

ABSTRAK

Samudro, Megah. 2025. “Pendekatan Lean Service Untuk Mengurangi Waste Layanan Cuci Mobil (Studi Kasus Ajs Carwash Purwokerto)”. Skripsi. Purwokerto: Teknik Industri, Fakultas Teknik, Universitas Jenderal Soedirman.

Penelitian ini bertujuan untuk mengidentifikasi pemborosan (waste) yang terjadi pada proses pencucian kendaraan di AJS Carwash menggunakan pendekatan lean service. Metode penelitian dilakukan dengan time study sebanyak lima kali percobaan, yang kemudian dipetakan menggunakan Value Stream Mapping (VSM) untuk mengetahui aktivitas bernilai tambah (VA), tidak bernilai tambah tetapi perlu (NNVA), serta tidak bernilai tambah (NVA). Hasil penelitian menunjukkan bahwa dari total cycle time sebesar 3207 detik, terdapat waste sebesar 333 detik (10,38%). Waste yang dominan muncul di antaranya adalah penggunaan slang dan water jet yang dipakai bergantian untuk motor, pengulangan lap eksterior-interior, multitasking kendaraan, hingga idle time akibat pegawai mengobrol. Setelah dilakukan analisis akar masalah menggunakan fishbone diagram dan five whys analysis, dirancang perbaikan berupa penerapan single-piece flow, penambahan SOP mikro, serta penyediaan alat kerja sesuai ergonomi. Implementasi simulasi perbaikan menunjukkan penurunan cycle time menjadi 2416 detik atau setara penghematan 791 detik (24,66%). Hasil ini membuktikan bahwa penerapan lean service dapat meningkatkan efisiensi waktu proses di layanan jasa pencucian kendaraan.

Kata kunci: Lean Service, Waste, Value Stream Mapping, Time Study, Carwash

ABSTRACT

Samudro, Megah. 2025. “A Lean Service Approach to Reduce Waste in Car Wash Services (Case Study of Ajs Carwash Purwokerto)”. Thesis. Purwokerto: Industrial Engineering, Faculty of Engineering, Jenderal Soedirman University.

Article This study aims to identify waste in the vehicle washing process at AJS Carwash using the lean service approach. The research was conducted through a time study with five trials, then mapped using Value Stream Mapping (VSM) to classify activities into value-added (VA), necessary but non-value-added (NNVA), and non-value-added (NVA). The results show that from a total cycle time of 3207 seconds, there was 333 seconds (10.38%) of waste. Dominant wastes included the shared use of hoses and water jets for both cars and motorcycles, repeated wiping between exterior and interior, multitasking across vehicles, and idle time due to chatting. Root cause analysis using fishbone diagram and five whys identified solutions such as implementing single-piece flow, adding micro SOPs, and providing ergonomically placed tools. Simulation of the proposed improvements reduced the cycle time to 2416 seconds, saving 791 seconds (24.66%). This indicates that lean service implementation can improve process efficiency in vehicle washing services.

Keyword : Lean Service, Waste, Value Stream Mapping, Time Study, Carwash