

Evaluation of E-Government Websites in Lesotho: An Empirical Study

MOLEFI LAWRENCE MATSIELI

University of KwaZulu-Natal

Corresponding Author

molefimatseili@gmail.com

RADHAMANY SOORYAMOORTHY

University of KwaZulu-Natal

Email: sooryamoorthy@ukzn.ac.za

Abstract

Evaluation is essential for assessing the implementation and outcomes of programs for the purpose of informing decision making. However, although there are studies that evaluated e-government implementation in Lesotho, comprehensive studies are rare. This paper presents an empirical study of the evaluation of four websites of the ministries of the Government of Lesotho using content analysis. Since the website content analysis metrics and criteria are not entirely exhaustive, this study based the evaluation on four dimensions, namely, accessibility, usability, transparency and interactivity. The findings indicate that the ministerial websites of the Government of Lesotho are falling short in addressing these issues. The evaluation results highlight that the web information and features that are key in fostering accessibility, usability, transparency and interactivity of government services are insufficient or completely non-existent in the ministerial sites. The government must focus more efforts on improving these sites to enhance accountability and restore citizen trust in government and confidence in public administration.

Keywords: E-government, Accessibility, Usability, Transparency, Interactivity



Introduction

E-government is a worldwide phenomenon. The evolution of e-government generally emerged from a need to reinvent government and improve service delivery quality (Fang, 2002). E-government is defined as the use of information and communication technologies (ICTs) to transform government structures, processes and procedures thereby reducing administrative and processing time and costs, minimizing corruption among the government workers, reducing human errors, facilitating more access and convenient use of public services, generating wider citizen participation and social inclusion and increasing transparency and government accountability (Asogwa, 2011; Kitaw, 2006; Lim, Masrom and Din, 2013). This paradigm enables government to be more responsive, effective and efficient in its operations and offers new opportunities for citizens to do business with government faster, cheaper and with more ease. E-government represents a phenomenon that allows citizens, businesses, employees and other government agencies to interact with government 24 hours a day, seven days a week without physically visiting the government offices (Basu, 2004).

Due to these advantages, many governments around the world have embraced e-government as a service delivery strategy and an instrument for good governance. Although the use of ICTs has evolved slowly in Africa, today all African governments have implemented at least one e-government website (Rorissa and Demissie, 2010; Verkijika and De Wet, 2018b), with others such as South Africa already offering sophisticated web-based services for their population, albeit in small numbers. E-government websites play an important role in e-government implementation and the achievement of government objectives (Magayane, Mokuia and Lanrong, 2016). These websites act as an interface between government and citizens, presenting themselves as a platform where citizens can exchange information with government online and access public services anywhere and anytime at their convenience (Ashraf, Cheema, Saba and Mateen, 2017).

In Lesotho, the implementation of e-government services started with the adoption of its ICT Policy of 2005. This policy identifies e-government as a key framework destined to guide government on how ICTs can be fully exploited to improve service delivery quality and access, integrate the nation into the global economy and thus create new impetus to ease poverty and improve the lives of all the Basotho nation. However, various researchers have raised concerns about the slow progress of the implementation of the ICT policy in Lesotho, and e-government, in particular, which fails to satisfy the needs of the citizens. For example, Mathaha (2015) raised concerns about the lack of implementing structures with the ability to organize e-government projects to meet people's needs. Mutula (2008) argued about the e-government websites which did not allow government-citizen interaction. Although there have been studies that contributed to the understanding of e-government implementation in Lesotho, most of these studies used comparative analysis, comparing Lesotho with other countries, and largely drawing on secondary data. There



have not been any substantial attempts focusing on Lesotho's e-government without comparing it with those of other countries.

It is not surprising then that the call for empirical investigations into e-government for Lesotho has been made previously. Scholars such as Mathaha (2015) argued that comprehensive studies of the situation of e-government in Lesotho using primary data and employing different methods of analysis are critical to support implementation of the ICT policy and strategic planning of future e-government development projects. This paper seeks to bridge the knowledge gap in the literature of e-government in Lesotho by drawing on an empirical study to examine the current situation of e-government websites in the country. It evaluates four official websites of the ministries of the Government of Lesotho by manually visiting each site and checking the presence of features and textual information that support accessibility, usability, interactivity and transparency. The feedback from an empirical evaluation is critical because it will provide legislators with first-hand information about the performance of e-government implementation on an ongoing basis and help them to understand whether policy goals have been achieved (Thompson, McClure and Jaeger, 2003). It will also help government to understand whether e-government initiatives are designed to meet the expectations of the targeted groups. The far-reaching goal of e-government is to have a reformed government which is able to reach beneficiaries and offer an improved quality and access to public services through the use of websites (Alshehri and Drew, 2010), ensure transparency and accountability in government processes (Mkude and Wimmer, 2013), facilitate government-citizen interaction (Yanqing, 2010) and assist in building citizen trust in government (Colesca, 2009).

