ABSTRAK

Penelitian ini menganalisis dan membuat pemodelan proses bisnis bertujuan untuk meningkatkan efisiensi proses bisnis manajemen inventory dan purchasing di PT Stechoq Robotika, sebuah perusahaan yang berfokus pada *Research and Development* (R&D). Metodologi yang digunakan mencakup *Business Process Improvement* (BPI), *Business Process Modelling Notation* (BPMN), dan *Failure Mode Effect Analysis* (FMEA).

Identifikasi masalah menunjukkan adanya inefisiensi dalam proses bisnis, termasuk ambiguitas dalam pembagian tugas, duplikasi pekerjaan, dan pemanfaatan sistem Odoo yang belum maksimal. Tujuan utama penelitian adalah melakukan analisis mendalam dan restrukturisasi model proses bisnis, mengembangkan blueprint proses yang telah dioptimalkan, serta menciptakan model proses bisnis yang lebih efektif dengan integrasi sistem Odoo yang lebih komprehensif.

Temuan penelitian melakukan perbaikan berdasarkan penilaian RPN *Risk Priority Number* (RPN) pada proses manajemen inventory dan purchasing. Rasionalisasi alur kerja dan optimalisasi sistem Odoo berhasil meningkatkan produktivitas secara signifikan. Model proses bisnis yang direkomendasikan melalui BPMN memberikan perspektif yang lebih komprehensif tentang aktivitas dan pembagian tanggung jawab antar tim. Hasil simulasi proses bisnis menunjukkan peningkatan efisiensi sebesar 37,50% untuk manajemen *inventory* dan 26,92% untuk manajemen *purchasing*. Kesimpulannya, implementasi proses bisnis yang direkomendasikan terbukti meningkatkan efisiensi operasional dengan mengoptimalkan penggunaan sistem Odoo.

Kata kunci: Proses bisnis, BPI, BPMN, FMEA, Odoo, efisiensi

ABSTRACT

This research analyzes and creates business process modeling aimed at improving the efficiency of inventory management and purchasing business processes at PT Stechoq Robotika, a company that focuses on Research and Development (R&D). The methodology used includes Business Process Improvement (BPI), Business Process Modeling Notation (BPMN), and Failure Mode Effect Analysis (FMEA).

The problem identification showed inefficiencies in business processes, including ambiguity in the division of tasks, duplication of work, and not optimal utilization of the Odoo system. The main objectives of the research were to conduct an in-depth analysis and restructuring of the business process model, develop an optimized process blueprint, and create a more effective business process model with more comprehensive Odoo system integration.

The research findings made improvements based on the Risk Priority Number (RPN) assessment of the inventory management and purchasing processes. Workflow rationalization and Odoo system optimization have significantly improved productivity. The recommended business process model through BPMN provides a more comprehensive perspective on activities and division of responsibilities between teams. The business process simulation results showed an efficiency improvement of 37.50% for inventory management and 26.92% for purchasing management. In conclusion, the implementation of the recommended business processes is proven to improve operational efficiency by optimizing the use of the Odoo system.

Keywords: *Business process, BPI, BPMN, FMEA, Odoo, efficiency*