

## ABSTRACT

Diponegoro Kaos Oblong is a company in the field of fashion which is located at Jalan Diponegoro No. 08, Bojonegoro, East Java. At this time applying a passive marketing method, because it only refers to the store and without doing other marketing techniques. Diponegoro Kaos Oblong have decreased the number of customers in 2018, and nearly 100% of consumers come from the region of Bojonegoro itself, whereas Diponegoro Kaos Oblong should have a great opportunity in reaching the market to increase its revenue, according to the desired target of reaching a minimum of 10% customers who come from outside the store area. Therefore, the design of an e-commerce web application can help increase sales and marketing areas of the Diponegoro Kaos Oblong.

In making e-commerce applications using the WordPress framework with Woocommerce plugins. The method used is agile development, which is a development approach that is implemented based on user input. The system design is done using UML (Unified Modeling Language), namely use case diagrams, *Sequence Diagrams*, *Activity Diagrams* and class diagrams.

Tests used to test the system are using black box testing, credibility parameters, web design parameters, and based on ISO 9126 standards by testing several characteristics to test the quality of a software including aspects of functionality, reliability, usability, efficiency, maintainability, and probability. The technique used in testing is the distribution of questionnaires to 30 application users.

The results of this research are in the form of e-commerce websites that are easily understood by users. Then the results of the testing of the respondents stated that the website display was attractive, the menu on the website went well, and had very good access speeds, and the results displayed were as desired.

Keywords : E-Commerce, WordPress, Agile Development, ISO 9126