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A Social Media Model for Public Participation in a South African Municipality

By

Ifeoluwapo Fashoro

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Promoter: Dr Lynette Barnard

Declaration

I, Ifeoluwapo Fashoro, hereby declare that the thesis for the degree Philosophiae Doctor is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

Ifeoluwapo Fashoro

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UNIVERSITY

DECLARATION BY CANDIDATE

NAME: _FASHORO, IFEOLUWAPO OMOLADE_

STUDENT NUMBER: _215283317_

QUALIFICATION: _DOCTOR OF PHILOSOPHY COMPUTER SCIENCE_

TITLE OF PROJECT: _A SOCIAL MEDIA MODEL FOR PUBLIC_
PARTICIPATION IN A SOUTH AFRICAN MUNICIPALITY

DECLARATION:

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned treatise/ dissertation/ thesis is my own work and that it has not previously been submitted for assessment to another University or for another qualification.

SIGNATURE: _Fashoro_

DATE: _17 OCTOBER 2018_

Acknowledgements

Summary

Social media have become the preferred method of communication for individuals, organisations and even governments. These technologies have become ingrained in our everyday lives and have changed the way we communicate, collaborate are informed of recent happenings around the world. Social media websites are reported to be the most popular around the world. In the government sphere, social media is purported as a technology that will revolutionise citizen participation, service delivery and government-citizen interactions. Accordingly, governments around the world are steadily implementing social media in a bid to meet citizens' demand for immediate and constant access to information, as well as increased opportunities to participate in government. Public participation has become an important focus area for government which could be used to effectively engage citizens and foster citizen trust.

The United Nation's E-government survey reports the presence of 125 countries on social media platforms. Despite the increased use of social media by governments, consensus among researchers is that governments need guidance on how to use social media effectively to achieve the potential benefits proposed by these technologies. Many social media adoptions by governments have been deemed as experimental; no formal action plan was designed, and many government employees are expected to learn social media use on-the-job.

The aim of this research was to investigate and propose a social media model for public participation to leverage the opportunities provided by social media and present an effective and structured approach towards public participation. The research was designed as a mixed methods research using a case study based in the Eastern Cape Province of South Africa. The research involved a survey of citizens in the selected municipality based on the Uses and Gratifications Theory, interviews with employees responsible for social media in said municipality and a contents analysis of the existing social media pages of the municipality. The model was developed from the findings of the survey, interviews and existing literature.

The implementation of the model was done in the Nelson Mandela Bay Municipality. The municipality appointed a social media champion responsible for obtaining support from top management and politicians within the municipality. Additional staff were added to the social media team and formal social media training was provided to the team. An official social media strategy was drafted and at the time of writing, needed to be approved by top management. The proposed model was operationalised within the Nelson Mandela Bay Municipality.

This research makes several contributions to the E-government and social media fields in South Africa. The major contribution is the provision of guidance for South African municipalities to implement and use social media in an effective manner to achieve public participation. The research provided a phased approach to social media implementation that eliminates ad hoc experimentation and ensures the municipality's social media activities are effective. The development of the model was based on the characteristics of the municipality and its citizens derived from the interviews and survey carried out. There are five phases in the model; Initialisation, Setup, Organisation, Institutionalisation and Maintenance. The model can be thought of as a guideline, and as such municipalities should adapt the implementation of the model to fit their organisational characteristics. The social media model will assist municipalities to determine the resources, tools and tactics to enable them to implement social media effectively, which will result in an improved engagement and participation process with citizens, and thereby foster trust.

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List of Abbreviations

ACCESS - Audience, Concept, Competition, Execution, Social Media and Sales Viability

AGIMO - Australian Government Information Management Office

BT – British Telecommunications

CASE - Computer-aided Software Engineering

CD-ROM - Compact Disc Read-Only Memory

DPLG - Department of Provincial and Local Government

DPSA - Department of Public Service and Administration

EGDI – Electronic Government Development Index

eNaTIS - Electronic National Traffic Information System

GCIS - Government Communications and Information Systems

GIS – Geographic Information Systems

ICT – Information and Communications Systems

IDP – Integrated Development Plan

IS – Information Systems

JCSE - Joburg Centre for Software Engineering

KPI – Key Performance Indicators

LSM - Living Standard Measure

MMORPG – Massive Multiplayer Online Role-Playing Games

NMBM – Nelson Mandela Bay Municipality

OECD - Organization for Economic Co-operation and Development

OGP - Open Government Partnership

PC – Personal Computer

PDCA - Plan, Do, Check and Act

POST - People, Objectives, Strategy and Technologies

ROI – Return on Investment

RSS – Really Simple Syndication

SAARF - South African Advertising Research Foundation

SARS - South African Revenue Service

TAM – Technology Acceptance Model

TOE – Technology Organisation Environment Framework

TRA – Theory of Reasoned Action

TSA - Transportation Security Administration

UK – United Kingdom

UN – United Nations

US – United States

USGS – United States Geological Survey

UTAUT - Unified Theory of Acceptance and Use of Technology

VCR – Video Cassette Recorder

Chapter 1 : Introduction

1.1 Background

Advancements in Internet technologies have changed the world we inhabit in many different ways; from the way we interact in our personal lives, the way we do business, and even the way our governments are run (Chun, Shulman, Sandoval, & Hovy, 2010; O'Reilly, 2010). Governments, the world over, have turned to Information and Communication Technology (ICT) as a way to improve the services they provide to citizens, work efficiently and effectively, engage better with citizens and achieve transparency in governance (Bonsón, Torres, Royo, & Flores, 2012; Guillamón, Ríos, Gesuele, & Metallo, 2016; United Nations, 2014). This use of ICT in government has led to what is termed "Electronic government (E-government)". The United Nations (UN), describes E-government as the use of ICT in the provision of information and public services to citizens (United Nations, 2014).

E-government has become essential to governments that want to remain competitive in the global arena due to the rising demands of demographic, economic, social and global trends (Kumar, Mukerji, Butt, & Persaud, 2007). The goal of most governments that have taken up the E-government initiative, is to adopt technologies in a bid to increase the value of services offered to citizens, reduce waiting times, cost of services and build trust with citizens through transparency (Berman, Angula, Khan, & Madisha, 2010; United Nations, 2014). This, however, seems to be a herculean task for many countries, as evidenced by the UN's 2014 and 2016 reports on E-government. Of its 193 member countries, 45% achieved an above average (above 0.5) Electronic Government Development Index (EGDI) in 2014, and this increased by 4% in 2016 (49%) (United Nations, 2014; United Nations Department of Economic and Social Affairs, 2016). In 2014, 25 countries had a very high index (between 0.75 to 1.00), increasing to 29 countries in 2016 (United Nations, 2014; United Nations Department of Economic and Social Affairs, 2016). The EGDI is a readiness index that measures a country's capacity and willingness to use ICT to deliver public services. Countries are scored on an index ranging from 0.00 to 1.00 (United Nations, 2012). The EGDI is a composite measure of three important dimensions of e-government, namely: provision of online services, telecommunication connectivity and human capacity (United Nations, 2014).

Some of the challenges faced in implementing E-government are problems of poverty, an ICT skills shortage, a digital divide, a lack of ICT infrastructure, language barriers and a lack of usability of E-government systems (Berman et al., 2010; Bertot, Jaeger, Munson, & Glaisyer, 2010a; Mutula & Mostert, 2010; Reddy & Govender, 2013). This is especially true for South Africa with its population diversity and history. South Africa has eleven official languages, and a diverse racial composition; made up of Blacks, Whites, Coloureds and Asians. According to the 2016 census, the total population is 55 653 654, with 44 891 603 Blacks, 4 516 691 Whites, 4 869 526 Coloureds and 1 375 834 Asians (Statistics South Africa, 2016). The racial composition is further divided into groups based on

languages, with the black population having nine dominant ethnic groups, and the white population predominantly made up of two groups; the Afrikaans speaking, and the English speaking groups (Finestone & Snyman, 2005). A large portion of the South African population live in rural areas with limited access to ICT infrastructure, the gap between the rich and poor is continuously increasing, and there is a shortage in ICT skills (Finestone & Snyman, 2005; JCSE, 2014; Mutula & Mostert, 2010; Thakur & Singh, 2012).

The South African government has not restricted its efforts, however, to implement E-government, despite these challenges. The South African government has recognised ICT as a tool to achieve social and economic development in the country, a way to modernise its processes and improve the standards of its service quality (Farelo & Morris, 2006; Mutula & Mostert, 2010). E-government efforts in South Africa include the introduction of a web portal that provides information on government services, policies, and legislations known as "Batho Pele Gateway", websites for some municipalities, online forms for registering births and deaths, online tax returns filing, and job portal websites. "Batho Pele" means "People First," and represents the government's efforts towards improving the accessibility and quality of services offered to citizens (Draai, 2010). These efforts have led to South Africa's ranking as one of the leading countries in relation to E-government readiness in the African region (United Nations, 2014).

One of the major foci of E-government is the involvement of citizens, which has spurred a new field of E-government, termed E-participation (Peristeras, Mentzas, Tarabanis, & Abecker, 2009; Sæbø, Rose, & Skiftenes Flak, 2008; United Nations, 2014). E-participation is a way of empowering citizens by providing them opportunities to engage with the government through ICT tools. Its focal point is increasing the ability of citizens to participate in digital governance (Sanford & Rose, 2007). E-participation has evolved with the maturity of E-government. E-participation has grown from simply providing static information on government websites, to dialoguing with citizens as a way of getting citizens involved in problem solving and policy-making (Chun, Shulman, Sandoval, & Hovy, 2010; United Nations, 2014). The introduction of ICT into the participation process has the increased benefit of enhancing inclusion by increasing the reach and range of people involved in participation, as well as by increasing the storage, analysis, presentation, and dissemination of the contributions made to policies by the public (Sanford & Rose, 2007). This is due to the availability of a centralised point of storage for these contributions.

A technological trend that has been identified in the improvement of E-participation, is social media (Bertot, Jaeger, Munson, & Glaisyer, 2010b; Nam, 2012; United Nations, 2014). Social media are a group of Internet-based applications based on the ideas and technologies of Web 2.0, enabling the creation and exchange of user generated content (Kaplan & Haenlein, 2010). Social media technologies include social networking sites, blogs, wikis, social tagging, social bookmarking, Really Simple

Syndication (RSS), and other forms of collaborative tools. According to Alexa (n.d.), the web analytic company, social media websites are some of the most visited around the world. Social media 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, citizens living in remote areas, and reduces traditional barriers to participation and offers a cost effective method of engagement (Bertot et al., 2010a; Norris, 2001; United Nations, 2014).

Governments around the world have adopted social media in different capacities in the past few years. The UN's E-government survey reported an increase in the number of governments using social media from 71 in 2014, to 152 in 2016 (United Nations Department of Economic and Social Affairs, 2016). The United States (US) government, for instance, uses a wiki, ExpertNet, to engage citizens in problem solving, and to gain expert opinions on topics they are working on (Nam, 2012). The United Kingdom (UK) government provides a service, FixMyStreet, for citizens to report and discuss local problems (Bertot et al., 2010a). Several US government agencies have profiles on YouTube, Facebook and Twitter, where they provide information to the public and engage them in conversations (Bertot et al., 2010a).

South Africa is not exempt from the social media adoption trend. South Africa had a 54% Internet penetration in 2018, up from 52% in 2016, and unique mobile phone subscriptions are reported as being 38 million subscriptions 2018 (We Are Social & Hootsuite, 2017, 2018a). Figure 1-2 provides a visual representation of these statistics. Social media uptake has also been on the rise in South Africa, with Facebook users increasing to 16 million in 2017, from 14 million in 2016. Twitter users increased to 8 million in 2017, from 7.7 million in 2016, YouTube users increased to 8.7 million users in 2016, from 8.2 million in 2015, and LinkedIn has 6.1 million subscribers (BusinessTech, 2017; Wronski & Goldstuck, 2016). South Africans are adopting the Internet and social media at a fast rate, and are presenting the government with an opportunity to also adopt social media as well.
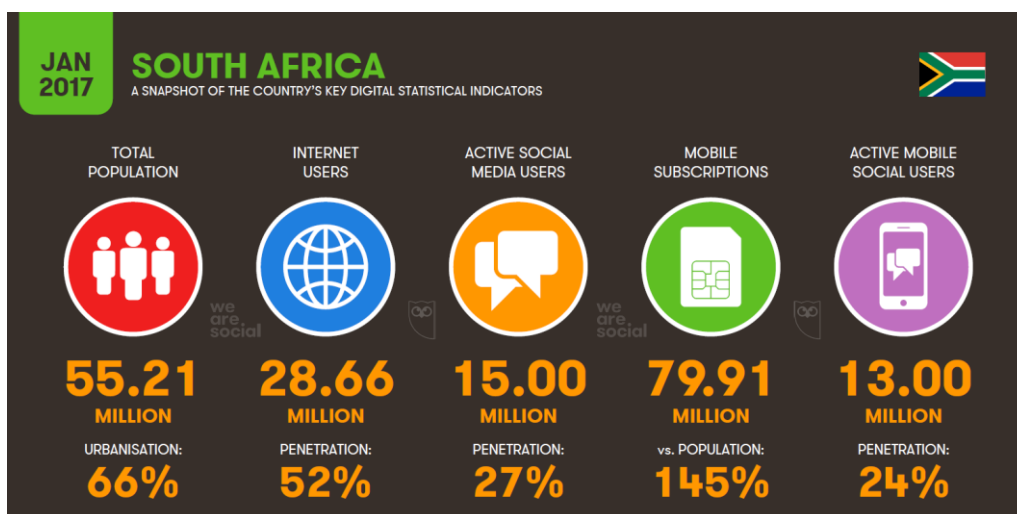
Figure 1-1: South African Digital Landscape 2017 (We Are Social & Hootsuite, 2017)
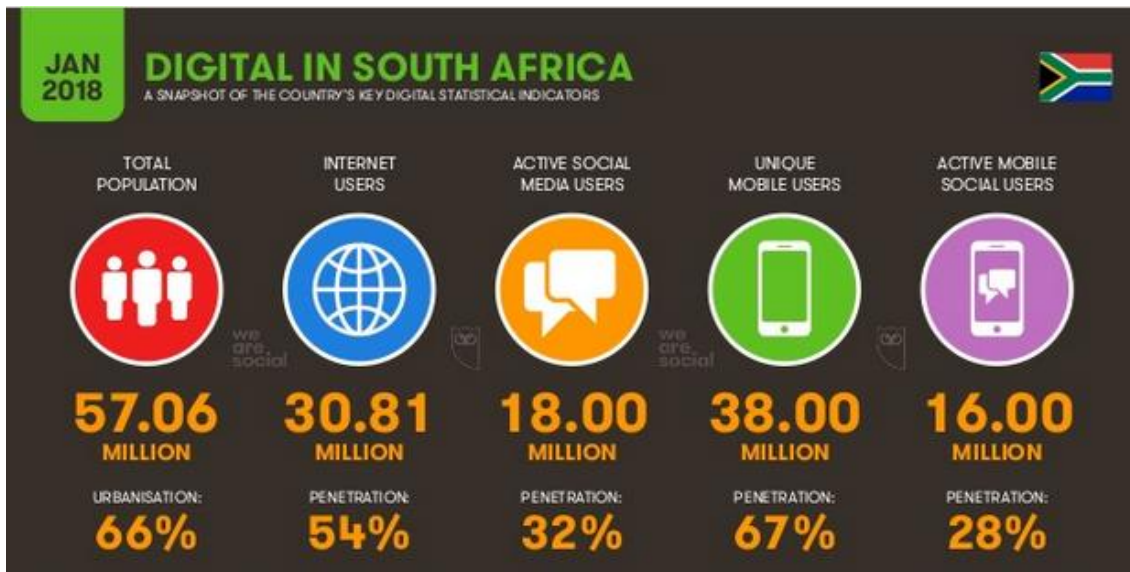
Figure 1-2: South African Digital Landscape 2018 (We Are Social & Hootsuite, 2018b)

The national government currently has a presence on social media platforms such as Twitter, Flicker, Facebook and YouTube, and uses other technologies such as RSS. Several municipalities have a presence on social media platforms, and some of them have set up blogs to engage the public (Van Jaarsveldt & Wessels, 2011). In Cape Town, a service called "Lungisa" has been deployed as a community reporting and monitoring tool (United Nations, 2014).

In spite of the South African government's efforts towards participation and engagement, the public remains dissatisfied, and its E-government performance is waning. There seems to be a disconnection between the government and the citizens. Although the number of public protests in the country are reportedly reducing since 2014, when it was at its highest since 2007, with 218 protests, these protests cover wider areas, last longer and have become increasingly violent (Chigwata, O'Donovan, & Powell, 2017; Powell, O'Donovan, & de Visser, 2014). In 2017, there were 123 protests, less than the 170 protests in 2016 (Dullah Omar Institute, 2018). Citizens are complaining about being ignored by the government, and are demanding better service delivery (Chigwata et al., 2017; Piper & von Lieres, 2008; Powell et al., 2014; Thakur & Singh, 2012). Meyer (2007) studied users' E-government use in South Africa and found most were not satisfied with the services provided. Twinomurinzi, Phahlamohlaka, and Byrne (2012) stated that most government efforts towards participatory governance using ICTs are unsuccessful. Although the UN's survey shows an improvement in South Africa's EGDI readiness index in 2016, the country's E-government initiatives are deemed ineffective by citizens (United Nations Department of Economic and Social Affairs, 2016).

The South African government needs a way of communicating with its citizens, engaging them in discussions about service delivery, and allowing them to participate in the decision-making process.

Social media could provide this opportunity for the government to connect with, and build trust, among citizens. The potential of social media is enhanced due to its increasing adoption in South Africa.

1.2 Problem Statement

Social media provides many benefits to E-government, especially as a means to provide cost effective ways for public participation. It has not been leveraged in a coordinated manner, however, by the South African government. While other countries seem to have seamlessly included social media in the engagement process, the South African government has struggled to take advantage of the opportunities provided by social media. For instance, in the US, town hall meetings have been successfully held using social media, and in France and Latvia, the government votes for issues to be raised in parliament based on proposals made by the public on social media websites (Mergel, 2013d; Mickoleit, 2014).

The current approach to implementing social media and E-government in South Africa appears disorganised, and without a specific plan of action (Nkomo, 2012; South African Local Government Association, 2011). There is no consolidated effort towards adoption; some municipalities and provincial governments have adopted social media in one form, or another, while others have no presence on social media. While several municipalities and provinces have adopted social media as a way of engaging the public, it is not certain that they are effectively achieving their goals. A municipality's mere presence on social media is not sufficient in ensuring effective public participation (Gálvez-Rodríguez, Sáez-Martín, García-Tabuyo, & Caba-Pérez, 2018; Mainka, Hartmann, Stock, & Peters, 2015). Mawela (2017) and Van Jaarsveldt and Wessels (2011) explored the adoption of social media in the South African government and found it inadequate. The authors proposed further research into the optimal use of social media by the South African government.

Researchers have called for the development of models, frameworks and strategies for using social media technologies in E-government (Bertot, Jaeger, Munson, et al., 2010a; Chun, Sandoval, & Arens, 2011; Chun et al., 2010; Mainka et al., 2015; Nam, 2012). Hao, Zheng, Zeng, & Fan (2016) citing Mergel (2013a, 2013c) remarks about the lack of guidance for government officials on how to use social media effectively. Currently, existing models such as the Open Government Maturity Model for social media-based public engagement (Lee & Kwak, 2012), focus on accessing the maturity levels of social media implementation. Other frameworks focus on the measurement of impact of social media in government (Mergel, 2013a, 2014). There is a lack of research on the process of implementing social media in government organisations. There seems to be an assumption that the implementation process can be learned on-the-job since social media technologies are common place in the lives of individuals and businesses.