Conceptual Background

Evaluation of government websites has increasingly been a topic of research in recent years. However, there has not been a conclusively accepted or comprehensive set of evaluation criteria or rubrics (Karkin and Janssen, 2014). Different researchers proposed and used a range of content concepts to evaluate government websites. For instance, Henriksson, Yiori, Belinda and Michael (2006) described security/privacy, content, usability, features, services and citizen participation fundamental in evaluating the quality of government websites. Magayane et al. (2016) used visibility, language, inter-linkage, interactivity, usability and currency for evaluating Tanzanian national, ministerial and other government agencies' websites. Although there is diversity in terms of aspects for evaluating government websites, the scope of the study presented in this paper is limited to four dimensions, namely, accessibility, usability, transparency and interactivity. These concepts are described below.



Accessibility

Website accessibility, according to Verkijika and De Wet (2018b), refers to the extent to which a website is accessible to the wide range of people, ensuring that all possible users have equal access to website functionality and content. For Shneiderman (2000), accessibility of a website should accommodate a diverse user populace including persons with disabilities, different abilities, knowledge, skills, competencies, gender, age, culture and literacy. In essence, accessibility is defined as the techniques and principles to be considered when designing websites in order to make the information and services on these websites accessible to all users (Laurin, et al., 2014). Although website usability received a great deal of attention, most of the researchers (Akgul and Vantasever, 2016; Bilal, Yu, Song, and Wang 2019; Mbetse and Kondoro, 2017) focused on the access for people with disabilities. A main problem remains the lack of research which explains accessibility in terms of the language used on the websites. Language is now identified as one of the major determining factors of website accessibility (West, 2005).

Accessibility in the context of e-government suggests that government has a compelling role to maximize the ability of all users to access not only the websites but also their contents. Agangiba and Kabanda (2016) contrast that e-government is distinct from any other electronic services because information and services of e-government websites should be accessible to all to obtain user satisfaction. Lack of equal access to e-government websites creates serious forms of exclusion which include, but are not limited to, digital, informational and social. Kamoun and Almourad (2014) report that guaranteeing access to anyone visiting an e-government website is of great significance in promoting inclusive governance and equal or equivalent government services and information access.

Usability

Usability is the quality feature that evaluates the easiness of an interface (Ashraf et al., 2017). The International Standard Organization (1998) defines usability as “The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use”. In this fashion, usability describes the quality of a website from the point of view of the user instead of the organization or company itself. Usability typically describes how effective, efficient and satisfactory a website is to its visitors. Srivastava (2017) reports that usability is an important element of a website quality not only because it determines a website usage and user satisfaction. It also has a great impact on the failure or success of the site. In their study that evaluated small business websites, Fisher, Bentley, Turner and Craig (2004) report that usability affects the users’ emotional response towards the website and their intention to visit that site in future. In many countries, usability evaluation of government websites was performed. However, scholarship is divided concerning usability assessment



criteria. A key problem is that no single authoritative set of attributes exist for measuring website usability. For example, Korsten and Bothma (2005) assessed the usability of the South African websites focusing on efficiency and effectiveness. The attributes that were used included home page, layout, page templates, search capability, information architecture, site-wide design, overall writing style, linking strategy and navigation. Asiimwe and Lim (2010) used legal policies, navigation and design layout attributes to conduct usability evaluation of four websites of the Government of Uganda.

Transparency

Transparency is a quintessential component that governments employ to improve openness (Bertot, Jaeger and Grimes, 2010). However, organizational attitude and efforts directly influence the depth and breadth of openness. Researchers such as Armstrong (2005) and La Porte, Demchak and Jong (2002) report that transparency exists to the extent that a government agency freely opens up its internal systems to external audiences and universally provides unrestricted access to timely and comprehensive information about its internal operations, procedures, processes and decisions. The spirit of transparency in e-government websites is to enhance the disclosure of information that can enforce trust, legitimacy and accountability of the public sector organizations (Grimmelikhuijsen and Welch, 2012). Transparency and accountability are intertwined in such a manner that it is only possible for the constituencies to hold government accountable when they know what the government plans and activities are (Pina, Torres and Royo, 2007). According to Al-Soud and Nakata (2010), the public sector website that makes it easy for users to confirm its ownership and authenticity of its content is considered legitimate by users, consequently affecting them to maintain trust in government. In view of the above, transparency broadly refers to the website aspect that can make government trusted by citizens (Verkijika and De Wet, 2018a). In general, a series of legitimacy, trustworthy and accountability features and textual information affect transparency in websites.

Interactivity

Interactivity, like any other contemporary concept, has never been an easy word to define. In the study that sought to give clarity to the meaning of 'interactivity', Aoki (2000) contends that although the term has gained popularity among scholars, it is understood, defined and applied differently by different people. In a similar study that attempted to address conflicting findings about the meaning of the concept of interactivity, Palla and Zotos (2017) conclude that there is a shared notion which describes interactivity as an essential construct that differentiates new mediums of communication from the traditional ones. Interactivity typically embodies a two-way flow of information between users and the people a website represents. Shi and Zhang (2014) add that apart from allowing users to have effective communication with the information providers,



interactivity also enables users to have maximum interaction with the website content. The emphasis on the latter is based on users' ability to exert control over the content exchanged over the websites (Liu, 2003). Interactive websites permit users to make complete transactions online, and enables them to download forms, modify their content and submit them online (United Nations, 2002).

