ABSTRACT

In the era of the industrial revolution 4.0 now, market globalization has influenced trade behavior which always tries to meet consumer needs. Likewise, micro, small and medium enterprises (MSMEs) must also be able to follow market developments in order to survive and increase the market. Problems that are often faced include the lack of efficient economic growth due to the lack of implementation of information technology in operations.

Warehousing activities in MSMEs are important in a business that involves storing goods because a business requires a stock of products to be sold. The problems that often occur are manual stock recording, only using books and not updating automatically. The trigger for this problem is generally not having an application to manage warehousing because it costs more to use the application because there are still many expenses for other more important needs. One solution to this problem is the implementation of the shared service concept.

This research produces a warehousing application for MSMEs with a shared service concept to solve problems in warehousing data management and assist in overcoming limited resources. Shared service is an integration of the business model, which allows available resources to be combined by integrating and centralizing operational activities in all divisions. The method used in this application is waterfall development which allows systematic work, facilitates project control, and allows for appropriate and timely development stages.

This warehousing application for MSMEs will be based on a website so that it can be faster, more practical, and more efficient when used. Created using the JavaScript programming language, data storage using MongoDB, ReactJS library on the frontend layer while the backend layer uses NodeJS and Express. The results of this study were tested using the Blackbox, UAT (User Acceptance Test) and load testing methods, where the test results will be used to determine the level of functional evaluation of the system and also the level of acceptance from the user.

The results of this study are expected to later be able to assist the operations of MSME actors, especially in the warehousing sector. According to the results of system testing carried out in the verification phase, in the Blackbox test it was found that all application system features were running as expected. In the evaluation of the User Acceptance Test, it was found that the percentage value of 84% in the question of application usability to MSMEs, was taken from the Likert Scale Criteria Table which was categorized as strongly agree that this application helps in warehousing operations.

Keywords— ***MSME, Warehousing, Shared Services ,Website, Waterfall, JavaScript***