Expanding Communication Channels between Government and the Citizenry: Role of Social Media

Nestory Maro
Business and Information Technology
The University of Dodoma
Dodoma, Tanzania

Deo Shao
Virtual Education Technology and Applications
The University of Dodoma
Dodoma, Tanzania

ABSTRACT
Social media are not just a great avenue for finding old friends or read gossips trending in the streets but also an incredible tool for expanding communication channel between citizen and government. The use of social media has brought revolutionary changes to our society irrespective of age, race and geographic boundary. The use of social media has provided room for marginalized voices to be heard by their government. However, there has been a delay by the government to deal with cases reported in social media. This paper explores the use of social media as a forum for promoting citizen engagement in different matters around their societies. The results show citizens interact positively with the posts published in social media. Politics, Government budget, Constitution and social issues are main agendas discussed in social media. The study also reports two cases, which triggered government action after appearing on the social media. In general the use of social media is promising for improved government accountability and transparency in Tanzania.

General Terms
Government, Technology

Keywords
Social media, Social networks, Web 2.0, NodeXL, Social Network Analysis, web mining.

1. INTRODUCTION
Over the past few years the world of technology has witnessed an undisputed growth of web technologies ranging from computer based to mobile-based applications. The emergence of Social media, popularly known as Web 2.0 has been a central topic in the information world.

Helou and Rahim [1]; define Online Social Networks (OSNs) as virtual communities which allow people to connect and interact with each other on a particular subject or to just “hang out” together online. Social media sites around the globe provide users with a number of options to interact such as entertainment, sharing, and games [2]. OSNs provide their users with a better avenue for collaboration, participation, empowerment, and time. They provide the ability for users to connect and form communities to socialize, share information, or to achieve a common goal or interest[3]. Moreover, OSNs create a platform for users to express freedom of opinion to anyone to inexpensive publish or broadcast information in near-real time.

OSNs use by the government could re-invent government to citizen communication channel and hence foster transparency and accountability. Accountability [4] here is defined as an important value of good governance that puts the mechanism to ensure effectiveness and efficiency of firm’s performance. The protests in Arabic countries such as Egypt was to a great extent connected to the use of social networks [5] and the leakage of diplomatic cables through Wiki leaks [6] forces governments to pay attention and be accountable to what is happening in OSNs. Bertot et al[7] mentions three key advantages for government to use OSNs as (1) promoting democratic participation and engagement; (2) facilitating co-production of materials between governments and citizen; and (3) crowd sourcing solutions and innovations for public betterment.

The growing number of social media subscribers opens doors for government to tap on OSNs to engage citizens in meaningful ways in order to understand public sentiment. Statistics recorded last year shows that 90.7 percent of the online presence in Tanzania prefers Facebook, followed by 3.52 percent of the population who are using the Internet for reading purpose, twitter users stands at 2.44 percent and YouTube left with 1.78 percent while 0.4 percent of them are using linked-in[8]. This could be attributed by the fact that internet and mobile technology services subscriptions in Tanzania has been skyrocketing in few last years [9].

However, the existences of OSNs have made the political environment in many countries controversial and not well understood [10]. There are arguments as to whether social media can really influence, or even encourage, digital democracy and citizenship [2].

There are cases where OSNs have called for action from governments to act upon some of the issues that OSNs present to the public services, which help towards more open and transparent government processes and activities to the citizens. This tendency can expand the government to citizen communication channel, for example assume if these practices were to be adopted by the government. Citizens post cases on OSNs for instance, water pipeline supply leakage, electricity grid vandalism, or government official performing unethical conduct and other issues being reported and fixed.

Unfortunately there are very few examples of this happening so far. This study reveals the citizen’s engagement on various issues through OSNs in Tanzania and also provides evidences of the government actions as a response towards what is being discussed on OSNs. The study explores the role of social media in expanding government and citizen communication channel through OSNs.

2. METHODOLOGY
A comprehensive literature review was conducted to assess the state of art of the role of social media in promoting citizen
engagement and government transparency. A structured questionnaire was then used to assess the state of affair by asking the social media users what do you they discuss in the social media.

Content analysis, and web site analysis was then performed whereby a Social Network Analysis (SNA) tool NodeXL [11] [12] was used to crawl tweets from Facebook which is a social media mostly used in Tanzania [8] to get multiple perspectives on citizens engagement and government transparency and accountability on social networks. The sentimental analysis of the tweets was performed following the steps proposed by Figure 5 below [13].

Keywords such as “Katiba” and “Bajeti” were used to cluster the tweets in categories. Descriptive analysis using SPSS were performed to determine the patterns in the crawled tweets.

3. RELATED WORKS
Scholars and practitioners in public policy and administration have paid considerable attention to the potential of social media in increasing citizen trust in government.

Kalita and Manjit [14], explored the use of social media by the government of India. The study analyzed how various government agencies in India are using social media to connect with citizens. The Department of Electronics and Information Technology of the Government of India has formalized the use of social media by proving the guideline of how agencies can leverage on social media [15].

Panagiotis and Steven [16], gives the overview of how the UK government is exposting twitter to enhance the openness while expanding the communication with their citizens. The findings in the study report a high level of maturity of Twitter in the UK local government.

Khasawneh and Abu-shanab [17], explore the impact on social media in e-government initiative, the paper report positive engagement of the citizens in government matters and suggest social media as a channel for e-government to be realized.

