt principles were made, which is a set of rules for the organization of perceptual scenes[Todorovic, 2008][Graham, 2008]. These fundamental rules can be used to design anything from physical interfaces to digital interfaces, and architecture to city management.
This section will give a short overview the gestalt principles.

2.6.1 Proximity

The principle of proximity says that if objects that are in close proximity to each other then they will be seen as belonging together, while objects apart from each other is seen as distinct objects not related to each other[Todorovic, 2008].

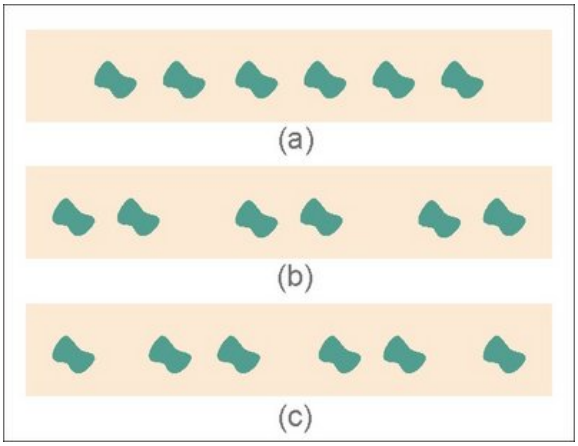

Figure 2: Figure showcasing the principle of proximity[Todorovic, 2008]

2.6.2 Similarity

Objects that look similar e.g. same color, size, shape etc. will be perceived as groups, and even if they are in close proximity, the similarity is the dominant principle, as seen in figure 3's a, b, c and d. But if objects with similarity is in two different groups based on proximity, as in illustration h the result is less clear. If you look at it in terms of similarity you will see 3 groups, being green, brown and black. But if you look at it via proximity you will see 4 groups, 1 with just a green, 1 with a green and a brown, 1 with a brown and a black, and 1 with just a black[Todorovic, 2008].

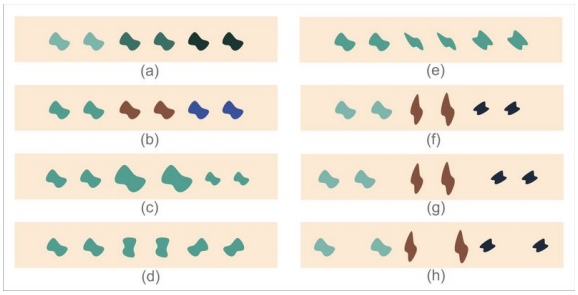

Figure 3: Figure showcasing the principle of similarity[Todorovic, 2008]

2.6.3 Symmetry

Symmetry is a visual property where elements are made up of equivalent parts to resemble balance and proportion. There are 3 types of symmetry, reflection symmetry being the most known, radial symmetry, and translation symmetry. Reflection symmetry is when both sides looks the same e.g. a leaf and a person has reflection symmetry. Radial symmetry is where the parts have been mirrored around in a circular fashion, e.g. a steering wheel of a ship. Lastly, translation symmetry, when the object is repeated multiple times[Ges, a].

2.6.4 Closure

Closure is about connecting and completing incomplete elements, e.g. in the IBM logo with its white lines over the letters[Todorovic, 2008][Graham, 2008].

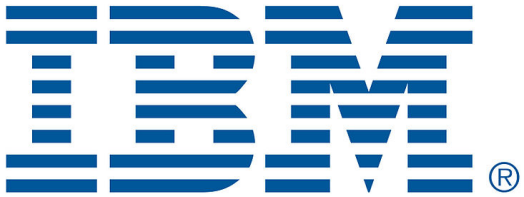

Figure 4: Figure showcasing the principle of closure used in the IBM log[IBM]

2.6.5 Continuity

The principle of continuity is about when objects, lines, shapes etc. continues on the same path without an abrupt / sharp change in its path. These elements on the path ends up being perceived as grouped together[Todorovic, 2008][Graham, 2008].

2.6.6 Figure ground

This principle helps us identify objects as distinct from their backgrounds. One of the ways to make a figure-ground relationship work is by using contrast. If there is not enough contrast the object will simply be perceived as part of the background. Black text on white background is an example of figure ground, or even Japan's flag with it's red dot on white background. But it can also be more complex, such as negative space, where the background forms an image of something such as in the Pittsburgh Zoo logo that looks like a tree at first, but with a closer look there are also some animals in it[Todorovic, 2008][Graham, 2008].

Figure 5: Figure showcasing the principle of figure ground in the Pittsburgh Zoo logo[Pit]

Other ways of making a figure-ground relationship is by blurring the background because things further away from the focal element is more blurry[1][Ges, b]. Making an element have a larger size can also be used to make an item seem to be in front of another, as we perceive larger elements as closer[Ges, b]. Lastly, separation clearly indicates that the background and foreground are two different elements[Ges, b], this can be achieved by viewing the scene from a different perspective e.g. the side, or being able to see there is a shadow cast onto the background from the foreground element.

2.6.7 Common Ground

If objects are surrounded by a border, or other region-defining feature, those objects will be seen as being grouped together, even if e.g. their proximity is close to other of similar objects, they will still be perceived as a separate group[Ges, c].

[1]This is also true if there is blurred element in front of the element in focus

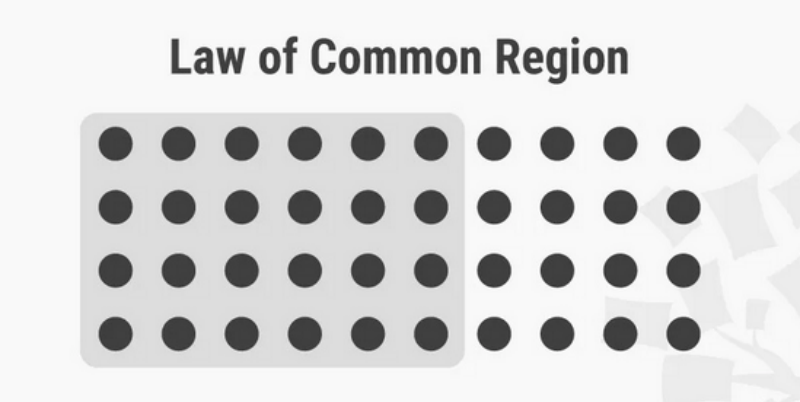

Figure 6: Figure showcasing the principle of common ground[Ges, c]

2.6.8 Past Experience

The last principle is 'past experience', which dictates that objects can be grouped together based on past experiences. For example in figure 7 a to e where the word 'minimum' is being broken up and altered over time, but it is still possible to read the word due to past experience.
This principle is easily dominated by other principles, which can be seen in figure 7g, where it is harder to read the word due to more prominent patterns are generated by continuity and closure[Todorovic, 2008].

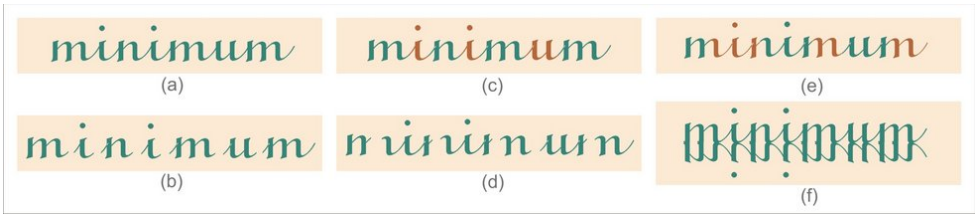

Figure 7: Figure showcasing the principle of past experience[Todorovic, 2008]

2.7 How users use the web

When users are on the web looking for information, they do not read everything carefully, instead they skim the pages in order to find the information they need. However, it is not all pages that we simply skim, some pages such as newspapers, articles and other pages where the content is the text. The reasons for this is that we usually want to achieve our goal as fast as possible. We also don't need everything that is on a page, so we simply skip what we believe is unnecessary to achieve our goal, and we are good at it since it is a basic skill taught over time when we scan newspapers, books, Reddit, Facebook etc. [Krug, 2014].
Besides simply skimming, users also "satisfice". They pick the first reasonable option that they think will get them closer to their goal. In other words, it is a trial and error strategy, and it works because the risks are low, if the user ends up on a wrong page they simply click the back button a

few times. It is less mental effort than weighing the different options that might not even improve the chance of reaching ones goal, and it can even lead to surprises and fun if you happen to find something interesting by mistake[Krug, 2014].
Lastly, users also usually don't take the time to properly learn how something works, they simply just use trial and error until something works and then continue from there, and they will keep on using this method they stumbled upon in the future as well, even if it is a bad method. This happens because knowing the "best" way of doing something is not important, as long as we can get the job done [Krug, 2014].
This strategy of trial and error and skimming makes it seem like the 'specify' stage of the seven stages of the action cycle model from section 2.5.2 is missing and therefor the 'gulf of execution' is still not bridged properly, and we are trying to fill it out. Furthermore, since the risks are low we aim for a fast and exploratory strategy using trial and error and skimming instead of carefully considering our options.
But when we have found it the first time, the next time we have the plan "I will search the web", the specify stage "go to X page, and then do these A, B, C actions and then the goal has been achieved". If we ended up with a bad "specify" step we are still not motivated to find a better solution, because it is not more effective for us in most cases. Even if we do decide to look for a better strategy, we might not find it, and then we have just wasted a lot of effort for nothing.
Therefor, in order to make it easy for users to optimally bridge the gulf, the content of a website must be optimized for scanning, not reading. This can be done by taking advantage of conventions, creating effective visual hierarchies, breaking the page up into sections / defined areas, making it obvious what is clickable and eliminating distractions [Krug, 2014]. This can be achieved using theory of the Gestalt principles, and affordances and signifers.

2.8 Time & Perceived Time

An important aspect of human-computer interaction (HCI) is time in regards to user-input feedback. Imagine clicking a button, and 10 seconds later a light turns on. Did the light turn on by accident or did you turn it on? Furthermore, in terms of websites, applications etc. there is often some waiting time due to the user needs to download data via the internet, or the server needs to handle the user's requests, etc. Therefor, it is not only important to reduce the time it takes for these actions to complete, but also further reduce the perceived waiting time.
Before discussing how to reduce the perceived time, let us first mention the 3 timescales in HCI that are relevant to this project[Nielsen, 1993].

1. 0.1 seconds is the duration between user-input and feedback where it feels instantaneous to the user.

