

## Software User Experience Enhancement through Collaborative Design

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**Abstract :** User-centered design skills play an important role in crafting a positive and intuitive user experience for software applications. Embracing a user-centric design approach involves understanding the needs, preferences, and behaviors of the end-users throughout the design process. This mindset not only enhances the usability of the software but also fosters a deeper connection between the digital product and its users. This paper encompasses a 6-month knowledge exchange collaboration project between an academic institution and an external industry in 2023, aims to improve the user experience of a digital platform utilized for a knowledge management tool, to understand users' preferences for features, identify sources of frustration, and pinpoint areas for enhancement. This research conducted one of the most effective methods to implement user-centered design through co-design workshops for testing user onboarding experiences that involve the active participation of users in the design process. More specifically, in January 2023, we organized eight workshops with a diverse group of 11 individuals. Throughout these sessions, we accumulated a total of 11 hours of qualitative data in both video and audio formats. Subsequently, we conducted an analysis of user journeys, identifying common issues and potential areas for improvement. This analysis was pivotal in guiding the knowledge management software in prioritizing feature enhancements and design improvements. Employing a user-centered design thinking process, we developed a series of graphic design solutions in collaboration with the software management tool company. These solutions were targeted at refining onboarding user experiences, workplace interfaces, and interactive design. Some of these design solutions were translated into tangible interfaces for the knowledge management tool. By actively involving users in the design process and valuing their input, developers can create products that are not only functional but also resonate with the end-users, ultimately leading to greater success in the competitive software landscape. In conclusion, this paper not only contributes insights into designing onboarding user experiences for software within a co-design approach but also presents key theories on leveraging the user-centered design process in software design to enhance overall user experiences.

**Keywords :** user experiences, co-design, design process, knowledge management tool, user-centered design

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