

***Analysis and Implementation of Warehouse Store Websites on Availability
Using the Topsis Method in the Case Study of Ayula Store***

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ABSTRACT

Efficient inventory management is essential to maintain stock availability and maximize store revenue. However, traditional management methods that rely on manual estimates have many limitations. This study aims to analyze and implement a website-based inventory management system using the TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) method in a case study of Ayula Store. This system is designed to simplify the process of identifying low-stock products and providing data-based restock recommendations. This study uses the waterfall software development method because its stages are systematic, allowing for more structured planning and testing. The results of the black box test showed a 100% success rate in processing data and providing accurate restock priority analysis results. The test results confirmed that the system can support store managers in making appropriate and efficient restock decisions. In conclusion, this website-based inventory management system with the TOPSIS method is able to improve store operational efficiency and reduce the risk of running out of stock, providing a positive impact on customer satisfaction and overall business performance.

Keywords: *inventory management, TOPSIS method, website, efficiency, Ayula Store.*