2. 1 second is roughly the limit for the user to stay uninterrupted. Here the user will notice the delay, but normally no special feedback is required. But for delays longer than 1 second, it is best to show an indicator that the system is working on the user's request.

3. 10 seconds is roughly the limit for keeping the user' attention. For longer waiting times, the user would like to perform other tasks in the mean time, and therefor the system should give feedback about when the system is expected to complete the processing of the given task.

Furthermore, in regards to websites, it is important to take note on how waiting time can result in a higher bounce rate. 'Bounce' meaning a user visits the time but leaves again without performing

interactions on the site e.g. navigating to a different page. It was found that the 'sweet spot' for loading times, for mobile users, is 2 seconds, because already at around 3 seconds 53% of users have bounced[Everts, 2016].
Therefor, the goal should be to keep the actual loading time of the website below 2 second. But it is also possible to reduce the perceived loading time, and therefor make the user stay waiting for longer than they would originally have had.
To reduce the perceived waiting time, it is possible to use loading animations, which can make the waiting time more 'interesting' / 'fun'. There are several ways of doing this, such as using a spinner, loading bar, skeleton loading animations, detailed non-repetitive animations e.g. a baking animation of making bread from mixing the dough to taking it out of the oven, an animation with personality e.g. a jumping dots with a quote It was found that the personalized jumping dots with a quote was perceived as the fastest, followed by skeleton screens, even when a blank screen was technically the fastest. Therefor, for showing something is loading, either a personalized jumping dots animation (or similar) with a quote, or a skeleton loading element should be used to indicate something is still being loaded[Persson, 2019].

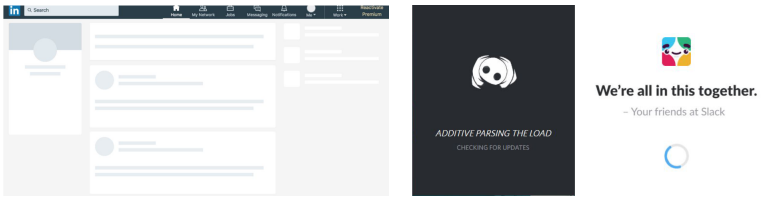

Figure 8: Left: Skeleton Loader. Right: 2 examples of a loader with personality

2.9 Delimitation

No professional / professional looking images will be taken. Only existing images and stock images will be used for the website. Specifically, stock images from Unsplash will be used as they are legally free to use for commercial use[Uns].

2.10 Requirements

This section will cover the requirements gathered from the business's wants / needs, and the target group's needs.

1. Include the client's secondary business (Tavlevogns Beredskab) on the site as well, to a lesser extent.
2. The site must allow users to request an offer for a service from the businesses.
3. Must be able to call the business directly from the user's computer (if the computer supports it).
4. The site's personality / design must incorporate the yellow and red stripes that are on construction vehicles.
5. The site must be SEO friendly to allow people to easily find the website using search engines.

6. There must be a gallery or similar to show case the work of the business.
7. The owner must be able to manage the images of the gallery for the website by themself.

2.11 Final Problem Statement

With the aforementioned research, the final problem statement is as follows:

"How can a performant and SEO friendly (multi-)business website, that primarily has other companies as their primary target group, be made in order to attract new customers?"

3 Design

This section will cover the design wireframes, feedback on the design from the client, and the final design in colors.

3.1 Site Map

A site map, in an information architectural context, is used to give a high level overview of the website's hierarchy of its pages[Sit]. Since this is a simple business website I can narrow down the type of sitemap required to either an 'one page' sitemap or a flat sitemap.
Since the client requested to have both businesses on the same site, I believe a flat hierarchical design will be better than a 'one page', in order to be able to keep the landing page for building trust and selling the businesses to the potential customer. Then using additional pages to go further in-depth on specific topics, e.g. services, more info about the business etc., if the potential customer desires more information.
In the sitemap on figure 9, I have decided to also include the sections of each page for a better overview of the site.

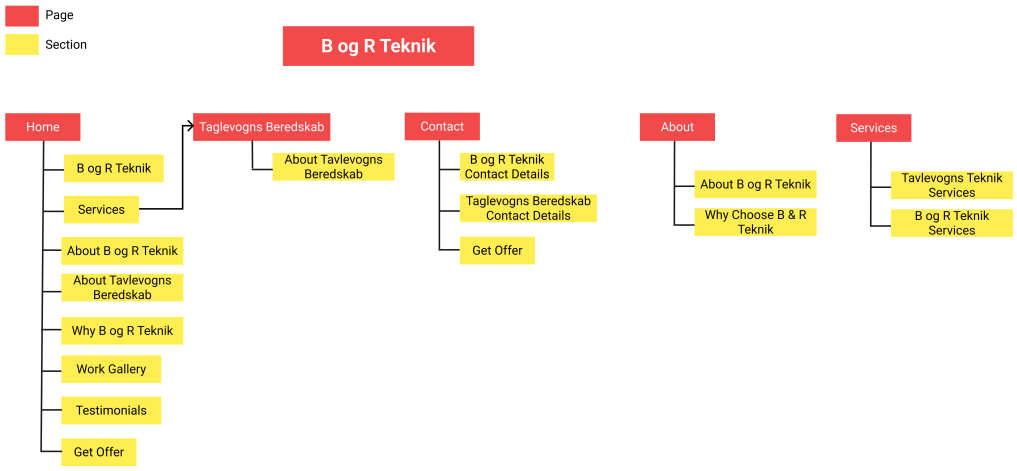

Figure 9: Sitemap of 'B og R Teknik' website.

It can be seen that there will be 5 pages. All pages are accessible using the primary navigation menu. While the "Service" page will also be linked to from the 'service' section under the 'Home' page.

3.2 Site Personality

The site's personality is similar to a person's personality. Some sites are very professional, some are fun / quirky, some are friendly etc.. A site's personality is primarily seen in the visuals, such as the layout, colors, etc., but also through how the site communicates e.g. using slang or not, emoji usage, type-faces, succinctness of the text, graphics used etc. [Schoger, December 2018].
Since the client's car has red and yellow stripes and according to the client it is common on vehicles used for driving with board carts and similar emergency related work, shown in figure 10. Therefor it could be an idea to include it in the site's design.

Figure 10: The client's car with red and yellow stripes

Furthermore, the communication on the site should be to the point, but still friendly. To achieve a more friendly communication, a more rounded type-face should be used. But emojis or slang shouldn't be used as it is still a professional site aimed towards businesses and not individuals. Furthermore, a lot of white-space / blank space around elements will also be used to make elements "breathe" [Schoger, December 2018] to make the user-interface feel more user-friendly.
Lastly, the site should also show that the business is trustworthy and competent. This will be done by adding a 'testimonials' section, and images of the owner in-action of working.
To summarize; the site's personality should portray the business as professional, friendly, trustworthy and competent. This is achieved primarily through the use of fonts, layout, white-space, testimonials section and proof of previous work.

3.3 Style Direction

This section will cover 2 style directions for the website, specifically the landing page, with their final colored versions. It will also include the chosen design style that will be further improved upon.
The goal of this phase was not to get a full design for the website, but figure out what direction the style should be. Therefor, certain requirements does not exist in the design as of yet. They will be added later in the improved version(s) of the chosen design.

3.3.1 Professional Style

This design aims to be primarily professional while retaining the client's own personality of being bold and to the point.
This is achieved using basic figure-ground with contrast color for 'foreground' elements such as text, icons, links, input fields, call-to-action buttons etc. Furthermore, the principle of common region, see 2.6.7, was used in the testimonials section by having a small border around each testimonial item to group the information inside it and make it clear what info belongs to what item.

Figure 11: Initial home page design - professional style

3.3.2 Bold Style

This design aims to be play up on the bold side of the client's personality and the colors while retaining the professional aspect as well.
This was achieved by focusing on the figure-ground principle, see section 2.6.6, especially in the usage of contrast and separation with a colored drop-shadow to make foregrounds elements pop-out from the background. Together with grouping related info using the common ground principle, see section 2.6.7, by using the contrasted areas from the figure-ground relationship as the border to group the elements. In the 'service' section you have some translation symmetry, see section 2.6.3, with its 3 identical elements.

Figure 12: Initial home page design - bold style

3.3.3 Interaction Elements

In both designs, call-to-action buttons are used which are buttons designed to catch people's attention and be interacted with. Therefor, the affordance must be clearly shown, and this is achieved using the following signifiers; high contrast, text in form of actions "get offer", "call now", "read more". When hovering over the button, its color changes to a lighter color, together with the cursor (the normal diagonal arrow) changing to a 'pointer' (hand that is pointing) which further indicates that it is possible to interact with this element.
Another element that is used in both designs is the input fields, which are designed using the figure-ground principle by using contrast to signify an indentation or 'cut-out' to show the affordance of being able to write in the input field.
Lastly, the navigation menu at the top uses the continuation principle for the layout of the links. And when scrolling, a drop-shadow will appear, separating it from the page content below it. The reason for this is to allow the user to easily go to a different page at any point.

3.3.4 Chosen Design

After presenting the 2 designs to the client, the client wanted to continue with the first style - the professional style. Therefor, that design was continued to be improved upon, and the remaining pages will also use the final design. These improvements will be covered in the next section.

3.4 Improving the chosen design

This section will cover the initial improved design, feedback on it and the final design for the landing page.

3.4.1 Initial Improved Design

The initial improved design includes all the requirements and missing elements. Starting from the top of the page, here are the changes made.

Made the 'services summary' section use separation from the figure-ground principle to be able to 'hover' above the hero image and the white background in order to bring the visitor's attention downwards, shown in figure 13. Furthermore, this also ends up using the common ground principle to group the elements inside the 'hovering' section. The elements are still using translation symmetry.

