

ABSTRACT

EVALUATION OF BUMDESA MARKETPLACE PLATFORM WITH ISO/IEC 9126 STANDARDIZATION APPROACH AND GREY-BOX TESTING

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This research focuses on BUMDesa XYZ, a village enterprise in Rowokele District, Kebumen Regency. BUMDesa XYZ aims to improve the economy of the village community, which is mostly engaged in the plantation and trading sectors. To address the existing economic challenges, a marketplace platform was developed to support BUMDesa in fostering the community and bridging the distribution of business products through BUMDesa supervision. Although the development of the platform is currently underway, comprehensive testing of the BUMDesa marketplace platform has not been conducted. This research uses grey-box testing method with ISO/IEC 9126 standardization approach to determine software feasibility. The result show that the use of the grey-box testing method helps identify quality aspects based on ISO/IEC 9126 standard. In addition, the problems found can be known in more detail the cause, making it easier to get the right improvement recommendations. While based on ISO/IEC 9126, the results revealed that functionality aspect reaches a "Fair" feasibility (73%), the reliability aspect reaches the interpretation of "Good" feasibility (86%), the efficiency aspect reaches the interpretation of "Very Good" feasibility (100% success in running test cases with a response time under one minute), the mainability aspect reaches the interpretation of "Less" feasibility (62%), and the portability aspect reaches the interpretation of "Very Good" feasibility. In summary, the BUMDesa marketplace platform demonstrates the reliability, efficiency, and portability aspects have met the ISO/IEC 9126 standardization aspects, the functionality and mainability aspects necessitate refinement for comprehensive ISO/IEC 9126 compliance.

Kata Kunci: ISO/IEC 9126, Grey-box Testing, Platform, Marketplace, BUMDesa