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Recommended Citation

Fashoro, Ifeoluwapo and Barnard, Lynette, "Social Computing as an E-Participation Tool in South Africa: An Exploratory Study" (2016). *CONF-IRM 2016 Proceedings*. 19.

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61. Social Computing as an E-Participation Tool in South Africa: An Exploratory Study

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Abstract

Social Computing technologies have become prevalent in all spheres of life; businesses, individuals and governments are adopting these technologies at a fast pace. These technologies are interactive and collaborative and therefore present an opportunity to bridge communication gaps between governments and citizens. The main objective of this paper is to explore the use of Social Computing as a tool for public participation in South Africa. Social Computing presents local government with the opportunity to reach out to a larger number of citizens and involve them in policy making while providing them with information relevant to policy making, improve service delivery, improve accountability and transparency. This is especially true with the increase in the number of South African citizens on Social Computing platforms.

Keywords

Social computing; Public Participation and Engagement; E-participation

1. Introduction

Social Computing represents a shift in the nature of computing over the past decade with social interaction and communities becoming a new standard in computing (Parameswaran & Whinston, 2007). Technology is no longer used for computational purposes only but also supports human socialisation (Erickson, 2014). Social Computing enhances social interaction, enables content sharing, allows collaboration, enables dissemination of information and propaganda and assimilates collective bargaining power (Parameswaran & Whinston, 2007). Citizens are empowered to express creativity and are given a voice via Social Computing. Subsequently, organisations and governments are experiencing a shift in power, with changes coming from the bottom up (Parameswaran & Whinston, 2007).

With regards to South Africa, the increase in the use of Social Computing tools provides an opportunity for their adoption by the government for the purpose of public participation. Although public participation has been enshrined in the South African constitution and legislations, participatory efforts are reportedly falling short of their goal (Friedman, 2006; Van Belle & Cupido, 2013). Citizens are not clearly informed of the government's efforts and the government lacks local knowledge on community necessities (Piper & von Lieres, 2008). The purpose of this paper is to explore the use of Social Computing as a tool for public participation and engagement in South Africa.

This paper is a work in progress paper based on an ongoing research project which aims to address the following question: How can Social Computing be used as a tool for public

participation and engagement by the South African government? The rest of the paper is structured as follows: First, existing literature on Social Computing, Participation and Engagement, and the role of Social Computing in public participation are reviewed. This is followed by a description of the proposed research methodology to be used in the study.

2. Literature Review

2.1 Social Computing

In its simplest form Social Computing enables social behaviour through Information and Communication Technologies (ICTs) and involves humans working together in a computation process. Social Computing is defined as a group of technologies ‘that facilitate collective action and social interaction online with rich exchange of multimedia information and evolution of aggregate knowledge’(Parameswaran & Whinston, 2007). It appeals to the innate nature of humans to interact in a community; it creates and strengthens connections and enables meaning and insight to be derived from these interactions (Erickson, 2014). Social Computing technologies include Social Networking Sites, Social Tagging and Bookmarking Systems, Collaborative Filtering Systems, Wikis, and Blogs. These technologies are associated with Web 2.0 which is known as the second generation of the Internet (Ali-Hassan & Nevo, 2009). Social Computing is thus sometimes referred to as ‘Web 2.0’.

Some characteristics of Social Computing platforms are decentralized organisation, highly dynamic content, a bottom-up structure that relies on peer review, ratings and feedback to determine preferred content, and a locus of control that is closer to the user (Parameswaran & Whinston, 2007). It is also characterised by user-generated content with its value increasing with the number of users contributing (Ali-Hassan & Nevo, 2009). This characteristic describes the network effect of Social Computing platforms.

Social Computing enables bi-directional communication between citizens and the government, co-creation of public services, gives a voice to previously ignored and disadvantaged groups such as the younger generation, reduces traditional barriers to participation and offers a cost effective method of engagement (Bertot, Jaeger, Munson, & Glaisyer, 2010; United Nations, 2014). It is an enabler in the shift towards an open, collaborative and cooperative government. Social Computing has been identified as a driving force behind recent transformation in public participation and engagement (Chun, Sandoval, & Arens, 2011).

2.2 Public Participation and Engagement

Public participation and engagement describe the involvement of citizens in aspects of government. Participation and engagement is described as the ‘involvement of citizens in a wide range of administrative policy-making activities, including the determination of levels of service, budget priorities, and the acceptability of physical construction projects, in order to direct government programmes towards community needs, building public support, and encouraging a sense of cohesiveness within society’ (Fox & Meyer, 1996). This definition demonstrates the different degrees of participation and engagement; ranging from simply voting to citizens actively contributing to policy making.