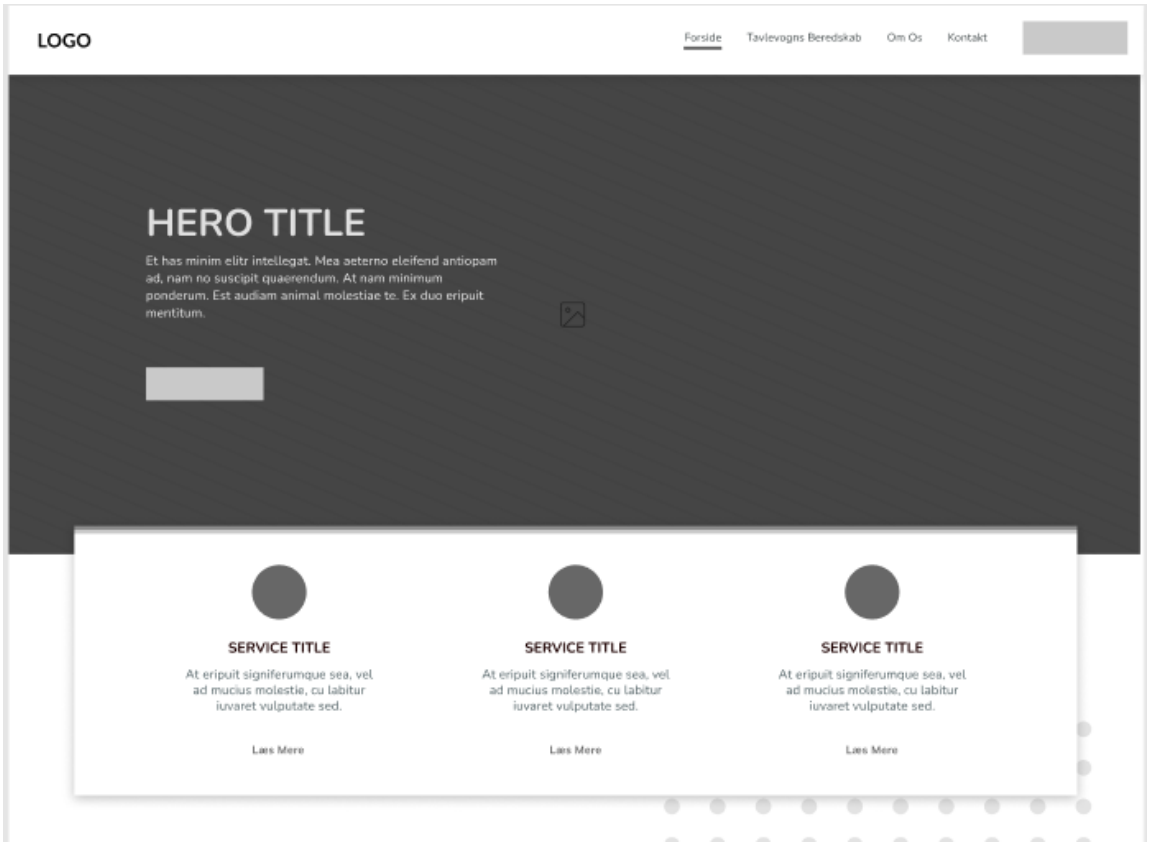

Figure 13: Initial improved design of the hero and service summary sections

Two 'about' sections each containing an image, text and a call-to-action button to be able to read more about the specific business. This was added after service summary section to provide a bit of information about the company, and what and why they do the work they do. The design can be seen in figure 14. This helps in building trust with the potential customers by allowing them to get a better understanding about who the company is. The 'about' section's uses the proximity principle, see 2.6.1, to group related elements together e.g. title, description, call-to-action button and image.

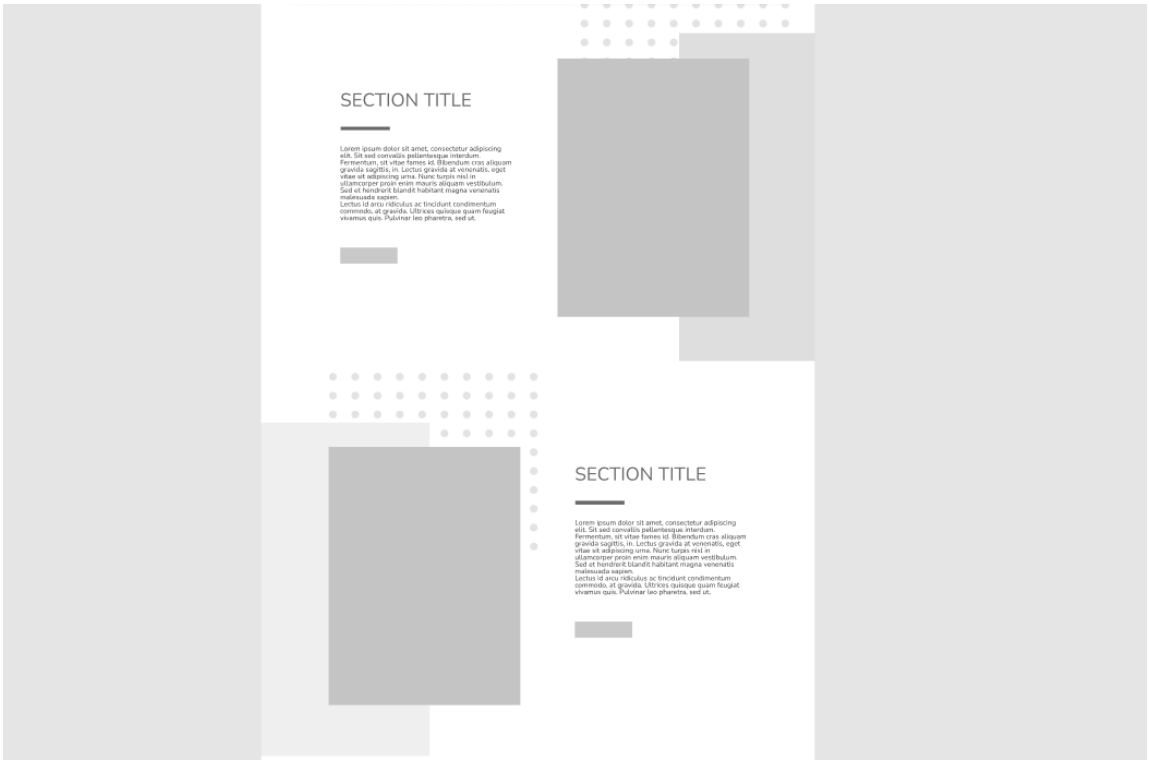

Figure 14: Initial improved design with about sections of the two businesses

A section with 4 chosen services to provide a bit more specific information about those services. The show-cased services are supposed to be some of the most requested services. The section design is shown in figure 15. This section uses the figure-ground in terms of the contrast on the text and image, and proximity to group related pieces of information together. It also includes an reflection symmetry in how the 2 about sections are mirrored.

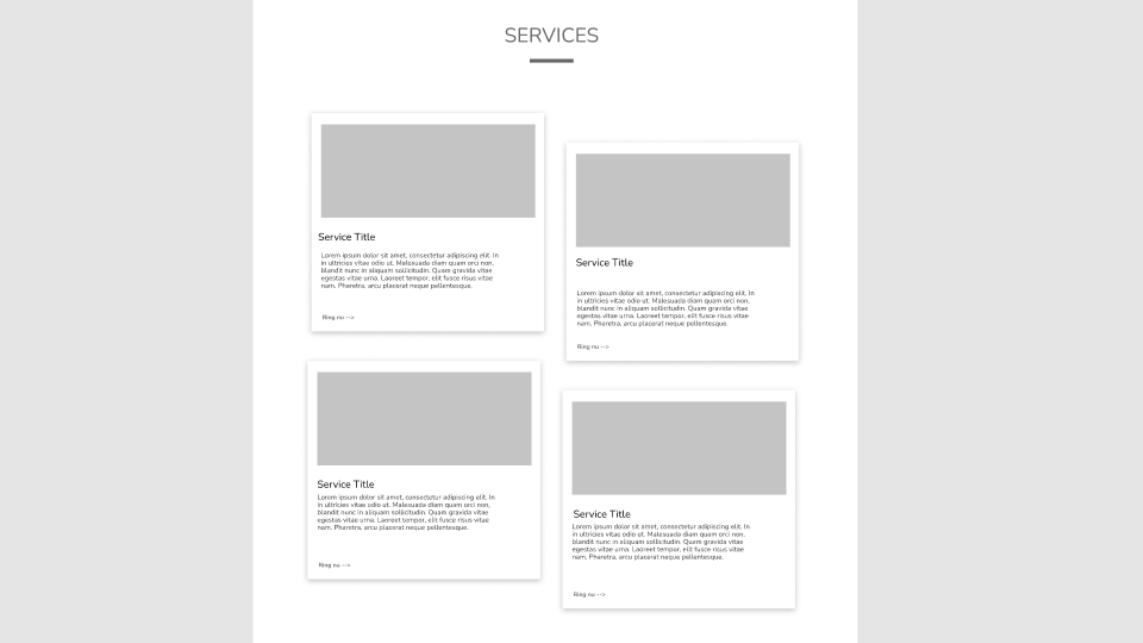

Figure 15: Initial improved design's highlighted services section

A 'why us' section where 3 reasons are given to why a potential customer should choose this company over someone else. This helps build trust and ensure that the potential client can feel safe in their decision. Design shown in figure 16. The items are laid out in a translation symmetrical way, with each element using proximity to group related information together.

Figure 16: Initial improved design's 'why us' section

And lastly, a gallery for showcasing previous work to build up trust with the potential customer. The gallery design can be seen in figure 17. The layout for the gallery was primarily because of personal preference of a masonry gallery.

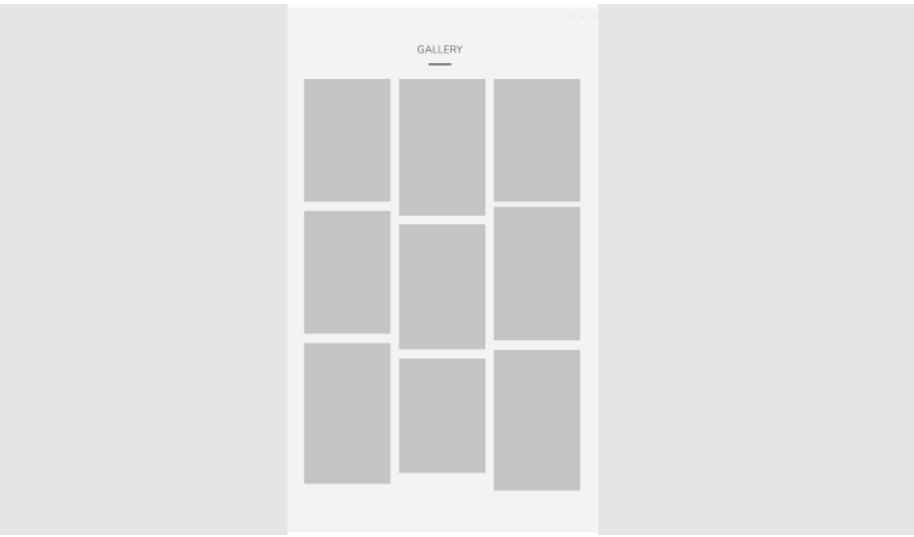

Figure 17: Initial improved design's gallery

3.4.2 Feedback

For feedback, I asked the client for his thoughts. Furthermore due to limited resources convenience sampling was used to get a bit of extra feedback. Therefor, 1 friend and 1 work colleague, aged 23 and 27 respectively, with UX/UI design education were also asked to give feedback. These were informal and unstructured interviews/discussions that started with the question "What do you think about this design?". The interviews with friend/colleague were performed online via Discord with the friend, and in-person with the colleague. They were closer to being discussions than interviews. The interview with the client was performed in person.
The feedback received in summarized forms:

1. The length of the gallery makes it hard to get an overview of the page properly
2. The 2 service sections doesn't make much sense, especially with a service page
3. Too many decorations
4. Feels like it is aimed towards a young audience compared to a broad age group
5. Too "fun"/"friendly" needs to look more professional
6. Client would like an optional CVR field in the contact form
7. Client would like when the CVR field is inputted to automatically fetch data about the respective company and attach it to the email

3.4.3 Adjusting the design

Taking the feedback into consideration, these are the resulting changes.