Methodology

We conducted an empirical study to evaluate the websites of four ministries of the Government of Lesotho based on accessibility, usability, transparency and interactivity. By ministry we mean a higher governmental organization in Lesotho, headed by a cabinet minister, which manages a particular sector of the public administration. Content analysis was employed for manually conducting the websites evaluation. As observed by Parajuli (2007), a meaningful e-government content analysis must include the aspects of accessibility, usability, transparency and interactivity. The rationale for employing content analysis in this study was because this technique is popular (Krippendorff, 1989; Nurdin and Aratusa, 2020) and has been used in similar analyses. For example, content analysis was used by Mimbi and Lehong (2017) to determine maturity, usability, interactivity and transparency of the national government websites in ten countries of the Southern Africa Development Community (SADC). In addition, a content analysis study was conducted by Kaaya (2004) to assess the state of government websites of three East African countries, namely, Tanzania, Uganda and Kenya – using usability, establishment year and visibility attributes. Based on this, a content analysis technique was deemed appropriate in this study to analyze the presence or non-presence of the websites' features and textual information for making valid inferences.

The ministries that had functional official websites were chosen from the list of the 26 ministries of the Government of Lesotho that were listed in the National Government Web Portal, www.gov.ls. The functionality of a website was determined by the clickability of the web address. Convenience sampling was used to draw a sample of four ministries with functional websites. It is notable that out of the 22 ministries of the Government of Lesotho that were eliminated from the study, eight had dysfunctional web addresses and 14 did not have web addresses. While the selected ministries are shown in Table 1, Table 2 shows the attributes that were used to evaluate the accessibility, usability, transparency and interactivity of these websites. These attributes are extracted from prior studies (Al-Soud and Nakata, 2010; Kaaya, 2004; Mimbi and Lehong, 2017; Parajuli, 2007; Pina et al., 2007; Verkijika and De Wet, 2018b). The evaluation of the websites was carried out in June 2019.



Table 1. Selected Websites

Ministry	Web Address	Short Form
Ministry of Development Planning	www.planning.gov.ls	MDP
Ministry of Tourism, Environment and Culture	www.mtec.gov.ls	MTEC
Ministry of Forestry, Range and Soil Conservation	www.forestry.gov.ls	MFRSC
Ministry of Finance	www.finance.gov.ls	MoF

Table 2. Attributes Used for Evaluating the Selected E-Government Websites

Accessibility	<p>As was done in Parajuli (2007) and West’s (2005) studies, language is an important attribute this paper used in assessing the accessibility of the websites. Kaaya (2004) argues that language used on the website must represent the languages of the local people. Accepting the fact that English is a widely used language on the Internet and that not all the people visiting government websites are speakers of it, West (2005) reports that the design of these websites must ensure the accessibility of non-English language native speakers. As of February 2017, Sesotho, according to the World Bank Group (2017), was the mother tongue language of more than 99.7% of the Basotho nation and a widely spoken language in Lesotho. Although there are other minority indigenous languages including Sethepu, Sephuthi, IsiXhosa and IsiZulu, the speakers of these languages typically speak Sesotho. It is not surprising then that Lesotho is almost a homogeneous nation and described as “monolingual nation” in Sesotho (UNICEF, 2016). To examine the extent to which the websites of the Government of Lesotho provide access to the citizens of Lesotho, we investigated whether or not the content of the websites is provided in both the national official languages of Lesotho, which are Sesotho and English. Although these languages are already used in print media, less is known about their use on government websites.</p>
Usability	<p>In order to measure usability, we examined the presence of navigation tools. We evaluated the sites for the presence of frequently asked questions (FAQs), search facilities, and sitemaps. As the name suggests, a sitemap is a map of the website that reveals, among others, the structural and logical order of a website (Parajuli, 2007). FAQs provide visitors with ‘frequently asked questions’ and common queries normally raised together with the official answers from the agency (Al-Soud and Nakata, 2010). Search capability facilitates the user’s ability to retrieve information fast within a website without browsing through webpages (Asiimwe and Lim, 2010). These navigation features help users to find information and services on the website with ease, quickness and satisfaction. The more the navigation tools exist, the more the site is considered usable.</p>
Transparency	<p>To see how transparent the ministry is within the site, we have adapted the attributes used by La Porte et al. (2002) and Pina et al. (2007). We evaluated transparency using several variables that we grouped into organizational introductory information, publications, contact information, privacy and security statement, and working hours. Organizational introductory information concerned the values, vision, mission and goals and senior management structure of the ministry. Publications content was</p>



about circulars, official statements, tenders, calendar of events, latest news, reports, laws, bills and policy frameworks. Contact information pertained to contact person(s), email address, telephone number, postal and physical address for the ministry. The presence of these items increases the level of legitimacy, accountability and public trust (Al-Soud and Nakata, 2010; Pina et al., 2007).

