

The Estonian Internet Foundation (EIF) handles the management of Estonia's top-level domain .ee, its sub-domains, its sub-domains and shares information regarding the .ee country domain. For managing the domain names, registration, and sharing the information about domain rules, the Estonian Internet Foundation has a number of current and new environments. These have been gathered under the domain name **internet.ee**:

- The EIF homepage the first point of contact for sharing information about the .ee domain and entry point to all services provided by the EIF.
- Information space accreditation rules for registrars, technical- and regulatory conditions.
- Training environment (new) training and certification for employees of registrars.
- Registrars' portal allows the perform registration services by registrars: registration of new domains, extensions, changes, deletions. Also handles credit management and invoices.
- Registrants' portal gives the domain registrant overview of their registered domains.
- Auction environment (new) ensures that everyone has an equal opportunity to register an
 expiring domain and to perform after-market activities.

The foundation wanted to revamp and unify the user experience of their existing services at internet.ee. The current services have been developed at a variety of points in time and are therefore inconsistent in structure and phases of development. They needed help in figuring out how everything should work.

The challenge when beginning the design process was the volume of the information. There was a lack of understanding of target user groups and their needs. We used service design to understand the users and current services, to form new ideas and validate our design solution.

User study

Once we started working, our first challenge was to define who are the main user groups. Our goal was to understand who is the real users and which services they required. During a co-creation workshop we mapped out all the possible user groups, their interests and needs. This was quite challenging since we were dealing with a very niche service. We managed to get six clearly defined groups, of which two were identified as main user groups.

Information gained held great value for us, but we needed to dig deeper. For designing a supreme user experience, knowledge about what users need is not enough. We needed to understand how users felt and related to things – the feelings behind the needs.

For a better understanding of users the method to be used is *personas*. Based on EIF input we assembled two personas: the potential domain registrant and domain registrar. The personas became the focus point of service design. We also used them in the discussions with the client to help them understand design decisions made during development. Persona descriptions also included problems, needs and pain-points.

Untangling the mess

We quickly ran into the next challenge. The information architecture of the current services was incomprehensible. The navigation was full of links which carried users to a variety of pages, each with more links. To gain a clear picture of how big the challenge really was, we created a comprehensive map of all existing environments.

Next we wanted to understand how users navigate in the respective environments. Based on the personas we defined main user journeys and conducted user testing with potential domain registrants. We performed 75 tests in total. Based on test results we created a new service map which increased information visibility from 30% to 75%. There was still room for improvement, but we had enough information to move on to the idea generation and design stage.

Forming the ideas

The basis for new ideas were insights gathered from user study and the untangling the existing services. We defined the following design principles to serve as a starting point for further development:

- Less is more the fewer the environments, the easier to navigate and not to get lost.
- **Simple copywriting** users are not familiar with niche terminology. Keep the language of service simple so end users could understand.
- Focus gather relevant information on one page rather than dividing it between different pages where it would confuse users.
- Highlight the important users want to see first what's important to them.

The first design sketches were made on paper. Then we continued wireframing in UXPin, which allows the creation of large-scale and responsive prototypes.

Validation and improvement

We began collecting feedback as soon as the first draft was ready. We conducted 10 online interviews with users chosen based on personas. The interviewer saw video of the users and their screens. Observers took notes of findings and made comments. This kind of on-site analysis method allowed us to avoid the time-consuming transcription and interview analysis.

Feedback pointed to the main shortcomings related to terminology and user flows which we could improve in next iterations. Once the prototype was completed, we ran usability study with seven users. The results showed the clarity and improved satisfaction with the service. Feedback from study participant: "The result is awesome! All different environments joined together. The structure is nice and clear."

Outcomes:

- Clearly distinguished information directed at two different user groups domain registrants and registrars.
- Number of different environments reduced from six to two. This allows users to navigate more easily and find what's important to them.
- New information architecture has greatly improved information visibility (success rate increased from 30% to 75%)
- Enhanced convenience and flexibility of service administration.

The design solution created is currently in its production phase and the improved service will be launched in autumn 2018.