The existing models and frameworks are targeted towards national government agencies, not the municipal government. This means the models are designed to address the specific purpose of these agencies. The development of a social media model for public participation at the municipal level of

government will therefore be the undertaking of this study. This study will focus on public participation at the municipal level, because it is more effective at the government level, closest to the citizens. Officials at this level have a better understanding of what is required by the citizens (Bagui & Bytheway, 2013; Bonsón, Royo, & Ratkai, 2017; Ellison & Hardey, 2014).

A model provides the basis for understanding a behaviour, thinking about, or describing a complex system, problem or situation (MacKenzie, 2003). It is a symbolic representation of relationships among variables and concepts (Otte & Carpenter, 2009). In terms of this research, a model will present the tools, processes, strategies, challenges and best practices for using social media for public participation.

The main research problem for this study is therefore:

South African municipal governments are beginning to use social media to engage citizens. However, the effectiveness of their social media adoption has not been determined. No structured approach towards adoption, especially in leveraging the opportunities provided by social media in engaging citizens, and offering them opportunities to participate in government, could be found.

1.3 Thesis Statement

A model for the facilitation of public participation in the South African municipal government will be investigated, and developed. Existing processes, strategies, and tools applied in other countries, and organisations, will be studied, and those relevant will be integrated into the model to be developed. The proposed model will be applied in a case study in a selected municipality.

The thesis statement for this research is therefore:

A model can be developed to leverage the opportunities provided by social media and present an effective and structured approach towards public participation in selected municipal E-government initiatives in South Africa.

1.4 Research Objectives

The purpose of this research is to develop a social media model that will facilitate public participation in a selected South African municipal government. The model aims to present a structured approach towards using social media as a tool for public participation. In order to achieve the purpose of this research, the main objective of the research is:

RO_M: *To develop a social media model that will facilitate an effective and structured approach to public participation in a selected South African municipal government.*

RO_1: To understand the current implementation of public participation in South Africa.

RO_2: To investigate the use of social media for public participation through cases in other countries and organisations for best practice identification.

RO$_3$: To understand the use of social media in the selected municipality through interviews and Uses and Gratifications Theory surveys.

RO$_4$: To develop a social media model for public participation in South African municipal government.

RO$_5$: To determine what measures and metrics will be used to evaluate the effectiveness of the developed model.

RO$_6$: To evaluate the developed model using measures and metrics determined in RO$_5$.

1.5 Research Questions

This study will be answering the following question based on the problem identified:

RQ$_M$: *How should social media be used for facilitating an effective and structured approach to public participation in municipal E-government initiatives in South Africa?*

The following sub-questions have been identified, and will be answered with the purpose of answering the main research question:

RQ$_1$: To what extent is public participation implemented in South Africa?

RQ$_2$: How can social media be used for public participation?

RQ$_3$: What are the factors that affect the public's adoption of social media for engaging with the municipal government?

RQ$_4$: What are the best practices in the use of social media for public participation?

RQ$_5$: What elements should be included in a social media model that facilitates an effective and structured approach to public participation?

RQ$_6$: How should the effective use of social media by the municipal government be measured?

RQ$_7$: To what extent is the social media model effective in enabling public participation?

1.6 Research Methodology and Design

The purpose of research is to answer questions, or provide solutions, to problems, and, in order to do this, data needs to be collected (Saunders & Tosey, 2013). The choice of methods for collecting and analysing this data is based on research philosophies, approaches, and strategies. The combination of these terms has been referred to as the "Research Onion" by Saunders, Lewis, and Thornhill (2009). The research design presents the overall approach that will be taken in testing the thesis statement and answering the research questions (Hofstee, 2006; Saunders et al., 2009). According to Saunders, Lewis, and Thornhill (2009), the research design is represented by the inner three layers of the research onion, that is; the research strategies, time horizons and data collection methods.

This research will be carried out using a mixed methods approach that will include the Survey and Case Study strategies. The research design and research strategies will be explicitly discussed in Chapter 2.

1.7 Scope and Constraints

This research will aim to facilitate public participation by means of social networking sites in South African government context, within the Eastern Cape, through the development of a social media model. The research will be limited to the municipal government, as the municipal government is the government level closest to the citizens. A single municipality will be selected, and the selected municipality should have an existing presence on social media platforms. Possible constraints to the research could be the low penetration of Internet around South Africa, and a lack of support from the identified municipal government.

1.8 Risks

Possible risks associated with this research are linked to the context of the study. The study will be done in the Nelson Mandela Bay Municipality which, at the time of the study (2015 – 2018), does not have individuals permanently appointed to a specific role. There are continuous personnel changes and reshuffling within departments. This constant change might make it difficult to identify the right contact person within the municipality. There is also a risk of the research not being prioritised by these contacts, because they are in the role temporarily, and therefore cannot make permanent decisions. Another risk identified, is a lack of support from municipal officials, who might be reluctant to work with an outsider.

1.9 Chapter Outline

Chapter 1- Introduction: This chapter will contain background information on the topic area, and introduce the research problem. The chapter will include the problem statement, research questions and objectives of the research. The scope and constraints will be presented.

Chapter 2 - Research Design: The methodology for this research, its appropriateness and how it will be used to achieve the aims of this research, will be discussed in this chapter.

Chapter 3 & 4 - Literature Review: Chapter 3 will explore E-government, participation and engagement, and E-participation in detail. These concepts will be defined, and their current implementation in South Africa will be discussed.

Chapter 4 will focus on **social media**. The use of social media in E-government will be explored in a bid to identify the tools and technologies that will best support public participation. The opportunities, capabilities, challenges, and best practices in implementing these tools and technologies will also be identified.

Chapter 5 - Social Media in Nelson Mandela Bay Municipality: This chapter will analyse the use of social media by the government, and citizens of the Nelson Mandela Bay Municipality, through interviews and a survey.

Chapter 6 – **Social Media Model for Public Participation**: The design of the proposed model and its implementation in the selected municipality will be discussed in this chapter. The elements that make up the model will be identified through the review of literature in the previous chapters.

Chapter 7 - Evaluation and Reflection: The evaluation of the model, which will be done through a case study and subject matter experts will be discussed, and the results of this evaluation will be presented.

Chapter 8 - Conclusion and Recommendations: The conclusions drawn from the research will be discussed. The limitations of the research, and recommendations for future study, will also be presented at this point.

Figure 3-1 presents an overview of the thesis chapters, linking them to the research objectives identified.
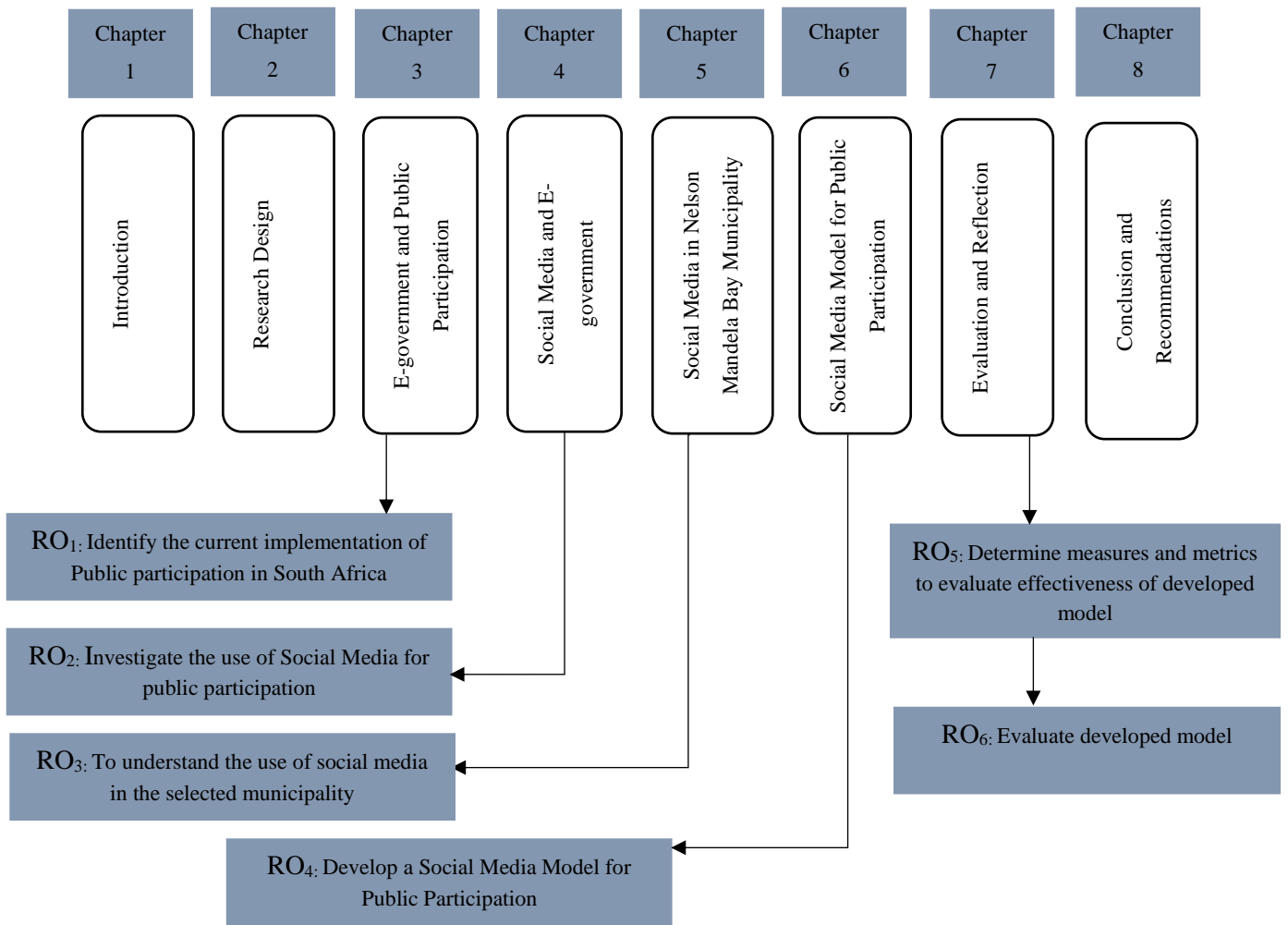
Figure 1-3: Thesis Overview

Chapter 2 : Research Design
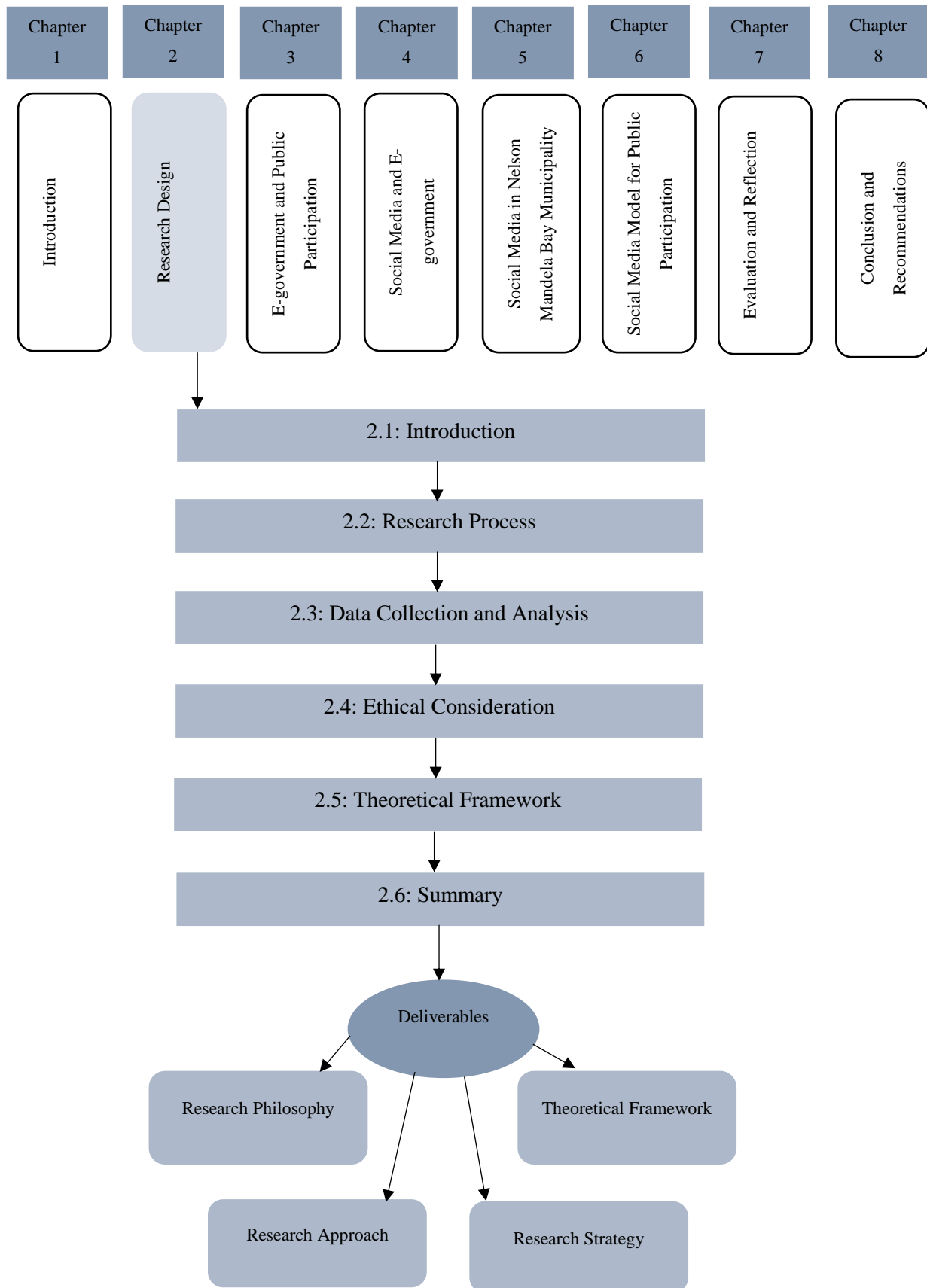
Figure 2-1: Chapter Overview

2.1 Introduction

The purpose of research is to answer questions in a systematic way in order to increase knowledge, or produce new knowledge (Saunders et al., 2009). The question to be answered in this research study is *"How can a social media model for facilitating an effective and structured approach to public participation in municipal E-government initiatives in South Africa be developed, and evaluated?"* (Section 1.5).

This chapter describes the research methodology that will be used to achieve the research objectives, and answer the research questions set out in Section 1.4 and Section 1.5. This chapter content includes the research process (Section 2.2), the data collection and analysis procedure (Section 2.3), the ethical considerations for the research (Section 2.4), a discussion on the theoretical framework for the research (Section 2.5) and a summary (Section 2.6). Figure 2-1 depicts the overview of the chapter indicating the chapter deliverables.

2.2 Research Process

In order to achieve meaningful and valid results in research, a structured process has to be followed. The layers of the research design by Saunders et al. (2009), known as the "Research Onion," depicts the research process. The research process involves the selection of the procedures and methods to be used in collecting and analysing data for the research. The choice of procedures and methods are dependent on the research philosophy and the research approach, which are the first two layers of the research onion in Figure 2-1. These layers are discussed in the subsequent sub-sections.
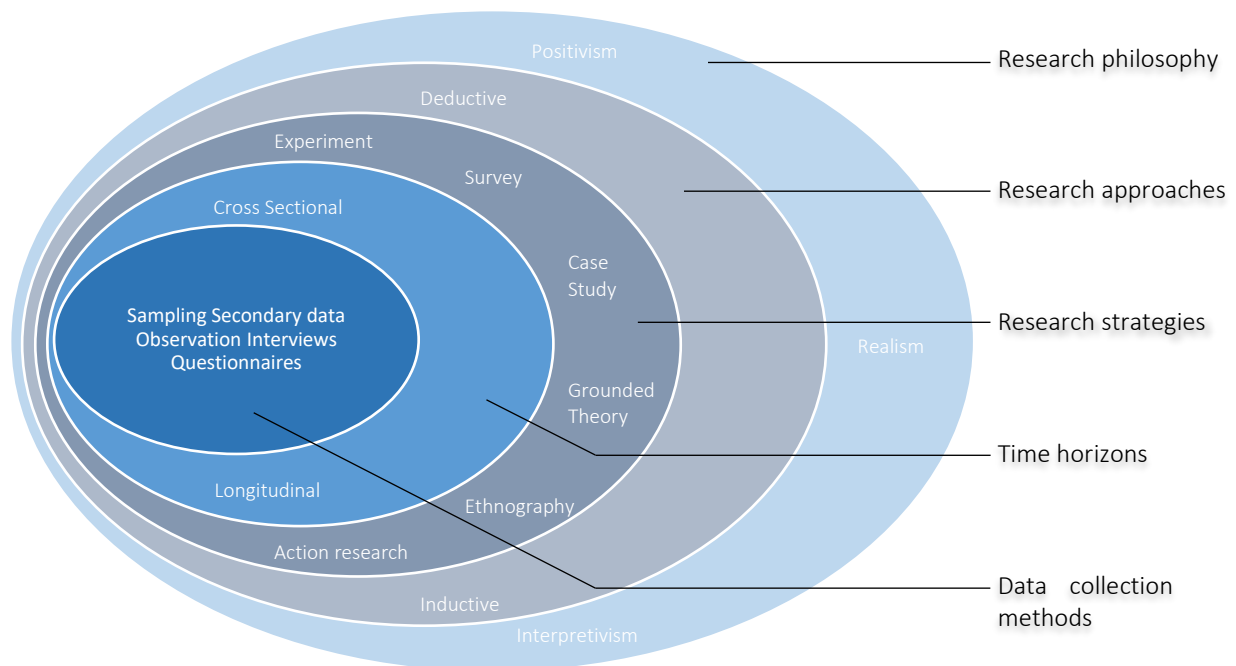
Figure 2-2: The Research Onion. Adapted from Saunders, Lewis and Thornhill (2009)

2.2.1 Research Philosophy

The research philosophy signifies the researcher's view of the world, assumptions about human knowledge, and how knowledge is created (Saunders & Tosey, 2013). Research philosophy is described as the framework that guides the way scientific research is conducted (Collis & Hussey, 2014). There are four main philosophies that currently guide research; Positivism, Realism, Interpretivism and Pragmatism (Saunders & Tosey, 2013).

- Positivism is entrenched in natural sciences, and is used by researchers that are concerned with observing and predicting outcomes (Collis & Hussey, 2014; Saunders & Tosey, 2013). Positivism is independent of the researcher's opinion, and involves the proposition and testing of theories with highly structured, and measurable data (Saunders & Tosey, 2013).

- Realism, like positivism, is scientific in its approach to knowledge development. Realism is based on the belief that objects exist independent of the human mind, and what the senses show us as reality is truth, but researchers are still influenced by world views and their own experiences (Saunders et al., 2009; Saunders & Tosey, 2013).

- Interpretivism emerges as a criticism to positivism, and the emergence of the social sciences (Collis & Hussey, 2014). Interpretivism involves the study of social phenomenon in the natural world, and is based on the belief that social activity is affected by the act of researching it, and cannot be separated from the researcher's views (Collis & Hussey, 2014; Saunders & Tosey, 2013).

- Pragmatism regards the research question as the most important determining factor in designing a research project. Pragmatism is the foundation for the mixed methods approach to research, but does not mandate its use (Evans, Coon, & Ume, 2011; Saunders & Tosey, 2013). Pragmatism focuses on the problem, and uses all relevant approaches to understand the problem rather than centring on the methods used to solve the problem (Creswell, 2009). This philosophy simply chooses the best approach to answering the research question; whether objective (positivism and realism), or subjective (interpretivism) (Saunders & Tosey, 2013).

The research will be conducted in one South African municipality. To answer the research question, however, the municipality's social media use will be explored using different approaches including interviews, survey and social media websites content analysis. The worldview of pragmatism will therefore be adopted for this research, because the research will be carried out using a mixed methods approach.