Participation and engagement, when done properly, can provide disadvantaged and previously ignored citizens the opportunity to be heard. This is possible by providing multiple mechanisms such as ICTs that appeal to younger generations and technology savvy citizens and traditional channels such as public meetings in areas where citizens are marginalised. It makes democracy inclusive and accessible by broadening the range of citizens involved in governance (Chun et al., 2011; Nam, 2012). Citizens are equipped to provide the government with ideas, collective knowledge and population expertise, and communicate to government about their needs and important issues (Chun, Shulman, Sandoval, & Hovy, 2010; Mzimakwe, 2010). Consequently, governments' focus on significant projects and policies is guided by citizens thus improving government decision-making as they become more aware of what occurs at grass-root levels.

Participation and engagement can be challenging to implement due to factors such as poor implementation of policies, poverty, lack of education, time pressure, and poor design of public spaces (Denhardt, Terry, Delacruz, & Andonoska, 2009; Piper & von Lieres, 2008). Poverty makes participation and engagement less of a priority to the poor because they struggle with basic needs and do not have time or money to travel to public deliberation venues (Denhardt et al., 2009). A lack of education and self-confidence make people less willing to voice their opinions (Denhardt et al., 2009). The process of public participation in policy making is usually long and drawn out and this presents a challenge to governments (Denhardt et al., 2009). Due to the time sensitive nature of policies and reforms, it becomes difficult to include citizens in policy deliberation. Poor design and management of public spaces often lead to the amplification of social inequalities when disempowered groups are placed together with political elites who try to monopolise these meetings (Nam, 2012; Piper & von Lieres, 2008).

ICT has been identified as a way to overcome some of these challenges and this has led to the term *E-participation* (Phang & Kankanhalli, 2008). ICT enables communication on a platform that is interactive, inclusive and cost effective (Coleman & Gøtze, 2002). The prevalence of the Internet and Social Computing have largely contributed to the increased focus on the use of E-participation in recent years.

2.3 The Role of Social Computing in Public Participation

Social Computing has the ability to alter the way governments and citizens interact, source for solutions and deliver services (Bertot, et al., 2010). Traditional channels of participation involving time-consuming, face to face meetings have led to a growing disinterest from citizens (Abelson et al., 2003). However, Social Computing transcends the time and space barriers of traditional channels and allows citizens to participate at their convenience; anytime and anywhere (Phang & Kankanhalli, 2008). The interaction between governments and citizens using Social Computing is open and immediate; governments provide information on a platform citizens prefer and citizens can respond directly by commenting, tagging, contributing content and sharing (Bonson, Torres, Royo, & Flores, 2012). Since these technologies are characterised by user-generated content, citizens can be encouraged to produce content by sharing ideas, providing feedback and sharing their experiences.

Information and knowledge have been used as tools to influence political debates by restricting dissemination to all citizens (Gaventa & Cornwall, 2001). Citizens with more information and knowledge are given priority in public spaces and have more influence during deliberations. With Social Computing, information and knowledge can be dispersed to a larger audience therefore empowering more citizens to engage in political debates. Citizens are also provided

with a platform to share and form opinions as well as articulate and debate differing views using (Shirky, 2011). The traditional channels of public participation have been criticised as unrepresentative of the citizenry due to the need to carefully select participants as a result of space restrictions (Abelson et al., 2003). This has led to an exclusion of certain voices from the political debate as well as empowering the political elites who have access to public participation spaces. Social Computing expands the voices involved in political debates and deliberations.

Social Computing enhances service delivery by including citizens in the service delivery process. Citizens collaborate with governments in sourcing solutions to service delivery issues (Bertot, et al., 2010). Crowdsourcing is a possibility due to the large number of users on Social Computing platforms; expert opinions can be sought and innovative solutions formulated in less time and with less money (Nam, 2012). Solutions and policies created via crowdsourcing have the benefit of appealing to the majority of the community since they reflect citizens' opinions and are backed by the power of the crowd (Nam, 2012; Sæbø, Rose, & Nyvang, 2009). Citizens and non-governmental organisations also create services for the public using Social Computing technologies; for instance, Lungisa was created as a community monitoring tool that allows the public to report service delivery issues to local government (United Nations, 2014). The role of citizens in service delivery through Social Computing is described as 'Prosumer' as they are both producers and consumers of services (Nam, 2012; Sæbø et al., 2009).

