ABSTRACT

Textile production continues to rise with increased foreign capital investment and high demand for textile fabrics. To address these challenges, advanced technology is essential to ensure the quality of fabric production. This research focuses on developing a backend system to present the results from an object classification machine learning model that detects defects. The Laravel framework and PHP language were chosen as the foundation for development, while MariaDB serves as the database. This research aims to enhance the accuracy and resolution in cacat *detection, establish clear product quality standards, and replace manual inspection, which is prone to subjectivity and errors. With PT Gracia Mega Karya as the primary focus, this research aims to significantly contribute to improving the efficiency and quality of textile fabric production. As a result, a reporting website called "Defector" was developed, which provides visual information on defect detection in textile fabric production. This website is designed to facilitate decision-making related to the improvement and development of the production process effectively.*

Keywords— ***backend, defect, laravel, MariaDB, PHP, textile.***