ABSTRACT

The Liquefied Petroleum Gas (LPG) industry plays a vital role in domestic energy supply, with demand continuously increasing alongside population growth and economic activities. Distribution systems at LPG depots still largely rely on conventional methods, which are inefficient. Therefore, a web-based ordering system offers a solution by enabling real-time stock monitoring and easier ordering for consumers. The System Usability Scale (SUS) is a measurement method used to quickly and effectively assess system usability from the end-user perspective. This study employs the Rapid Application Development (RAD) method, which emphasizes iterative prototyping and active user involvement to accelerate application development. The results show that the developed web-based LPG ordering application improves stock management accuracy and facilitates consumers in placing orders online. The system also reduces recording errors common in manual methods and enhances stock management efficiency at the LPG Yetna Depot. Thus, the implementation of this web-based information technology developed using the RAD method provides an effective solution to improve the quality of LPG distribution services.

Keywords: *LPG Ordering, Web-Based Application, Rapid Application Development, Black Box Testing, System Usability Scale, Operational Efficiency.*