2.2.2 Research Approach

The research approach refers to the way in which the theoretical basis of the research is formed. It reflects the relationship between theory and research (Bryman & Bell, 2015). The primary approaches are deductive and inductive.

- The deductive approach is the most common view of the relationship between theory and research (Bryman & Bell, 2015). The researcher develops hypotheses based on what is known in the domain being researched, and theories that exist in that domain. A deductive approach entails the testing of pre-defined theories through data collection and analysis. Hence, the data collection and analysis process is driven by existing theory.

- The inductive approach involves an attempt to build theory based on data collected and analysed during the research (Saunders et al., 2009). This approach moves from the specific to the general; since general inferences are induced from particular instances (Collis & Hussey, 2014).

A combination of both approaches can also be applied in research. Saunders et al. (2009), suggest that a combination of both approaches is advantageous over a single approach. This study will be using a combination of the deductive and inductive approaches. The deductive approach will use existing knowledge and theory from the E-participation and social media domains will be used in the research (Chapter 3 & Chapter 4). Theoretical frameworks, like the Uses and Gratifications Theory, will also be applied in this study. The inductive approach will employ knowledge acquired from interviews with selected municipal employees to build theory.

The research philosophy, and research approach, guide the construction of the research question which, in turn, guides the design of the research (Saunders et al., 2009). The research design lays out the overall plan that will be followed in conducting a research study. It is the framework for the collection and analysis of data (Bryman & Bell, 2015). The three inner rings in the research onion depicted in Figure 2-1, represent the research design elements. These elements are discussed in sub-section 2.2.3 and Section 2.3.

Another important aspect of the research design to be considered, is the methodological choice which determines if the research will be carried out quantitatively, or qualitatively, or a combination of both (Saunders & Tosey, 2013). As stated in Section 1.6, the methodological choice is a mixed methods approach. This is an approach that combines qualitative and quantitative data collection and analysis techniques, in order to achieve a greater overall strength of the study, rather than when only one technique is used (Creswell, 2009; Saunders et al., 2009). According to Creswell (2009), mixed methods history can be traced to psychology; the Campbell and Fiske (1959) multitrait-multimethod matrix, and Jick's interest in converging, or triangulating divergent qualitative and quantitative data sources in 1979 (Jick, 1979). Triangulation is the use of different data collection techniques, methodological approaches, design, theoretical perspectives, or analytical methods in one study (Saunders et al., 2009; Thurmond, 2001).

Mixed methods research is usually employed for several reasons, which include gaining a broader understanding of a phenomenon, using one approach to better understand the results from the other,

compensating for the weakness of one approach by employing the other, and obtaining a different view of the same phenomenon and validating the results of one approach (Venkatesh, Brown, & Bala, 2013).

The purpose of employing mixed methods for this research is to broaden the understanding of the use of social media for public participation. Mixed methods will also provide a way of assessing the results from one strand of the study with the other, thereby triangulating the data collected. Although literature shows South African citizens have increasingly adopted social media since 2010 (Worldwideworx, 2011), it cannot be assumed that this adoption will extend to its use in public participation and engagement. Therefore, a quantitative survey with the purpose of understanding citizens' intention to use social media for public participation, will be conducted. A qualitative approach based on interviews and observations of municipal employees, will also be adopted, in order to understand the municipal context.

2.2.3 Research Strategy

The research strategy is the general plan of how the research questions will be answered. The choice of research strategy should be based on how well the research question can be answered, and the research objectives met (Saunders et al., 2009). When choosing a research strategy, consideration should be made regarding the extent of existing knowledge, the amount of time and other resources available, and the researcher's philosophical underpinnings (Saunders et al., 2009). Research strategies are generally classified into two broad categories: qualitative and quantitative (Creswell, 2009). Quantitative research is synonymous with research that generates numerical data through the data collection and analysis techniques (Saunders et al., 2009). This type of research is concerned with "how much, how many, how often, to what extent" and involves large samples. Quantitative research is objective; the interpretation does not change no matter who computes the data (Quinlan, 2011; Zikmund, Babin, Carr, & Griffin, 2010). Qualitative research allows researchers provide elaborate interpretations of phenomena by focusing on discovering true inner meanings and new insights (Zikmund et al., 2010). This type of research is less structured than quantitative research and is researcher-dependent; requiring researchers to extract meaning from unstructured responses.

These research strategies are not necessarily mutually exclusive but can be used in combination in a single research project. When these strategies are combined, they are referred to as "mixed methods" (Creswell, 2009). The major strategies, as presented by Saunders et al. (2009), are action research, archival research, case study, ethnography, experiment, grounded theory and survey. This study will employ two research strategies; the case study and the survey strategies.

2.2.3.1 Case Study Strategy

A case study is an empirical investigation of a current phenomenon in a real word context, where there might not be a clear distinction between the context and the phenomenon (Yin, 2014). This methodology is able to generate answers to the "why," "what" and "how" questions in a research project. The case

study strategy should be employed when the researcher wishes to gain an in-depth understanding of the context of the research, and the processes being executed (Saunders et al., 2009; Yin, 2014). Some of the strengths of the case study strategy are:

- Depth: In case study researches, a particular case, or a small number of cases is studied in an in-depth, thorough manner, as opposed to studying a large number of cases superficially, such as in surveys, or experiments (Lazar, Feng, & Hochheiser, 2010). It is therefore intensive and not extensive (Rule & John, 2011).

- Flexibility: The unit of a case study can be anything from an individual to an organisation, or a country, making it flexible in terms of what can be studied (Rule & John, 2011). The methods that can be employed in data collection and analysis with a case study, also make it a flexible research strategy.

- Versatility: Case studies are not always alternatives to other research strategies, but are complementary to them (Yin, 2014). A case study can be used in combination with other research strategies. Strategies such as surveys and action research can be used in conjunction with case studies (Rule & John, 2011).

- Manageability: Case study research provides researchers with a particular unit to study which can be differentiated from other units, and therefore focuses the study (Rule & John, 2011). Each case in the case study has a boundary that helps the researcher manage and determine the scope of the research project (Yin, 2014).

The case study was selected for this research project for the following reasons:

Firstly, the research requires detailed knowledge of the way public engagement is implemented by the selected municipality, how social media might make participation more effective, and what processes will need to be employed to successfully use social media for public engagement. The case study's ability to study phenomenon and contexts in detail make it suitable to this research.

Secondly, case studies are suitable for studies in a real-life context. This study will be carried out in the context of the Nelson Mandela Bay Municipality, studying the social media processes as they are being carried out. This municipality was selected based on an initial analysis of all South African municipal web pages. The presence of the municipality on social media, and the extent of its use, were deciding factors, coupled with the proximity of the municipality to the researcher. Some of the municipalities considered either did not have social media accounts, or these accounts were inactive. The selected municipality is active on social media, but has not gone beyond the information dissemination stage. Their presence on social media means the municipality recognises the opportunities provided by social media, and has resources dedicated to running social media. Therefore, an evaluation of their current practices can be done at the beginning of the study, and a comparison can be done after implementing the model to be developed.

Thirdly, a case study also relies on multiple data sources as a way of verifying research findings (Yin, 2014). This study will source data from two categories of participants; municipal employees and citizens of the municipality. This triangulation ensures that the results of the case study are validated.

Lastly, case studies are suited to answering "what", "how" and "why" questions. A case study will therefore be suitable for answering the research questions; RQ_2, RQ_3, RQ_5 and RQ_7. Research questions RQ_1, RQ_4 and RQ_6 will be answered through a review of existing literature.

Case studies can either study a single case or multiple cases; a case is the unit of analysis for the research (Rule & John, 2011; Yin, 2014). A single case should be selected if it is critical, unusual, common, revelatory, longitudinal, or the researcher has experience of the case as a participant, or the researcher has easy access to the case (Rule & John, 2011; Yin, 2014). Results from single cases can be generalised based on theory rather than the results of the case (Yin, 2014). Single case studies can meet the requirements to confirm, challenge, or extend theory, as well as significantly contribute to knowledge and theory building (Yin, 2014). Multiple cases are used where there is a need to generalise from the findings of the study, or a need to make comparison across cases (Rule & John, 2011; Saunders et al., 2009).

A single case has been selected for this study because it is a common case. The processes and conditions in the chosen municipality could be similar to those in other municipalities where social media are being implemented. Public participation is a goal for all municipalities, and a shift towards the use of social media for public engagement is becoming inevitable (Chun et al., 2011; Draai, 2010).

2.2.3.2 Survey Strategy

The survey strategy is a common strategy in research, and is usually used to answer questions of "who", "what", "where", "how much" and "how many" (Saunders et al., 2009; Yin, 2014). This strategy allows the collection of a large amount of data from a large number of respondents in an economical way. The data collected is usually from a fraction of the targeted population, rather than the entire population (Fowler, 2009). Surveys allow generalizable statements to be made about the entire population by studying a sample of this population. The survey strategy provides a snapshot of the object of study at a given point in time, and yields little information regarding the underlying meaning of the data, therefore lacking depth (Gable, 1994; Oates, 2010).

The use of surveys, as a single method in Information Systems (IS) research, has been deemed inappropriate due to the complex issues addressed by this discipline; a mixed method approach is prescribed as more effective (Gable, 1994; Petter & Gallivan, 2004; Venkatesh et al., 2013). Surveys and case studies are described as complementary, rather than competing strategies in IS research (Gable, 1994; Yin, 2014). Both strategies account for the weaknesses of the other; where surveys are inflexible and do not allow for in-depth studying of a context, case studies are flexible and in-depth in nature. Surveys are used in contexts where you already have an idea of what needs to be studied, therefore

acting as a method of verification, as opposed to case studies, which are methods of discovery of new and unknown contexts (Gable, 1994).

The survey questionnaire is provided in Appendix D. The survey questions for this research were adapted from literature and include:

- Demographics: This section covers general biographical information on respondents such as age, gender, marital status, employment category, and income category.
- Social media habits: Questions in this section were adapted from Ayankoya (2012), and cover the social media usage information of respondents.
- Public engagement habits: Questions in this section were formulated by the researcher and adapted from literature studied. The questions investigate information on the respondent's habits of engaging with the government.
- Motivations for using social media: This section is based on the Uses and Gratifications Theory and adapted from literature (Gil de Zúñiga, Jung, & Valenzuela, 2012; Ko, Cho, & Roberts, 2005; Papacharissi & Rubin, 2000; Whiting & Williams, 2013). Each construct of the theory included is based on existing survey questions.
- Use intentions: Questions in this section are adapted from Venkatesh et al.'s Unified Theory of Acceptance and Use of Technology study (Venkatesh, Morris, Davis, & Davis, 2003). The questions measure intention to use social media.

The survey will target citizens in the Nelson Mandela Bay municipality. Participants will be identified through non-probability sampling. Non-probability sampling occurs when the chance of every member of the population being selected is not known. The sample cannot be chosen statistically at random, and the sample frame is not known, therefore sample selection is done based on the subjective judgement of the researcher (Saunders et al., 2009). Limited resources and the inability to identify the sampling frame are the main reasons for non-probability sampling (Saunders et al., 2009). Non-probability sampling, using the convenience technique, has been adopted for this study. Participants will be recruited through social media and contacting people at community centres.

The questionnaire will be made available online using the university's online survey tool, LimeSurvey, and the municipality's website. There will also be an offline, paper-based version. The targeted participants for the paper-based questionnaire are citizens with a Living Standard Measure (LSM) of 4 and below, who most likely do not have access to the questionnaire online. These citizens will be reached at community centres. Participants will be provided with basic information about the study and its purpose. They will be asked to sign a consent form, and their anonymity will be guaranteed. The LSM is an industry measure that categorises consumer patterns in South Africa, and was developed by the South African Audience Research Foundation (SAARF, n.d.). The LSM divides the population into

10 LSM groups, with 10 being the highest and 1 the lowest. These categories use criteria such as degree of urbanisation and ownership of cars and major appliances.

A pilot study will be carried out to test the validity of the questionnaire. The pilot study will assess the appropriateness of the questions included in the questionnaire. Participants of the pilot study will be members of the general public who will be contacted at stores, taxi ranks and other public spaces. Any feedback received from the pilot study will be used to improve the final questionnaire design.

2.3 Data Collection and Analysis

The data to be collected during the course of this research, will be quantitative and qualitative in nature, due to the application of a mixed methods approach discussed in Section 2.2.2. The corresponding analysis methods will be used; statistical analysis for the quantitative data, and content analysis for the qualitative data.

2.3.1 Data Collection

Data will be collected in the following ways:

- Literature Review: The literature review will serve as a secondary source of data. The review will cover literature on E-government, public engagement, E-participation, social media, social media use in government, social media strategy models, and the Uses and Gratifications Theory. The literature study will be presented in Chapter 3 and Chapter 4.
- Survey: The survey strategy will be used to collect primary data using questionnaires. The questionnaires will be administered online, and physically, using a paper-based survey. The content of the questionnaire, the administration procedure, and the characteristics of the respondents have been discussed in sub-section 2.2.3.2. Participants will be provided with a consent form and be informed of their rights to withdraw their participation. The ethical clearance required for the survey will be discussed in Section 2.4.
- Case study: The case study will also be a primary data source. Data will be collected by one-on-one interviews of the municipal employees, as well as a content analysis of the municipality's social media platforms. The interview schedule is provided in Appendix C.

2.3.2 Data Analysis

Analysis of the quantitative data will be done using statistical software. The data will be categorised, and relationships between variables analysed. The results of the analysis will be reported through graphs, charts and descriptive statistics.

The qualitative data collected through interviews will be analysed using a qualitative data analysis technique. Prior to analysing this data, each interview will be transcribed by the researcher. The analysis of qualitative data aims to develop a thick, rich and competent account of the phenomenon under investigation (Quinlan, 2011). The process involves exploring, describing, detailing and constructing.

Content analysis is a qualitative analysis method that allows the distillation of words into fewer content-related categories (Elo & Kyngäs, 2008). The words, phrases and sentences classified in the same category are believed to share the same meaning. These categories are then grouped together under higher order headings or themes. These themes can then be used to build a model, conceptual map, or conceptual system, depending on the aim of the research (Elo & Kyngäs, 2008).

2.4 Ethical Consideration

Research ethics relates to the moral and responsible way in which research is conducted; it refers to the appropriateness of the researcher's behaviour in relation to the rights of the subjects of the research (Saunders et al., 2009). Some key ethical issues that arise during the course of a research project are (Saunders et al., 2009):

- Privacy: This consideration relates to the participants' right to not partake in the research, and their rights to privacy when they do partake in the research.
- Confidentiality: This relates to the right of access to information provided by research participants, and the need to keep such information private.
- Consent: This consideration is concerned with providing participants with information about the nature, purpose and use of the research, their role within the research, and obtaining their permission to be involved with the research.

This study will involve the participation of human subjects, and therefore needed approval by the university's Research Ethics Committee: Human (RECH). An application was made to the committee and ethical clearance was granted by the Sub-committee for Ethics in the Faculty of Science. The ethical clearance reference number is H15-SCI-CSS-012, and the ethical clearance letter is provided in Appendix A. In abiding by ethical codes of conduct, consent will be sought from all participants of this research, and participants' data will be kept confidential. Anonymity and privacy of participants will be ensured by using pseudonyms, or assigned numbers during publication of the research results.

2.5 Theoretical Framework

Technology use and adoption is one of the most common and mature research areas in Information Systems research (Venkatesh, Davis, & Morris, 2007). The success of Information Systems (IS) is based on their acceptance by users, as dissatisfaction will lead to their replacement, or begrudging use, which in turn leads to a loss of intended benefits (Davis, 1993). This, therefore, necessitates the need to study a users' adoption and use of IS. IS adoption research seeks to understand the factors that lead to users' adoption, and continuous use of a specific technology. Several theories have been developed and applied in this research area, such as the Technology Acceptance Model (TAM), the Theory of Planned Behaviour, the Innovations Diffusion Theory, the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Theory of Reasoned Action (TRA). TAM, UTAUT and Uses and

Gratifications Theory will be discussed in the following sections. These theories have been chosen because they are modified versions of older theories, such as the Theory of Planned Behaviour, and are a combination of several of these older theories, and have more constructs added to them.

2.5.1 Technology Acceptance Model (TAM, TAM2 & TAM3)

The Technology Acceptance Model (TAM) is the most widely used adoption theory in technology adoption and management information systems research. It was proposed by Davis in 1986 to predict the use of Information Systems (Davis, 1989). It originated from Fishbein and Ajzen's (1975) TRA (Davis, 1993). The model predicts information system use through user intention, which is influenced by user perception of the system (Davis, 1989). The original TAM stipulates the causal linkages between "perceived usefulness and perceived ease of use and, users' attitudes, intentions and actual computer adoption behaviour" (Davis, Bagozzi, & Warshaw, 1989, p. 983). Perceived usefulness is defined as "the degree to which a person believes that using a particular system will enhance his, or her, job performance". Perceived ease of use is "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). Perceived usefulness is more strongly linked to use rather than perceived ease of use, which is posited to be a precursor to perceived usefulness.

TAM2 was developed to understand the construct of perceived usefulness, since it proved to be a stronger predictor of behavioural intention and use than perceived ease of use. The extension of the original TAM model included new constructs that were determinants of perceived usefulness and usage intention (Venkatesh & Davis, 2000). The constructs that were added are; subjective norm, voluntariness, image, job relevance, output quality and result demonstrability.

TAM3 combines TAM2 with the determinants of perceived ease of use, proposing an integrated model of technology acceptance (Venkatesh & Bala, 2008). The determinants of perceived ease of use had been identified in previous research (Venkatesh, 2000). These determinants include computer self-efficacy, computer anxiety, perception of external control, computer playfulness, perceived enjoyment and objective usability.

2.5.1.1 Criticisms of TAM, TAM2 and TAM3

These models have been criticised for several reasons, the most common being the need to add other factors in order for it to cope with the changing use of IT in different contexts (Benbasat & Barki, 2007; Xu, Ryan, Prybutok, & Wen, 2012). This has therefore led to a number of adaptations to the theory that include constructs such as social influence, prior experience, perceived enjoyment, gender and self-efficacy (Davis, 1989; Taylor & Todd, 1995; Van Der Heijden, 2004; Venkatesh & Morris, 2000). Other criticisms include the possibility of methodological bias through the use of self-reporting techniques (Straub & Burton-Jones, 2007). This, however, is a common problem with most technology adoption models. Bagozzi (2007) argues that constructs of perceived usefulness, and perceived ease of use, are too simplistic, and do not adequately represent users' motivations for using a technology; he

explains that even when these constructs are recognised by technology users, such constructs do not explicitly lead to the decision to use the technology in question. The TAM models have also been criticised for focusing on the use of technology as an ultimate goal instead of the benefits of technology use, and fails to answer the question; what makes the system useful (Bagozzi, 2007; Benbasat & Barki, 2007) ?

2.5.1.2 Uses in Research

The TAM models have been used to determine technology acceptance of "communication systems, general purpose systems, office systems and specialized business systems" (Lee, Kozar, & Larsen, 2003, p. 758). Research into adoption of communication systems include email, voice mails, mobile phones, and text messaging (Davis, 1989; Li, Chau, & Lou, 2005; van Biljon, Kotzé, & Renaud, 2008). General purpose systems adoption research comprise computers, the internet and mobile commerce (Cyr, Head, & Ivanov, 2006; Shao Yeh & Li, 2009; Yi, Jackson, Park, & Probst, 2006). The adoption of office systems such as text editors, spreadsheets, database programs and presentations has also been studied using TAM (Davis, 1989; Venkatesh & Davis, 2000; Wixom & Todd, 2005), as well as the adoption of specialized business systems such as Decision Support Systems, Enterprise Resource Planning Systems and CASE Tools (Taylor & Todd, 1995; Venkatesh & Davis, 2000; Yi & Hwang, 2003). The efficacy of the TAM models can be attested to by the number of studies and contexts it has been applied to. However, the many updates and extensions of the these models led to the introduction of the UTAUT model.

