

Adoption of Emerging Technologies in The Textile Industry: A Study of Southern African Countries

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Abstract

The textile industry contributes significantly to economic growth and employment creation. The textile manufacturing industry in Southern African countries relies mainly on conventional manufacturing techniques. Efforts to adopt emerging technologies in production processes have shown promising results. Currently, the textile industries face problems with international market penetration, high production costs, and minimal digitalisation. This is compounded by the inadequate availability of local skills to effectively maintain emerging technologies manufacturing equipment. In this study, secondary data was employed through existing research on textile manufacturing to explore the current state of digital technology adoption and its impact on the textile industry. The comparative analysis of best practices unlocked opportunities to improve productivity, efficiency, and competitiveness, as well as identify skills gaps and training needs. Further work was needed to assess and comply with environmental requirements associated with the use of emerging technologies in textile industries.