The gallery was adjusted to a horizontal gallery, that now uses Gestalt's continuity principle, to reduce the amount of space it takes up, while retaining the ability to showcase previous work. The gallery also have a hidden affordance being that it is possible to scroll by dragging anywhere in the section from right to left or left to right. This is signified by that it is a common mobile pattern of being able to rotate carousels and slideshows by simply dragging, which relies of Gestalt's 'past experience' principle, see 2.6.8. Furthermore, it is reinforced on desktop when hovering the cursor over the area, where the cursor changes to a "grabbable" cursor. However, since it is hidden, another perceivable way of navigating the gallery was adding, being mapped left and right arrows directly beneath it in order to navigate to the left or right image respectively. Lastly, 'progress' dots showcasing what image is currently being viewed was also added to tell the user how much left there is to see.

It was weird that there were 2 'service' sections. This resulted in the 'highlighted services' section being removed, and more specific information regarding the services will only be on a separate page.

Too many decorations led to removal of the dots and colored blocks near the images in the 'about' sections. Furthermore, the testimonials overlapping the contact section was also changed to no longer be overlapping to simplify the layout a bit. These changes also helped with reducing the "fun"/"friendliness" of the site, and simplified it making the site feel more professional. This also

means it is more approachable by a broader age group.

A CVR field was also added to the design. Automatic fetching of the CVR data has also been added to make automatic try to fill out the data for the user. Since the automatic fetching of the CVR data has been added, the CVR field is the most important field as it improved the speed a user can fill out the form. Therefor it will be placed first.

In figure 18, on the next page, the full home page can be seen as both wireframe and in color. The final colored designs for the remaining pages can be found in the appendix in section 8.1.

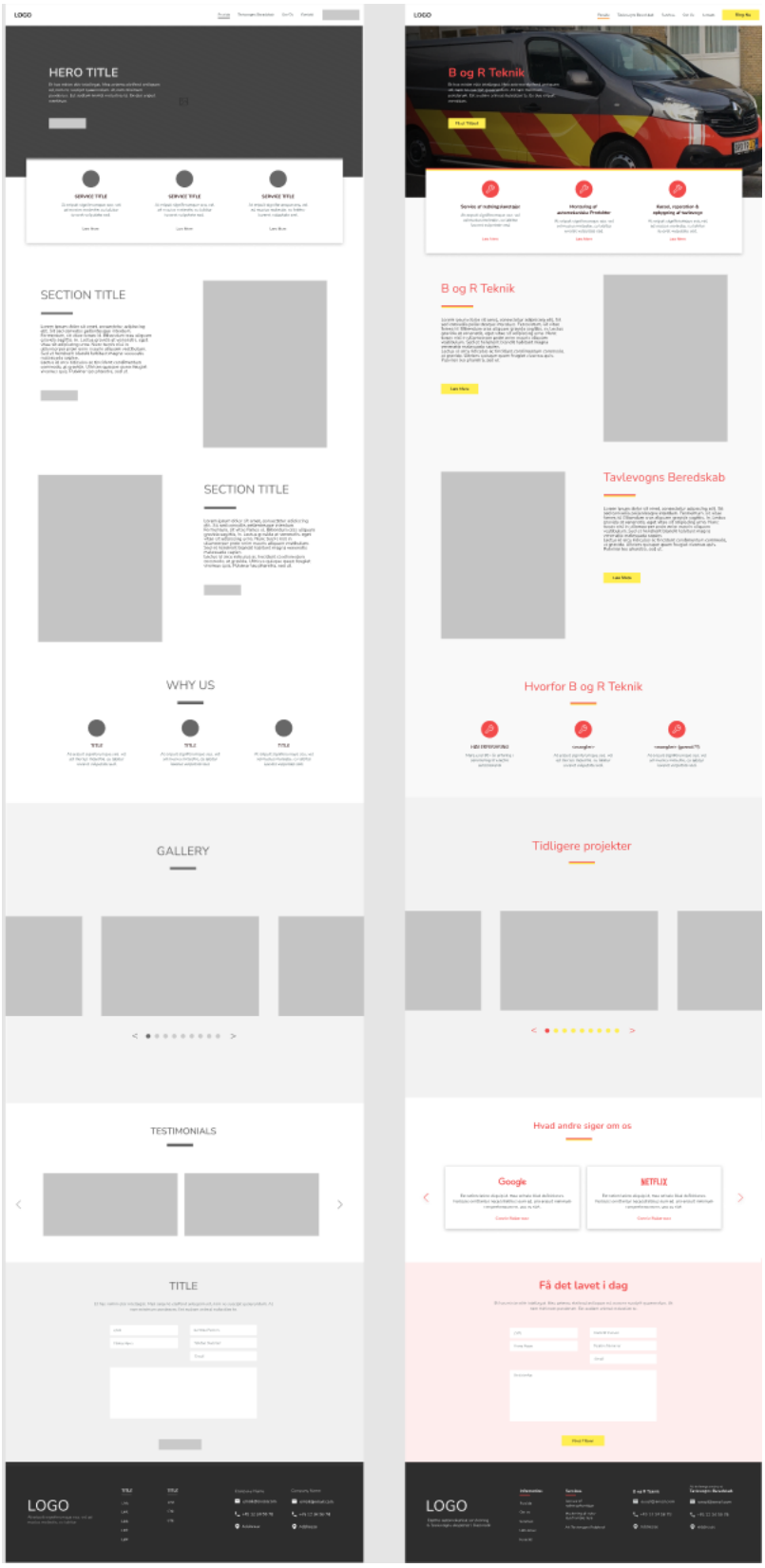

Figure 18: Initial improved design's gallery

3.4.4 Changes after revisiting theory

This section will cover changes to the design that has occurred after revisiting the interaction and user-experience design theory.

3.4.4.1 Loading Indications

For the loading of contact information and gallery images, skeleton loading elements should be used to reduce the perceived loading time, as discussed in section 2.8. Furthermore, for images a blurred image will be displayed until the full image has been loaded.

3.4.4.2 Services Page Redesign

The 'services' page has been re-designed because the design of the service elements had an false-affordance of being clickable when they were not. This is because they were small rectangular elements containing little text inside, and they had a drop-shadow. These properties are common signifiers of button designs. Therefor, the page was re-designed to what is seen in figure 19

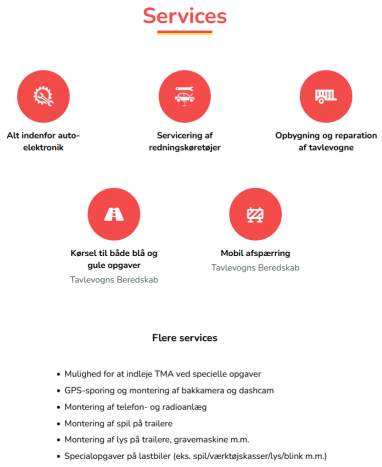

Figure 19: Re-design of 'services' page

This design uses large icons with a label text underneath for the service's name. They are positioned in 2 rows, upper row for highlighted / most commonly asked for services from B og R Teknik', and lower row for most commonly asked for Tavlevogns Beredskab's services. Even if this design is not entirely symmetrical, no reflection symmetry and also arguably no translation symmetry, the items still feel grouped because of the principle of similarity. Furthermore, it is also clear what icons and text belongs together due to their proximity. Another thing that can be seen, is the 'flere services' ('more services') bullet list, this was added to show that the business also performs other services, but they are not the most common services provided.

3.4.5 Testimonial Section Change

After further consideration and discussion with the client, it was determined that changing the testimonial section to a 'partners' section, containing the partners B og R Teknik is working alongside with, would fit the client's needs better. The new section will require less maintenance, and when changes are required to be made, they are easier to make. Instead of requesting both a quote from the company and be allowed to use the company's logo, it is now only required to be allowed to use the company logo.

4 Implementation

The primary tools and frameworks that was used to develop the website is based on the requirements as described in section 2.10 and the designs in section 3. This section will shortly cover the reasoning for each tool/framework and alternatives.

4.1 NextJS

NextJS is a React framework that allows for server side rendering [NextJS, a]. Therefor, it was decided to use NextJS over React due to that the sites's performance increases the rank of the page in Google's search results [Google, a]. This performance increase comes from that NextJS allows for server-side rendering, which makes the site will load faster on the first render [Connolly][NextJS, b].
A static site would not be possible since some of the content is required to be dynamic, such as the gallery images as they might be changed by the client over time.
Alternatives to NextJS would be Vue and Angular which supports server side rendering. Lastly, making the server side rendering yourself is also an option. But all those were ruled out due to the lack of resources.
Typescript was used alongside of NextJS to improve development speed and experience. This was optional and purely based on personal preference. In short, TypeScript is built on Javascript in order to add type safety to the language[Typ].

4.2 CMS

The content management system (CMS) that will be used is Contentful[Con]. The reasons for this is that Contentful is free for small projects such as this. It allows for managing both images and non-image content, instead of using two different services. Furthermore, the UI is intuitive and therefor easy to teach and hand-over to the client.
Other CMS options are WordPress, which is a lot more complicated and primarily focused around blogs[Wor]. Netlify CMS is a good alternative, especially if the hosting is done on Netlify, but was ruled out as the UI was not nearly as user-friendly compared to alternatives[Net].
It would also be possible to make a custom made CMS, but that would require implementing additional UI for managing content, a database and then also hosting the custom made CMS.