2.5.2 Unified Theory of Acceptance and Use of Technology (UTAUT & UTAUT2)

Technology acceptance research has led to the development of several acceptance models, all of which have their different constructs that determine user acceptance (Venkatesh et al., 2003). The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed in 2003 with the purpose of converging existing technology acceptance models (Venkatesh et al., 2003). The UTAUT model combines constructs from eight different acceptance models and their extensions, to present a more cohesive model based on similarities found among the existing models. These eight models are: the Theory of Reasoned Action, the Technology Acceptance Model, the Motivational Model, the Theory of Planned Behaviour, a Combined Technology Acceptance Model and a Theory of Planned Behaviour model, the Model of PC Utilization, the Innovation Diffusion Theory, and the Social Cognition Theory.

The theory identifies two constructs that directly affect use behaviour; facilitating conditions and behavioural intention and three constructs that indirectly affect use behaviour via behavioural intention; performance expectancy, effort expectancy and social influence. Four moderating variables are also identified in the model; gender, age, experience and voluntariness of use. The influences of performance expectancy, effort expectancy and social influence are moderated by gender and age. The influence of facilitating conditions is also moderated by age. Effects of effort expectancy, social influence and

facilitating conditions are moderated by experience. Voluntariness of use moderates the effect of social influence. These variables have been previously tested in several studies using the eight models integrated into UTAUT.

UTAUT was updated to include new constructs in order to extend its use to the consumer use context (that is technologies designed for the individual consumer) catering to the increasing use of consumer technologies (Venkatesh, Thong, & Xu, 2012). Its predecessor UTAUT, was originally developed for use in organisational context though it has been used by researchers for varying technology types. The constructs added in UTAUT2 are hedonic motivation, price value, and experience and habit. The voluntariness of use construct was removed from the model in UTAUT2. The changes to constructs were done because UTAUT2 is intended for studying voluntary technology acceptance and use with consumers (Venkatesh et al., 2012).

The UTAUT2 model proposes additional relationships between its constructs. The facilitating conditions, habits, and hedonic motivation constructs are moderated directly by age, gender and experience. The impact of price value on technology use is moderated by age and gender while the impact of behavioural intention is moderated by experience.

2.5.2.1 Criticisms of UTAUT

Similar to TAM, the UTAUT model has received several criticisms, even though it has been used extensively by researchers (Venkatesh et al., 2003). According to Benbasat and Barki (2007), the introduction of more constructs to the model has made it more complex. The use of the model is reportedly complicated due to the addition of 41 constructs that predict intention, and eight constructs that predict behaviour (Bagozzi, 2007). The UTAUT model is also criticized for the gaps between the linkages intention and use, and individual reactions to using information systems and intention (Bagozzi, 2007). Firstly, UTAUT assumes intention will lead to use automatically, without an intermediate process to ensure this step. Secondly, the model assumes a user that recognizes the benefit of the system, will make the choice to use the system, which might not always be the case. The criticisms of UTAUT apply to its modified successor; more constructs have been added increasing its complexity, and the same assumptions made about UTAUT apply to UTAUT2.

2.5.2.2 Uses in Research

The UTAUT model has been extended, compared to other models and applied in several adoption research (Williams, Rana, Dwivedi, & Lal, 2011). The model has been used partially, and completely, to examine different categories of IS. These systems include communication systems such as email systems, general purpose systems such as the Internet, and mobile banking, E-government system adoption, and specialised business systems such as healthcare systems, and speech recognition systems (Williams et al., 2011).

E-government systems and services were studied in the US and Kuwait using the model (Schaupp, Carter, & McBride, 2010; Suha & Anne, 2008). Sapio, Turk, Cornacchia, Papa, Nicolo and Livi (2010) also studied government services provided over digital television services in Italy. UTAUT has been used to study social media adoption for public relations (Curtis et al., 2010). Carlsson, Carlsson, Hyvönen, Puhakainen, and Walden (2006) studied the adoption of mobile devices/services in Finland using UTAUT.

UTAUT2 was originally used to study the adoption and use of mobile Internet technology in Hong Kong (Venkatesh et al., 2012). Since its introduction technology acceptance researchers have extensively used the UTAUT2 model. Some of the technologies research include online banking, mobile banking, e-learning and mobile learning, and healthcare applications (Arenas-Gaitan, Peral-Peral, & RamÓn-JerÓnimo, 2015; Sudburya et al., 2013; Tarhini & El-Masri, 2017; Yang, 2013). Although UTAUT and UTAUT2 have not been used as extensively as the TAM model, they have gained popularity in IS adoption research (Williams et al., 2011).

2.5.3 Uses and Gratifications Theory[1]

The Uses and Gratifications Theory has its foundation in media and mass communications studies (Katz, Blumler, & Gurevitch, 1974; Ruggiero, 2000). It originated in the 1940s when researchers became interested in audiences' media behaviour, such as listening to the radio (Ruggiero, 2000). The theory researches media consumption from the point of view of the audience, rather than the effects of media on audiences, such as in traditional media studies where the audience was seen as passive (Kaye & Johnson, 2002; Lee & Ma, 2012; Quan-Haase & Young, 2010). Users are seen as being active in selecting the media they use, and having an understanding of their needs (Ancu & Cozma, 2009). The premise of Uses and Gratifications Theory is that users seek out media that meets their social and psychological needs, and leads to ultimate gratification (Coleman, Lieber, Mendelson, & Kurpius, 2008; Lariscy, Tinkham, & Sweetser, 2011; Lee & Ma, 2012; Xu et al., 2012). These gratifications are what predict adoption and continuous use of these media over an alternative media. The theory was originally used to study traditional media such as newspapers, radio and television. Recently, its use has been extended to studying the Internet, computer mediated communication and social media.

2.5.3.1 Criticisms of Uses and Gratifications Theory

The theory has had several criticisms since its inception. The first criticism is related to the self-reporting nature of uses and gratifications research; users are expected to report on their media consumption based on self-introspection which can lead to methodological bias (Katz et al., 1974;

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[1] Some of the literature discussed in this section was obtained from research published as a full double-blind peer-reviewed conference paper at the European Conference on Social Media in July 2017. Fashoro, I. and Barnard, L. 2017. Motivations for Adopting Social Media as a Tool for Public Participation and Engagement in Nelson Mandela Bay Municipality. Proceedings of the 4th European Conference on Social Media ECSM 2017 (Vilnius, Lithuania, 2017), 106–114. (APPENDIX I)

Ruggiero, 2000). Critics argue that the results of these self-reported data are suspect, because they depend on audience awareness of their media use and interpretation of their behaviour, rather than the actual audience behaviour (Ruggiero, 2000). The theory has also been criticised for not regarding social contexts but focusing solely on individuals' needs, making it difficult to explain societal impacts of media use (Katz et al., 1974; Ruggiero, 2000). Other critics argue that the cornerstone of Uses and Gratifications Theory; the active audience and the validity of self-reported data to determine motives, is a naïve assumption made by researchers (Ruggiero, 2000).

Despite these criticisms, the Uses and Gratifications Theory has seen increased application in research with the advent of telecommunication technologies and the Internet (Ruggiero, 2000). Uses and Gratifications Theory provides an innovative theoretical approach to studying mass communications media in their early stages (Kaye & Johnson, 2002; Papacharissi & Rubin, 2000; Ruggiero, 2000). New technologies present users with more choices and make it simpler for users to switch from one choice to another, hence the need to understand the gratifications required by users has become more critical (Ruggiero, 2000; Xu et al., 2012).

Uses and gratifications research was initially carried out using a two-step process of focus groups followed by surveys (Sundar & Limperos, 2013). This process has now been narrowed to just the survey process using modified instruments from past research. This is due to the extensive number of gratifications that have been identified since the 1950s (Sundar & Limperos, 2013). In reviewing uses and gratification research of both old and new media, Sundar & Limperos (2013) found that there are overlapping gratifications, hence the reuse of survey instruments from past research.

2.5.3.2 Use in Research

The Uses and Gratifications Theory stemmed from media effects theory (Ruggiero, 2000). Earlier research involving Uses and Gratifications Theory were based on the effects of traditional media on audiences. The theory was used in studying mass media effects on election outcomes in the 1940s (Ruggiero, 2000). In the 1950s and 1960s, the motivations for radio listening, children's use of television and the impact of race and social class on media consumption were studied, using the Uses and Gratifications Theory. Other research carried out between the 1970s and 1990s studied motivations for public television, public affairs magazines, electronic bulletin boards, news media and soap operas, and sought to identify a common set of gratifications from using these forms of media (Ruggiero, 2000). Other research using the Uses and Gratifications Theory in the 1990s have examined the motivation for the initial, and subsequent subscriptions to cable television, telephones, television remote control devices, VCRs, and CD-ROMs (Ruggiero, 2000). In the 2000s, research included gratifications from using the Internet, political blogs, video games, cell phones, MP3s, and reality televisions (Sundar & Limperos, 2013).

With the advent of social media and other computer mediated communications systems, there has been a rise in the application of the Uses and Gratifications Theory in research. These research include studies on motivations for using Facebook, Twitter, YouTube, Myspace and comparisons of gratifications obtained from each of these social media websites (Chen, 2011; Sundar & Limperos, 2013). There is a need to understand motivations for using social media over traditional media as well as the motivations to use one form of social media over another, since there are so many to choose from (Chen, 2011; Ruggiero, 2000; Xu et al., 2012).

2.5.3.3 Use in Political Research

One of the earliest applications of the Uses and Gratifications Theory is the area of political research. The theory was used to study the motivations for seeking political information through media by Blumler and McQuail (1969) and McLeod and Becker (1974). Other research into the use of media for political information includes that of Ancu and Cozma (2009); Garramone, Harris, and Anderson (1986); Kaye and Johnson (2002); Lariscy et al. (2011). The media studied include online bulletin boards, the Internet, and social media platforms (YouTube, Facebook, Twitter and Myspace). Gratification themes identified in the past political research include surveillance, information seeking, guidance, social utility, convenience utility, entertainment and personal identity.

Surveillance and Information seeking are sometimes clustered together as one theme in research. Surveillance is the use of media to monitor other people's activity, and be kept informed on what others are doing, while information seeking involves the use of media to get information and improve self-knowledge (Gil de Zúñiga et al., 2012; Whiting & Williams, 2013). **Guidance** involves the use of media as a way to decide on political issues such as how to vote, judging candidates' personalities and getting unbiased viewpoints (Kaye & Johnson, 2002). **Social utility** theme involves the use of media to interact and communicate with others (Kaye & Johnson, 2002; Papacharissi & Rubin, 2000; Whiting & Williams, 2013). This theme is also referred to as social interaction (Whiting & Williams, 2013), social motivation (Korgaonkar & Wolin, 1999), interpersonal utility (Papacharissi & Rubin, 2000) and companionship (Palmgreen & Rayburn, 1979). **Convenience utility** refers to media being more useful, easier to use and saving time compared to other media choices (Whiting & Williams, 2013). **Entertainment** refers to the use of media as a source of diversion of the user's attention, enjoyment, passing time and occupying users' time (Garramone et al., 1986; Kaye & Johnson, 2002; Whiting & Williams, 2013). **Personal identity** reflects the individual's need to establish a reputation in relation to others (Garramone et al., 1986; Gil de Zúñiga et al., 2012).

2.5.3.4 Motivations for Using Uses and Gratifications Theory

Several researchers have used the Uses and Gratifications Theory to study social media (Ancu & Cozma, 2009; Chen, 2011; Lee & Ma, 2012; Whiting & Williams, 2013; Xu et al., 2012). The Uses and Gratifications Theory has been described as being suitable to the study of Internet and web-based

applications (Lariscy, Tinkham, & Sweetser, 2011; Xu et al., 2012). It is relatively easy for users to switch from one content provider to another on these platforms, such as switching websites by simply entering a new web address. Therefore, it is necessary to understand the motivations of the users when choosing a specific media platform (Xu et al., 2012).

Social media is one of the different ways through which citizens can interact with the government, thus there is a need to understand why it might be chosen over the other options, such as physical office visits, phone calls or town hall meetings, available. Since the focus of this study is social media, the Uses and Gratifications Theory has been chosen as the appropriate theory to be applied in this research.

The Uses and Gratifications Theory will be used in this study to understand what an active citizen wants to do with social media in terms of interacting with the government. The theory will help to elucidate the interaction needs of citizens and thereby focus government social media activities and strategies. According to Al Athmay, Fantazy, & Kumar (2016), a prerequisite for governments to provide effective services to citizens through ICT is their ability to meet the needs of these citizens. Employing the Uses and Gratifications Theory in this research focuses the model design on the needs of citizens thereby making the implementation of social media in the selected municipality effective. The Uses and Gratifications theory will help establish citizens' needs in regards to their social media use.

2.6 Summary

This purpose of this chapter was to describe the research design for the study. The discussion included the research process, the data collection and analysis methods, and the ethical considerations for this research. The philosophy influencing this research will be pragmatism (Section 2.2.1). The approach will be a deductive approach; using existing theories and knowledge (Section 2.2.2). The research will be carried out using a single case study and a survey strategy (Section 2.2.3). The research will also be utilising a mixed methods methodological choice (Section 2.2.2). The data collection methods identified for this study are literature review, survey, and case study (Section 2.3.1). The data will therefore be both qualitative and quantitative in nature, and the analysis of the data will be dependent on the nature of the data (Section 2.3.2). The next chapter will focus on the review of existing literature on E-government, public participation and E-participation.

Chapter 3 : E-government and Public Participation

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 8
Introduction	Research Design	**E-government and Public Participation**	Social Media and E-government	Social Media in Nelson Mandela Bay Municipality	Social Media Model for Public Participation	Evaluation and Reflection	Conclusion and Recommendations

3.1: Introduction

3.2: Electronic Government

3.3: Public Participation

3.4: E-participation

3.5: Public Participation and E-government

3.6: Conclusion

Research Objectives

RO₁: To determine the current implementation of public participation in South Africa

Deliverables

Challenges and risks of E-government

Benefits of E-government

E-participation Evaluation Frameworks

E-participation mechanisms, activities and technologies

Figure 3-1: Chapter Overview

3.1 Introduction

The literature review is a source of secondary data for the research study. It is part of the data collection methods in the research process depicted in Figure 2-2. The aim of the current chapter is to provide context to the research from existing literature, direct the design of the research instruments, answer research question RQ_1 and to address research objective RO_1.

RQ_1: To what extent is public participation implemented in South Africa?

RO_1: To understand the current implementation of public participation in South Africa.

In addressing RQ_1 and RO_1, an investigation into E-government and related concepts is imperative. The chapter will discuss E-government, the benefits and challenges of E-government (Section 3.2), public participation (Section 3.3), E-participation (Section 3.4), and public participation and E-government in South Africa (Section 3.5). The current implementation of public participation in South Africa is discussed in Section 3.5.2. The chapter overview is shown in Figure 3-1.

3.2 Electronic Government

Government departments and procedures have been known for their inefficiency and slowness in the past, and citizens grew accustomed to this because they had no alternative providers for government services (Phang & Kankanhalli, 2008). However, with the adoption of ICT in other areas of life, such as personal communications and commercial activities, citizens have experienced fast and efficient services that are available at any point during the day. Citizens now expect this same level of service efficiency from the government. Furthermore, governments' attitudes towards service efficiency are changing due to their desire to keep up with developments in the business sector, and not be perceived as out-of-touch with societal and technological trends (OECD, 2014).

Governments have made massive investments in ICT as a way of reforming public services and establishing responsive public administration systems (Chun et al., 2010; Peristeras et al., 2009; United Nations, 2014). Improving internal efficiency and meeting the information and communication needs of citizens, are drivers in the adoption of ICT by governments (Phang & Kankanhalli, 2008). The use of ICT in government is known as electronic government (E-government).

E-government is defined as a way for governments to use the most innovative ICTs, especially web-based Internet applications, to improve access to government information and services by citizens and businesses, to enhance the quality of these services and to provide greater prospects to participate in democratic institutions and processes (Fang, 2002). This definition, although not recent, encompasses the focus of this study, which is public participation in government through web-based and social media technologies.

E-government can be categorised according to the relationships between the government and its different stakeholders. The categories of E-government identified include, Government-to-Citizen, Government-to-Business and Government-to-Government (Fang, 2002; United Nations, 2014; Yildiz, 2007). These categories are based on the recipients of the government's services and interactions, which could be other government agencies or departments, business organisations or citizens, and civil societies. This study focuses on the Government-to-Citizen category, which centres on government interaction with citizens.

Most countries that have initiated E-government strategies have followed a sequential approach. Initially, efforts are focused on establishing a digital presence by providing information to the public using websites. The next stage involves enabling communication through emails and forms on these websites. Then it moves to providing services online. In recent years, the E-government efforts have focused on multi-directional communication, collaborative decision-making and open governance. This sequential implementation process has been described as the evolution of E-government, or the maturity stages of E-government (Chun et al., 2010; Nam, 2012; Ngulube, 2007).

The evolution of E-government is continuous and dependent on advancements in technology. Galbraith, Cleland, Martin, Wallace, Mulvenna and McAdam (2013) highlight the need for a connection between citizens and governments for a successful and satisfactory E-government implementation. One of the most important benefits of E-government is therefore the ability to promote interaction between citizens and the government. This benefit will be the focus of Section 3.3. The next sections discuss the benefits, challenges and risks of E-government.

3.2.1 Benefits of E-government

Properly designed and implemented E-government can offer several benefits to a country. These benefits accrue to the different stakeholders that use E-government systems. With the introduction of ICT, citizens are able to access personalised information on government websites, reduce the time and cost of contacting government employees in person, or over the phone, and have access to more accurate and reliable data (Weerakkody, Irani, Lee, Osman, & Hindi, 2013). Since these government services are available 24/7, citizens also benefit in terms of convenience and flexibility. For the government and its employees, benefits include an increase in effectiveness and productivity of employees, reduction in their workload, cost saving, time saving and improvement of service delivery efficiency (Coleman & Gøtze, 2002; Mutula & Mostert, 2010; Weerakkody et al., 2013).

Some other benefits of E-government include sustainable development, transparency, and accountability (Bonsón et al., 2012; Ngulube, 2007; United Nations, 2014). Sustainable development is possible through the promotion of effective natural resources management, stimulation of economic growth, advancement of social inclusion and enabling knowledge sharing and skills development (United Nations, 2014). Transparency, and accountability, have become an important issue for

governments in a bid to fight corruption and restore citizens' trust and confidence in governments (Bonsón et al., 2012; Chun et al., 2010; Mzimakwe, 2010). The waning interest of the public in politics, and low election turnouts, have made it imperative for governments to improve transparency and accountability. E-government strengthens the citizen/government relationship, and reduces corruption through greater access to information, such as budgets and government spending and activities, using ICT technologies (Weerakkody et al., 2013). ICT provides a platform for communication that is interactive, cost effective, inclusive and overcomes the barriers of time and distance (Coleman & Gøtze, 2002).

3.2.2 Challenges and Risks of E-government

E-government implementations around the world are reported to have failed to achieve their projected goals (Almarabeh & AbuAli, 2010; Twinomurinzi et al., 2012). This failure is due to various challenges and risks involved when implementing E-government. Some of these challenges have been identified, in Chapter 4; this topic will be revisited, however, in more detail in this section. The challenge of infrastructure is most common in developing countries; in order to take advantage of new technologies, basic ICT infrastructure needs to be available within the country (Almarabeh & AbuAli, 2010). These basic infrastructures include telecommunications and electricity, which are foundational to successfully establishing E-government initiatives. The implementation, operational and maintenance costs of running E-government, also pose a challenge to many countries; ICT projects are generally cost intensive, and there is the additional burden of keeping up with the ever-changing technology (Almarabeh & AbuAli, 2010; Signore, Chesi, & Pallotti, 2005). Another challenge faced with E-government implementation is in the area of laws and policies; with the introduction of ICT to government, many laws and policies will have to be updated to accommodate the new processes, and policy makers will need to ensure existing laws and policies do not impede the E-government agenda (Almarabeh & AbuAli, 2010).