Interactivity Interactivity of the websites of the Government of Lesotho was measured by the presence of four aspects, namely, important links, interactive features, online applications/submissions/registrations and downloadable materials. A website with links to other important agencies within and outside the government system is considered interactive because it permits the user to browse other websites without a need to leave the site or start a new search. The interactivity of the e-government website was determined by its ability to provide important links to government and non-government agencies as well as the social media. Interactive features comprised of a subscribe button and feedback features. The far-reaching benefit of an interactive website is an enhanced two-way communication between government and citizens and strengthened participatory governance.

Findings and Discussion

The findings of the study are based on the manual evaluation of the textual information and features that support accessibility, usability, transparency and interactivity of four websites of the ministries of the Government of Lesotho. The outcome of this study may act as a blueprint for the efficient, participatory, transparent, and accountable government.

Accessibility

The accessibility results are presented in Table 3. It can be seen from this table that none of the ministries of the Government of Lesotho used Sesotho as the medium of conversation and web content. All the websites used the English language. This is despite the fact that bilingualism is advocated and protected by Section 3(1) of the Constitution of Lesotho which states that “The official languages of Lesotho shall be Sesotho and English”. Furthermore, it is stated above that Sesotho is not only the first language of more than 99% of the population but is also a widely used medium of communication (World Bank Group, 2017). Given this background, it is puzzling but not unexpected, that Sesotho is not part of the languages used on the government websites. As Daniel et al. (2011, p. 26) observed, developing countries “like to display their English-speaking abilities”. This anomalous behaviour disregards the fact that the imported English language, especially in Africa, is spoken largely by the educated elite (Mutula, 2002) while the majority of the populations remain uncomfortable with it (Kende and Quast, 2016). In Lesotho, although serious attempts have been made to ensure that Basotho children learn to speak, write



and read in English, many Basotho do not go beyond basic primary education due to socio-economic challenges and remain not competent in English (Makhasane, 2010).

Conversely, citizens appreciate receiving government services in their local language, either by preference or due to necessity (Marlow, Clough and Dance, 2007). Content is more relevant and accessible when it is in the language that is widely understood by the local people. Delivering website content in any language other than that of the local people is a serious barrier to accessibility (United Nations, 2014). It discriminates against the people who may not be competent in the English language or may ordinarily be more comfortable when information is available in their native language(s) (Magayane et al., 2016). It also weakens the very fabric of e-government and democracy by disabling greater citizen participation in governance and government affairs. Based on this, it becomes inevitable that to increase the accessibility of e-government information and services and enhance citizen participation, the content of the websites must be in the language that is familiar to and widely understood by the local people.

Because English remains the language of prestige, power, administration and seemingly computing in Lesotho, government must ensure a bilingual approach to content delivery and accessibility by treating Sesotho equally. By using Sesotho on their websites, the Government of Lesotho can give value to the local citizens for whom the English language is not favourable, thereby eliminating social boundaries that limit information access to only a number of people.

Table 3. Evaluation Results for Accessibility of the E-Government Websites

Ministry	Language(s) Used	
	English	Sesotho
MDP	√	X
MTEC	√	X
MFRSC	√	x
MoF	√	X

Usability

From Table 4, it is observed that none of the websites had FAQs or sitemaps and not more than 50% had a search facility. This clearly indicates that the websites of the Government of Lesotho suffer from usability challenges. This finding supports the results of the previous studies (Asiimwe and Lim, 2010; Venkatesh, Hoehle and Aljafari, 2014) which suggested that usability remains a challenge for a number of governments in developing countries. According to these findings, e-government websites fail to satisfy user expectations. For example, Verkijika and De Wet (2018a, p. 18) found that “the overall usability of e-

government websites in the [Sub-Saharan African] region was quite poor, with e-government websites from most countries performing very badly”. In another study, Islam, Rahman and Islam (2017) found that e-government websites of Bangladesh suffer from serious usability problems, which significantly affect the overall acceptance of e-government websites by the citizens of this country in South Asia. This is a serious concern. El-firjani et al. (2017) observed that users can easily leave a site of a private company when it is not usable to find the same or similar service or information on another competing website. Unfortunately, such possibilities do not exist with the government (Anjoga, Nyeko and Kituyi, 2017). In Lesotho, for instance, the issuing of birth certificates, passports and identity documents is exclusive to the Ministry of Home Affairs while the issuing of driver’s licences and car disc renewals is by the Traffic Department of the Ministry of Transport. Against this background, it is self-defeating that the government can invest in e-service delivery mechanisms which largely do not conform to user expectations, providing citizens with services and information access which is not convenient and faster. It is on these grounds that the government must understand and continuously carry out usability evaluation. This will assist in improving the degree of navigation and ease of the e-government website’s usage. Furthermore, whilst poor quality frustrates users and eventually discourages them from visiting the site in future, a highly usable website not only enhances user satisfaction. It also increases user’s loyalty towards the site and citizen trust in government (Dingli and Cassar, 2014).

