

ABSTRACT

PT Imperium Dankai Sentosa faces various challenges in managing pest control service technicians, particularly in scheduling, monitoring, leave requests and technician substitutions, daily reporting, and service result documentation. These processes are still performed manually without standardized procedures or proper documentation, posing risks of coordination inefficiencies and loss of service data. This study aims to map the existing As-Is business processes, propose process improvements through To-Be models, and evaluate their effectiveness using simulation and efficiency improvement analysis. The methodology used is the Business Process Improvement (BPI) approach, with BPMN modeling conducted using Bizagi Modeler software. The modeling results in five proposed To-Be processes: technician scheduling, service monitoring, temporary technician leave and substitution, daily reporting, and service execution. These proposals are supported by technical SOP drafts and digital tools such as Google Forms for reporting and Google Drive for document collection. Simulation results using Bizagi Modeler show that the scheduling process experienced a time reduction of 18% and a utilization decrease of 17%. The monitoring process showed time efficiency of up to 48%, activity reduction of 20%, and cost reduction of 48%. The technician leave and substitution process showed time efficiency of 29% and workload reduction of 26%. Daily reporting showed a time reduction of 14%, cost reduction of 14%, and activity decrease of 25%. Meanwhile, the service execution process showed a slight time efficiency improvement of 0.8% and a utilization reduction of 1%. Overall, the proposed To-Be process model provides improved operational efficiency and effectiveness, supports more organized documentation, and is feasible to be considered for implementation to enhance the efficiency and effectiveness of pest control service operations.

Keywords: *Business Process Improvement, BPMN, Bizagi Modeler, Business Process, Pest control, Operational Efficiency, Digitalization, SOP*