4.3 Email Service

Since the site will need to be able to send emails from potential clients to the business directly from the site, an email service is required.
The service chosen is EmailJS, which is free for up to 200 emails / month. This should be more than enough for a small website, and if it ends up requiring more it is a cheap option. It is just important to ensure that a person can't repeatedly send emails without some delay to prevent accidental spam and also bots from using up the monthly quota[Ema].
A free alternative to the email service is Nodemailer, but it requires a more extensive setup to use and therefor ruled out for at least the near future[Nod].

5 Testing

This section will cover the methodology used for the tests, the results and discussion / analysis of the results.

5.1 Testing Methodology

An unsupervised usability test was conducted online using a survey, which was sent to 4 participants. Furthermore, session recordings, and heat-maps for clicks, scrolling, and hover position of the cursor was used as an observation method to learn more about the participants' behaviour. Due the data that was gathered is primarily data such as time, amount of clicks, percentage scrolled, Likert Scale and Likert items' values etc. the usability test falls in the category of quantitative methods. The usability test was tested with a pilot test on a single friend before it being sent to the real participants, to ensure it was possible to complete it without any guidance. In addition to the usability test, an evaluation of the SEO performance was also performed by figuring out the page ranking for several keywords and keyword combinations.

5.1.1 Sampling Method

The sampling method that was used was convenience sampling of friends and family, since participants from target group are not required to figure out if the website is easy to use.

5.1.2 Survey

The survey contains 3 sections being personal info, tasks / scenarios and the last section contains usability and UX questions

5.1.2.1 Personal Info

A short section asking for the participants' age and gender.

5.1.2.2 Tasks / Scenarios

This sections contains 4 tasks, which are intended to make the user explore the site searching for information and perform user interactions on the implemented features. The tasks times will be inferred by looking at the session recordings. This does introduce a bias of figuring out when a task is started and has ended. LogRocket, the website used for session recordings, does show inactivity time on the session recording's timeline[LogRocket], which makes it possible to reduce the bias significantly. More about the bias in section 5.1.5.4.
All tasks are followed up by a 5 weight Likert item asking how easy or difficult the task was to complete.

Finding services The first task is making the user find several services and determine if they are provided by B og R Teknik or not. The task is phrased as follows, translated to English: "You have just arrived on the website and would like to see if B og R Teknik offers the service you are looking for. Which of the following services are being offered?"

Since it is a test using participants and not a field study of observing real users, the participants most likely do not need a service from B og R Teknik, therefor asking to find multiple services is used to simulate multiple users looking for a specific service, to ensure it is possible to find it and how difficult it is to find.
There is also an attention check, to ensure they don't just swiftly check 'yes' on all questions, being "food delivery".
Some of the services can be found in multiple places, some are only explicitly stated in one place but falls under another service that can be found on the service page e.g. "servicing of emergency vehicles" and "servicing of firetrucks", the latter being a service that falls under the same category of the former.
For every service it is possible to answer "yes" (it is provided), "I think yes, but not sure" which is intended as an option for services not explicitly stated but would make sense that it is provided, e.g. "vej afspærring" (road closure) instead of the written "Mobil afspærring" (Lit. 'mobile closure').

Finding contact options The 2nd task is phrased as follows: "You have now gotten a good impression and now would like to contact B og R Teknik to hear closer about getting your issue solved. What contact options can you find on the website?"
The response is given in form of a text, where the user is expected to write the contact options they have found, in order to prevent giving hints about what types of contact options there are. This will then be analyzed using coding to figure out how many of the contact options they found.
The goal is to ensure that the people can find the contact options and pick their preferred contact method. There are in total 4 contact options: Call via soft-phone, normal phone call, email and contact form.

Previous Projects Gallery The 3rd task is aimed at ensuring that the gallery is easy to use. The task is quite simple, "Look through the 'previous projects' gallery".

Contact Form The last task is ensuring that the users are able to fill out and send a mail via the contact form. For the testing website, the sending of the email has been removed, to not send emails unrelated to actual requests.
This task also allows participants to send fake data, since the data itself is irrelevant and the focus is on the usability, and there is not given any specific enquiry e.g. ask about getting a dash cam install in your car.
The task is phrased: "Send an email to B og R Teknik using the contact form".

5.1.2.3 Usability Questions

The last section of the survey starts out with asking the user about the perceived performance of the website when they load it for the first time, and when they explore it. The first time load is critical to ensure that users do not bounce, as discussed in section 2.8.
Then the 10 questions from the System Usability Scale (SUS)[Usability.gov], which is a reliable 5 weight Likert scale used to evaluate the usability of a wide variety of systems, is given to the user.
Lastly, 3 questions regarding what impression the site has given the users on B og R Teknik in these 3 areas: Professionalism, trustworthy, and experience. This is used to evaluate if the design / marketing portrays the desired values of the business.

5.1.3 Session Tracking and heat maps

In addition to the survey, the users' session will be recorded via LogRocket. This is used as observation when it is not possible to 'look-over-the-shoulder' on the participants while they are performing the task. Furthermore, LogRocket also provides heat maps for clicks, scrolling and hover locations, which can all be used to analyze the users' behaviour and pin-point problem areas with the site.

5.1.4 SEO Evaluation

For evaluation of the SEO of the website, the page ranking for several keywords and keyword combinations will be looked at.
The following keywords and keyword combinations, also known as queries, will be used to determine page ranking. Variations of keyword phrases will also be used, each keyword variation in the phrase is indicated with a '/'.

- b og r teknik
- r og b teknik *(note: simulating an user error)*
- servicering af brandbil/ambulance/politi bil/redningskøretøj
- brandbil/ambulance/politi bil etc. servicering
- lydbro/dashcam/GPS/bakkamera montering
- montering af lydbro/dashcam/GPS/bakkamera
- tavlevogn servicering
- opbygning af tavlevogn
- få bygget en tavlevogn
- tavlevogns kørsel

These queries can be categorized into 4 categories: Brand (eg. 'B og R teknik'), board-cart (e.g 'tavlevogns kørsel'), auto-electronic (e.g. 'dashcam montering'), and emergency vehicle servicing (e.g. 'brandbil servicering').

5.1.5 Biases

There are several biases in the test setup being as follows

5.1.5.1 Non-Natural Setting

Since the participants are given tasks, and not tracking users in a natural setting of them visiting the website based on their own initiative, the heat maps are expected to be biased towards the tasks given, compared to how a user would naturally explore the site. This means that related actions to the task will most likely be highlighted on the heat maps.
Therefor, the heat-maps should primarily be used for identifying issues related to the tasks.

5.1.5.2 Participant gets stuck

It is possible that participants might get stuck during the survey because they are unable to fully complete a task. This can end up leading to a non-response bias, or the participant simply inputting a random answer, and therefor reduces the likelihood of the test being representative of the target group. Since there is no supervision it is not possible to quickly help the participant. Therefor, the survey needs to be tested with a pilot test before being sent out to avoid this.

5.1.5.3 Low sample size

A low sample size might lead to unreliability in the test results. Furthermore, it also risk only having answers from a specific group of the the target group, which is not representative of the target group.

5.1.5.4 Timing the tasks

Since the testing is unsupervised and it is therefor not possible to control, or know exactly, when someone starts or stops a task. This will result in the time spent completing tasks might be incorrect.
One way to mitigate it, is to only use LogRocket's active time as task time, in order to normalize what counts as task time and not task time. But this still leaves figuring out when a task has started and stopped to guess work. Longer periods of inactivity can be used as a reasonable guess as to when the user is filling out / reading the survey and can therefor be used as a good enough indicator for when a user finishes / starts a task.

5.1.5.5 Contact form

Regarding task 2 and 4, the 2nd task requires them to write about the contact form, and the 4th requires them to visit and use the contact form. This might make people go back and input the answer into the 2nd task's reply. Therefor, contact form should not be used as a 'valid' answer because it is a given answer. Furthermore, this is justified by that if they can find the contact form in the 4th task, then they were most likely also able to find it in the 2nd task.

5.1.5.6 Search results differs from person to person

If 2 people search the exact same phrase they might get different search results. This is because Google tries to measure the relevancy of the shown links to the user, by using e.g. location, language, device etc.[Google, b]. Therefor, the keywords and keyword combinations evaluation can be biased in either direction, depending on how Google measures the relevancy of the links. To reduce this as much as possible, the searches will be performed using an incognito window.

5.2 Pilot Test

A pilot test was made with 1 friend to ensure it was possible to complete the survey without problems and no guidance. It went well and no major issues were found. The participant did mention a few of the previously mentioned intentional 'traps' as possible issues, e.g. he did not know the difference between "vej afspærring" ('road closure') and "mobil afspærring" (lit. 'mobile closure').

5.3 Testing Results

This section will present the testing findings for SEO, the survey responses, session recordings and heat-maps.

5.3.1 SEO

This section will cover the evaluation of the site's SEO by looking at the queries' page rank (see section 5.1.4).
Each query will be grouped into one of the following categories based on their page rank: between 0 and 3 (good), 4 to 10 (acceptable), 11 and higher (bad), and 'not found' (terrible) if it was not found within the first 5 pages.
There was a single outlier, being the query for 'b teknik', which was shown on the first page along with other businesses underneath a map. But this result only had the location of the business (on the map) and the name of the business underneath the map, among the other businesses. Therefor, this will given the page rank of 5, since it was shown on the first page for a query that is a misspelling of the business' name. The original page rank for the query is 28.

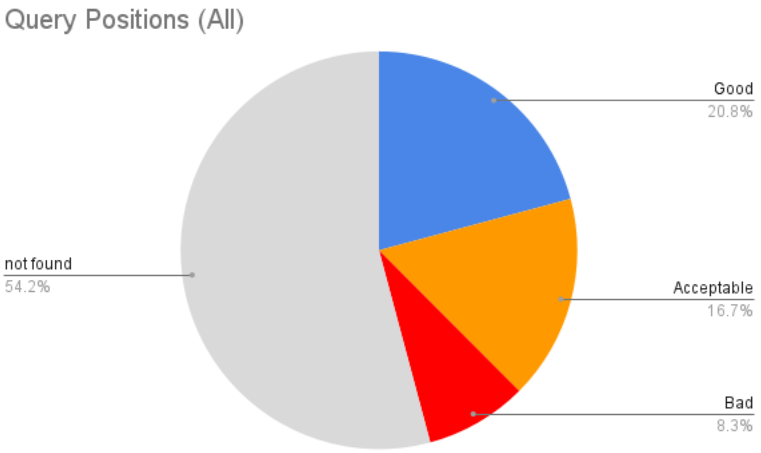

Figure 20: Page Ranks distribution for all queries (N = 24)

Figure 20 shows that the majority (52%) of the 24 queries were not found. But the majority of the queries that were found were acceptable or better (page rank 10 or better)
Taking a deeper look into the queries when they are grouped by category will show where there the problems are, starting with 'brand'.