Table 4. Evaluation Results for Usability of the E-Government Websites

Ministry	Navigation Tools		
	FAQs	Search Facility	Sitemap
MDP	x	X	x
MTEC	x	√	x
MFRSC	x	√	x
MoF	x	X	x

Transparency

Table 5 presents the transparency results of the websites of the ministries of the Government of Lesotho. The results show that all the websites had organizational introductory information, publications and contact information which is required for a transparent government. None of these websites had the existence of a privacy and security statement and working hours. The analysis of the data presented in Table 5 shows that although there is a promising trend for the Government of Lesotho to make government information public through the e-government websites, much is still needed to achieve this objective. The spirit of transparency in e-government websites is to ensure that all the information that can enforce government accountability is made public.



Whereas Pina et al. (2007, p. 456) consider the information such as that present on the e-government websites of Lesotho, as demonstrated in Table 5, to represent “a mere dissemination of information on the ‘noticeboard’”, our analysis suggests that this information is of utmost importance. Since the Internet and Web applications are full of uncertainty and risks, names of the government officials, in particular senior management and the contact details of the agency show ownership and legitimacy of the website (Kaaya, 2004; La Porte et al., 2002). Such information provides a basis for citizen involvement in matters that affect them. On the other hand, the absence of timely communication and easily accessible information can destroy public trust. Thus, giving feedback on the performance is an important component of transparency. As such, by disclosing its intentions and progress on the part of administration and governance through policies, laws, bills, circulars, reports, current official speeches and latest news visible on its websites, the Government of Lesotho clearly shows its willingness to be scrutinized or its performance monitored, and institutions held accountable.

However, transparency in government – which reduces chances of corruption and promotes efficiency and effectiveness in the public administration – is not possible without the security and privacy statement visible on the site. This statement generally provides information to users about how the data collected from them will be managed and provides specific guidelines as well as terms and conditions governing the use of the website. Like Parajuli (2007) found in his study of Nepal, we also found that none of the websites that were analysed had visible privacy and security statements. Concerns about insufficient privacy and security protections in online platforms can lead to distrust in public websites that might pose risks such as vulnerability to online identity theft and fraud or unauthorised access to private information (Colesca, 2009). In essence, when crucial information such as a privacy and security statement, which affects citizens is scarce or not shared on the website, trust in government and confidence in its processes may not be realized (Rosen and Purinton, 2004). To maintain a good relationship between government and citizens, e-government websites must be developed in such a way that they demonstrate higher levels of government openness and transparency.

Furthermore, Nygren (2009) reported that the objective of e-government is to improve government performance internally and relations externally. Based on this, it would be in the best interests of the ministries of the Government of Lesotho to disclose their working hours for the citizens who may require services at the government departments. Being transparent about the operating hours not only brings convenience to citizens and saves them travelling costs. It also allows them to hold government institutions and employees accountable, especially those who may open after and leave offices before the official working hours. Therefore, to avoid uninformed visits to government offices and to introduce e-government as a system of saving time and simplifying life, governments must showcase working hours on their websites.



Table 5. Evaluation Results for Transparency of the E-Government Websites

Ministry	Organizational Introductory Information	Publications	Contact Information	Privacy Security Statement	and Working Hours
MDP	√	√	√	x	x
MTEC	√	√	√	x	x
MFRSC	√	√	√	x	x
MoF	√	√	√	x	x

Interactivity

Interactivity was measured by the presence of the important links, interactive features, online applications, submissions, registrations and downloadable material. The results are presented in Table 6. As can be seen from this table, there are variations in terms of interactivity attributes among and within the websites.

The analysis indicates that the complete interactivity of the websites cannot be achieved with other interactivity features missing on the sites. For example, whereas the rest of the websites did not expose users to downloadable material, the MoF website did provide them with a vendor's Supplier Registration Form. However, this form could not be submitted online. Instead, the physical address was provided on the site where the completed form could be submitted offline. This finding corroborates the results of several studies about the websites of African countries. Asogwa (2011), Oni, Okunoye and Mbarika (2016) and Magayane et al. (2016) in their studies found that government websites in the African region are still basic. In another study, Mutula (2008) found that most of the government websites in sub-Saharan Africa pay little attention to citizen interaction. At the highest level of interaction, website users can complete transactions online and engage in two-way communication with government officials. Lack of the necessary interaction supporting two-way communication not only decreases user-interest and creates a bad impression towards government institutions (Mimbi and Lehong, 2017; Nurdin and Aratusa, 2020). It also obstructs effective citizen involvement in policy processes.

The failure of the government to link its official websites to the social media, as demonstrated by some ministries as seen in Table 6, disrupts the new forms of communication through which government information is delivered to citizens faster and with more effectiveness. More recently, social media is an easily accessible and the favourite communication space for many people (Khasawneh and Abu-Shanab, 2017). It has a great deal to offer citizens with an enhanced information access, creating an effective communication platform, empowering and making citizens more involved in dynamic



policy development. On the similar background, a feedback feature offers great benefits to both government and citizens alike. Without this interactive feature as demonstrated by some ministerial websites, the government may not realise an opportunity to gather positive information and criticisms about the e-services it offers. As the World Bank (2009) found in their study, more often citizens feel distant from their elected leaders and civil servants. By making e-government websites interactive, the government will not only be closing the gap between public servants, elected officials and citizens. It will also be instilling an ideal of participation in government and democratic processes, involving citizens in all policy development stages including formulation, implementation and feedback processes. Therefore, ministries must ensure that their websites do not turn into notice boards where citizens become nothing but consumers of information. These websites must be developed in such a way that they allow users to interact *with* and *through* them.

