

Abstract

SIABDes TAXion, as the previous generation of BUMDes accounting information system, faced a number of issues such as the inability to handle the full fiscal correction business process and the dependency on a separate platform for BUMDes e-commerce activities. These conditions lead to operational inefficiencies, risk of miscommunication between stakeholders and developers, and low traceability of requirements as user needs often change dynamically. To address these challenges, this research conducted a requirements analysis and modeling on the development of SIABDes MAXY with a focus on integrated fiscal correction and e-commerce features, using the Agile Requirement Engineering (ARE) approach. Requirement collection was conducted through interviews and group discussions with key stakeholders, followed by requirement modeling using various UML diagrams, such as use case diagrams, activity diagrams, and ERDs, to ensure effective communication between teams across backgrounds. Validation of requirements is done iteratively through presentations and discussions with stakeholders, while traceability of requirements is maintained by the implementation of a Requirement Traceability Matrix (RTM) that is continuously updated. The results showed that the combination of ARE method, structured requirement modeling, and RTM was able to produce adaptive, measurable, and sustainable system requirements, as well as improve the effectiveness and quality of SIABDes MAXY development to support digital village economy and governance.

Keywords: requirement analysis, SIABDes MAXY, agile requirement engineering, fiscal correction, e-commerce