The issue of the digital divide and accessibility are common in E-government literature. Digital divide describes the disparity in accessing ICT; it is the gap between those that have access to ICT, and those who do not (Almarabeh & AbuAli, 2010; Norris, 2001). Citizens who do not have access to ICT cannot participate in the E-government process, and therefore present a challenge to the government since they have to provide another means of reaching these citizens (Almarabeh & AbuAli, 2010; Mutula & Mostert, 2010; Picazo-Vela, Gutiérrez-Martínez, & Luna-Reyes, 2012). Accessibility on the other hand, involves the provision of E-government services to all citizens irrespective of their physical capabilities (Almarabeh & AbuAli, 2010; Picazo-Vela et al., 2012; Signore et al., 2005). Governments need to ensure that online services are designed with interfaces that are appropriate for use by citizens with disabilities. E-government services should be easy to use and understand to be effective (Signore et al., 2005).

Where access to ICT services is available, citizens should be able to use these technologies. Citizens should be literate in order to understand the information provided by the government, and be able to make informed decisions (Bertot, Jaeger, & Grimes, 2010c; Bertot et al., 2010a). ICT literacy presents a huge challenge for governments implementing E-government. Citizens who are not computer literate will be unable to use ICT services provided by the government. Governments need to, therefore, provide adequate solutions to the problem of literacy, or risk propagating the digital divide that may already exist within the country (Almarabeh & AbuAli, 2010; Bertot et al., 2010a). Another issue related to literacy is the language barrier; non-English speaking citizens should be catered for in their local language, to bridge the gap in accessibility of E-government services (Bertot et al., 2010a). E-government content should be made available in as many languages as are spoken in the region, to reach as many citizens as possible.

Privacy, security and trust issues need to be considered by governments implementing E-government. Citizens are generally concerned with the privacy of the information they provide online. The government is required to have proper procedures in place to ensure protection and effective use of collected and stored data (Almarabeh & AbuAli, 2010; Signore et al., 2005). Privacy is a top priority for governments, as any privacy breach will result in a loss of citizens' trust. The introduction of ICT opens up government organisations to security risks, such as malware insertions into government websites (Picazo-Vela et al., 2012). Goud (2017) and Sanderson (2017) have reported on such cyberattacks on the Fayette county email systems in the US and several Venezuelan government websites. Governments, therefore, need to ensure they have technical measures in place to mitigate such risks.

Despite these challenges and risks, ICT tools and technologies have been recognised as key to improving the engagement between governments and citizens. The next section discusses public participation in government.

3.3 Public Participation[2]

Public participation and engagement describes the involvement of citizens in aspects of government. Fox and Meyer (1996) described participation and engagement 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 to direct government programmes towards community needs, in building public support, and encouraging a sense of cohesiveness within society" (Fox & Meyer, 1996, p. 20). This definition demonstrates the different

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[2] Some of the literature discussed in this section was obtained from research published as a work-in-progress double-blind peer-reviewed conference paper at the International Conference on Information Resources Management in May 2016. Fashoro, I. and Barnard, L. 2016. Social Computing as an E-Participation Tool in South Africa: An Exploratory Study. CONF-IRM 2016 Proceedings (Cape Town, South Africa, 2016), 9. (APPENDIX H)

degrees of participation and engagement; it can range from simply voting, to citizens actively contributing to policy-making. Participation and engagement can be done in different ways, including surveys, town meetings, drop-in centres, citizen advisory committees, citizen panels, public hearings, correspondences and focus groups (Chun et al., 2011; Phang & Kankanhalli, 2008).

Public participation and engagement, in the context of this research, will refer to the two-way communication between the government and citizens; this will include information provision by both parties, and extend to the decision-making process of the local government. While public participation and engagement are used interchangeably in literature, these terms can also be described on a continuum with varying degrees of interaction. Within this continuum, participation is on the lowest spectrum with limited interaction, while engagement has a higher level of interaction and citizen involvement in matters of government (Mergel, 2013c; Zavattaro & Sementelli, 2014).

Communication	Consultation	Co-production
One-way flow of information from service providers to the public	Two-way dialogue between service providers and the public	Active involvement of the public in policy decisions and/or service design/delivery
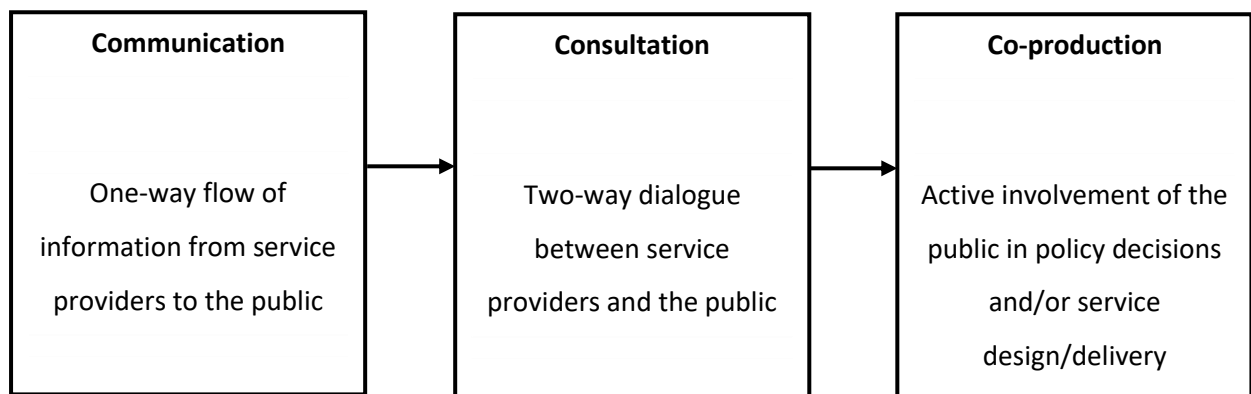
Figure 3-2: Public Participation and Engagement Spectrum. (Mzimakwe, 2010)

Figure 3-2 illustrates the continuum of public participation and engagement; with participation falling between the communication and consultation sections, and engagement going beyond consultation to the co-production section. This is also referred to as the "levels of citizen involvement" by Staiou and Gouscos (2010), although, their first stage is referred to as the "information level," and the last stage as the "participation level".

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 will appeal to younger generations and technology savvy citizens, and traditional mechanisms, such as public meetings, in areas where citizens are marginalised. Participation and engagement make democracy inclusive and accessible, by broadening the range of citizens involved in governance (Chun et al., 2011; Friedman, 2006; Mzimakwe, 2010; Nam, 2012). Citizens are equipped to provide the government with ideas, collective knowledge and population expertise, as well as communicate to government about important issues in their communities (Chun et al., 2010; Mzimakwe, 2010). Consequently, the government's focus on significant projects and policies in the community is guided by citizens, and this improves government decision-making. Participation and engagement, therefore,

makes the government more effective and "strengthens the legitimacy of the political process" (Galbraith et al., 2013, p. 283). Piper and Lieres (2008), and Sanford and Rose (2007), attest that with participation and engagement, development projects have better outcomes, because there is better support from the community due to a sense of co-ownership.

Transparency and accountability can also be achieved through participation and engagement. Mzimakwe (2010) suggests that, when participation and engagement are widespread, public officials become accountable to citizens, and this would prevent these officials from making policies that are not in the best interest of the community.

Participation and engagement are not easily achieved, despite the best intentions of governments and citizens. Participation and engagement can be challenging to implement due to factors which include poor implementation of policies, poverty, lack of education, time pressure, poor design of public spaces and lack of will among political elites (Denhardt, Terry, Delacruz, & Andonoska, 2009; Piper & von Lieres, 2008). Political elites are people who have organised capacity to influence public officials due to their strategic locations in large, or otherwise pivotal organisations, and movements (Higley, 2008).

Poverty makes participation and engagement less of a priority to the poor, because they struggle with basic needs, and do not have the time, or money, to travel to public deliberation venues (Denhardt et al., 2009). Lack of education and self-confidence make people less willing to voice their opinions (Denhardt et al., 2009). Due to the time sensitive nature of policies and reforms, it becomes difficult to include citizens in governance. 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). Poor design and management of public spaces, often leads to the amplification of social inequalities when disempowered groups are placed together with politically influential individuals who try to monopolise public participation meetings (Nam, 2012; Piper & von Lieres, 2008).

Denhardt et al. (2009) are of the opinion that even when other challenges are overcome, there is usually a lack of will among political elites, elected representatives and executives, to engage with the disadvantaged. This lack of will is also identified by Piper and von Lieres (2008). Empowering the public to participate in the decision-making process may be viewed as a loss of power by government executives and elected representatives (Macintosh, Coleman, & Schneeberger, 2009). Public participation and engagement also makes these elected representatives and executives more accountable to the public. Consequently, there is usually a resistance to public participation and engagement by politically influential institutions/individuals, elected representatives and executives.

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).

3.4 E-participation

In recent years, most democracies have experienced a shift in the paradigm of government, where citizens are provided access to government information, partake in government and are no longer just consumers of government services (Bonson et al., 2012; Coleman & Gøtze, 2002; Nam, 2012). This shift has been encouraged by agencies such as the World Bank and UN, who have acknowledged participation and engagement as a medium for sustainable development (Piper & von Lieres, 2008; United Nations, 2014).

Governments have therefore recognised the need to involve citizens in the service delivery process to attain global sustainable development goals. This is largely as a result of the increasing challenges in the society that surpass the capacity of the public sector (Baumgarten & Chui, 2009; O'Reilly, 2010). On the other hand, citizens are demanding more from the government because they are used to having access to information and resolving issues in a collaborative environment due to technologies such as the Internet and social media (Baumgarten & Chui, 2009; O'Reilly, 2010; United Nations, 2014). These two developments have contributed largely to the increased focus on the use of E-participation in recent years.

E-participation is the process of engaging citizens in policy and decision-making to encourage a participatory, inclusive, collaborative and deliberative form of public administration through ICTs, taking citizen participation beyond voting (United Nations, 2014, p. 61). This participation can range from citizens as voters, citizens sharing government information, citizens demanding accountability from the government, to consultations of public opinion, dialog with citizens, and citizens participating in shared governance and government decision-making (Chun, Sandoval, & Arens, 2011, p. 190). The purpose of E-participation is to enhance the involvement of citizens in the political process and digital governance (Sanford & Rose, 2007). It is a response by governments to the decline in political engagement, a disconnection between citizens and their elected representatives, and the decline in the legitimacy of political institutions, by providing new opportunities and avenues for engagement (Sæbø, Rose, & Molka-Danielsen, 2010).

E-participation offers advantages over traditional participation and engagement channels by transcending the time and space barriers of offline channels, and allowing citizens to participate at their convenience; anytime and anywhere (Phang & Kankanhalli, 2008, p. 128). E-participation initiatives promote two-way interactions between government and citizens, inform citizens about policy-making, legitimise government decisions, and provide avenues for joint learning (Phang & Kankanhalli, 2008, p. 128).

The main focus of E-participation is the citizen, and is therefore usually implemented at the government level closest to its citizens; the local government, or municipal level of government (Bagui & Bytheway, 2013; Thornhill, 1995). Phang and Kankanhalli (2008) identify four objectives of E-participation;

information exchange, education and support-building, a decision-making supplement, and input probing. E-participation also supports communication between citizens and community building. Continuous participation in these communities enables trust building among its members, which eventually leads to collective action (Mandarano, Meenar, & Steins, 2010). E-participation therefore may empower citizens in seeking change by increasing their voice. E-participation broadens the range of voices involved in governance by the inclusion of new actors, and the creation of new public spaces for engagement (Nam, 2012). Public spaces are physical, or virtual locations, where the public meets to discuss, debate and deliberate on public matters (Lutz & du Toit, 2014). Public spaces are essential to public participation. Virtual public spaces refer to technology platforms such as chatrooms, online feedback forms, email, and blogs. Section 4.3.1 describes some of these technologies.

E-participation activities are usually based on existing technologies as opposed to technological innovations (Sæbø et al., 2008). These technologies are believed to influence citizen participation, because they have been developed independent of the E-participation activities they support. The next sections will discuss E-participation activities, and the technologies that support these activities.

3.4.1 E-participation Activities

E-participation activities are a social practice that is political in form, and can be modernised and supported by ICT (Sæbø et al., 2008). These activities are sometimes referred to as participation areas, and determine the scope of citizen involvement in the democratic process (Kalampokis, Tambouris, & Tarabanis, 2008; Tambouris, Liotas, Kaliviotis, & Tarabanis, 2007). E-participation activities include eVoting, eConsultation, eCampaigning, ePetitioning, eActivism, online political discussion and online decision-making. Table 3-1 is a description of these activities by Sæbø et al., 2008:

Table 3-1: E-participation activities. Adapted from Sæbø et al., 2008

Activity	Description
eVoting	Supporting the voting process either through electronic voting machines, or other technologies that make distance voting possible.
eConsultation	Focuses on increasing the input on government set agendas from the different E-government stakeholders (citizens, businesses and the government) using ICT. The consultation process is usually a two-way feedback mechanism process.
eCampaigning	The use of Internet technologies to campaign for candidates, involving the recruitment of volunteers, gathering information on potential voters, and raising money to support political candidates.
ePetitioning	Online petition signing to propose an issue for government consideration. In some cases, a certain number of signatures forces the government to discuss the issue.

Activity	Description
eActivism	The efforts made by voluntary organisations, or interest groups to influence the political process using ICT. This is done by promoting their viewpoints and agendas to the government and public, while presenting more objective information to the public than the government generally provides.
Online political discussion	Involves online deliberation, and the inclusion of citizens in political discourse for agenda setting, and rulemaking.
Online decision-making	The direct inclusion of citizens in the political decision-making process, rather than political discussions, using ICT. An example of this is the use of Geographic Information Systems to increase citizens' influence over neighbourhood planning.

The objectives of these activities should determine what technologies are used (Phang & Kankanhalli, 2008). E-participation technologies are discussed subsequently.

3.4.2 E-participation Technologies

Technologies and tools used for E-participation are based on already existing technologies that have been adapted for participation purposes (Sanford & Rose, 2007). These technologies are usually Internet-based and support socialisation. Phang & Kankanhalli (2008) categorise these technologies according to the objectives of public participation, while Sanford & Rose (2007) identified them according to their uses. Table 3-2 presents a list of E-participation technologies and their categorisation by both Phang & Kankanhalli (2008) and Sanford & Rose (2007).

Table 3-2: E-participation Technologies. Adapted from Phang & Kankanhalli (2008) and Sanford & Rose (2007)

Technologies	E-participation Objective (Phang & Kankanhalli, 2008)	Technology Use (Sanford & Rose, 2007)
Collaborative writing	• Information Exchange	• Shared authorship of community documents
Content management	• Information Exchange	• Support of document publication
Data mining	• Input Probing	• Political and demographic information
Decision support systems	• Decision-making supplement	• Community decision-making in contentious issues
Geographic information systems	• Decision-making supplement	• Visualisation of spatial data, for example in land use planning processes
Text and Data Analysis tools	• Input Probing	• Analysis of citizen input to policy-making

Technologies	E-participation Objective (Phang & Kankanhalli, 2008)	Technology Use (Sanford & Rose, 2007)
Visualisation (including virtual reality)	• Decision-making supplement	• Visualising future developments, typically for design and planning purposes
Web logging	• Education and Support building	• Political activism on the Internet
Web virtual meeting places (chat-rooms, discussion forums)	• Information Exchange • Education and Support building	• Development of virtual political communities as supplement to conventional

Although social media has been described as an ideal platform for E-participation, and has been linked to recent transformation in public participation (Chun et al., 2011; Sæbø, Rose, & Nyvang, 2009), it has not been included in Table 3-2. Chapter 4 discusses social media, and its use to support E-participation projects.

With the increasing popularity of E-participation projects and ICT tools supporting these projects, researchers recognised the need for frameworks to assess and characterise these projects, as well as the E-participation domain. The assessment of public participation through social media in South Africa will be done using one of these frameworks in Chapter 4.

3.4.3 E-participation Assessment Frameworks

E-participation assessment frameworks, or models, were developed to explain E-participation in relation to traditional participation, to align traditional participation areas to E-participation areas, to identify technologies that can be used in these areas and identify the stakeholders involved in the E-participation process. The assessment frameworks describe the components of the E-participation process, and the relationships between these components. The frameworks are similar in comprising components and relationships between these components. This section will discuss three of these frameworks. The selected frameworks are the most popularly referenced in literature, and are the foundations of other frameworks (Porwol, Ojo, & Breslin, 2016). Researchers use either the term framework, or model to describe these assessment frameworks.

3.4.3.1 E-participation Domain Model

Kalampokis, Tambouris, and Tarabanis (2008) set out to characterise the E-participation domain by providing a model that identifies and describes its most significant facets, and the relationship between them. Researchers have used the model to assess E-participation projects and initiatives. The model is divided into three sub-domains; Stakeholders, Participation process and ICT tools.

- Stakeholders: This represents stakeholders and the roles they play in the E-participation process. Stakeholders could include citizen groups, elected representatives, government officials, and non-governmental organisations. The roles identified in the model are input provider, decision maker, moderator/facilitator and owner/initiator. These roles could be held by any stakeholder (Kalampokis et al., 2008).

- Participation process: This domain is made up of *participation activities,* and the characteristics which describe them. The participation process also has a *scope*. The scope can either be national, regional or local, depending on the group of people targeted. The participation activities refer to activities stakeholders engage in during the democratic process. These activities are aimed at a *stage* in the democratic process such as agenda planning, policy creation, or policy implementation. Each participation activity belongs to a *participation area* such as deliberation, campaigning, consultation, and information provision. Participation activities are carried out using specific *techniques* like charrettes, deliberative polling and focus groups (Kalampokis et al., 2008). Each activity has an *outcome,* which should be responded to by the government, or fed into the next stage of the participation process. According to Kalampokis et al. (2008), participation activities also have levels which are dependent on how involved the public is in the participation process. These levels are eInforming, eConsulting, eInvolving, eCollaborating and eEmpowerment.

- ICT tools: These are tools that support the participation activity. Examples of these tools are virtual communities, blogs and web portals. According to Kalampokis et al. (2008), E-participation tools belong to the following categories: ePetition systems, eVoting and eReferenda, eConsultation systems, ePolling, community systems, GIS and Map-based tools, online surgeries and chat rooms, and combined collaborative systems. These tools are based on technologies such as semantic web services, knowledge management, argumentation support systems and collaborative environments. The final aspect of this sub-domain is the channel by which these tools are provided; these are mobiles, PCs and kiosks (Kalampokis et al., 2008).

3.4.3.2 E-participation Scoping Framework

Tambouris, Liotas, Kaliviotis, & Tarabanis (2007) describe the E-participation scoping framework's purpose as scoping E-participation. The framework contains five layers that can be viewed from a top-down, or bottom-up approach, as depicted in Figure 3-3.

The layer at the top of the framework is democratic processes, which refers to activities that are involved in the democratic process such as voting, public debates, and campaigning. The next layer is the participation area; this refers to areas in the democratic process that engage and involve citizens (Tambouris, Liotas, & Tarabanis, 2007). Some of these areas are deliberations, consultations, campaigning, information provision service delivery, discourse and participatory policy-making.