4. RESULTS AND DISCUSSIONS

4.1 Government agencies in social media
There has been few government agencies presence in social media. Despite these few existence, there have been few followers compared with the large number of social network users in Tanzania. Moreover, these presences are not verified by the social media service providers, therefore could not be trusted by the users. Table 2 shows the list of the government agencies in social media and number of their respective followers.

Table 1: Government agencies in social media (Facebook and Twitter)

<table>
<thead>
<tr>
<th>Government Agency/Ministry</th>
<th>Number of followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>RITA (Registration, Insolvency and Trusteeship Agency) in Tanzania</td>
<td>35,301</td>
</tr>
<tr>
<td>EGovernment agency of Tanzania</td>
<td>21</td>
</tr>
<tr>
<td>Tanzania Meteorological Agency</td>
<td>871</td>
</tr>
<tr>
<td>Tanzania Forest Service Agency</td>
<td>746</td>
</tr>
<tr>
<td>Tanzania National Roads Agency</td>
<td>744</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government Agency/Ministry</th>
<th>Number of followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanzania Government Flight Agency</td>
<td>24</td>
</tr>
<tr>
<td>Tanzania Ministry of Construction</td>
<td>2462</td>
</tr>
<tr>
<td>Tanzania Ministry of Education</td>
<td>5590</td>
</tr>
<tr>
<td>Tanzania Ministry of Law and Constitution</td>
<td>1202</td>
</tr>
</tbody>
</table>

4.2 Agendas discussed in Social Media
The tweets crawled with NodeXL on Facebook from 1st April 2014 to 19th October 2014 155 tweets indicated that the citizens use social media for various reason ns. However, we classified these tweets into categories based on their contents and the following were the results. Majority of the citizens post and discuss about politics as shown in Figure 1 below. This involves 31% commenting on various issues about Tanzanian politics in general, while 34% of the posts were about the Tanzanian Constitution since this was the time when the Tanzanian Constitution assembly was discussing the new constitution. The rest of the posts 31% and 2% were discussing about Social issues and National Budget presented to the national parliament respectively.

Figure 1 Citizens discussion in OSNs

4.3 Gender Distribution on Social Media
From the data collected by NodeXL from face book, majority of the people participating in social media are men. Around 84% of the people who posted comments on crawled posts were men, as shown in Figure 2. The remaining percent were women. This shows how low the participation of women on OSNs is, hence calling for more efforts to empower women in engaging in issues of public interest.

Figure 2 Participation by gender
4.4 Government response
Figure 3 depicts that, majority of the respondents, amounting to 43% consider the government response on issues raised on OSNs to be Average. Very few consider the actions fast. However, majority of the respondents who filled the questionnaire agree that the presence of government Ministries, Departments and Agencies could bring more benefits to both parties and thus have a common understanding of how the country is run.

**Government response towards posted issues on OSNs**

![Government response chart](image)

**Figure 3 Government response**

4.5 Credibility of the twitted posts
Insipite of the frequent use of OSNs, users trust on the information posted is still not satisfactory. On this regard 92%, Figure 4, have moderate trust on the posted information. This may be attributed by the fact that most of the content posted on OSNs are user generated. Very few MDAs have trusted official pages on OSNs. Therefore a need to make their pages official (certified) is vital and also encouraging other users to post issues that are of benefit to the society hence increasing trust to the remaining users of OSNs.

**Trust of users on tweets posted**

![Trust of users chart](image)

**Figure 4 Trust of Users**

4.6 Government accountability Case studies

4.6.1 Misconduct Traffic Polices Officers
There was a controversial picture that went viral on the OSNs showing two police officers in romantic pose while in their uniforms. This has caused the national police force of Tanzania (TPF) to withdraw their employment posts as a punishment for their conduct. This followed after the case being posted and shared in social media in a period of two weeks [18].

4.6.2 Immigration Department Hiring Saga
The government of Tanzania revoked the hiring of 200 newly employed Immigration Department officers. The unprecedented decision followed the claims, which was shared across social media pointing the serious irregularities, including nepotism, in the process of hiring the workers. The case was shared across social media in period of one month [19].

Social media play a big role in reinventing the governance by expanding the citizen feedback mechanisms. Studies indicates that ICTs and social media, particularly when coupled with planned e-government initiatives, can provide a substantial foundation for the development of transparent and open government [20].

5. CONCLUSION
Improved accountability and responsiveness are critical for reaching the goals of eliminating extreme poverty and promoting shared prosperity with a focus on improving the lives of the most vulnerable and marginalized groups in society.

The social media have the potential of enhancing transparency and foster new cultures of openness both by giving
Governments new tools promote transparency and reduce corruption and by empowering members of the public to collectively take part in monitoring the activities of their governments.

The use of social media provide complementary communication and participation channels for citizens to access government and government officials effectively and to make informed decisions; that is, new types of citizen-government interaction have emerged, utilizing social media.

In fact, social media in government can significantly increase transparency and interactivity between citizens and governments through enhanced civic engagement in government affairs. In turn, increased transparency can increase accountability and eventually reduce the magnitude of the corruption.

The government should realize and formalize social media as means of citizen engagement first by leveraging on the great adoption of mobile and Internet technologies.

This study calls for future work to measure quantitatively and qualitatively the impact of social media in promoting good governance.

6. ACKNOWLEDGMENTS

Our thanks go to Mr Seif Hassan for advising in the sentimental analysis.

7. REFERENCES


