ABSTRACT

Proper operational data management is a crucial factor for the effectiveness of computer store services. However, at Golden Service, the absence of a technical knowledge base causes the repair diagnosis process to be often inefficient as it relies heavily on individual technician memory. This research aims to develop a Knowledge Management Information System (KMIS) to manage repair service history into an organizational knowledge base. System development utilizes the Extreme Programming (XP) methodology, which includes planning, design, coding, and testing phases. The system is designed by integrating the Knowledge Management Cycle (KMC) framework. Research results show that the system is capable of capturing technician knowledge through the diagnosis input feature, managing and disseminating it within a knowledge repository, and facilitating the application of that knowledge to assist future repair processes. System testing using the Black-box testing method against test scenarios shows that all system functionalities run validly and in accordance with user expectations. Based on the Black-box testing results and user validation at the final stage of development, this system implementation is proven successful in providing a centralized digital solution that accelerates access to technical information through the repository search feature and supports operational efficiency at Golden Service.

Keywords: Information System, Knowledge Management, Extreme Programming, Computer Store, Next.js, Express.js, MongoDB