

IMPLEMENTASI VISUALISASI DASHBOARD DALAM OPTIMALISASI MANAJEMEN PERSEDIAAN PADA CV BALI TREASURES

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ABSTRAK

Dunia saat ini memasuki era transformasi digital dan revolusi industri 4.0 menuju *society* 5.0, perusahaan dituntut untuk mampu mengelola data secara efektif. CV Bali Treasures, produsen instrumen musik perkusi, masih mencatat data produksi kayu secara manual menggunakan Microsoft Excel, yang menyebabkan kesulitan dalam memahami tren dan mengambil keputusan strategis. Penelitian ini bertujuan untuk mengimplementasikan visualisasi *dashboard* berbasis *Business Intelligence* (BI) menggunakan Microsoft Power BI guna membantu manajemen persediaan bahan baku. Metodologi yang digunakan mengacu pada tahapan *Business Intelligence Roadmap* dengan data berupa Laporan Mutasi Hasil Hutan Kayu Olahan (LMHHKO) dari Maret 2019 hingga September 2024. Pengujian dilakukan menggunakan *User Acceptance Testing* (UAT) dengan metode *Black Box Testing*. Hasil penelitian menunjukkan *dashboard* mampu menyajikan informasi persediaan kayu secara visual, memudahkan analisis pola, dan mempercepat proses pengambilan keputusan. Implementasi ini diharapkan mendukung transformasi digital perusahaan serta meningkatkan efisiensi operasional dan daya saing di pasar global.

Kata Kunci: *Business Intelligence*, Visualisasi *Dashboard*, Manajemen Persediaan

IMPLEMENTATION OF DASHBOARD VISUALIZATION IN OPTIMIZING INVENTORY MANAGEMENT AT CV BALI TREASURES

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ABSTRACT

The world is currently undergoing a digital transformation and entering the Fourth Industrial Revolution, moving toward Society 5.0, where companies are required to manage data effectively. CV Bali Treasures, a manufacturer of percussion musical instruments, still records its wood-based production data manually using Microsoft Excel, which creates difficulties in identifying trends and making strategic decisions. This study aims to implement a Business Intelligence (BI)-based dashboard visualization using Microsoft Power BI to support raw material inventory management. The methodology follows the stages of the Business Intelligence Roadmap, utilizing data from the Wood Processed Forest Product Mutation Report (Laporan Mutasi Hasil Hutan Kayu Olahan or LMHHKO) from March 2019 to September 2024. System testing was conducted using User Acceptance Testing (UAT) with the Black Box Testing approach. The results show that the developed dashboard successfully visualizes wood inventory data, facilitates trend analysis, and accelerates decision-making processes. This implementation is expected to support the company's digital transformation and enhance operational efficiency as well as competitiveness in the global market.

Keyword: *Business Intelligence, Dashboard Visualization, Inventory Management*