# Chapter 4 COVID-19 Digital Technology Response in Sub-Saharan African Countries

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# **ABSTRACT**

This chapter investigated the use of digital technologies as a response to the COVID-19 pandemic in Sub-Saharan African countries. The study explored possible ways towards building an open, inclusive, and secure digital ecosystem using digital technologies to create awareness of the coronavirus pandemic. The qualitative approach and critical discourse analysis were adopted to critically analyze the effects of digital technologies in the healthcare sector of the Sub-Saharan African region, while the technology determinism theory was used as the theoretical lens of the study. This study advocated the use of digital technologies as an effective tool to disseminate information about infectious diseases to the citizens of the Sub-Saharan African region.

## INTRODUCTION

The Coronavirus infection primarily transmitted via contact and respiratory droplets (Gates, 2020; Kuca, 2020) was declared a global pandemic by the World Health

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Organization (International Labour Organization, 2020) on the 11th of March 2020 (Haman, 2020). Eight months into the COVID-19 pandemic, there was an average of 54, 014, 420 confirmed infection cases and 1, 313, 563 deaths globally (International Labour Organization, 2020). The African continent recorded its first case of COVID-19 in Egypt on February 14, 2020, and thereafter, there have been reported COVID-19 infection cases in a total of 52 African countries (World Health Organization, 2020; Kalantaryan and McMahon, 2020). The realization is that the efforts made towards eradicating poverty are being forfeited as the pandemic has increased global poverty, given that many Sub-Saharan African countries just like many other nations in the world are experiencing a drastic economic recession (Sumner et al., 2020). Due to this many people were rendered jobless without a meaningful livelihood (International Labour Organization, 2020), while small to medium-sized enterprises (SMEs) were unable to operate causing some to eventually fold up, while big organizations were forced to change their business operations to use digital means to guide and adapt to new company measures (Dwivedi et al., 2020).

This study reflects on one of the targets of sustainable development goal (SDG) 9, which is to significantly increase the access to information and communications technology (ICT) to different sectors such as the healthcare sector, educational, government, and private organizations, and strive to provide universal and affordable internet access in the least developed countries by 2030. The several levels of strict lockdown strategies implemented by governments globally to limit the COVID-19 pandemic compelled organizations to encourage their staff to work from home (Dwivedi, et al., 2020). While essential sectors like the health systems in the Sub-Saharan Africa region faced many challenges such as equipment, data and service inadequacy, staffing, lack of medical infrastructure, poor deployment to meet medical outcome demands, lack of maintenance of medical equipment and instruments, management of clinical data, lack of new medical innovation and designs, lack of access to treatment and communication before the COVID-19 pandemic occurrence (Walsham, 2020; Ben, 2020). Hence, the lack of health information systems increased during the COVID-19 pandemic and the existing degeneration of the health sector became overwhelming due to the demand for medical treatment caused by the pandemic hazard (Walsham, 2020).

In adherence to this directive, the citizens of many Sub-Saharan African countries and the staff of many organizations have adopted the use of Wi-Fi connections in their homes, which in turn have promoted the use of digital technologies in both organization and human lives (Katz et al., 2020). In addition, the education sector across the world is compelled to replace in-person classrooms with online lesson delivery (Said et al., 2020; Mpungose and Khoza, 2020). While Sub-Saharan African countries such as South Africa, Kenya, Nigeria, Zimbabwe, etc. declared national health emergencies, broad travel restrictions, and border closure to reduce the spread

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