Table 6. Evaluation Results for Interactivity of the E-Government Websites

	Important Links		Interactive Features			Online Application/ Submission/ Registration	Downloadable Material
	Govt Agencies	Non-Govt Agencies	Social Media	Feedback Features	Subscribe Button		
MDP	√	x	√	√	√	x	x
MTEC	√	√	√	x	x	x	x
MFRSC	x	x	x	√	x	x	x
MoF	x	√	x	x	x	x	√

Conclusion

E-government websites have a great deal to offer towards improving people’s lives, more especially the most vulnerable. This explains why it is important to assess the state of these websites on a regular basis. However, an evaluation of e-government websites is still very scarce in Lesotho. This paper contributed knowledge to the dearth of research by conducting an empirical study which evaluated the websites of the ministries of the Government of Lesotho. The findings showed that these websites are partially making the public information and services accessible and usable, administrative decisions, processes and activities transparent, and institutions and services interactive. This makes the integrity of the government institutions questionable concerning their ability to put citizens’ needs and interests first. While this paper argued that the e-government websites – which are service delivery mechanisms and communication channels – be developed and regularly updated to meet user’s expectations, this should not be seen as an end in itself. The government is strongly urged to concentrate their efforts on improving these sites to

enhance accountability and restore citizen's trust in government and confidence in public administration. Lack of accountability and trust in government not only makes a mockery of e-government development but also hinders citizen's involvement in policy and political processes. However, an evaluation of e-government may not be entirely exhaustive without government's view on the issues and challenges constraining the web-based service delivery in the country. Therefore, future studies in e-government field should be extended to include organizational perspective.

References

- Agangiba, M. and Kabanda, S. (2016). E-government accessibility research trends in developing countries. In *Mediterranean Conference on Information Systems*. Paphos, Cyprus, September 2016.
- Akgul, Y. and Vatanserver, K. (2016). Web Accessibility Evaluation of Government Websites for People with Disabilities in Turkey. *Journal of Advanced Management Science*, Vol. 4, No. 3, pp.201-210.
- Al-Soud, A. R. and Nakata, K. (2010). Evaluating e-government websites in Jordan: Accessibility, usability, transparency and responsiveness. In *2010 IEEE International Conference on Progress in Informatics & Computing*, Vol. 2, pp.761-765. IEEE.
- Alshehri, M. and Drew, S. (2010). E-government fundamentals. In *IADIS International Conference ICT, Society and Human Beings*. Freiburg, Germany, 29 June - July 31, 2010.
- Anjoga, H., Nyeko, S. and Kituyi, M. (2017). A Framework for Usability of E-Government Services in Developing Countries. *Journal of Accounting and Auditing: Research & Practice*. Advance Online Publication. DOI: 10.5171/2017.313796
- Aoki, K. (2000). Taxonomy of interactivity. Internet research 1.0: The state of the interdisciplinary. In *Proceedings of the First Conference of the association of Internet Researchers*. University of Kansas.
- Armstrong, E. (2005). *Integrity, transparency and accountability in public administration: Recent trends, regional and international developments and emerging issues*. New York, United Nations, Department of Economic and Social Affairs.
- Ashraf, M., Cheema, F. S., Saba, T. and Mateen, A. (2017). Usability of Government Websites. *International Journal of Advanced Computer Science & Applications*, Vol. 8, No. 8, pp.163-167.
- Asiimwe, E. N. and Lim, N. (2010). Usability of Government Websites in Uganda. *Electronic Journal of eGovernment*, Vol. 8, No. 1, pp.1-12.
- Asogwa, B. E. (2011). The State of E-Government Readiness in Africa: A Comparative Web Assessment of Selected African Countries. *Journal of Internet and Information System*, Vol. 2, No. 3, pp.43-57.



