Ocmulgee

EVIDENCE-BASED CASE STUDY

Manufacturing | Medium company

A 165-person clothing maker triples line efficiency: Technology and data

MANUFACTURING | MEDIUM | TECHNOLOGY AND DATA

87.5%	-66.7%	8
LINE EFFICIENCY [1]	WORKSTATIONS [1]	DEPARTMENTS ADOPTING 5S [1]

PROBLEM

Twelve workstations, uneven work, and limited visual control created low line efficiency. Work was distributed poorly, so the line could not use its available labor effectively.

SOLUTION

The company used workplace cooperation, 5S, daily management, visual controls, and assembly-line balancing. The team combined workstations and redistributed tasks around the measured production demand.

RESULT

Workstations fell from 12 to 4. Calculated line efficiency rose from 29.17% to 87.5% and the smoothing index fell sharply.

BUSINESS LENS

SWOT: scale created coordination weakness, while the larger workforce created an opportunity to spread a proven method.

ASSUMPTIONS AND LIMITS

The strongest figures are calculated line-balancing results. Long-term cost, output, and defect results were not reported.

DEPARTMENT APPLICATION

TECHNOLOGY AND DATA

Visual measures gave leaders a shared operating view.

Application analysis based on the cited source. It is not a separate measured result.

Prepared by Ocmulgee Business Process Solutions from the cited independent source. This is not an Ocmulgee client engagement or an original Ocmulgee result.

SOURCE [1]

Ramasu and Kanakana-Katumba, 2025. Implementation of a Lean Manufacturing Approach to Improving Productivity in SMEs. https://doi.org/10.7166/36-4-3238

Peer-reviewed quantitative case study | Size basis: The company employed 165 people; about 75% worked in production.