

Abstract

This study addresses the usability challenges of the alumni management system at SMK Telkom Bandung by redesigning the platform using the Goal-Directed Design (GDD) methodology. The existing system faced critical issues, including fragmented alumni information, poor interface design, and inefficient manual administrative processes. Through interviews and observations with 30 participants—including students, alumni, parents, and administrative staff—this research identified key pain points and user needs. The modeling phase developed user personas, goals, mental models, and interaction models to inform the design process. The requirements phase mapped user goals to system features, which guided the creation of a conceptual model and wireframes during the framework phase.

The redesigned alumni platform was evaluated using the System Usability Scale (SUS) with 18 participants. The results showed a significant improvement in usability, with the SUS score increasing from 58.06 to 82.92, surpassing the industry standard of 68. The new platform resolved key pain points by introducing a centralized testimonial repository, an alumni distribution map, and an automated job posting system. Additionally, the administrative dashboard streamlined data validation workflows, reducing manual workload and improving operational efficiency.

This research demonstrates how Goal-Directed Design effectively aligns system functionalities with user needs, resulting in measurable usability improvements. The study concludes that the redesigned platform enhances user engagement, optimizes administrative processes, and delivers a more intuitive and efficient alumni management system. Future work is recommended to further refine the job search filtering system, improve submission feedback mechanisms, and expand usability testing to a broader user base.

Keywords: *Alumni Portal, Usability Testing, Goal-Directed Design, System Usability Scale, User Experience, Web Redesign, Educational Technology*