# Chapter 69 Determining the Accessibility of e-Government Websites in Sub-Saharan Africa Against WCAG 2.0 Standard

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## ABSTRACT

The purpose of this study was to determine the conformance levels of government websites in Sub-Saharan Africa (SSA) to Web Content Accessibility Guidelines (WCAG) 2.0 and examine which macro factors influenced the accessibility these websites. The findings indicated that the majority of government websites in SSA still had a long way to go to become accessible based on the WCAG 2.0 standards. None of the 217 government websites examined adhered to all the WCAG 2.0 guidelines. Cross country analysis showed that there are three macro factors influencing e-government accessibility in SSA, namely Human Development Index (HDI), Corruption Perception Index (CPI), and percentage of the active population (15-64 years). Countries with high HDI levels and low CPI levels tend to have websites with fewer accessibility errors, while those for countries with high percentage of the active population have more accessibility errors.

## INTRODUCTION

During the last two decades, governments in developing countries have progressively adopted e-government as an essential means of improving their general performance. E-government, which broadly refers to the espousal of Information and Communication Technologies (ICTs) into mainstream government activities, is continuously becoming an extremely valuable strategy for governments to enhance their

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administrative efficiency, gain citizen's trust, eliminate corruption, and ultimately boost democratic governance (Elbahnasawy, 2014; Jun, Wang, & Wang, 2014; Seifert & Chung, 2009). Eliassen and Sitter (2007) expound that e-government initiatives have significantly improved how the public sector manages its resources and deliver required services to the public. Consequently, e-government development has become a vital precondition in the strategy of many governments worldwide (Hui, Xiaolin & Jianying, 2014; Sorrentino, & De Marco, 2013). With government websites being one of the key platforms for government interaction with citizens and other stakeholders, a key e-government competency has been the creation of universally accessible government websites to allow the broad-spectrum of e-government stakeholders to gain access to government information and e-services. Ensuring e-government accessibility is particularly important as it enables all citizens, including those with any form of cognitive or functional limitations, to effectively access government services.

People with disabilities form a considerable part of the world's population, and the need to provide them with access to government information and electronic services have gained considerable attention over the years. Latest statistics from the World Health Organization (WHO, 2011) indicated that over 15% of the world's population was affected by from some form of disability (over 1 billion people), of which 80% are found in developing countries. The case is even worse for poor people living in developing countries as 20% of them are affected by some form of disability (World Bank, 2011). This is concerning, as many factors within a country can establish and maintain barriers to access of e-government services that prevent people with disabilities from actively engaging in economic, civic, and community life (Kuzma Dorothy & Oestreicher, 2009; World Bank, 2011). As such, several researchers (Kuzma, 2010; Olalere & Lazar, 2011; Youngblood, 2014; Abanumy, Al-Badi & Mayhew, 2005; Adepoju et al., 2016; Al Mourad & Kamoun, 2013) across the globe have engaged in e-government accessibility research to examine the compliance levels of e-government portals and provide directions for improving their accessibility. Albeit web accessibility guidelines are well developed, many government websites do not comply with these guidelines (Leist & Smith, 2014). Even in developed countries where e-government accessibility has matured immensely, evidence still indicates that the accessibility compliance of government websites have not improved noticeably over the last two decades (Youngblood, 2014). Consequently, governments in the developed world are continuously enforcing stringent legislations to mandate the accessibility of these websites. This is, however, not the case with countries in the developing world regions, like Sub-Saharan Africa (SSA), where accessibility laws are either non-existent or less stringent (Kuzma et al., 2009).

While e-government accessibility research has gained momentum and is receiving considerable attention in many parts of the globe, there is still a dearth of such research in SSA. E-government development, adoption and diffusion in SSA still lack behind other regions of the globe and the only way to ensure that a wide array of people can access e-government services in SSA is to make the government websites more accessible. Current efforts to examine the state of e-government accessibility in SSA include Adepoju, Shehu and Baker (2016); Costa, Fernandes, Neves, Duarte, Hijón-Neira and Carriço (2013); and Kuzma et al., (2009). With almost all countries in SSA having some form of government website and the existing studies covering less than 15% of these countries, it is evident that there is still a huge gap in terms of understanding the state of e-government accessibility in SSA. In order to fill in this gap, and to contribute to the development of universally accessible government websites in SSA, this study will address the following objectives:

Determine the compliance levels of government website accessibility in SSA

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