

# Chapter 1

# Enhancing Sustainability Practices and Role of Emerging Technologies on Fast Fashion Manufacturing Enterprises in Sub- Saharan Africa

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## ABSTRACT

*The fast fashion manufacturing enterprises are responsible for large employment in many countries. Despite the enormous contributions of the fast fashion manufacturing enterprises, the performance in developing and emerging economies is slow and, in some cases, is likely to decline due to challenges such as technology adoption. Therefore, this chapter investigates the effect of emerging technologies on the profitability of fast fashion manufacturing enterprises focusing specifically on Nigeria the largest consumer industry in Africa. This study adopted a survey research design. A simple random sampling technique with proportionate allocation was used to select the respondents. A structured and validated questionnaire was used for data collection and the response rate was 95%. Findings revealed that emerging technologies had a significant effect on profitability of fast fashion manufacturing enterprises in Nigeria. The chapter concludes that emerging technologies*

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*can enhance profitability particularly in emerging economies. It is recommended that to improve profitability in fast fashion manufacturing enterprises adoption of emerging technologies and artificial intelligence should be considered to enhance daily operations, product efficiency, and business profitability.*

## **I. INTRODUCTION**

The global pandemic induced by the severe acute respiratory syndrome coronavirus of 2019 (often known as COVID-19) has underscored the significance of technology and innovation globally. Technology has empowered manufacturers and companies to operate at unparalleled velocities within a few years. Likewise, digital technologies have revolutionised the methods by which individuals work, communicate, and obtain services. The necessity for scientific input to facilitate informed decision-making and actions in managing the COVID-19 pandemic was significant in both industrialised and developing nations. The capacity of nations to get, produce, use, and enhance scientific knowledge and technology, or to experiment with novel and developing inventive solutions, is contingent upon their human, institutional, and financial resources (Olubiyi, et. al, 2022). New technologies open opportunities to create new industries, deliver new services, expand existing production systems, create incomes, reduce environmental degradation and uphold sustainability

Small manufacturing firms account for around 75% of employment and 99% of all enterprises in the non-financial business sector in any given nation (Olughor, 2015; Rotar, Pamic & Bojnec, 2019). Therefore, a crucial topic that is currently the focus of policy discussions worldwide is how to stimulate economic development by enhancing the operational efficiency of these enterprises (Audrey & Jaraji, 2016). In recent years, the global business environment has become more competitive and demanding, posing challenges for fast fashion manufacturing enterprises. Manufacturing organisations worldwide have ongoing difficulties in maintaining consistent performance metrics during several years of operation (Okusanya et al., 2021). Without a question, companies must employ modern technology in order to thrive in the new normal and beyond, amidst intense global rivalry brought about by the fourth industrial revolution (4IR). Although many white-collar positions have been automated as a result of the technology associated with the Fourth Industrial Revolution (4IR) and COVID-19 survival measures, leading to a dual disruption in the labour market (WEF, 2020), the precise effect of the 4IR paradigm on jobs is now unpredictable. In order to achieve a sustainable economy, particularly during the era of the Fourth Industrial Revolution (4IR), the area aspires to develop a robust and internationally competitive manufacturing industry. The analysis of disruptive breakthroughs and technologies first focused on their potential influence on future

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