Social Computing encourages creativity and innovation by citizens and the government. In order to stimulate participation, Social Computing adoption needs to be customised to suit the unique characteristics of the country and its citizens instead of taking a one size fits all approach (Mickoleit, 2014). Some countries, for instance, analyse citizens' personal social media pages to get an idea of policy agendas important to the public whereas other countries source for this information by asking citizens to post on the government's official social media platform. Citizens are enabled to build services for their own use using data available from the government. Social Computing also allows governments to experiment and evaluate services in collaboration with citizens before they are rolled out and be innovative in their approach to Social Computing adoption (Mickoleit, 2014).

2.4 Opportunities for the Use of Social Computing for Public Participation in South Africa

The number of active subscribers on Social Computing platforms presents an opportunity for South African government to adopt it as a public participation tool. Social media uptake has been on the rise in South Africa with Facebook subscriptions increasing from 6.5 million in 2013 to 9.4 million in 2014, Twitter subscriptions increasing from 2.4 million in 2013 to 5.5 million in 2014 and Mxit subscriptions increasing from 6.5 million in 2013 to 7.4 million in 2014 (Goldstuck, 2014). Internet accessibility, especially via mobile phones is a major enabler of Social Computing adoption. Internet penetration in 2013 was 48.9%, up from 41% in 2012 and mobile phone subscriptions are reported as 146 subscriptions per 100 inhabitants in 2013, up from 131 subscriptions in 2012 (International Telecommunication Union, 2014a, 2014b).

Social Computing via the use of mobile technologies provides a way of including citizens that do not have high speed Internet in their homes in the participation process. In 2010, Nielsen reported 76% of South African adults owned mobile phones with 85% accessing Facebook using their phones (Hutton, 2011). As part of the E-government initiatives undertaken by the South

African government, multipurpose community centres, public information terminals and telecentres have been established in most communities. These centres provide Internet access to the public who have no access at home or through mobile phones (Mutula & Mostert, 2010).

Additionally, South Africa has legislative frameworks that make participation an obligation. Social Computing can be leveraged as a tool to meet the government's legal requirements. These frameworks described by Friedman (2006), Mzimakwe (2010) and Reddy & Govender (2013) are listed below:

- The South African constitution embraces both representative and participatory governance. Section 152 of the constitution emphasises accountability and encourages citizen involvement in matters of the local government. The constitution stipulates the participation of citizens in policy making regarding the provision of public service.
- The 1997 White Paper on Transforming Service Delivery stipulates the enhancement of public participation by giving priority to citizens as customers and taking into account their views in the decision making process.
- The 1998 White Paper on Local Government commits municipalities to working with communities and civic groups to improve quality of life and developing municipal areas.
- The Local Government Municipal Structures Act 117 of 1998 deals with the establishment of ward committees in the local government. These committees provide ordinary citizens the chance to partake in the political process by representing their communities in an advisory capacity while working with the municipality.
- The Local Government Municipal Systems Act 32 of 2000 encourages municipalities to involve citizens in community affairs via public meetings such as the 'Imbizo'. 'Imbizo' is an open-ended community meeting where representatives of the government listen to concerns in the community and engage citizens in policies. Municipalities are also obliged to discuss budgets and Integrated Development Plans (IDP) with communities before these plans are developed. IDP is a strategy that helps municipalities plan future developments in their areas.

Public participation in South Africa can be enhanced through Social Computing since several opportunities that promote the adoption of these technologies by the government exist within the country. Local government municipalities need to be more effective in their use of Social Computing technologies. This study will therefore focus on developing a structured approach to implementing Social Computing in public participation efforts by municipalities. The next section of this paper will discuss the proposed methodology of the study.

3. Research Methodology

This research will be carried out using a case study methodology and a mixed methods approach. The context for the case study will be a municipality in the Eastern Cape. The current Social Computing efforts of the municipality will be studied, municipal workers will be interviewed and literature will be reviewed in order to develop a structured approach for public participation in South African municipalities. The survey strategy will be incorporated into the case study as a way of studying citizens' adoption of Social Computing for public participation. The outcome of the research is a model with the aim to present a structured approach towards using Social Computing as a tool for public participation in South Africa.

4. Conclusion

The purpose of this paper was to identify the role Social Computing can play in public participation in South Africa. The literature on Social Computing, public participation, and the factors that foster the use of Social Computing within South Africa indicates that untapped potential exists within the citizenry. The proposed model will aim to prove the concept that South African municipalities can access this potential.

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