

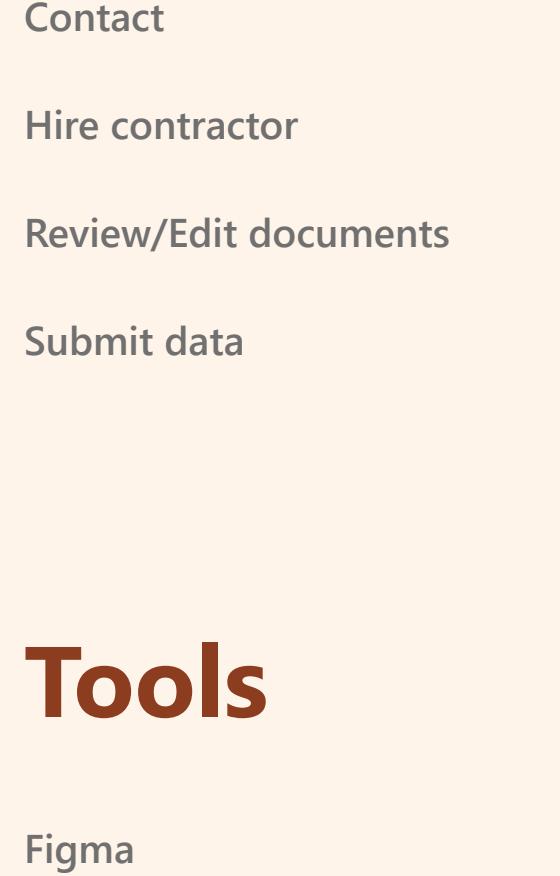
Goals

Digitalize process
Lead generation
Reduce calls
Increase transparency

Challenges

Reliant on external API's
Low accessibility color scheme
Lack to access to end users
Website redesign by customer

Style Guide



End User

Tenants

25-70 years

Requirements

Error report
Property search
Contact
Hire contractor
Review/Edit documents
Submit data

Tools

Figma
Figjam
Optimal Workshop
Adobe Illustrator

Duration

6 months

Background

RentEstate is a family owned business that owns and manages several properties throughout Denmark.

They are currently in a process of remaking their entire brand, starting with their website.

We were approached by them as they were looking to create an application that could be used by existing tenants.

The project was to be developed in two stages, with each iteration adding additional features.

My role in this project was UX/UI Designer and Product Owner.

Overview

The main purpose of the application would be to digitalize the current means of communications but also to give the user access to documents such as invoices, rental contract and newsletters. Currently the only way for the user to access this information would be to call the company and request it. The process of reporting errors was also phone based, where a RentEstate employee would need to enter the information manually into a back-end system.

User data in terms of documents was stored with an external company called UnikBolig. The application would therefore need to access it via external API's.

Some website features such as the ability to search for vacant properties and submit water/electricity/heating readings was to be migrated to the application.

A user management would need to be implemented.

Problem

The application would need to present a large amount of unformatted data, yet retain a sense of lightness and ease of use. This could potentially present a problem in order to create a sense of coherency between the website and the application, with the new website design being made with little consideration to usability. The design choices I would make for the application would need to be aligned with the decisions made by the customer's own designers.

The backend system was static and it would be difficult to submit any additional data outside its current use. This could be obstructive with part of the usability improvement being revised data input and with additional options being introduced.

Process

Beginning with EMPATHIZE, I focused my research on any feedback and reviews left by previous and current tenants, in order to assess the general impression of RentEstate, but also to pick up on any pain points or bad experiences related to renting. I also looked at competitor designs to ensure any design choices were in line with the rental industry in Denmark.

I used Figma throughout this process as I find it to be an excellent tool to gather and share the process with colleagues and stakeholders. It also has in my opinion a great supply of various templates and a strong community.

I arranged stakeholder interviews and was able to create an extensive feature list from the meeting notes.

This can be viewed here.

The first takeaway was that users generally are happy with the service provided and there does not seem to be any negative sentiment in regards to having to contact the customer with every inquiry. My thoughts are that the customer is acting preemptively in order to reduce its own costs and improve upon the existing service. It is my recommendation that the focus should lie on simplifying the current process and ensuring that information is easy to find to reduce number of calls.

The second takeaway was that most competitors are already offering a similar application, but it is a streamlined product that only offers the user to create tickets for issues or general enquiries. The user still needs to request information via proper channels and are unable to access it themselves. This could be a competitive advantage, but a limited such as renters tend to primarily look for the right venue rather than a specific vendor.

The third takeaway was that it is crucial for the user to get full transparency. This specifically refers to pricing and availability.

The fourth takeaway came from the stakeholder interviews, where it became clear to me that the customer was reluctant to give me access to the end user until a viable product was available. I was unable to convince them otherwise and would have to adapt my process accordingly.

The **research process** can be found on the following link:

[Figjam board](#)

Acting as product owner in addition to designer, I was in constant contact with the stakeholders and held interviews with them to be able to define and narrow the scope as well as establish requirements for the project, both in terms of features and deliverables. We also set up goals that were aligned with their business strategy and the expectations for the application.

The customer was very involved in the process and wanted regular updates. They did not however have much input in terms of the process itself, reserving their feedback for the future prototype.

