

PERANCANGAN VISUALISASI KINERJA UNTUK PENGAMBILAN KEPUTUSAN OPERASIONAL PADA UMKM BNM COOKIES

Amanda Mufidah

ABSTRAK

UMKM BNM Cookies mengalami kendala dalam pemantauan kinerja operasional karena pencatatan yang dilakukan secara manual dan belum terintegrasi, sehingga menyulitkan pemilik usaha dalam mengambil keputusan operasional, terutama pada periode permintaan musiman yang berpotensi menimbulkan *stockout*. Penelitian ini bertujuan merancang *Dashboard* operasional yang mampu menyajikan informasi secara *realtime* guna mengurangi potensi *stockout*, serta menganalisis peran *Dashboard* tersebut dalam mendukung pengambilan keputusan operasional. Perancangan dilakukan menggunakan metode ADDIE, Whatsapp sebagai media *input* data, Google Spreadsheet sebagai basis pengolahan data, dan Google Looker Studio sebagai media visualisasi. Pengolahan data mencakup perhitungan *revenue*, *completion rate*, *cancellation rate*, produktivitas, peramalan permintaan menggunakan metode SARIMA, perhitungan *safety stock*, dan *reorder point*. Pengujian sistem dilakukan menggunakan *Black Box Testing* dan *User Acceptance Testing* (UAT). Seluruh fitur *Dashboard* dinyatakan lulus pada pengujian *Black Box Testing*, sedangkan hasil UAT menunjukkan tingkat penerimaan sangat baik pada aspek fungsionalitas (84%), kinerja (84%), tampilan dan kemudahan (80%), serta produktivitas (100%). *Dashboard* operasional yang dihasilkan terbukti mampu menyajikan informasi kinerja secara ringkas, visual, dan *realtime*, sehingga membantu UMKM BNM Cookies memantau kondisi operasional, mengantisipasi potensi *stockout* melalui perhitungan *safety stock* dan *reorder point*, serta mendukung pengambilan keputusan operasional yang lebih tepat dan berbasis data.

Kata Kunci : *Dashboard* Operasional, UMKM, ADDIE, SARIMA

PERFORMANCE VISUALIZATION DESIGN FOR OPERATIONAL DECISION MAKING AT UMKM BNM COOKIES

Amanda Mufidah

ABSTRACT

UMKM BNM Cookies faces challenges in monitoring its operational performance due to manual and unintegrated data recording, making it difficult for the owner to make operational decisions, particularly during seasonal demand periods that risk causing stockouts. This study aims to design an operational Dashboard capable of presenting realtime information to reduce stockout potential, and to analyze the Dashboard's role in supporting operational decision-making. The design was carried out using the ADDIE method, with WhatsApp as the data input medium, Google Spreadsheet as the data processing base, and Google Looker Studio as the visualization medium. Data processing includes calculation of revenue, completion rate, cancellation rate, productivity, demand forecasting using the SARIMA method, safety stock, and reorder point. System testing was conducted using Black Box Testing and User Acceptance Testing (UAT). All Dashboard features passed the Black Box Testing, while UAT results showed a very good acceptance level for functionality, performance (each 84%), display and usability (each 80%), and productivity (100%). The resulting Dashboard proved capable of presenting performance information concisely, visually, and in realtime, helping UMKM BNM Cookies monitor operational conditions, anticipate stockouts through safety stock and reorder point calculations, and support more accurate, data-driven operational decisions.

Keywords : *Operational Dashboard, MSME, ADDIE, SARIMA*