Participatory techniques are the third layer of the framework, and represent methods used to engage citizens and other stakeholders in the democratic process. Techniques include focus groups, scenario workshops, public hearings and deliberative polling. The next layer is the category of tools that represent ICT tools, used to support and enhance E-participation. Some of these tools include chatrooms, virtual communities, podcasts, bulletin boards, web portals and survey tools. The bottom layer of the framework represents technologies, which are the backbone of ICT tools used in E-participation.
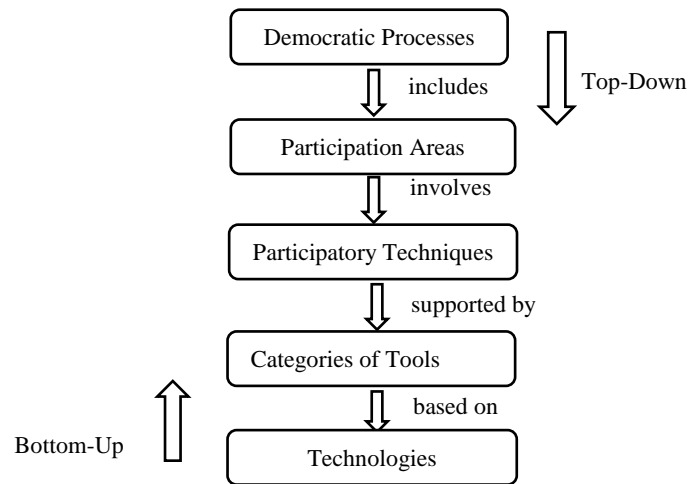
Figure 3-3: E-participation Scoping Framework (Tambouris et al. 2007)

3.4.3.3 E-Participation Evaluation Framework

This framework was developed by Macintosh & Whyte (2008), with the purpose of increasing understanding of E-participation, measuring its impact and potential opportunity. The framework presents three perspectives to E-participation evaluation; the democratic, project and socio-technical perspectives. Each of these perspectives have their own criteria for evaluation. The democratic criteria are representation, engagement, transparency, conflict and consensus, political equality, and community control. Project criteria includes engaging with a wider audience, obtaining better informed opinions, enabling in-depth consultation, a cost-effective analysis of contributions, and providing feedback to citizens. Socio-technical criteria are:

- Social acceptability — trust and security, relevance and legitimacy;
- Usefulness — accessibility, appeal, content clarity, responsiveness; and
- Usability — navigation and organisation, efficiency and flexibility, error recovery.

The framework includes the following actors in the evaluation process; citizens, councillors, engagement managers, project managers and technologists, moderators and administrators. The final elements in the framework are the evaluation methods involved, and these are; semi-structured interviews, field tests of the E-participation tools, online questionnaires, inspection of project

documentations, analysis of online discussions and web server log analysis. Figure 3-4 depicts the different perspectives of the framework and their outcomes.

Stakeholders' aims, methods and
expectations of public engagement

Public take-up,
usefulness and
acceptability

Socio-technical criteria

Project criteria

Impact on democracy

Democratic criteria
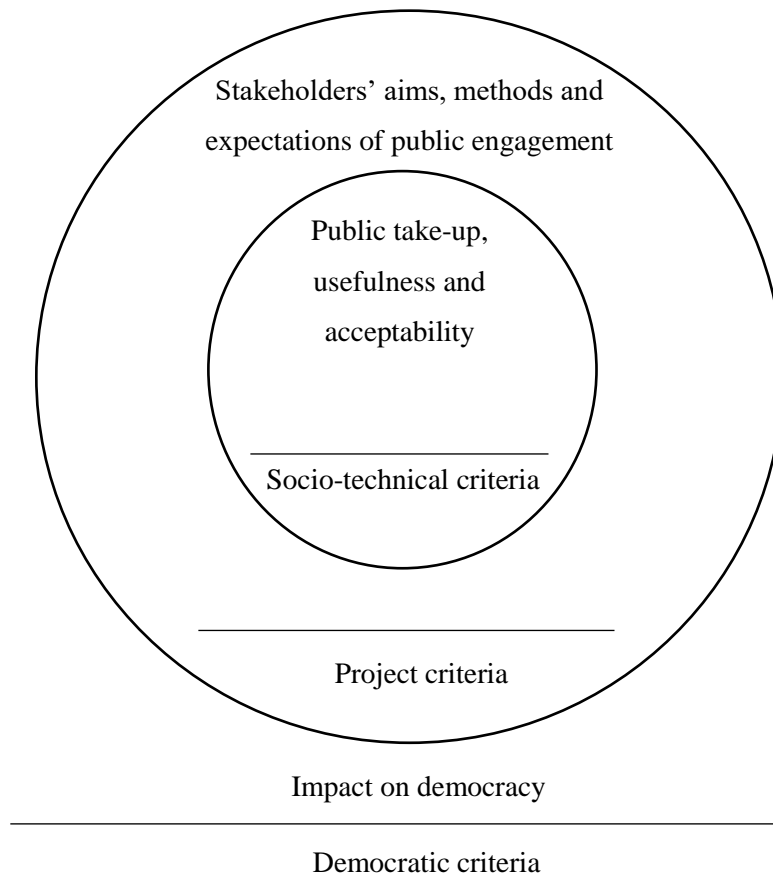
Figure 3-4: E-participation evaluation framework (Macintosh & Whyte, 2008)

3.5 Public Participation and E-government in South Africa

South Africa has a three-tier system of government; the national, provincial and local governments with each tier having legislative and executive authority over their own domains (South African Government, n.d.). The local government is further split into three categories of municipalities; the metropolitan, district and local municipalities. The responsibilities of these municipalities include providing infrastructure and service, and growing local economies (South African Government, n.d.).

3.5.1 Legislation in South Africa[3]

In the democratic South African government, public participation and engagement have been entrenched in the governance system. Friedman (2006) discusses the influence of the anti-apartheid

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[3] Some of the literature discussed in this section was obtained from research published as a work-in-progress double-blind peer-reviewed conference paper at the International Conference on Information Resources Management in May 2016. Fashoro, I. and Barnard, L. 2016. Social Computing as an E-Participation Tool in South Africa: An Exploratory Study. CONF-IRM 2016 Proceedings (Cape Town, South Africa, 2016), 9. (APPENDIX H)

struggle on the inclusion of citizens in decision-making in the then new South African government. The author explains how the fight against the exclusion of the majority in government led to the development of formal mechanisms for public participation. Legislative policies were created by the South African government to encourage public participation. Some of these policies are listed by Friedman (2006), Mzimakwe, (2010), and Reddy and Govender (2013) and are provided below:

- The South African constitution embraces both representative and participatory governance. Section 152 of the constitution emphasises democracy, accountability and encouraging citizen involvement in matters of the local government.

- The White Paper on Transforming Service Delivery of 1997 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 White Paper on Local Government of 1998 committed municipalities to working with communities and civic groups, to improve quality of life and development of municipal areas.

- The Local Government Municipal Structures Act 117 of 1998 deals with the establishment of ward committees in South African 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 through public meetings, such as the "Izimbizo". Izimbizo is an open-ended community meeting where representatives of the government listen to concerns in the community, and engage citizens in policies. It is usually held in churches, or township meeting places. Municipalities are also obliged to discuss budgets and Integrated Development Plans (IDP) with communities before they are developed. IDP is a strategy that helps municipalities plan future developments in their areas.

- The Promotion of Access to Information Act 2 of 2000 promotes transparency and accountability in public institutions by giving citizens access to information held by these institutions.

- The Traditional Leadership and Governance Framework Act 41 of 2003, proposes the involvement of traditional leaders in democratic leadership by co-operating with municipalities, and fostering participation in their communities.

Despite these numerous provisions by the government to enable public participation and engagement, Friedman (2006) and Van Belle and Cupido (2013) argue that these efforts fall short in their ability to enhance participatory governance and service delivery. The channels currently employed are plagued with problems due to poor implementation by administrators, power struggles between ward committees and ward councillors, misrepresentation by ward councillors, lack of trust between stakeholders, and a lack of commitment by political elites (Friedman, 2006; Piper & von Lieres, 2008;

Van Belle & Cupido, 2013). The South African public seem dissatisfied with the government's efforts. Piper and Lieres (2008), and Thakur and Singh (2012) report on the rising number of protests and public disorders against local government service delivery, and the public's voice being ignored by the government. There is therefore a need for more effective measures towards public participation and engagement.

The South African government has recognised the importance of ICT in improving service quality and government efficiency and has, in the last decade, since 2000, made investments in ICT infrastructure (Mutula & Mostert, 2010). The South African presidency has supported the development of ICT in the country, as demonstrated by the establishment of the Presidential National Commission on Information Society and Development in 2001 (Mutula & Mostert, 2010). The mission of this commission was to coordinate ICT initiatives in the country. In this regard, several policies and regulatory frameworks have been developed to encourage and serve as preconditions to E-government implementation in the country. Mutula & Mostert (2010) list these as Freedom of Information policy, ICT policy, Universal Access policy, Vision 2014 Development Strategy, Universal Service and Access policy, and E-government Vision.

In 2001, the Department of Public Service and Administration (DPSA), put forward a strategy document titled "Electronic Government, The Digital Future: A Public Service IT Policy Framework," that served as a high level framework for the implementation of E-government in South Africa (Farelo & Morris, 2006). This document recommended that E-government initiatives in the country should deal with three domains; E-government, E-service and E-business addressing government-to-government, government-to-citizen and government-to-business operations respectively (Farelo & Morris, 2006; Mutula & Mostert, 2010).

As part of the E-government initiatives undertaken by the South African government, multipurpose community centres, public information terminals and tele-centres 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). A major step in implementing E-government in 2004 was the development of the "Batho Pele Gateway"; a web portal that provides access to government services and information, and is translated into all eleven official languages of the country (Mutula & Mostert, 2010).

Other successful initiatives include the South African Revenue Service (SARS) E-filing system that enables citizens to file their tax returns online, and the Electronic National Traffic Information System (eNaTIS) for the application for driving licenses; registration and licensing of motor vehicles; notification of change of ownership/sale of motor vehicles; and application for learners licenses (Mutula & Mostert, 2010). These developments, and others, have led to South Africa's high rating in the United Nations' E-government survey. In 2016, South Africa's E-government was rated 76th in the world, and

3rd in Africa, by the United Nations E-government survey (United Nations Department of Economic and Social Affairs, 2016).

3.5.2 Public Participation Tools in South Africa

The tools employed to support public participation and citizen engagement in South Africa are aimed at achieving three objectives; inform, consult and involve (DPLG, 2007). Some of these tools are explicitly identified in the laws and legislations listed in Section 3.5.1. Others have been initiated by individual government bodies in order to achieve their public participation goals. The Department of Provincial and Local Government have listed the following tools:

3.5.2.1 Advisory Committee

Advisory committees are generally made up of key members of the community, such as experts, or key role-players in local economic development (DPLG, 2007). These committees advise on council decisions regarding community projects, and may sometimes be involved in carrying out these projects.

3.5.2.2 Annual report

The annual report is a report to the community on the performance of the municipality over the period of the previous financial year. It details the activities of the municipality over this period. The report is prepared by the municipal manager. The public must be provided with copies of the municipality's annual report; this could be on the municipal website, or by making hard copies available at municipal offices. The public must also be made aware of the details of the council meeting where the report will be discussed (DPLG, 2007).

3.5.2.3 Citizen's Participation Charter

The citizen's participation charter outlines the rights and duties of citizens regarding public participation in municipal matters (DPLG, 2007). The municipality's Public Participation Policy is usually published in the charter. General information regarding the municipality is also included in the charter. This information includes; basic information on the municipality, how to make enquiries and complaints, contact details for ward councillors, ward committees, the IDP forum coordinator and the Imbizo co-ordinator, and the public participation year planner for the municipality (DPLG, 2007). The charter is updated annually to update the municipality budgeting information. It is made available to the public at municipal offices, as well as on the municipal website (DPLG, 2007).

3.5.2.4 Citizen's Satisfaction Surveys

Satisfaction surveys are employed by municipalities to gauge citizens' attitudes towards municipal performance (DPLG, 2007). These surveys are used to assess areas such as municipal performance in service delivery, and the responsiveness of municipal officials to the public. Satisfaction surveys can be done independently by external organisations hired by the municipality to ensure the results are unbiased.

3.5.2.5 Community Complaints Management System

Community complaints management systems institutionalise procedures to handle complaints from the community. These systems are set up in varying ways by each municipality; some municipalities have a central office that is responsible for this system, while others have these systems set up in each of the major service orientated line departments (DPLG, 2007). The requirements for such systems include publicising contact details for making complaints such as telephone numbers, forms to log complaints on the municipal website, as well as provide important documents like the citizen's participation charter. The system should cater to citizens who want to make complaints in person and allow complaints to be made in their home language. The systems should also address rules for handling complaints, such as who is responsible for handling the complaint, the time frame for responses, processes to allow the public to track complaints, and the threshold of the basic information that must be provided (DPLG, 2007).

3.5.2.6 Council meetings

Council meetings are held by the municipal government officials to make decisions regarding the community. These meetings are open to the public, and a public notice of the meeting venue, date and time should be provided to the community. These meetings are used to discuss issues that affect the community such as bylaws, budget, IDP, performance management system, and service delivery agreements (DPLG, 2007).

3.5.2.7 Deliberative polling

Deliberative polls are used to consult the community on specific issues such as street naming (DPLG, 2007). The goal of deliberative polling is to "develop more informed, stable attitudes and promote civic engagement" (Hall, Wilson, & Newman, 2011, pg. 2). According to Hall, Wilson and Newman (2011), citizens are engaged in a process of dialog, exposed to information and interact with experts in a bid to make critical decisions about their community.

3.5.2.8 Newsletter

Newsletters are tools used to inform the public of council decisions, municipal matters and the community's rights and duties (DPLG, 2007).

3.5.2.9 Posters, loudhailers, banners, email notification, media adverts

These mechanisms are generally used to inform the public about important events, or meetings in the community, such as Izimbizo or council meetings (DPLG, 2007).

3.5.2.10 Public meetings/Izimbizo

These are informal, open-ended community meetings where the president, ministers or councillors listen to community concerns, explain policies and assign officers to follow-up on decisions made (Friedman, 2006; Reddy & Govender, 2013). These are usually held in church halls, or township

meeting places. They are fashioned after meetings used by traditional rulers to consult their subjects (Friedman, 2006).

3.5.2.11 Stakeholder forums

Municipalities use local stakeholder forums to support monitoring and evaluating the implementation of IDP projects and service agreements (DPLG, 2007). These forums include representatives from ward committees, and local stakeholder groups in the community. The role of these forums is to ensure that planning done at a more central level of government is implemented effectively at the local level (DPLG, 2007).

3.5.2.12 Ward Committees

The ward committee serves as an advisory committee consisting of members of the community (Reddy & Govender, 2013) with the aim to prioritise communication between the municipality and the local community. Ward committees enhance community participation, and address service delivery challenges in the community (Reddy & Govender, 2013) enabling ordinary citizens, interested in municipal matters, to contribute to their community by becoming a member of the committee. The committee usually consists of the ward councillor and about ten other persons from the ward concerned, while the councillor acts as the chairperson of the committee (Mzimakwe, 2010).

3.5.3 E-government Challenges in South Africa

Despite the continuous efforts by the South African government to promote E-government, issues such as poverty, inequality, corruption and insecurity pose a challenge to its successful implementation (Mutula & Mostert, 2010). South Africa, like most countries in Africa, is also faced with the challenges of building human capital, especially ICT literacy, and bridging infrastructure gaps which hamper the E-government development agenda (United Nations, 2014). These two basic challenges are the bedrock of other E-government challenges in South Africa.

E-government is dependent on the availability of affordable, basic ICT infrastructure; recent electricity shortages in the country, and the high cost of Internet broadband connections reduce the accessibility of E-government services in South Africa. The impact of this lack of stable infrastructure is most intense in rural areas, where about 45% of the country's population are found (Mutula & Mostert, 2010; Nkomo, 2012). In these areas, ICT infrastructure is less developed, citizens live in poverty and are sometimes located far from public information terminals and tele-centres. Inequality between the rural and urban areas, as well as the rich and the poor in South Africa, hampers the E-government development by exacerbating the digital divide.

South Africa suffers from human capital shortage challenges, especially in the area of ICT (Farelo & Morris, 2006; Mutula & Mostert, 2010). This skills shortage relates to both government employees and citizens. Employees lack the skills to use the ICT infrastructure provided by the government to successfully deliver E-government services, and, on the other hand, citizens do not have the skills

required to access the services provided by the government. ICT illiteracy, therefore, impedes the E-government development effort of the South African government.

3.6 Conclusion

The chapter set out to provide a background into E-government and public participation. E-government has transformed government functions and their interaction with citizens. The inefficiencies of government departments have largely been improved by the introduction of ICTs. Although E-government has been beneficial in many ways, there are also several challenges and risks involved in the use of ICT in government. However, there is a continuous investment in E-government, especially with the advancement in technology, and the expectations of citizens who use these technologies in their personal, professional and business lives.

Public participation and engagement is a major area of governance, and an area where ICTs have been implemented to bring about transformation. Literature indicates that participation and engagement occur in levels based on the involvement of citizens. Within each of these levels of participation and engagement, different activities occur, and are supported by different types of technology. Figure 3-5 shows these levels, with the activities and technologies discussed in Section 3.4.1, and in Section 3.4.2.

The growth of the E-participation field, and the inclusion of technology in the process of participation, has led several researchers to question the success of E-participation. This resulted in the development of frameworks/models for assessing E-participation projects and initiatives, as well as characterising the domain (Section 3.4.3).

In South Africa, legislative policies and frameworks have set a foundation for public participation and engagement. Many mechanisms exist that support citizen participation and engagement; these mechanisms fall within the public participation and engagement spectrum described by Figure 3-2. Some mechanisms are used for one-way communication, such as the annual reports and newsletters, while others allow for two-way communications, and even co-production, such as advisory committees and ward committees. ICTs can also be used to support the mechanisms discussed as seen in Figure 3-5.

Communication	Consultation	Co-production
Activities:	**Activities:**	**Activities:**
ePetitioning, eActivism, eCampaigning	eConsultation, Online political discussion	eVoting, Online decision-making
Technologies:	**Technologies:**	**Technologies:**
Web logging, Data mining, Text and Data Analysis tools	Collaborative writing, Content management, Web logging, Web virtual meeting places	Wikis, Geographic information systems, Decision support systems, Visualisations

Figure 3-5: Participation continuum showing activities and technologies.

Research question RQ_1 and objective RO_1 have been addressed by exploring the public participation mechanisms in Section 3.5.2 and the legislative policies and frameworks that make public participation an integral part of the South African political process in Section 3.5.1.

RQ_1: To what extent is public participation implemented in South Africa?

RO_1: To understand the current implementation of public participation in South Africa.

The next chapter explores social media as a tool for public participation.

Chapter 4 : Social Media and E-government

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 8
Introduction	Research Design	E-government and Public Participation	**Social Media and E-government**	Social Media in Nelson Mandela Bay Municipality	Social Media Model for Public Participation	Evaluation and Reflection	Conclusion and Recommendations

4.1: Introduction

4.2: Social Computing

4.3: Social Media

4.4: Social Media Analysis

4.5: Social Media and E-participation

4.6: Government Agencies on Social Media

4.7: South African Government Social Media Use

4.8: Best Practices

4.9: Conclusion

Research Objectives

RO₂: To investigate the use of social media for public participation.

Best practices in using social media in government

Deliverables

Challenges in using social media in government

Opportunities for using social media in government

Assessment of social media use in South African government

Figure 4-1: Chapter Overview

4.1 Introduction

From discussions in the previous chapter, the importance of ICT in government can be inferred. Technologies that have become integral to supporting E-participation were presented along with the specific E-participation activities they facilitate (Sections 3.4.1 & 3.4.2). Social media technologies have been identified as idyllic for E-participation (Sæbø, Rose, & Nyvang, 2009). Social media technologies represent the current phase in the evolution of computing since the 1950s.

Computing and ICT have evolved over several decades and are now ubiquitous, presenting the opportunity for their use by governments. The computing landscape is continuously changing with a reinvention occurring almost every decade. Computing evolved from the "Mechanical" level where it was just a set of hardware devices used for computations, to the "Informational" level. At the informational level, it involved the processing of information by the hardware devices. The "Personal" level is the next level where computing involved the interaction of users with systems to produce meaning to the information processed in the previous level (Whitworth & Ahmad, 2014). Currently, computing is at the "Social" level where it involves community interaction, and supports human communication (Erickson, 2014; Whitworth & Ahmad, 2014).

