

**MINIMALISASI PEMBOROSAN DENGAN
PENDEKATAN LEAN MANUFACTURING PADA TAHU
SUMEDANG MAS YETNO**

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ABSTRAK

IKM Tahu Sumedang Mas Yetno merupakan industri pangan skala kecil yang sebagian besar aktivitas produksinya masih dilakukan secara manual. Kondisi tata letak fasilitas yang belum mengikuti urutan proses, jarak antar stasiun kerja yang relatif jauh, serta belum tersedianya standar kerja menyebabkan terjadinya pemborosan. Penelitian ini bertujuan untuk mengidentifikasi jenis pemborosan yang terjadi serta merumuskan usulan perbaikan dengan pendekatan lean manufacturing. Data penelitian diperoleh melalui observasi langsung, pengukuran waktu proses dan jarak perpindahan, serta wawancara dengan pemilik. Kondisi awal sistem produksi dipetakan menggunakan Current state Value stream Mapping dan dianalisis melalui Process Activity Mapping, sedangkan akar penyebab pemborosan dianalisis menggunakan fishbone diagram. Usulan perbaikan yang dirumuskan berupa penyusunan Standar Operasional Prosedur pada setiap stasiun kerja dan perancangan ulang tata letak menggunakan Activity Relationship Chart dan BLOCPLAN, kemudian divisualisasikan melalui Future state Value stream Mapping. Hasil pemetaan kondisi awal menunjukkan terdapat 61 aktivitas dengan total waktu 5.326,05 detik, yang terdiri atas 16 aktivitas value added, 24 aktivitas non value added, dan 21 aktivitas necessary non value added. Pemborosan dominan yang ditemukan adalah transportasi dan overprocessing, yang terutama disebabkan oleh tata letak aliran material yang belum optimal, alur produksi yang belum satu arah, jarak antar stasiun kerja yang jauh, serta belum adanya standar kerja. Setelah usulan perbaikan, jumlah aktivitas berkurang menjadi 44 aktivitas, aktivitas non value added menurun menjadi 7 aktivitas, dan total waktu proses menjadi 4.665,22 detik. Process Cycle Efficiency meningkat dari 67,1% menjadi 82,1%. Hasil penelitian menunjukkan bahwa usulan perbaikan menciptakan aliran produksi yang lebih ringkas, teratur dan efisien.

Kata kunci: *Lean manufacturing, Waste, Value stream Mapping, Process Activity Mapping, fishbone diagram, BLOCPLAN.*

ABSTRACT

IKM Tahu Sumedang Mas Yetno is a small scale food processing enterprise in which most production activities are still performed manually. The facility Layout does not yet follow the sequence of the production process, the distance between several workstations is relatively long, and standardized work procedures have not been established. These conditions result in repeated material movements, non-value-added activities, and prolonged processing times. This study aims to identify the types of waste occurring in the production process and formulate improvement proposals using a lean manufacturing approach. Data were collected through direct observation, measurement of processing times and transportation distances, and interviews with the owners and workers. The initial production condition was mapped using Current state Value stream Mapping and analyzed in greater detail using Process Activity Mapping, while the root causes of waste were identified using a fishbone diagram. The proposed improvements consisted of developing Standard Operating Procedures for each workstation and redesigning the facility Layout using an Activity Relationship Chart and BLOCPLAN. The proposed future condition was subsequently illustrated through Future state Value stream Mapping. The initial mapping identified 61 activities with a total processing time of 5,326.05 seconds, consisting of 16 value added activities, 24 non-value-added activities, and 21 necessary non value added activities. The dominant. Furthermore, the Process Cycle Efficiency increased from 67.1% to 82.1%. These findings indicate that the proposed improvements have the potential to create a more streamlined, organized, and efficient production flow. However, because this study was limited to the proposal stage, the effectiveness of the improvements should be verified through implementation and direct evaluation.

Keywords: Lean manufacturing, Waste, Value stream Mapping, Process Activity Mapping, fishbone Diagram, BLOCPLAN.