- Basu, S. (2004). E-Government and Developing Countries: An Overview. *International Review of Law, Computers & Technology*, Vol. 18, No. 1, pp.109-132.
- Bertot, J. C., Jaeger, P. T. and Grimes, J. M. (2010). Using ICTs to Create a Culture of Transparency: E-Government and Social Media as Openness and Anti-Corruption Tools for Societies. *Government Information Quarterly*, Vol. 27, No. 3, pp.264-271.
- Bilal, M., Yu, Z., Song, S. and Wang, C. (2019). Evaluate accessibility and usability issues of China and Pakistan government websites. In *2019 2nd International Conference on artificial Intelligence and Big Data (ICAIBD)* (pp.316-322). IEEE.
- Colesca, S. E. (2009). Understanding Trust in E-Government. *Engineering Economics*, Vol. 3, No. 63, pp.7-15.
- Daniel, O. A., Oludele, A., Baguma, R. and Weide, T. (2011). Cultural Issues and their Relevance in Designing Usable Websites. *International Journal of Innovative Technology & Creative Engineering*, Vol. 1, No. 2, pp.20-29.
- Dingli, A. and Cassar, S. (2014). An Intelligent Framework for Website Usability. *Advances in Human-Computer Interaction*. Advance Online publication. <http://dx.doi.org/10.1155/2014/479286>
- El-firjani, N. F. M., Elberkawi, E. K. and Maatuk, A.M. (2017). A Method for Website Usability Evaluation: A Comparative Analysis. *International Journal of Web & Semantic Technology* Vol. 8, No. 3, pp.1-11.
- Fang, Z. (2002). E-Government in Digital Era: Concept, Practice, and Development. *International Journal of the Computer, the Internet and Management*, Vol. 10, No. 2, pp.1-22.
- Fisher, J., Bentley, J., Turner, R. L. and Craig, A. (2004). A usability instrument for evaluating websites: Navigation elements. In *Australian Computer Human Interaction Conference*.
- Grimmelikhuijsen, S. G. and Welch, E. W. (2012). Developing and Testing a Theoretical Framework for Computer-Mediated Transparency of Local Governments. *Public Administration Review*, Vol. 72, No. 4, pp.562-571.
- Henriksson, A.T., Yiori Y, Belinda F, and Michael, R. M. (2006). Evaluation Instrument for E-Government Websites. *Electronic Government: An International Journal*. Vol. 7, No. 1, pp.1-16.
- Islam, M. N., Rahman, S. A. and Islam, M. S. (2017). Assessing the usability of e-government websites of Bangladesh. In *2017 International Conference on Electrical, Computer and Communication Engineering* (pp. 875-880). IEEE.
- Kaaya, J. (2004). Implementing E-Government Services in East Africa: Assessing Status through Content Analysis of Government Websites. *Electronic Journal of e-Government*, Vol. 2, No. 1, pp.39-54.

- Kamoun, F. and Almourad, M. B. (2014). Accessibility as an Integral Factor in E-Government Web Site Evaluation: The Case of Dubai E-government. *Information Technology & People*, Vol. 27, No. 2, pp.208-228.
- Karkin, N. and Janssen, M. (2014). Evaluating Websites from a Public value Perspective: A Review of Turkish Local Government Websites. *International Journal of Information Management*, Vol. 34, pp.351-363.
- Kende, M. and Quast, B. (2016). Promoting content in Africa. <https://www.internetsociety.org>.
- Khasawneh, R. T. and Abu-Shanab, E. A. (2013). E-Government and Social Media Sites: The Role and Impact. *World Journal of Computer Application and Technology*, Vol. 1, No. 1, pp.10-17.
- Kitaw, Y. (2006). *E-government in Africa: Prospects, challenges, and practice*. Lausanne: International Telecommunication Union.
- Korsten, H. and Bothma, T. J. D. (2005). Evaluating South African Government Web Sites. Methods, Findings and Recommendations (Part 1). *South African Journal of Information Management*, Vol. 7, No. 2. Advance Online publication. DOI: 10.4102/sajim.v7i2.260
- Krippendorff, K. (1989). Content analysis. In Barnouw, E., Gerbner, G., Schramm, W., Worth, T.L. and Gross, L. (Eds.), *International encyclopaedia of communication* (pp. 403-407). New York, NY: Oxford University Press.
- La Porte, T. M., Demchak, C. C. and De Jong, M. (2002). Citizen Empowerment Reforms and Openness of Government via Web Site. *Administration & Society*, Vol. 34, No. 4, pp.411-446.
- Lim, A. L., Masrom, M. and Din, S. (2013). E-Government and E-Governance Concepts and Constructs in the Context of Service Delivery. *African Journal of Business Management*, Vol. 7, No. 28, pp.2817-2826.
- Liu, Y. (2003). Developing a Scale to Measure the Interactivity of Websites. *Journal of Advertising Research* Vol. 43, No. 3, pp.207-216.
- Magayane, A. A., Mokua, J. K. and Lanrong, Y. (2016). Evaluation of the Current Status of E-Government Implementation in Tanzania: Government Websites Perspectives. *Advances in Computer Science: An International Journal*, Vol. 5, No. 2, pp.47-55.
- Makhasane, S. D. (2010). *An exploration of how secondary schools in Qacha's Nek district of Lesotho manage their finances: A case study of three schools*. (MA Dissertation). University of KwaZulu-Natal, Pinetown.
- Marlow, J., Clough, P. and Dance, K. (2007). Multilingual needs of cultural heritage website visitors: A case study of Tate Online. In *International Cultural Heritage Informatics Meeting-ICHIM07*. Toronto, Ontario, Canada.
- Mathaha, P. (2015). Identifying Key Success Factors for E-Government Implementation: The Case of Lesotho. *Technology Management*, Vol. 1, No. 7, pp.1-38.



