

ABSTRACT

Productivity is a key factor in enhancing industrial competitiveness, including in the Micro, Small, and Medium Enterprises (MSMEs) sector, particularly in garment manufacturing. This study aims to improve work efficiency and productivity through the integrated implementation of the Simplified Systematic Layout Planning (SLP) and 5S methods, supported by work time analysis using the Time and Motion Study method. Data collection was conducted through direct observation of operator activities in the sewing area by recording cycle time and work motions. Based on observations, the initial cycle time was found to be 737 seconds with a total of 76 work motions, 12 of which were classified as non-effective motions. After improvements were made to the workplace layout using the Simplified SLP approach and the implementation of 5S principles, the cycle time decreased to 676 seconds, and the number of non-effective motions was reduced to 4. These improvements had a positive impact on the operator's daily productivity, increasing from 34 units per day to 37 units per day within a 7-hour workday. The findings indicate that the integration of Simplified SLP and 5S is effective in eliminating time and motion waste, improving workflow, and enhancing productivity in the production process of garment MSMEs.

Keywords: Productivity, Time and Motion Study, Simplified Systematic Layout Planning (SLP), 5S, Garment MSMEs