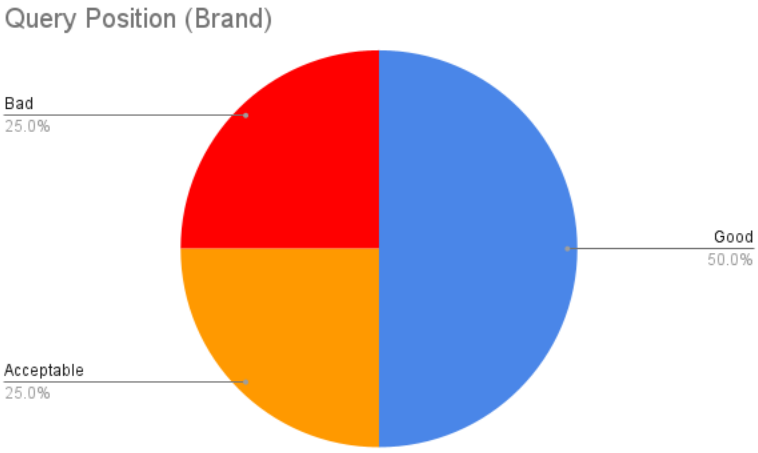

Figure 21: Page Ranks distribution for 'brand' queries (N = 4 out of 24 in total)

Figure 21, shows the page ranks for the 4 brand queries (b og r teknik, r og b teknik, r teknik, b teknik) are 2 good (b og r teknik, r og b teknik), 1 acceptable (b teknik), and 1 bad (r teknik). This shows that it is easy to find the business if you already know the name.

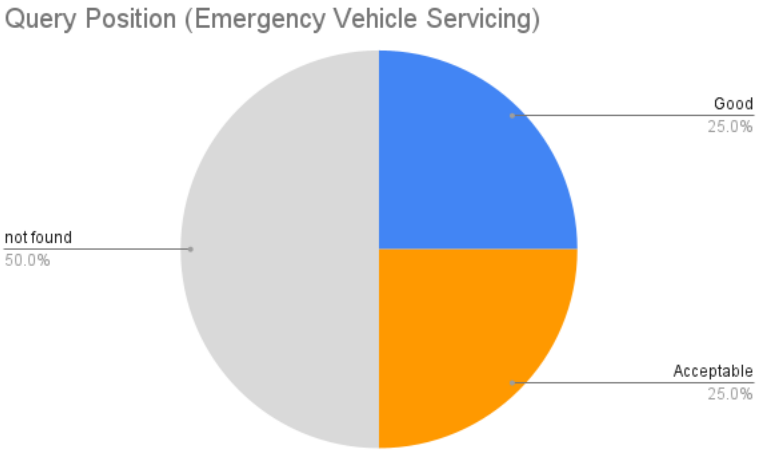

Figure 22: Page Ranks distribution for 'emergency vehicle servicing' queries (N = 8 out of 24 in total)

Figure 22, shows the page ranks for the 8 emergency services queries (4 variations of these 2 queries: 'servicering af X' and 'x servicering') are 2 good (the variations containing 'redningskøretøj'), 2 acceptable (the variations containing 'brandbil'), and the remaining 4 were not found.

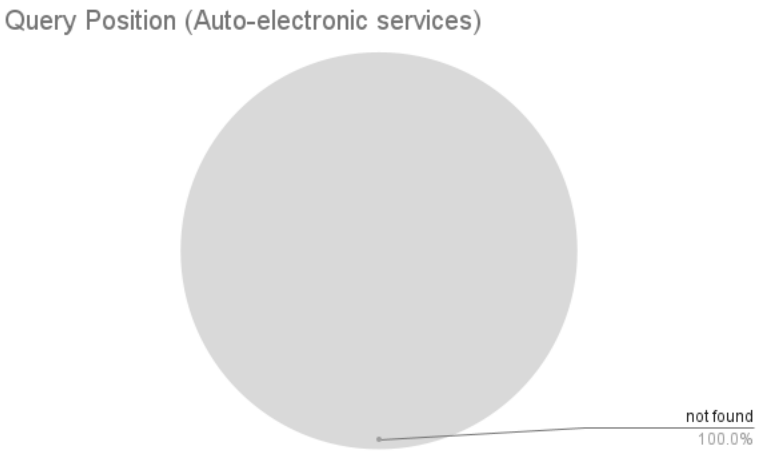

Figure 23: Page Ranks distribution for 'auto-electronical services' queries (N = 8 out of 24 in total)

Not a single query was found for auto-electronical services as seen in figure 24.

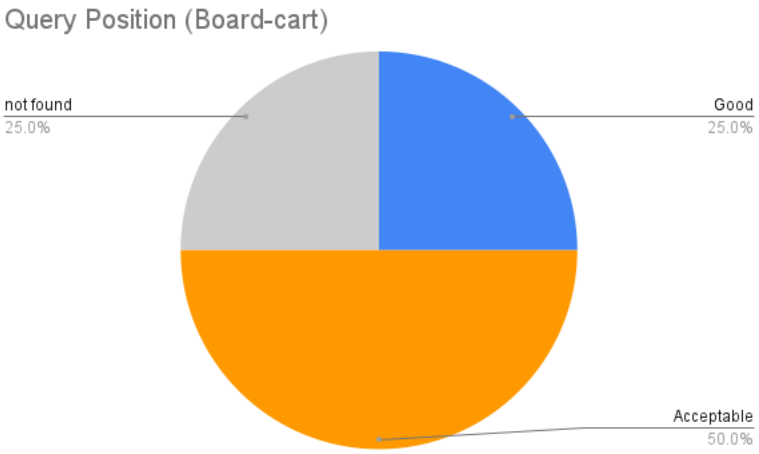

Figure 24: Page Ranks distribution for 'boart-cart' related queries (N = 4 out of 24 in total)

Figure 24 shows 1 good ('tavlevogns servicering'), 2 acceptable ('opbygning af tavlevogn' and 'tavlevogns kørsel') and 1 not found ('få bygget en tavlevogn') for the boart-cart related queries.

5.3.2 Survey Results

This section will cover the results from the survey

5.3.2.1 Personal Info

Out of the 4 participants, only 1 was between 20 and 25 years. The rest were between 50 and 60 years old. 3 of the participants were male (incl. the participant in the 20 - 25 age range), and 1 was female.

	Age	Gender
Participant A	55	Female
Participant B	24	Male
Participant C	56	Male
Participant D	51	Male

Figure 25: Participants' age and gender (N = 4)

5.3.2.2 Task: Finding Services Offered

When the participants were tasked with finding the services offered, everybody but 1 found them all, as seen in figure 26. The 1 participant who could not find all, only could not find a single service being 'mounting of electric winch on trucks', but the participant responded that they believed it was a service that is being offered. It can also be seen that nobody fell for the trap question 'food delivery'.

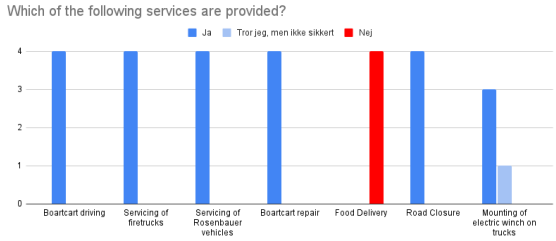

Figure 26: Responses to the task for finding the services offered on the site (N = 4).

Everybody responded with that it was 'very easy' to find the services provided.

5.3.2.3 Task: Finding Contact Options

Every participant found the email address, phone number and contact form. The contact form was expected, since it was part of task 4. However, for soft-phone it was more difficult to know for sure if they found it or not. This is because only 1 participant (Participant B), write explicitely what they found. The rest wrote along the following (translated to English) "2x telephone, 2x email", "phone - mail - contact form", "phone, mail and contact form". None of them explicitly states that they found the soft-phone. Therefor, the heatmaps were used as the final measurement for them, to

determine if they found it or no. If they hovered or clicked on the soft-phone button it was counted as that they had seen it.

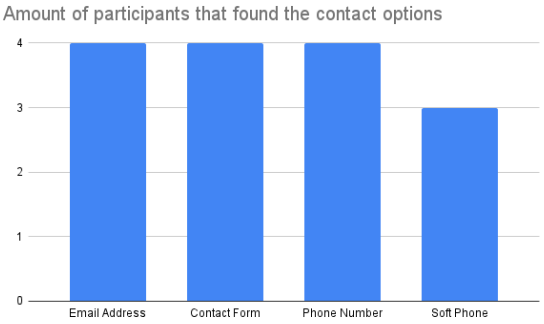

Figure 27: Amount who found each contact option (N = 4).

5.3.2.4 Task: Look Through the Gallery

All the participants found it 'very easy' to look through the gallery. 1 participant (participant A) tried to click on the image, as seen in figure 28. Participant B primarily used the dragging gesture instead of the buttons, in comparison to the other participants who only used the buttons.

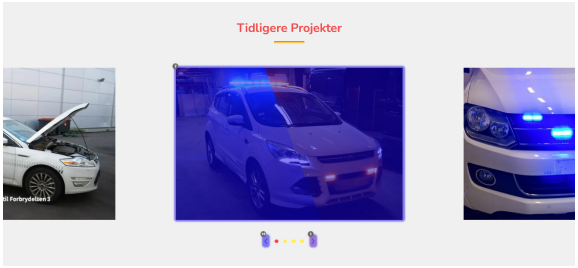

Figure 28: Image of where clicks occurred in the gallery section (N = 4).

5.3.2.5 Task: Send Email Via Contact Form

Participant B was the only person who used the contact form on the front page, which is close to were the gallery is, while the other participants went directly to the contact page and used the contact form there.

