Redesign of the hour registration application of Thales to improve workflow and efficiency

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Over the last years, companies find digital transformation more and more important. This applies to the Thales Group too. They want to improve the digital transformation of their clients, but they also focus on their own digital transformation [1]. The Thales Group is a global electronics company active in the fields of aerospace, defense, and information technology [2]. The Digital Competence Center (DCC) as a department of Thales Hengelo was launched to focus on the external and internal process improvements. One of the internal processes that needed improvement is the hour registration application "Oracle Time & Labour" (OTL). A total of around 1200 employees use this application weekly and they have multiple issues with it.

The bachelor assignment answers the research question: "How can Thales improve its hour registration workflow process into one design; for the main users to register their working hours more efficiently and userfriendly?" To answer this question in the time available, a few choices are made. So is feedback gained from a selected user group of around 10 to 20 users. Apart from that, the redesign will be done on the processes of booking and editing hours. Any other hour registration-related activities, e.g. the registration of absence hours or parental leave, are not taken into account. Internal and external analyses are done on the registration of hours. Firstly, the current situation has been investigated. This included analyses on the stakeholders, the users, the systems used within Thales related to the registration of hours, the current application OTL with the user pain points, and the style guide of Thales (Thales Design System). Afterward, competing applications of OTL and the guidelines for user interface designs are researched. From the analyses, the requirements are set up.

The redesign of OTL will be created in Figma, which is a prototyping tool to show the interfaces and interactions of the new design [3]. The design process is performed according to the scrum method of the agile mindset [4]. This method has a strong focus on the user to create user-centered designs. Three sprints of either two or three weeks were planned. Each sprint consists of user sessions to gain insights and feedback from different types of users. At the end of each sprint, a final sprint design is shown to the user group. Sprint 1 focused on the creation of a clear interface. Here the main focus was on which components were needed to create good navigation and a clear happy flow of the actions performed by the user. The second sprint improved on the sprint 1 design and incorporated styling too, according to the Thales Design System. During sprint 3, the

components and navigation applied in the sprint 2 design were incorporated in a newly styled interface to create a coherency of all the elements used in the interface.

Halfway through and at the end of sprint 3, the designs were tested on usability by multiple users during two user tests. The users were asked to perform a certain list of actions in the created prototype in Figma. The designer analyzed the users while they were performing the actions. Afterward, the Single Ease Question (SEQ) per process and the ten usability questions of the System Usability Scale (SUS) were conducted to evaluate the usability of the design. [5][6]

The users of the user group perceive the final design, see Fig. 1, as a user-friendly and efficient application. The user sessions, including the user tests, showed that the users have trust in the redesign. They expect that they will be able to work with the application and that their user pain points are addressed. The redesign, however, only addresses the processes of registering and editing one's hours, which leaves room for additional improvements. The redesign presented will be used as a starting point for the second phase of the development of the new hour registration application. In this phase, the following matters should be taken into account as well: the full group of 1200 users; any business-wide questions that arose during the user sessions, e.g., "What information is minimally needed by the finance department?"; and the other hour registration-related tasks, e.g., the registration of absence hours. The DCC must address all aforementioned matters to create an hour registration application that not only solves the user pain points of OTL addressed in this bachelor thesis, but also improves the general registration of hours to align with their vision on digital transformation.



Fig. 1: The redesign of the hour registration application

References

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