

# **SISTEM PENGADAAN STOK *HANDPHONE* TSURAYA CELL BERBASIS WEB DENGAN MENGGUNAKAN PENGUJIAN *BLACKBOX***

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## **ABSTRAK**

Penelitian ini bertujuan merancang sistem pengadaan stok *handphone* berbasis web pada Tsuraya Cell menggunakan metode *Weighted Moving Average* (WMA) untuk memprediksi kebutuhan stok berdasarkan data penjualan tiga bulan terakhir. Pengembangan sistem dilakukan dengan pendekatan *Waterfall*, melalui tahapan analisis, desain, implementasi, pengujian, dan pemeliharaan. Fitur utama meliputi manajemen stok, pencatatan transaksi, prediksi kebutuhan, serta *dashboard* ringkasan. Hasil peramalan menunjukkan tingkat akurasi yang cukup baik, terutama pada tipe dengan penjualan stabil, bahkan beberapa mencapai 100%. Rata-rata akurasi prediksi pengadaan stok mencapai 71,84%, menunjukkan kinerja prediksi yang cukup dapat diandalkan. Namun, metode WMA kurang efektif pada tipe yang tidak memiliki riwayat penjualan. Pengujian *Blackbox* menunjukkan keberhasilan fungsional sebesar 88,24%, sedangkan hasil beta testing dari 48 responden menunjukkan rata-rata kepuasan pengguna sebesar 4,33 dari skala 5. Sistem ini terbukti berfungsi dengan baik secara teknis dan diterima secara positif oleh pengguna. Dengan demikian, sistem dapat membantu mengoptimalkan pengadaan stok dan mendukung pengambilan keputusan di Tsuraya Cell.

**Kata kunci :** Sistem pengadaan stok, manajemen stok, *Weighted Moving Average*, pengujian *blackbox*, *website*.

# **WEB-BASED STOCK PROCUREMENT SYSTEM FOR TSURAYA CELL USING BLACKBOX TESTING**

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## **ABSTRACT**

*This study aims to design a web-based mobile phone stock procurement system for Tsuraya Cell using the Weighted Moving Average (WMA) method to predict stock requirements based on the last three months of sales data. The system was developed using the Waterfall approach, consisting of analysis, design, implementation, testing, and maintenance phases. Key features include stock management, transaction recording, demand forecasting, and a summary dashboard. The forecasting results show a relatively high level of accuracy, especially for product types with stable sales, with some reaching up to 100%. The average prediction accuracy for stock procurement reached 71.84%, indicating a fairly reliable forecasting performance. However, the WMA method is less effective for types with no sales history. Blackbox testing showed a functional success rate of 88.24%, while beta testing with 48 respondents yielded an average user satisfaction score of 4.33 out of 5. The system has proven to function well technically and is positively received by users. Therefore, the system can assist in optimizing stock procurement and support decision-making at Tsuraya Cell.*

**Keywords:** *inventory procurement system, stock management, Weighted Moving Average, blackbox testing, website.*