5.3.2.6 Task Durations

In figure 30 the time taken to complete for each task can be seen. The times were manually estimated. By comparing the estimated times to LogRocket's total active time it is possible to roughly measure how accurate the time estimates are. The estimated time's inaccuracy is 5% overall.

	Finding Services	Finding Contact Options	Looking Through Gallery	Send Mail via Contact Form	Total Estimated Time	LogRocket Total Time	% Time difference
Participant A	01:25	00:10	00:20	01:00	02:55	03:00	2.8
Participant B	03:48	00:20	00:19	00:45	05:12	04:59	4.3
Participant C	01:57	00:18	00:29	00:48	03:32	03:18	7.1
Participant D	01:16	00:14	00:23	00:36	02:29	02:38	5.7
Mean	02:06	00:15	00:22	00:47	03:32	03:28	5

Figure 29: Estimated Task Durations (N = 4).

On the session recording for participant B, it looked as if they double checked the their answers, which resulted in a longer than expected task duration for the first task.

5.3.2.7 Perceived Performance

All participants responded with that the site felt 'very fast' for both the initial load and while exploring the site.

5.3.2.8 SUS

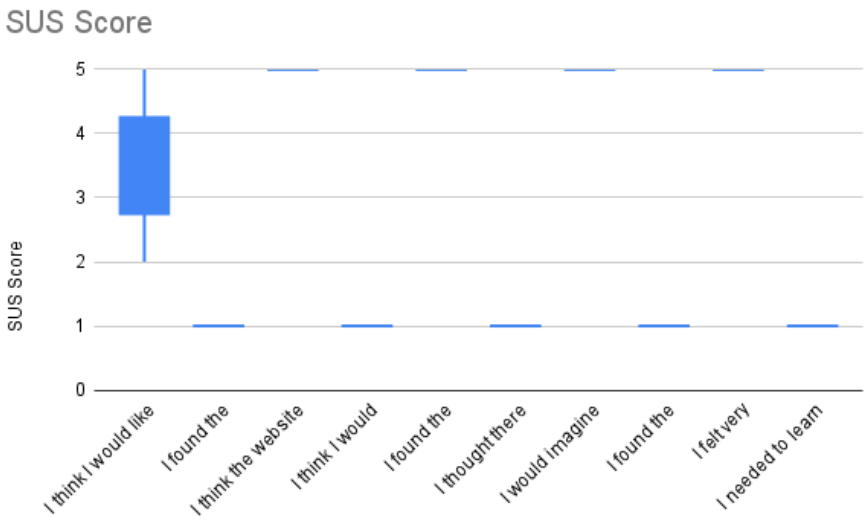

Figure 30: Box-plots showcasing the SUS scores for the participants. Negative questions score have not been inverted (N = 4).

It can be seen that the participants only picked the good option for the majority of the likert items. The only exception was the first question 'I think I would like to use the website often', where it was spread out between 5 to 2 with the mean being 3.5.

5.3.2.9 Design Personality

All 4 participants said that business seemed 'very trustworthy', 'very professional', and 'very experienced'.

6 Discussion

6.0.1 ReactJS vs NextJS

A paper that was published in 2021 claims that the performance for React is better and the SEO rating is equal to NextJS for small sites[Liban Husion, 2021]. Therefor the decision of using NextJS might have been wrong. But since it was not possible to find more contradicting data, it was decided to go with the generally agreed upon choice in the industry, that NextJS is more performant and has higher SEO than ReactJS.

6.0.2 Task Times

Based on the time taken to complete the tasks and the participants' own opinions, see section 5.3.2, it can be said that it is easy to use the website's functionality and it is also easy to find the services offered. The participants were similar in how long they took in completing the tasks, with the exception of the 'finding services offered' task. For that task, there was an outlier, being participant B, who took almost 4 minutes. As stated in section 5.3.2.6, it seemed the reason for it was to due the participant double-checking the answers.

6.0.3 User Behaviour: Gallery Interactions

A participant tried to click on the image to, most likely, try to enlarge the image. This is a common pattern, of being able to click an image to enlarge it, and therefor it should be considered to add that functionality to the gallery.

6.0.4 User Behaviour: Sending mail via contact form

When looking at the session recordings, it looked as if 2 of the participants were using an auto-fill feature (that was not the implemented CVR auto-fill) to fill out the information, and they then went back and corrected the incorrect information - if there was any. Participant A, used the CVR auto-fill functionality, and went back and corrected any incorrect information. Participant B filled it all out manually, and he did not give any contact information, which resulted in him receiving an error. Therefor, at minimum one of the contact information fields should be marked as required, to ensure it is clearly known that an contact option is required.

6.0.5 SEO Evaluation

The SEO has areas where it needs to be improved, since 52% of the queries did not give the site as a search result. The queries that yielded no results were primarily queries about auto-electronical services and emergency vehicle services. The SEO is acceptable if you simply tried to search for the business directly, or if you were looking for a board-cart related service. But for auto-electronical and emergency vehicle related services, the SEO needs to be improved. A possible idea to improve the SEO is to create more pages, specifically tailored towards a service area. This will give more opportunities to include SEO keywords.

6.0.6 SUS Score

Due to the small sample size and the simplicity of the website, the SUS results were expected to be quite favourable. However, it is a bit weird that people responded with a high positive score for the first question about that they think they would like to use the website often. As a participant you do not have a reason to often use a product after the test, except if you already are using the product. Perhaps they tried to imagine themselves as real users, and that they would have to re-visit the site multiple times while researching options.

6.0.7 Perceived Performance

It was found that the performance was perceived as fast, both on the first load and when exploring the site, and therefor the requirement of a site with high performance can be said to be fulfilled. However, there can still be made performance increases, both technical and perceived increases e.g. the gallery still does not have a proper "loading" background and therefor if you scroll down to it quickly, you will simply see a blank spot while an image is being loaded.

6.0.8 Design Personality Evaluation

Based on the responses regarding how the business is perceived due to the website, it can be said that it fulfills the desired design personality of making the business look professional, experienced and trustworthy.

7 Conclusion

This report explores one of several solutions that can be used to reach a wider audience by using digital means. In this case, a business website with the goal of having good search engine optimization (SEO), high performance and user-friendly was created for B og R Teknik.
The website design is custom-made and tailored to fit the needs of the B og R Teknik's target group, being primarily employees of companies who require auto-electrical services. More specifically, the employees who researches and contacts possible vendors that can solve their issues e.g a firetruck's siren stopped working. The design aims to convey the message of the company being professional, trustworthy and experienced. This was confirmed that the design does convey those traits from the usability test that was carried out. Furthermore, since the target group is employees of companies, ranging from small to large companies, support for 'softphone' call functionality was added, which allows users to easily call directly from their computer e.g. via Skype.
As stated before, a usability test was made. The test's 4 participants were sampled with convenience sampling. The usability test was unsupervised and consisted of an online survey that was sent to participants, which they could complete when they had the time. The survey consisted of questions about basic personal info e.g. age and name. Then 4 activities for the participants to perform and for each activity a question about how easy it was to complete that activity. Lastly, a collection of questions, 10 of them being from the System Usability Scale (SUS) used to evaluate the usability. Furthermore, a few questions about perceived performance and if the design personality conveys the desired personality of professionalism, trustworthiness and experience. Along with the survey, heat-maps and session recordings were used to gather data on the participants' behaviour while completing the survey. Furthermore, testing of about 25 SEO keyword queries e.g. "Tavlevogns Kørsel" was performed to evaluate how well the SEO for the website is.
It was found that the website achieved a very high SUS score of 96 out of a 100. Furthermore, all participants perceived the site's performance as 'very fast' for both the initial load and while exploring the site. However, the SEO aspect was found to be severely lacking in certain areas. Search queries related to emergency vehicles and auto-electrical services were found to be terrible. For emergency vehicle services only 4 of the 8 queries were found, while for auto-electrical services none of the 8 queries were found.
Due to lack of resources, the website only contains existing images from the client and stock images that are free for commercial use. These are expected to be updated over time afterwards with professional images.
The website can be viewed by navigating to 'bogrteknik.dk'.

