

ABSTRACT

Independent libraries in creative cities, such as The Room 19 Library in Bandung, serve as vital community hubs but face significant operational challenges. This research addresses the critical administrative inefficiencies at The Room 19 Library, which relies on manual and non-specialized digital tools like Google Sheets and WhatsApp for essential staff management and attendance tracking. These methods are inefficient, prone to human error, lack scalability, and present considerable data security risks, hindering the library's long-term sustainability and its mission to support community development goals. This study aims to design, develop, and evaluate a dedicated website with integrated modules for staff management and attendance to replace these high-risk manual systems. The project followed an Iterative Incremental software development methodology to ensure flexibility and continuous improvement based on feedback. The functionality of the resulting web application was validated using Black-Box testing, while its usability was assessed with the System Usability Scale (SUS). The primary outcome of this research is a centralized, secure, and scalable web application tailored to the library's needs. Key features include a staff management, an automated attendance system with verifiable evidence, and separate dashboards for the owner and staff, which collectively reduce administrative workload and improve data accuracy. By solving these operational bottlenecks, this purpose-built digital solution enhances internal efficiency and establishes a professional foundation for sustainable growth, strengthening the library's capacity to fulfill its cultural and educational role. This study also serves as a practical model for other creative small and medium-sized enterprises (SMEs) facing similar administrative challenges.

Keywords: Staff Management, Attendance System, Web Development, Iterative Incremental, Independent Library.