Abstract

In spite of the fact that e-government agency (ega) in Tanzania emphasize on the use of ICT within public institutions in Tanzania, accessibility, usability and web security vulnerabilities are still not considered by the majority of web developers. The main objective of this study is to assess the usability, accessibility and web security vulnerabilities of selected Tanzania e-government websites. Using several automatic diagnostic (evaluation) tools such as pingdom, google speed insight, wave, w3c checker and acunetix, this study assess the usability, accessibility and web security vulnerabilities of 79 selected e-government websites in Tanzania. The results reveal several issues on usability, accessibility and security of Tanzania e-government websites. There is high number of usability problems where 100% of websites were found to have broken links and 52 out of 79 websites have loading time of more than five (5) seconds for their main page. The accessibility results show that all 79 selected websites have accessibility errors and violate w3c Web Content Accessibility Guidelines (WCAG) 1.0. The results on web security vulnerabilities indicate that 40 out of 79 (50.6%) assessed websites have one or more high-severity vulnerability (SQL injection or cross site scripting-XSS) while 51
out of 79 (64.5%) have one or more medium-severity vulnerabilities (Cross site request forgery or Denial of Service). Based on these results, this study provides some recommendations for improving the usability, accessibility and web security vulnerabilities of public institutions in Tanzania.

References


Index Terms
Keywords