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8 Appendix

8.1 Remaining Pages Designs

8.1.1 Contact Page

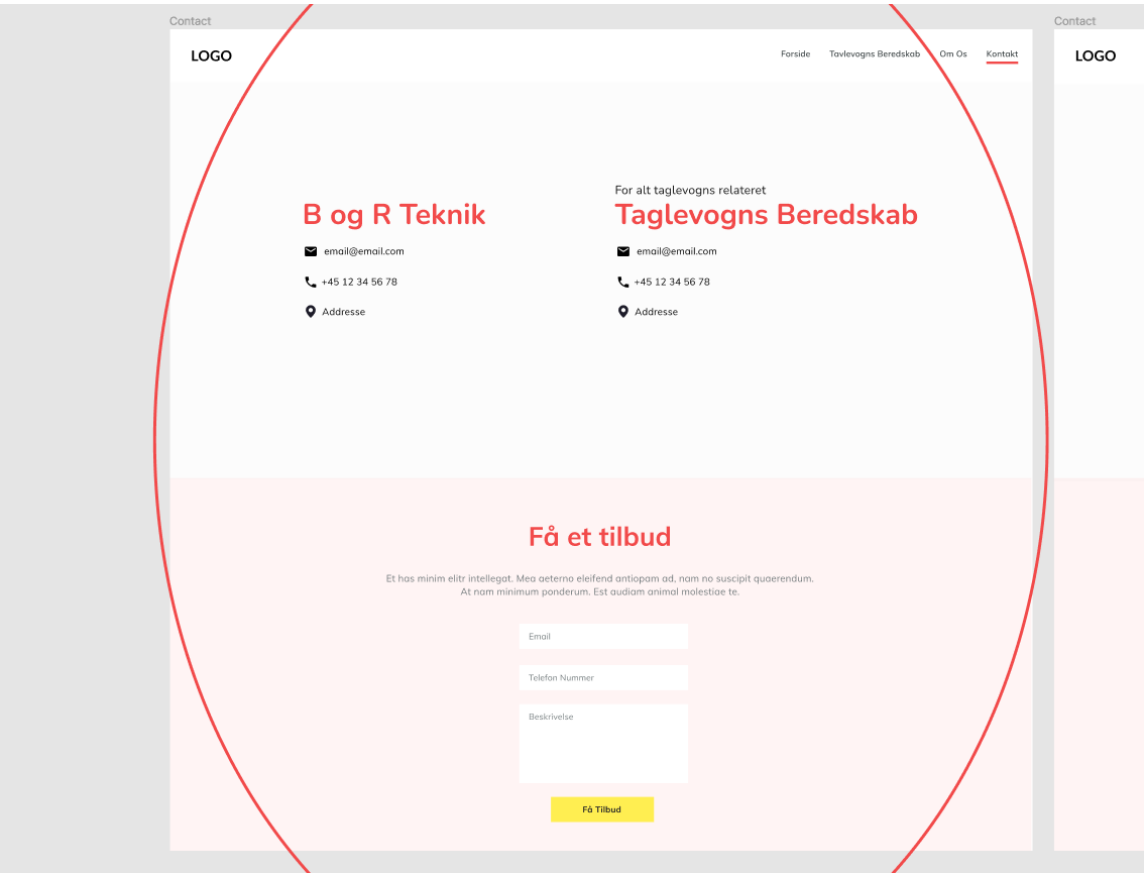

Figure 31: 'Contact' page design in color

8.1.2 About Us - B og R Teknik

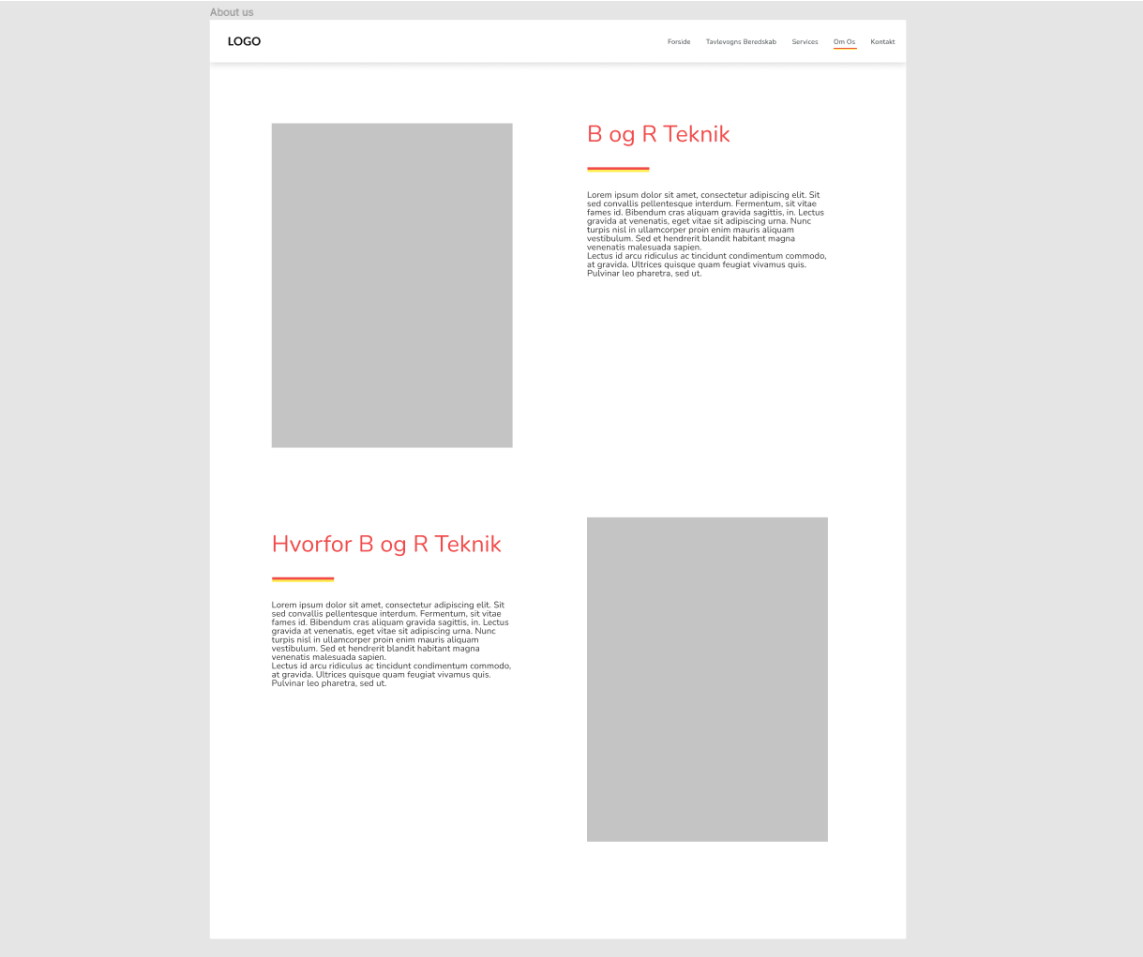

Figure 32: 'About Us' page in color

8.1.3 Tavlevogns Beredskab

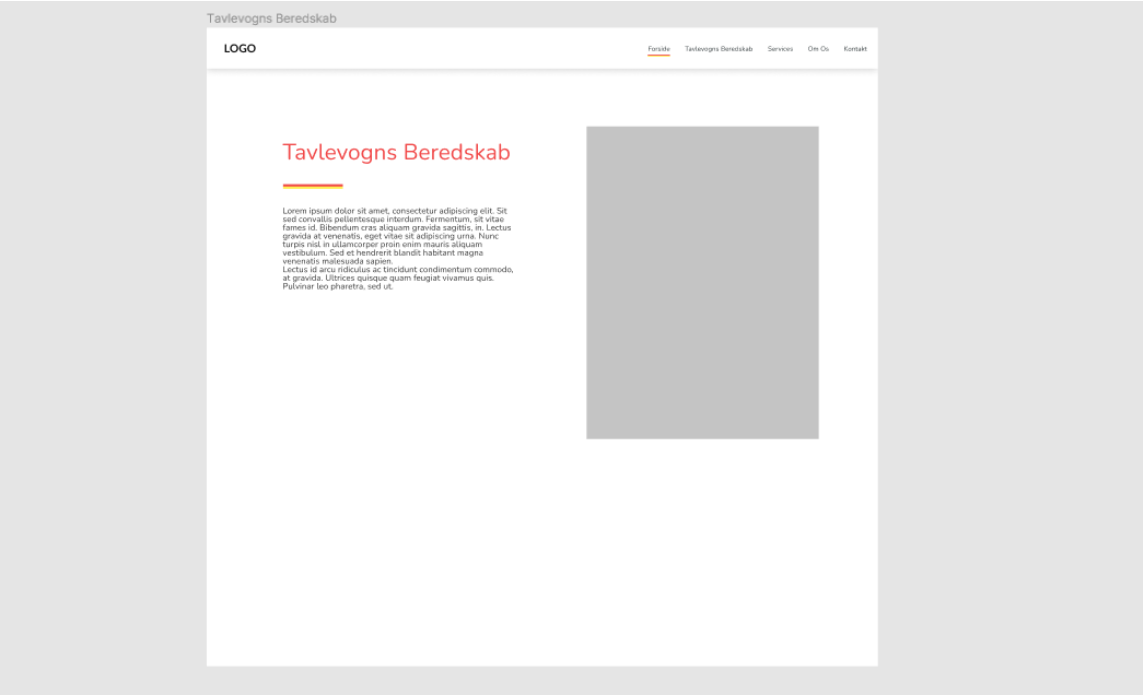

Figure 33: 'About Tavlevogns Beredskab' page in color

8.1.4 Services

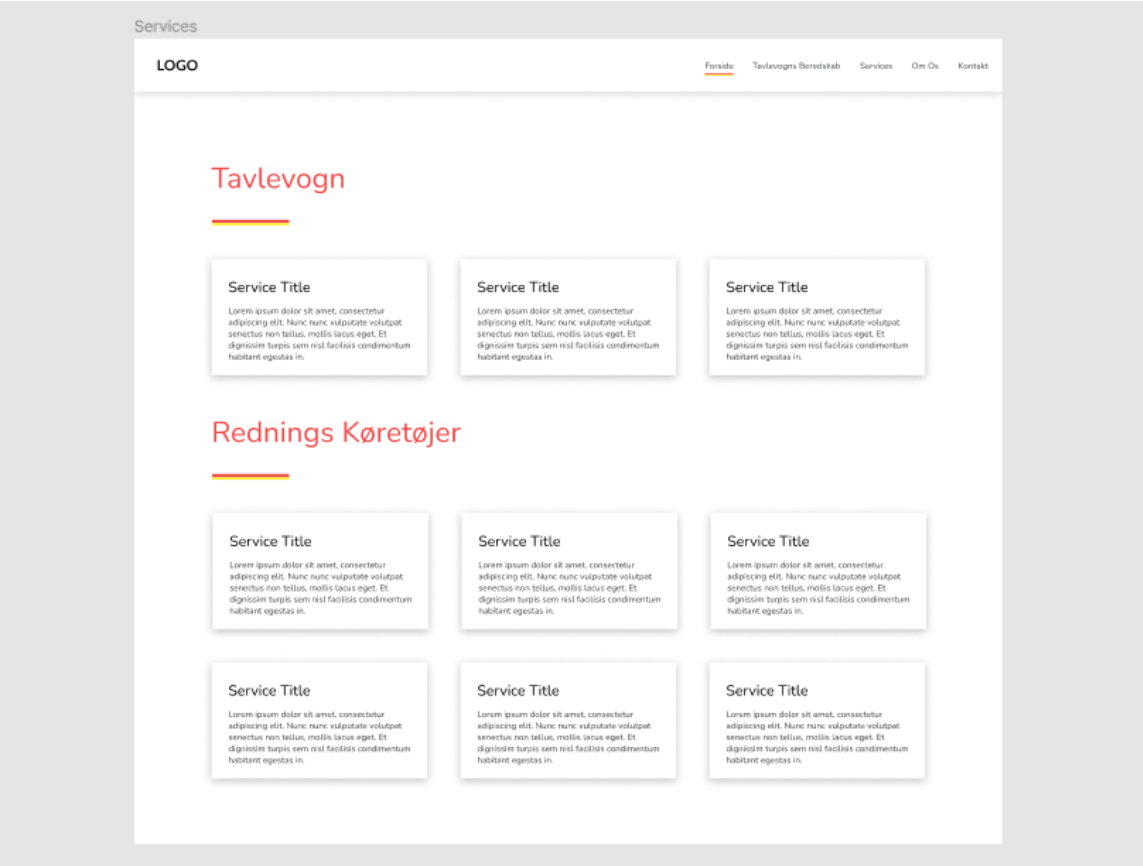

Figure 34: 'Service' page design in color