

ABSTRAK

PT Astana Indra Karya adalah perusahaan manufaktur yang memproduksi NTP digital *clock* secara custom. Perusahaan menghadapi permasalahan operasional akibat proses bisnis yang belum terstruktur, meliputi tumpang tindih beban kerja antar divisi, ketiadaan dokumen operasional standar, dan tidak adanya mekanisme evaluasi bahan baku yang gagal *quality control*. Penelitian ini bertujuan mengevaluasi proses bisnis *as-is*, mengidentifikasi akar permasalahan, dan merancang proses *to-be* menggunakan pendekatan *Business Process Improvement* (BPI). Pemodelan divisualisasikan dengan standar BPMN melalui Bizagi Modeler, sedangkan identifikasi akar masalah dilakukan menggunakan *fishbone diagram* dan *5-why analysis*. Hasil simulasi menunjukkan perbaikan signifikan, di mana utilisasi divisi sales turun dari 99,98% menjadi 1,74% dan divisi produksi dari 83,85% menjadi 48,40% melalui pembentukan dua peran baru, yakni PIC *purchasing* (58,58%) dan PIC *quality control* (15,01%). Waktu pengadaan bahan baku berhasil dipersingkat sebesar 25,3%, yaitu dari rata-rata 56 hari menjadi 41 hari. Meskipun durasi pada proses *order handling* melonjak sebesar 221,10% dan durasi proses produksi meningkat tipis 1,02%. Peningkatan durasi pada proses *order handling* dan produksi merupakan konsekuensi wajar dari formalisasi dokumen dan penerapan tahapan *quality control* demi mencegah kesalahan sistemik di masa depan.

Kata Kunci: Proses Bisnis, *Business Process Improvement* (BPI), *Business Process Model and Notation* (BPMN), *Fishbone Diagram*, *5-Why Analysis*.

ABSTRACT

PT Astana Indra Karya is a manufacturing company that produces customized NTP digital clocks. The company faces several operational issues caused by unstructured business processes, including overlapping workloads among divisions, the absence of standardized operational documents, and the lack of evaluation mechanisms for raw materials that fail quality control inspections. This study aims to evaluate the existing business processes (as-is), identify root causes of operational problems, and design improved business processes (to-be) using the Business Process Improvement (BPI) approach. Business process modeling was visualized using the Business Process Model and Notation (BPMN) standard through Bizagi Modeler, while root cause identification was conducted using fishbone diagram and 5-why analysis. The simulation results indicate significant improvements. The utilization rate of the sales division decreased from 99.98% to 1.74%, while the production division's utilization decreased from 83.85% to 48.40% through the establishment of two new roles: PIC purchasing (58.58%) and PIC quality control (15.01%). In addition, raw material procurement time was reduced by 25.3%, from an average of 56 days to 41 days. Although the duration of the order handling process increased by 221.10% and the production process duration increased slightly by 1.02%, these increases are considered reasonable consequences of document formalization and the implementation of quality control procedures aimed at preventing systemic errors and improving operational reliability in the future.

Keywords: *Business Process, Business Process Improvement (BPI), Business Process Model and Notation (BPMN), Fishbone Diagram, 5-Why Analysis.*