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# Establishing standard allowed minutes and sewing efficiency for the garment industry in Tanzania

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## Abstract

**Purpose** – The garment factories focus on improving their production systems by involving innovative and advanced production methods and/or techniques to cope with fast-changing trends. Accordingly, this study aims to establish the standard allowed minutes (SAMs) and sewing efficiencies for Tanzania's sewing industry, thus improving the production processes.

**Design/methodology/approach** – The research deployed a quantitative method. A stopwatch measured each operation for shirts and trousers to compute SAMs and efficiency. The shirt manufacturing processes involved 40 operations. Ten measurements were taken from different SL and LL industries operators for each operation. The trouser comprised 42 operations with 10 measurements taken from a different operator at the same garment factories for each operation.

**Findings** – SAMs for shirts at SL and LL factories were 29 and 31 min, respectively, while trousers were 30 and 34 min. The sewing efficiencies for shirts at both SL and LL factories were 83.98% and 81.93%, respectively. Similarly, the sewing efficiencies for trousers at both SL and LL factories were 81.25% and 80.95%, respectively.

**Research limitations/implications** – Since SAMs results are not established through literature rather a quantitative approach, the findings thus place crucial information for similar factories to benchmark from. Such information are crucial as factories could increase productivity and operational efficiency, reduce costs and non-value adding activities and estimate lead times. Notwithstanding the findings gathered, the study only established SAMs for two garments.

**Originality/value** – Although the garment industry has been developing over the years, this study was probably among the first studies in Tanzania that established SAMs. Theoretical underpinnings indicate that the factories use the experience to assemble garments, thus the need for this study.

**Keywords** Tanzania, Work measurement, Sewing efficiency, Sewing industry, Standard allowed minutes, Standard minute value

**Paper type** Research paper

## 1. Introduction

Tanzania is amongst the countries that manufacture garments. Since its independence in 1961, the country capitalised enormously in the apparel industry to satisfy the market demand for clothes and cotton growing in Tanzania (Coulson, 2016; Taifa and Lushaju, 2020). Tanzania had 50 garment industries by 2002, which were started by the government and private owners (Kinabo, 2004; Taifa and Lushaju, 2020). All factories were supposed to either follow standard allowed minutes (SAMs), rely on workers' experience or both.

The term SAMs refers to the time needed to execute a definite operation or work under certain settings and parameters, maintaining standard methods and efficiency (Alam *et al.*, 2018). The garment must be analysed carefully, and several factors that affect the SAMs

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