The evolution in computing can be associated with the advancements in computing power, and Moore's Law which predicted that the number of transistors on an integrated circuit will double approximately every two years (Moores Law, n.d.). The increase in the number of components on an integrated circuit not only increased the computing power, but also allowed for the reduction in the size of devices. This is most evident in mobile computing which has seen an increase in computing power over the years with a reduction in the size of mobile handsets. Figure 4-2 shows the evolution of computing from the first computer to today's social computing world.
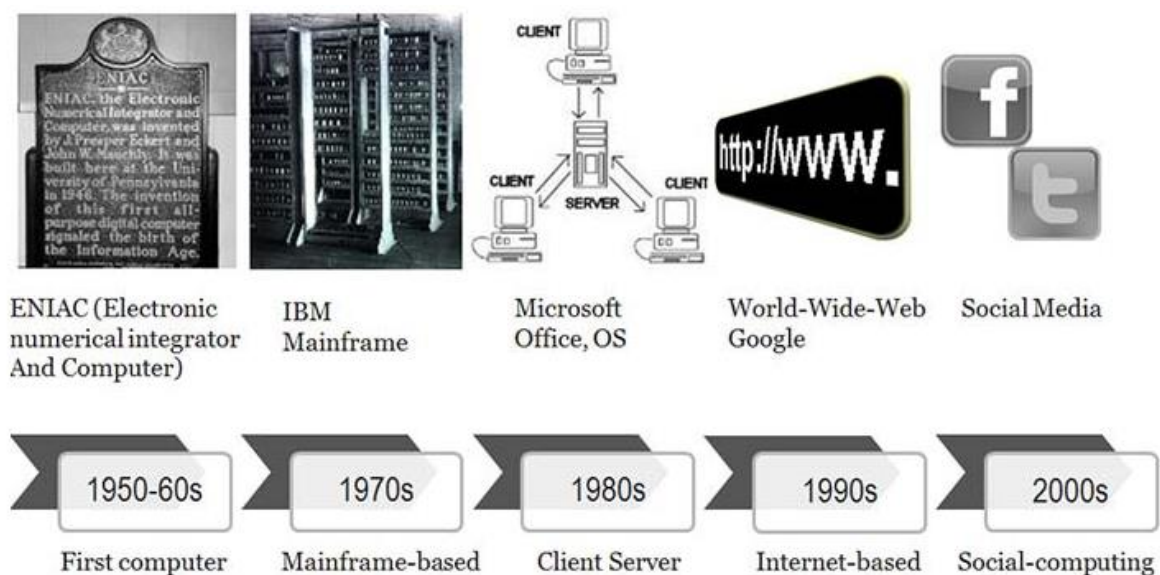
Figure 4-2: The Evolution of Computing. (Whitworth & Ahmad, 2014)

The shift in the nature of computing is largely due to the nature of humans as social creatures, with an innate need to interact with one another, to belong to a community and be recognised in these communities. These needs have been clearly identified and encapsulated in Maslow's Hierarchy of Needs (Sarner, Drakos, & Prentice, 2008). The evolution transformed computing from being strictly utilitarian to being hedonic; with computing systems existing for the purpose of entertainment and socialisation. These changes, according to Erickson (2014), go as far back as the 1970s when the first computer-mediated communication systems emerged. Since then, technology has been used for communication and interaction with simple applications like email and instant messaging. The current evolution has been primarily termed "Social Computing". Section 4.2 will present a discussion on social computing.

This chapter will address research questions RQ_2 and RQ_4, the research objective RO_2 will also be addressed.

RQ_2: How can social media be used for public participation?

RQ_4: What are the best practices in the use of social media for public participation?

RO_2: To investigate the use of social media for public participation through cases in other countries and organisations for best practice identification.

Subsequent sections of this chapter will discuss social media (Section 4.3), some available social media technologies (Section 4.3.1), social media implementation models (Section 4.3.2), and organisation (Section 4.3.3), and the use of social media in E-government (Section 4.5). The structure of the chapter and its deliverables are shown in Figure 4-1.

4.2 Social Computing[4]

In its simplest form, social computing enables social behaviour through ICTs, and involves humans working together in a computation process. Parameswaran and Whinston define social computing 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, p. 762). Although this definition, and many others, focus on the aspects of interaction and information exchange, social computing encompasses so many other technologies such as crowd sourcing, data mining, social networks and collective intelligence. Social computing technologies include social media, social tagging systems, wikis, collaborative document editing, Really Simple Syndication

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[4] Some of the literature discussed in this section was obtained from research published as a work-in-progress double-blind peer-reviewed conference paper at the International Conference on Information Resources Management in May 2016. Fashoro, I. and Barnard, L. 2016. Social Computing as an E-Participation Tool in South Africa: An Exploratory Study. CONF-IRM 2016 Proceedings (Cape Town, South Africa, 2016), 9. (APPENDIX H)

(RSS), blogs, and social bookmarking. Social computing harnesses the power of users to add value and co-create services and products (O'Reilly, 2010). According to Ali-Hassan and Nevo (2009), these technologies are associated with Web 2.0 which is known as the second generation of the Internet. Social computing is therefore sometimes referred to as "Web 2.0".

Web 2.0 does not refer to any particular technology; it refers to functionalities and trends in web design and application development. These functionalities focus on collaboration, interactivity, communication and mass participation in web content generation (Kaplan & Haenlein, 2010; Smith & Mckeen, 2008). Web 2.0 is the technological platform on which social media applications are built (Kaplan & Haenlein, 2010). However, Smith and Mckeen (2008) identify Web 2.0 as one of the trends that has resulted in social computing, along with cheap connectivity devices, peer-to-peer communication, and the change in the way people use technology.

Some of the characteristics of social computing platforms described by Parameswaran and Whinston (2007) are:

- decentralised organisation,
- highly dynamic content that is continuously refined,
- a bottom-up structure that relies on peer review,
- ratings and feedback to determine preferred content,
- unstructured quality assurance dependent on feedback and reviews from peers,
- revenue models that are altruistic and motivated by the community,
- a locus of control that is closer to the user,
- and, a free-form and flexible structure that is continuously changing and determined by users.

Social computing 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. The focus of this study is social media and its use by governments. The next sections will centre on these concepts.

4.3 Social Media

Social media refers to a set of Internet-based applications and tools that allow efficient connections and relationship building, and allow the creation and exchange of user generated content (Kaplan & Haenlein, 2010; Safko, 2012). These applications and tools are centred around communication and interactions on an individual, community and societal level. Social media are based on the ideological and technological foundations of Web 2.0 (Kaplan & Haenlein, 2010).

Social media connects people with other people and enables them to draw power from this connection, essentially, empowering people through technology (Li & Bernoff, 2011). This has led to a shift of power from organisations to the communities; customers no longer rely on companies for information,

but now rely on other customers, people they know and trust (Safko, 2012). Innovation in companies is also shifting from a top-down model, to a bottom-up model, as employees are empowered to collaborate and share ideas (Smith & Mckeen, 2008). Essentially, social media enables the convergence of communication and information, allowing people to break through traditional barriers, and creating new ways of interaction and information dissemination.

Social media has been embraced by individuals and businesses at a rapid pace since the 2000s (Lee & Chen, 2013). Bughin, Chui, and Harrysson (2015) recently reported that the use of social media has become common practise within organisations. Businesses are leveraging social media for improved communication, collaborative problem solving, innovation and knowledge management (Adija, Shockowitz, Pickering, Srinivasan, & Murkin, 2013). Tools such as wikis, blogs, social networking sites and RSS are seeing increasing use by organisations, both internally and externally, to engage employees, customers, suppliers and partners (Bughin, Manyika, & Miller, 2008).

Despite their many advantages and popularity, social media have their critics who believe these technologies have a negative effect on human relationships, and are changing the dynamics of work-life balance. Arguments against social media include the erosion of intimacy in relationships which has been blamed on shifting importance on weak-tie relationships formed on social media, lack of boundaries between work and pleasure, and a lack of presence in our physical world due to our constant presence on social media (Turkle, 2011).

Social media websites like Facebook, Twitter, YouTube and LinkedIn report millions of users. Globally, Facebook reports an estimated 1.45 billion users daily, Twitter reports 336 million users monthly, YouTube reports over a billion users and LinkedIn reports over 562 million users (Facebook, 2018; LinkedIn, 2018; Statista, 2018; YouTube, 2018).

Governments are usually slower on the uptake of technologies, trailing behind individuals and businesses in adoption. Nam (2012) remarks about government agencies being under pressure to adopt social media due to the expectations of citizens and businesses. This perceived pressure has led to an increase in the adoption of social media by governments around the world with 152 countries using social media on their national portals in 2016 (United Nations Department of Economic and Social Affairs, 2016). Some government agencies have admitted to adopting social media simply so that they can seem attractive to the public, while others indicated these technologies foster collaboration, allow the instant sharing of information, and the building of an online community (Nam, 2012). Some of the most common technologies used by individuals, organisations and governments, will be discussed in the next section.

4.3.1 Social Media Technologies

Social media technologies include blogs, social network sites, virtual worlds, virtual gaming sites, collaborative projects and content communities (Kaplan & Haenlein, 2010). The following sections describe these categories of social media.

4.3.1.1 Blogs

Blogs, one of the earliest forms of social media, provide a tool for writing personal, or group journal entries on websites, which are date-stamped in reverse chronological order (Kaplan & Haenlein, 2010; Li & Bernoff, 2011). The term blog was coined from "web log" (Safko, 2012). Although originally text-based, blogs now take on different formats including audio, video, and pictures. Blogs allow two-way interactions between the authors and readers using comments. Individuals and companies alike are using blogs to communicate with their audience.

4.3.1.2 Social Network Sites

Applications that enable users to connect by creating personal profiles, inviting friends to view their profiles, and interact using emails, or instant messages are known as social network sites (Kaplan & Haenlein, 2010; Li & Bernoff, 2011; Nepal, Paris, & Georgakopoulos, 2015). Some examples of social network sites are Facebook, LinkedIn, Twitter, MySpace, FourSquare and Orkut. These applications are targeted towards different audiences, and serve different purposes. LinkedIn, for instance is geared towards professionals, while FourSquare is a location-based social network site. Location-based social network sites enable users to share their locations, comment about their locations and make recommendations about these locations to their followers (Hinton & Hjorth, 2013). Social network sites enable interactions by sending alerts when a contact's profile is updated, allowing people to make comments, post pictures, videos, or web links on each other's profiles, and send messages to each other (Li & Bernoff, 2011). These sites allow the building of communities around brands and topics of interest of the users.

4.3.1.3 Virtual Worlds

Virtual worlds have their origin in three dimensional simulators which were graphical representations of a simulated environment (Safko, 2012). A virtual world is "an Internet-based simulated environment inhabited by avatars, or graphical representations of its interactive users" (Safko, 2012, p.348). Users enter into these environments, navigate them and interact on a personal, one-on-one level without limitations. The most popular example of a virtual world is "Second Life," which was created by Linden Research Inc. and allows users to create avatars and live like they would in real life (Kaplan & Haenlein, 2010). Users are allowed to create and to sell content to other users in exchange for Linden Dollars, a virtual currency used in Second Life. The Linden Dollars are traded against the US Dollar on the Second Life Exchange (Kaplan & Haenlein, 2010, p. 64). Virtual worlds can be a simulated version of the real world, a re-creation of part of the real world, or a fantasyland. As with other social media already

discussed, virtual worlds are used by individuals, educational institutions, companies as well as governments. An example of government use of virtual worlds are the city of Birmingham in the UK, and the Italian government's use of Second Life to provide tourism information and interact with the public (Van Jaarsveldt & Wessels, 2011).

4.3.1.4 Virtual Gaming Sites

Virtual gaming sites were created with the purpose of competition, winning, or overcoming a predetermined challenge (Safko, 2012). These games are generally multi-user in nature, and are therefore referred to as Massively Multiplayer Online Role-Playing Games (MMORPG). MMORPG is a genre of computer, or an Internet game, in which a large number of players interact in a virtual world (Safko, 2012). Similar to a virtual world, users create avatars to represent themselves. These avatars could take the form of humans, dwarves, monsters and other mythical creatures (Kaplan & Haenlein, 2010). MMORPG have increased in popularity in recent years due to the support from standard game console makers such as Sony and Microsoft, who allow users around the world to play their games simultaneously. Unlike virtual worlds MMORPG, have strict rules of conduct that users must adhere to while playing (Kaplan & Haenlein, 2010). Some examples of MMORPG are World of Warcraft, EverQuest, Tera, and RuneScape.

4.3.1.5 Collaborative Projects

These projects enable joint and collaborative content creation by many users, or contributors, with a shared responsibility of creating and maintaining content (Kaplan & Haenlein, 2010; Li & Bernoff, 2011). The main idea behind these projects is that multiple contributors will produce better results than can be expected from a single contributor (Kaplan & Haenlein, 2010). The main categories of these projects are wikis, and social bookmarking, and tagging applications. Wiki comes from the Hawaiian word that translates to "quick" (Li & Bernoff, 2011; Safko, 2012). Wikis are websites that allow multiple users to add, change and remove text-based information (Kaplan & Haenlein, 2010). Wikis are widely accessible, for example to the public or an entire employee base, which makes them vulnerable to mistakes and vandalism (Safko, 2012). To counteract this weakness, wikis are designed to be easy to edit and to correct errors, including mechanisms that allow pages to be restored to previous versions and providing information on recent edits, when the edit was made, and by whom (Safko, 2012). Common examples of wikis are Wikipedia, WikiHow, Conservapedia and WikiTravel.

Social bookmarking and tagging enable the categorisation and rating of Internet links, or media content (Li & Bernoff, 2011; Nepal et al., 2015). These classifications are done by users and depend on the users' own opinions. Users' store, organise, search and manage these bookmarks and tags on the Internet. Examples of such applications are Digg, a website that allows users to tag which stories they prefer, and decide into which category they go and del.icio.us, a downloadable application that allows users to bookmark websites and tag them according to their classifications (Li & Bernoff, 2011). Social

networking sites like Twitter, Instagram and Facebook also use the concept of tagging to allow users to categorise the contents they post online.

4.3.1.6 Content Communities

Content communities allow users to share media with one another. Communities exist for varying media types including videos, PowerPoint slides, text, and pictures (Kaplan & Haenlein, 2010). Examples of such communities are YouTube, Flickr, Tumblr, Pinterest and SlideShare. Users of content communities are not required to create an extended profile to share content, and where profiles exist they usually contain the most basic information about the user (Kaplan & Haenlein, 2010). Some of these communities congregate around topics of interest to the users. Other types of content communities include forums and user review sites. These types of communities allow users to ask questions and post comments on various topics. These comments and questions form threads that are viewed as conversations to visitors of such websites (Li & Bernoff, 2011). Typical examples of forums and review sites are Rotten Tomatoes, TripAdvisor, Epinions, and forums based around products and brands.

Due to the varying types and number of platforms available, the implementation of social media may be perceived as a confusing and cumbersome task. Social media experts and practitioners have devised several implementation models that are intended to serve as guides for organisations interested in implementing social media. Some of these models will be discussed in the next section.

4.3.2 Social Media Implementation Models

Social media implementation models describe how social media can be implemented in organisations. These models describe what steps should be taken in implementing social media, and how these steps can be adapted to specific organisations. These models have been selected because they are the most common models identified in social media literature, and referenced by social media experts and consultants (Chikandiwa, Contogiannis, & Jembere, 2013). The models to be discussed are POST, ACCESS and PDCA.

4.3.2.1 People, Objectives, Strategy and Technologies (POST) model

The POST model was developed by Forrester Research group as a strategic framework for planning the social media implementation in an organisation (Li & Bernoff, 2011). Figure 4-3 shows the elements of this model and some of the important questions to be considered for each.
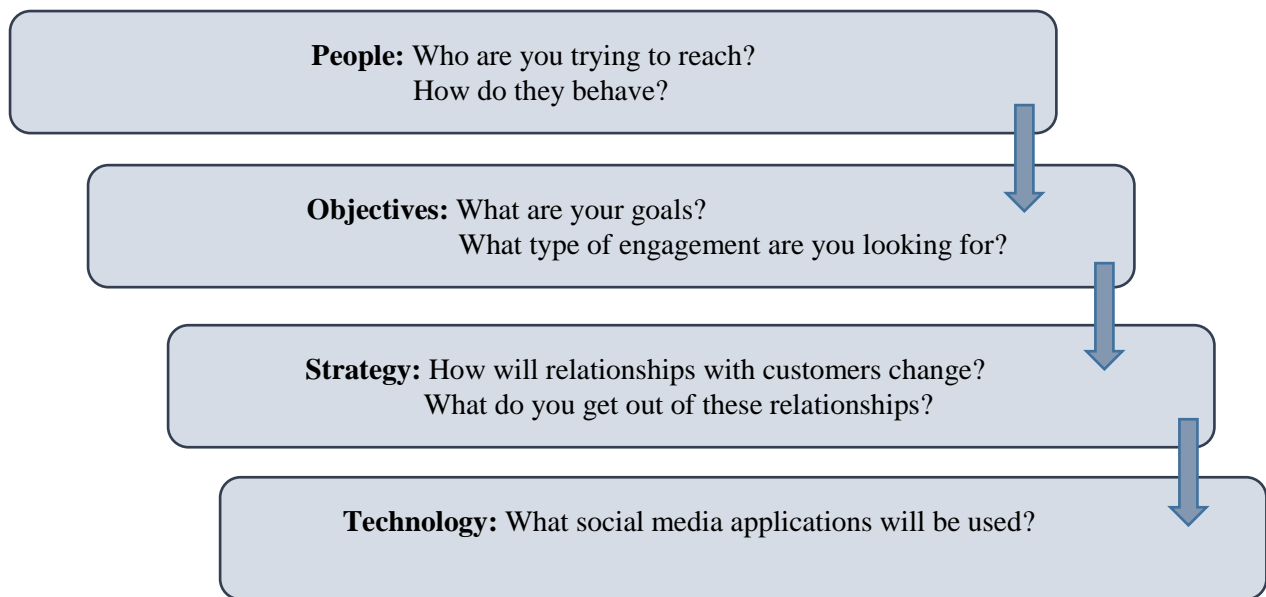
Figure 4-3: Social Media Post Model. (Social Media Models, n.d.)

People: This refers to the organisation's customers and how they engage on social media (Chikandiwa et al., 2013; Li & Bernoff, 2011). The strategy stresses the central role people play in the use of social media by focusing on people first (Auvinen, 2012). Forrester Research has developed a methodology known as the "Social Technographics Ladder" that groups social media users according to their level of engagement. Figure 4-4 illustrates this profile.

Li and Bernoff (2011) describe the social technographics ladder as a methodology for surveying customers, similar to demographics and psychographics, but based on customers' technology behaviour. This ladder makes it possible for organisations to decide on social media channels to implement based on the level of engagement of their customers. Analysing customers as a first step in planning a social media strategy ensures that the selected social media channel is relevant to their customers.