- Mbete, J. S. and Kondoro, A. W. (2017). Accessibility and Usability of Government Websites in Tanzania. *The African Journal of Information Systems*, Vol. 9, No. 4, pp.261-279.
- Mkude, C. G. and Wimmer, M.A. (2013). Strategic framework for designing e-government in developing countries. In *International Conference on Electronic Government* (pp. 148-162). Springer, Berlin, Heidelberg.
- Mimbi, L. and Lehong, S. (2017). E-government development in Southern African development community (SADC) countries: A comparative perspective. *African Conference on Information Systems & Technology (ACIST)*. Cape Town, South Africa, 10 – 11 July 2017.
- Mutula, S. M. (2002). Africa's Web Content: Current Status. *Malaysian Journal of Library & Information Science*, Vol. 7, No. 2, pp.35-55.
- Mutula, S. M. (2008). Comparison of sub-Saharan Africa's E-government Status with Developed and Transitional Nations. *Information Management & Computer Security*, Vol. 16, No. 3, pp.235-250.
- Nuridin, N. and Aratusa, Z. C. (2020). Benchmarking Level Interactivity of Indonesia Government University Websites. *TELKOMNIKA Telecommunication, Computing, Electronics and Control*, Vol. 18, No. 2, pp.853-859.
- Nygren, K. G. (2009). The Rhetoric of E-government Management and the Reality of E-government Work: The Swedish Action Plan for E-Government Considered. *International Journal of Public Information Systems*. Vol. 2, pp.135-146.
- Oni, A. A., Okunoye, A. and Mbarika, V. (2016). Evaluation of E-Government Implementation: The Case of State Government Websites in Nigeria. *The Electronic Journal of E-government*, Vol. 14, No. 1, pp.48-59.
- Palla, J. and Zotos, Y. (2017). Does the Level of Website Interactivity Affect Consumers' Behavior and Online Advertising Effectiveness? *International Journal of Journalism & Mass Communication*. Advance Online publication. <https://doi.org/10.15344/2349-2635/2017/131>
- Parajuli, J. (2007). A Content Analysis of Selected Government Web Sites: A Case Study of Nepal. *The Electronic Journal of e-Government*, Vol. 5, No. 1, pp. 87-94.
- Pina, V., Torres, L., and Royo, S. (2007). Are ICTs Improving Transparency and Accountability in the EU Regional and Local Governments? An Empirical Study. *Public Administration*, Vol. 85, No. 2, pp.449-472.
- Rorissa, A. and Demissie, D. (2010). An Analysis of African E-Government Service Websites. *Government Information Quarterly*, Vol. 27, No. 2, pp.161-169.
- Rosen, D. and Purinton, E. (2004). Website Design: Viewing the Web as a Cognitive Landscape. *Journal of Business Research*, Vol. 57, No. 7, pp.787-794.
- Shi, S. W. and Zhang, J. (2014). Usage Experience with Decision Aids and Evolution of Online Purchase Behavior. *Marketing Science*, Vol. 33, No. 6, pp.871-882.

- Shneiderman, B. (2000). Universal Usability. *Communications of the ACM*, Vol. 43, No. 5, pp.85-91.
- Srivastava, N. (2017). Assessing Usability of E-Governance Websites for Indian Farmers. *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 5, No. 1, pp.1092-1098.
- Thompson, K. M., McClure, C. R. and Jaeger, P. T. (2003). Evaluating federal websites: Improving e-government for the people. In George, J.F. (ed.). *Computers in Society: Privacy, Ethics & the Internet*. Upper Saddle River, N.J: Prentice-Hall.
- UNICEF. (2016). *The impact of language policy and practice on children's learning: Evidence from Eastern and Southern Africa 2016*. New York: UNICEF.
- United Nations. (2002). *Benchmarking e-government. A global perspective: Assessing the progress of the UN member states*. New York, United Nations, Department of Economic and Social Affairs, Division for Public Administration and Development Management Administration & American Society for Public Administration ASPA.
- United Nations. (2014). *United Nations e-government survey: The future we want*. New York: United Nations.
- Venkatesh, V., Hoehle, H. and Aljafari, R. (2014). A Usability Evaluation of the Obamacare Website. *Government Information Quarterly*, Vol. 31, No. 4, pp.669-680.
- Verkijika, S. F. and De Wet, L. (2018a). A Usability Assessment of E-Government Websites in Sub-Saharan Africa. *International Journal of Information Management* Vol. 39, pp. 20-29.
- Verkijika, S. F. and De Wet, L. (2018b). Quality Assessment of E-Government Websites in Sub-Saharan Africa: A Public Values Perspective. *The Electronic Journal of Information Systems in Developing Countries*, Vol. 84, No. 2, pp.1-17.
- West, D. M. (2005). Equity and Accessibility in E-Government: A Policy Perspective. *Journal of EGovernment*, Vol. 1, No. 2, pp.31-43.
- World Bank. (2009). *E-government primer*. Washington, DC: World Bank.
- World Bank Group. (2017). 'Working for a world free of poverty'. Retrieved on 12 February 2017, from <http://www.worldbank.org/en/country/lesotho/overview> on 20 November 2020.
- Yanqing, G. (2010). E-government: Definition, goals, benefits and risks. In *2010 International Conference on Management and Service Science*. Wuhan, China, 24 - 26 August 2010.