With scope and requirements DEFINE(d), I began to look at the new website design as it was important to create a consistent feeling between the different platforms. I was also hoping to do a UX analysis of the new website design being created by the customer, but my request was declined as it was not something the customer was being invoiced for. Still, I took some notes of the overall structure and reviewed how the style guide was being applied.

Lastly I created a few user stories based on the gathered data. I also visualized the main feature of the application, namely the ticket creation, using a task flow. This was very useful for presenting to the customer but also to the developers who struggled a bit to get an overview of this specific feature.

The **user stories** and **task flow** can be viewed on the Figjam board.

I moved on to IDEATE by creating a sitemap from the data I had collected from the stakeholder interviews. This felt especially important considering the sheer amount of data. I moved on to test the data structure using a tree test. I wanted to do this before moving on to sketching.

My first insight from this was that the information tree structure would be several layers deep, warranting a search functionality.

My second insight is that the data structure needed to be slightly revised after reviewing the test results.

The **sitemap** and **test results** can be viewed on the Figjam board.

After a series of meetings and slight revisions, the customer approved the initial concept. The next step would be to create a graphical interpretation of how the application may end up looking. I moved on to create a wireframe since the general look and feel had already been created with the new website design. I made 5 different styles of navigation, each suited to a different age group. We agreed on a click based navigation style since the customer showed us that the majority of their customers are 60+. Once the style of navigation had been agreed upon, I moved on to create the remaining screens.

I strive to follow the **human centered design principle** when designing. This meant involving the end user early on and ensuring they remain a part throughout the project lifecycle. With limited access to the end user, I had to improvise to ensure I was creating a solution that would be well received. It also meant that I had to apply some general theory to ensure good usability, and I looked for inspiration in previous designs. I also set up an internal focus group amongst the customer employees, and applied a condition that only staff who had not seen or been part of the development of this application could participate. I also requested they meet a condition of having worked a minimum of 1 year within the rental industry.

One important piece of information provided by the client was a survey that they had sent to their customers, showing that 80% of users would use the application mainly for ticket reporting. Because of this, I felt it was crucial that this feature not only is available on every screen, but it is also easy to spot and continuously referenced.

My interpretation of the design principle resulted in several design choices being made, to name a few:

- Associating certain shapes with certain actions

- Avoiding orange colors on dark background for accessibility

- Prioritize the order of information according to most accessed

- Ensuring navigation stays consistent throughout the application

- Quick, pain-free user management broken up into three steps

The wireframe itself has additional comments next to it that explains the choices I made. Once it was shared, the customer was given 1 week's time to comment on the design. Although not as biased as feedback from the end user, it provided some important insights and helped to clear up a few misunderstandings. In the end, it is important the customer also feels that its vision is visible in the final product and not completely disregarded in the name of usability.

The wireframe in its entirety can be viewed here.

We proceeded to TEST the revised wireframe by hosting a moderated online session. A series of qualitative interviews were held with a group of 3 users, since the customer did not wish to involve any more end users at this point.

The takeaway was that the concept was well received but some slight revisions needed to be made, namely the following:

- The user wanted notifications whenever new information became available.

- The data input during ticket creation process felt excessive and the user wished for further automation.

- The property search function contained too little information to spur an interest.

- Some of the taxonomy did not make sense, such as the current status of an existing ticket.

After the interview sessions, I was able to convince the customer that the end user should take part in the next round of usability tests. The main purpose of the application was after all information finding, and for this reason I set up an **atree test** using Optimal Workshop in order to test the information structure. I wanted to see if the users were able to locate information using the existing headlines. A total of 20 users participated. My initial suggestion had been to include at least 30 participants to be able to see any trends in the data, but this was unfortunately not possible.

The takeaway was that the user has a passing grade of 84% with 93% directness. I asked follow up questions to see whether the users guessed as well as how certain they were of their answers. The overall majority were fairly certain of their answers, but guessed when it came to finding contact details and certain documents. This allowed me to make the following recommendations to the customer:

- Move contact details to the lower menu bar to make it more visible.

- Conduct an open card sort to see how the user would name the headlines and organize the information.

The customer declined the suggestions above as they felt that it would be contradictory to one of the main goals of the project, namely reducing the number of calls, and they did not wish to include the end user for additional tests.

Following revisions, the sketches were turned into a high fidelity prototype which was presented to the customer. It was very well received but some features were scrapped or pushed for later versions to focus on the core features of the application.

The prototype in its entirety can be viewed here.

Solution

Despite limited access to the end user, I was able to get enough information to create a viable product. Some credit goes to the fact that the previous process of accessing information and creating tickets was dissatisfactory, and simply by increasing user control I was able to improve upon the experience. Nevertheless, it should not be discounted that the feedback we did obtain was very useful for the end product, especially the results from the tree test.

The presentation of large data amounts was solved by efficient sorting using lists and dropdowns. This was not an issue for the website design since it has considerably more space to utilize. By displaying the information on the same pages on both platforms, consistency was maintained.

The static backend issue was resolved by reusing certain fields and having the input data formatted in transit. This allowed for a lot more free text and additional fields to be added without having to spend time to create a separate backend system.

Initial metrics show that call frequency has gone down by 14%. Further data is needed before any definitive conclusions can be made.

It is not possible to determine at this stage if the application has resulted in an increase of website visitors, since the new website is not completed.

Future

A second design sprint is likely to begin in 2023 once the customer wishes to continue to add additional features.