

# An Interactive E-Health Machine Learning Model to Combat Pandemic Diseases: A Case Study of Tanzania

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## ABSTRACT

In recent years, Information and communication technologies (ICT) have been used in several different areas, i.e., agriculture (e-agriculture), health (eHealth), government (e-government), and has brought a positive impact in the community and at the government level. The provision of service also has advanced and has become more efficient with the use of ICT. In general, ICT has changed how we communicate with each other, find needed information, work, conduct business, interact with government agencies, and manage our social lives. In health, the use of ICT is termed e-Health. Its intervention in health sectors has brought positive impacts to form health service provision to reporting. With a recent COVID 19 that affects society globally and other pandemic diseases that its occurrence might lead to the global health problem, the need to have tools to address pandemic diseases challenge when it occurs is vital. Lives could be saved if we have an intelligent system and or an adaptive framework to address critical situations when they occur or before by predicting and make decisions. Using previous data with machine learning and data science techniques; innovative health systems/intelligent systems (mobile applications, web app, data tools, etc.), a prediction can be done, which can be used as an input for planning and decision-making regarding health service provision and delivery. This paper presents an interactive e-Health model to address pandemic diseases using machine learning and data science techniques. It provides smart mechanisms for smart/intelligent systems for planning and hence decision making using previous data and scenarios to predict and make a decision regarding different pandemic diseases.

