Optimizing the user interface of an online check-in application to enhance usability and user trust

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The goal of this bachelor thesis was to analyze the user interface of a startup in the hospitality sector to improve usability and user trust. The company is a platform for hotels and holiday parks that offers a digital check-in system for their guests. It provides a more efficient and secure alternative to physical check-in at the hotel desk while also offering accommodations a Customer Relationship Management system. As this platform is still in its early stage, its usability had not been researched before, making it the focus of this bachelor assignment.

After an initial analysis of competitor research, user scenarios, target group, and literature on user testing, a broad understanding of the situation was established. To explore the application's usability, pilot user tests and interviews were conducted to assess the user interface. It became apparent that completing tasks was not the main issue; instead, participants expressed concerns about trust. They were unfamiliar with the online check-in process and hesitated to trust the digital system with their personal data. Their primary question was not how to use the interface but rather why they should use it. This shifted the focus toward users' attitudes and, specifically, gaining their trust. An additional finding revealed that the user journey begins with the first communication through email, rather than solely with the user interface after logging in, as initially assumed. The start of the user journey was found to be highly important, as it is the moment when the user decides whether or not they want to engage with the platform.

Further research on trust in user interfaces was conducted through a literature review and competitor analysis to understand key factors that influence user trust. These insights helped shape potential improvements to increase user trust. A second round of user tests was conducted, providing deeper insights into users' attitudes and perceptions, now with a stronger focus on trust-related concerns.

To determine the impact of different improvements on usability and trust, two user interface prototypes were created. The first prototype was simplistic and focused on an icon-based approach, using design elements such as checkmarks, progress bars, and color contrast to communicate the system's status. The second prototype followed a text-based approach but included extensive explanations about the platform through an FAQ feature.

To evaluate the prototypes, 11 participants from different age groups were recruited. User tests were conducted, where each participant tested both prototypes while thinking out loud and then answered follow-up questions. Recordings were made to analyze participants' thoughts and feelings. Additionally, participants were asked to choose their preferred prototype and indicate which one they trusted the most.

A Reflexive Thematic Analysis was performed on the transcriptions of the participants' test sessions. Five main themes were identified, each with sub-themes that helped explain positive and negative perceptions of different design features: *Trustworthiness*, *Information Availability, Process Status Display, Clickability and Element Prominence, and Chatbot*. Additionally, the results of the participant questionnaires were analyzed.

The evaluation findings from both prototypes were used to develop design recommendations to enhance the application's usability and trust. The results indicate that a combination of both prototypes would be the most effective approach. Prototype Two was preferred for its information availability and ability to enhance trust by answering users' questions, while Prototype One was valued for its usability and visual indicators of process status. When prioritizing, trust comes first, but usability remains crucial.