

## **ABSTRACT**

### **ANALYSIS AND OPTIMIZATION OF FOOD SUPPLY USING INTERACTIVE PIVOT DASHBOARD (CASE STUDY: PERUM BULOG NORTH LAMPUNG)**

By

**RIZA ARIS APRIADY**

Public food supply chains require fast and data-driven operational decision support. Although Enterprise Resource Planning (ERP) systems have been widely used for recording and integrating operational activities, the information generated is generally periodic and static, which limited analytical visibility at the operational level. This study aimed to develop and evaluate an ERP based operational dashboard to enhance visibility and decision-making support in public food supply chains. A research and development method was applied through stages of identifying existing conditions, processing ERP data, designing the operational dashboard, and evaluating system usability using the System Usability Scale (SUS) and Single Ease Question (SEQ) at Perum BULOG North Lampung Branch Office. The results showed that the developed dashboard achieved a SUS score of 81.85 and an average SEQ score of 5.79, indicating a high level of usability. The dashboard improved operational visibility, simplify monitoring and support decision making in procurement, sales, inventory, and processing activities. The dashboard helped prevent stock shortages and imbalances between distribution and sales in regional public organizations.

**Keywords:** Decision-Making, Interactive Dashboard, Food Supply, Usability Evaluation.

## ABSTRAK

### ANALISIS DAN OPTIMALISASI RANTAI PASOK DENGAN *DASHBOARD* PIVOT INTERAKTIF (STUDI KASUS: PERUM BULOG LAMPUNG UTARA)

Oleh

**RIZA ARIS APRIADY**

Rantai pasok pangan publik memerlukan dukungan pengambilan keputusan operasional yang cepat dan berbasis data. Meskipun sistem *Enterprise Resource Planning* (ERP) telah digunakan untuk pencatatan dan integrasi aktivitas operasional, informasi yang dihasilkan umumnya masih bersifat periodik dan statis, sehingga membatasi visibilitas analitis di tingkat operasional. Penelitian ini bertujuan mengembangkan dan mengevaluasi *dashboard* operasional berbasis data ERP untuk meningkatkan visibilitas dan dukungan pengambilan keputusan dalam rantai pasok pangan publik. Metode *research and development* diterapkan melalui tahapan identifikasi kondisi eksisting, pengolahan data ERP, perancangan *dashboard* operasional, serta evaluasi kegunaan sistem menggunakan *System Usability Scale* (SUS) dan *Single Ease Question* (SEQ) pada Perum BULOG Kantor Cabang Lampung Utara. Hasil penelitian menunjukkan *dashboard* memperoleh skor SUS sebesar 81,85 dan nilai rata-rata SEQ sebesar 5,79 yang mengindikasikan tingkat kegunaan tinggi. *Dashboard* meningkatkan visibilitas operasional, mempermudah pemantauan, dan pengambilan keputusan pada proses pengadaan, penjualan, persediaan, dan pengolahan. *Dashboard* membantu mencegah kekosongan stok dan ketidakseimbangan distribusi dan penjualan pada organisasi publik daerah.

**Kata kunci** : Pengambilan Keputusan, *Dashboard* Interaktif, Pasokan Pangan, Evaluasi Kegunaan.