The social technographics ladder is a profile that categorises the different groups of social media users. Each level of user is more involved in using social media than the previous level. **Creators** are most involved in posting on social media with at least one post a month (Li & Bernoff, 2011). **Conversationalists** are also very active with interactions happening at least weekly; the nature of their interaction is usually back-and-forth dialogue such as status updates (Li & Bernoff, 2011). **Critics** are users that react to posts by other users; this may be by posting comments on blogs, editing Wikis, or posting reviews. **Collectors** aggregate information which help in organising content produced by Creators and Critics; they express their preferences without responding to the post unlike Critics (Li & Bernoff, 2011; Social Media Models, n.d.). Collectors save URLs and tags using social tagging and social bookmarking services. **Joiners** participate in, or join social networking sites, to maintain a profile and their relationship with other users of these sites. **Spectators** are consumers of the content provided

by other users; they have no active participation, but use these social media platforms as a source of information to increase their knowledge, for example about friends, family, and topics (Li & Bernoff, 2011; Social Media Models, n.d.). **Inactives,** are those that are not present on social media at all, or may be present, but do not participate in any way at all.
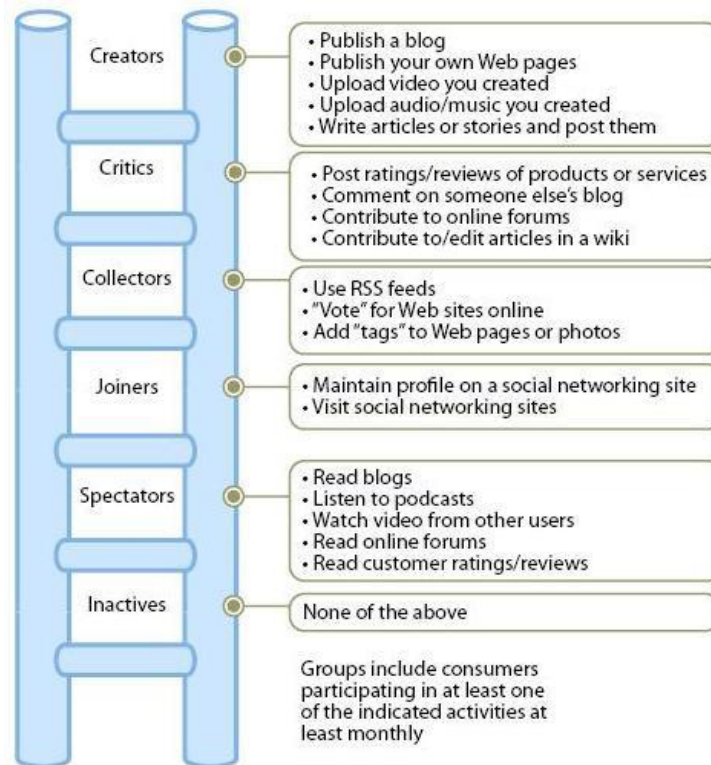
Figure 4-4: The Social Technographics Ladder. (Li & Bernoff, 2011).

Objectives: The objectives are an organisation's goals for adapting social media. The objectives can either reflect internal or external usage; reaching out to customers or helping employees work more efficiently (Li & Bernoff, 2011). Business objectives of social media include branding, product development, listening to customers to gain insight and raising awareness with customers (Chikandiwa et al., 2013). Five main objectives for external use of social media have been identified by Li & Bernoff (2011), and are presented in Table 4-1.

Table 4-1: Objectives for external use of Social Media. Adapted from Li & Bernoff (2011).

Objective	Description
Listening	The use of social media for research and studying customers. Organisations that have the aim of getting insights into marketing and product development, use social media in this way.
Talking	This involves providing information regarding an organisation to their social media audience. Organisations with the goal of digital marketing employ social media as a tool to talk to their audience.

Energising	Organisations that have brand enthusiasts can use social media to energise them and thereby advance their word of mouth marketing.
Supporting	Organisations with high support costs seek out social media to reduce these costs, especially when their customers are willing to help one another. Customers can respond to posts by other customers thereby eliminating the need for involvement from the organisation's employees.
Embracing	Integrating the organisation's customers into their operations. Organisations that apply social media in this way generally have prior experience with social media. An example of such integration is the involvement of customers in the product design and development process.

Strategy: The strategy refers to the "how" of planning social media strategy. It covers the dynamics of the organisation's relationship with its customers; how the relationship is expected to change, how involved the customers are expected to be in carrying out the organisation's message to others, and the extent of their engagement with the organisation (Li & Bernoff, 2011). Answering these questions will help the organisation plan for desired changes, and how these changes might affect the organisation.

Technology: Organisations need to decide between building a social media application and employing an already existing application. Some of the social media technologies available have been discussed in Section 4.3.1.

4.3.2.2 ACCESS model

ACCESS model was created by Content Connections LLC, a publishing services company, as a way of planning and executing the social media strategy of an organisation (Safko & Brake, 2009). ACCESS represents Audience, Concept, Competition, Execution, Social Media and Sales Viability. Figure 4-5 presents a diagrammatic depiction of the model, indicating that the audience, concept and competition elements, feed into the execution of the social media strategy. The choice of social media channels/technology, and the sales viability are encompassed in the execution of the social media strategy.
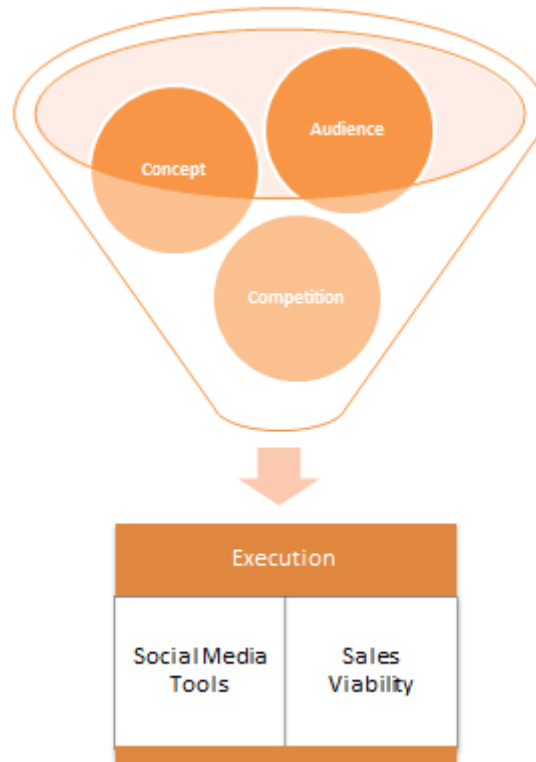
Figure 4-5: Social Media ACCESS model. (Social Media Models, n.d.)

Audience: The audience consumes the content provided by an organisation on social media. The first step in developing a strategy with the ACCESS model is to identify the organisation's audience. Like the POST model, the people are the starting point for implementing social media. Safko and Brake (2009) propose some approaches to identifying the audience:

- Demonstrated Behaviour: This involves monitoring actions of the targeted audience through analytics websites and tools.

- Self-Reported Behaviour: Surveying the target audience's behaviour through questionnaires, interviews and focus groups can help an organisation learn about them and bring the audience closer to the brand.

- Attitudes, Values and Beliefs: This involves analysing an organisation's target audience through psychographic, or lifestyle profiling.

- Demographic Data: This data helps organisations identify their audience based on demographics such as age, education, and household income. This type of information is beneficial in identifying the needs and behaviours of the targeted audience.

Concept: The concept describes the focus of social media for the organisation; whether internal or external, every employee within the organisation, or a specific group of employees, the organisation's entire brand, or a specific product/service. The needs of the potential audience should be considered rather than the needs of the organisation (Safko & Brake, 2009). Defining a concept ensures the social

media are relevant to the targeted audience (Chikandiwa et al., 2013). Once the concept has been defined, a concept statement should be articulated. This serves as a vision statement for the social media channel to be implemented (Safko & Brake, 2009). The concept should also be validated before final execution. Validation entails creating a sample of the social media site and verifying it with a sample (100-400 people) of the organisation's target audience.

Competition: Organisations need to know who their competitors are, and understand how their competitors are using social media. By studying the competition, organisations should be able to determine the advantages their concepts have over that of the competition (Safko & Brake, 2009). The competition should be studied through the point-of-view of an audience. This might also help the organisation refine previously created audience profiles. The focus on the organisation's competition should not be the tools used by the competition but the purpose achieved by these tools (Chikandiwa et al., 2013). Safko and Brake (2009) provide simple strategies for studying the competition. These strategies include:

- Make a list of competitors and their offerings.
- Identify the social media technologies employed by competitors and the purpose these technologies serve.
- Analyse the competition's content, the tone of their content, response from their audience and how frequently audiences post on their social media channels.

Execution: The execution of a social media strategy is critical to its success. Execution in this scenario relates to the sample content that will be used; such as videos, pictures, and audio (Safko & Brake, 2009). The content should be made available to a selection of the organisation's audience to obtain feedback. This has been referred to above as validation of the concept. After receiving feedback, the concept and content can be reviewed to suit the audience. This has the advantage of making the audience feel included in the strategy development process (Safko & Brake, 2009).

Social Media: This entails selecting the appropriate social media technology for the audience identified and concept developed. Social media technologies have been discussed in Section 4.3.1.

Sales Viability: Organisations need to decide on the best way to create value through social media. According to Safko & Brake (2009), the purpose of business is to make money. Hence, organisations should seek to create opportunities for profit making through their social media setup.

4.3.2.3 PDCA model
The PDCA is a logical model for social media strategy creation (Schaffer, 2013). The elements in this framework are Plan, Do, Check and Act.

- Plan refers to the crafting of the social media strategy to be implemented.
- Do is the actual implementation of the strategy according to the plan.

- Check means analysing the key performance indicators (KPI) and metrics regarding the selected social media and comparing actual performance against the selected strategy.
- Act refers to adjusting processes and optimising the plan according to results from the check phase (Schaffer, 2013).

The elements to be considered in the planning phase of the strategy are, Objective, Customer, Share, Who, and Brand. These elements are described below.

Objective: This is the reason for creating a social media strategy, and it should be clearly defined as the first stage of the planning process. Clearly defined objectives ensure that KPIs can be measured accurately. Social media strategy objectives should be aligned with the corporate strategy (Schaffer, 2013). According to Schaffer (2013), some common objectives for social media in organisations include:

- Increase sales: This could be by increasing client retention and sales to current clients and increasing brand awareness.
- Decrease expenses: This might involve using social media to recruit new employees, using social media for marketing, and shifting customer support services to social media.
- Generate more traffic to either the company website, or the brick-and-mortar facility.
- Using social media as the primary marketing channel for new companies.
- Integrating social media into the organisation's existing digital properties.

Customer: This denotes the target audience on social media. A detailed understanding of the demographics of an organisation's audience makes it easier to align social media activities with this audience (Schaffer, 2013). Organisations can identify their audience by: taking a survey of current customers, using web analytics software, analysing demographics of their competitors, and analysing demographics of their current social media platforms (Schaffer, 2013). Web analytics software such as Google Analytics enables organisations to analyse demographics of visitors to their website. Aside from their target customers, organisations should also identify their target market. The target market is a less focused distinction of the organisation's audience; the audience could be a particular region of the world, business-to-business markets, customer markets or industries (Schaffer, 2013).

Organisations with multiple target demographic groups, and target markets, should initially focus on just one group when starting out with social media (Schaffer, 2013). Once the social media strategy has been perfected, it can be targeted towards other demographic and market groups.

Share: This is the "what" of an organisation's social media strategy. The purpose of social media is communication and information; hence, this element is essential to the strategy. Content to be shared should be both unique to the organisation and curated from other sources that are relevant to the organisation's industry (Schaffer, 2013). Information that is already being shared through the

organisation's website, newsletter, webinars, or sales calls, should be provided on social media platforms. An organisation's content should also include videos and pictures of customers using their products and stories about their brand (Schaffer, 2013). According to Schaffer (2013), curated content from third-party sources should be from industry thought-leaders, social media influencers, and fans/customers. Organisations need to identify subject matters that are relevant to their key customer demography, and target market, as well as deciding on the frequency of posts. Another key consideration is the social media tool, or channel, to use (Schaffer, 2013). An organisation can be present on multiple social media channels. The different categories of social media technologies and their examples have been discussed in Section 4.3.1.

Who: The "who" element refers to the person or department within the organisation that will be responsible for implementing the strategy. An organisation might also decide to outsource their social media implementation and management to an agency (Schaffer, 2013). The responsibility of social media can be assigned to people with different roles in the organisation. The common choices of assigning this responsibility in most organisations include hiring an intern, allocating it to one employee as an added responsibility, making the responsibility a dedicated role for a single employee, inviting people from various departments to provide content and engage the social media audience, and outsourcing the role to an external agency (Schaffer, 2013). Whatever the choice of allocating the social media responsibility, an executive within the company should oversee the overall social media strategy implementation and management.

Brand: Branding, as a part of planning social media strategy, ensures that the organisation's brand guidelines are adhered to when communicating with social media audiences (Schaffer, 2013). Social media brand guidelines should include aspects on tone of voice, imagery, video and naming of social media pages. With regard to tone of voice, most posts on social media are conversational, and should be suitable to the target customer demography (Schaffer, 2013).

In this section, the "Plan" feature of the PDCA model was covered. The "Do" and "Act" features are dependent on the organisation, and the strategy developed in the planning phase. The "Check" feature of the PDCA model will be covered in Section 4.4.

For instance, BT, a telecommunications company in the UK was able to reduce the cost of customer service, while at the same time improving services to customers (Institute of Practitioners in Advertising, 2014). The overall strategy for the company was to improve customer service to create loyal customers which they identified as the backbone of their business. The objective for their strategy was to open themselves up to customers, making it easier for customers to reach them and focus on giving their customers an "easy" experience, instead of a "wow" experience (Institute of Practitioners in Advertising, 2014). The target customers were their existing customers. The channel strategy was focused on ease of reach, and social media channels outperformed other customer service channels in a

survey that was carried out by the company. The company selected four social media channels; Twitter, Facebook, YouTube and a community forum. The Twitter channel is used to proactively post about service outages and local exchange issues, the Facebook page focuses on a mix of news, promotions and engagement content, and the YouTube channel provides information and explanatory videos covering subjects such as billing, router set-up, e-mail and broadband and where necessary, customer service staff interact on discussion pages (Institute of Practitioners in Advertising, 2014). The community forum allows discussions between customers as well as BT staff, and community leaders are self-selected customers who provide advice and guidance. BT measured its customer service performance on KPIs such as the number of unique customers, effectiveness, or resolution rates, and the operational cost per channel. BT was able to reduce costs by £2 million a year due to its social media strategy. BT estimates it makes contact with about 600,000 customers a year via its social media channels, and customers reportedly find it easier to deal with BT through social media (Institute of Practitioners in Advertising, 2014).

4.3.2.4 Social Media Implementation Models Summary

Although each of these models have been developed by different companies, and may have been originally targeted towards other forms of media, more similarities exist between them than differences. These models are designed to answer the "who", "what, "how" and "why" questions of planning social media strategy.

The need to identify the targeted audience (who) is paramount to planning the social media strategy. Although these models have different criteria for identifying audiences, each of these models specifies the importance of the audience. The other consideration under the "who" of social media strategy planning is the assignment of the responsibility of social media management; this ensures accountability within the organisation if any issues arise.

All models highlighted the information (what) to be shared as being essential to the success of social media implementation. The choice of social media technologies and platforms (how), is also crucial as highlighted by each of these models.

The choice of technologies and platforms affects the effectiveness of the organisation's social media reach; choosing the wrong technology/platform could mean not reaching the targeted audience, and will therefore defeat the purpose of using social media.

From each of these models, there needs to be a definitive purpose (why) to adopting social media. This purpose directs the actions of the social media team/personnel, and is also the basis for measuring its success after adoption. The next consideration is how social media will be structured within the organisation.

4.3.3 Social Media Organisation

Once social media are introduced into the organisation, it should be integrated into the daily processes and functions of the organisation. Its use should go beyond experimentation by individuals and departments. The integration of social media within the organisation can be done in different ways. It can be cross-functional; involving every department in the organisation, or it can be assigned as the responsibility of a single department (Schaffer, 2013). The Altimeter Group presents a model that highlights five common ways social media is integrated into an organisation (Chikandiwa et al., 2013; Schaffer, 2013; Social Media Models, n.d.; Terpening, Li, & Akhtar, 2015). The model is presented in Figure 4-6 and each of the integration options will be discussed below.
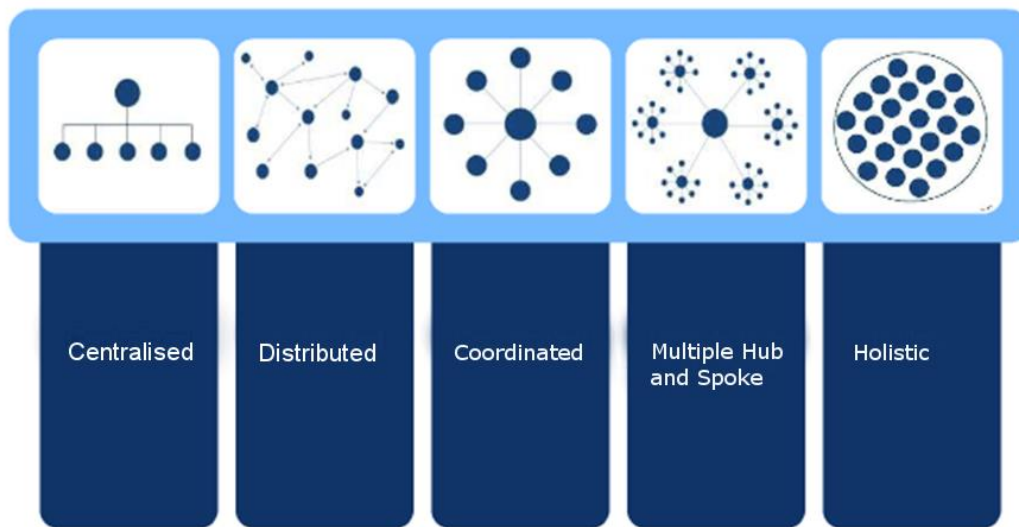
Figure 4-6: Social Media Organisation. (Social Media Models, n.d.)

4.3.3.1 Centralised

In a centralised organisation model, a single person or department is responsible for all the social media activities internally. Most organisations starting out with social media choose this model of integration (Schaffer, 2013). This model is not seen as authentic, however, since a single department/person is expected to produce content for every department within the organisation, despite the possible lack of expertise in other departments. The problem lies in the nature of social media to overlap every department within the organisation (Chikandiwa et al., 2013; Terpening et al., 2015). This model is therefore seen as a transitional model that is used to gain social media experience within the organisation (Schaffer, 2013). The centralised approach ensures consistency in an organisation's social media communications.

4.3.3.2 Distributed

The distributed model is decentralised and not coordinated (Chikandiwa et al., 2013; Terpening et al., 2015). Organisations using this model are still in the experimental phase. Each department, or an individual within the department, is responsible for the social media strategy for that department. The

advantage of this model is the authenticity of the social media communication since they come directly from the source (Chikandiwa et al., 2013; Terpening et al., 2015).

4.3.3.3 Coordinated

The coordinated model is sometimes referred to as the "Hub and Spoke" model. This model is seen as a trade-off between the centralised and distributed models (Chikandiwa et al., 2013; Terpening et al., 2015). Social media in this model is managed by a cross-functional team that is located in a centralised position and helps the various nodes (business units/departments) (Schaffer, 2013). The strategy for social media is led by this cross-functional team, but they are not involved in the day-to-day running of the social media channels. The policies and procedures are created at the central point and spread to the rest of the organisation. This central point is generally referred to as "social media centre of excellence" in most organisations (Schaffer, 2013).

4.3.3.4 Multiple Hub and Spoke

The multiple hub and spoke model is sometimes called the "Dandelion" (Schaffer, 2013). The model involves one global centre of excellence, and multiple hub, and spoke teams within the organisation. The model is ideal for scaling social media across different business units, brands, regional locations or countries (Schaffer, 2013). Organisations can be assured of the same strategy being implemented across their business units, brands and locations. Decisions are made at the various levels, and are coordinated at the global centre of excellence (Chikandiwa et al., 2013; Terpening et al., 2015).

4.3.3.5 Holistic

The holistic model is also referred to as the "Honeycomb" model (Chikandiwa et al., 2013; Terpening et al., 2015). In the holistic model, every employee is empowered to communicate on behalf of the organisation. Although every employee is involved in social media communication, the implementation of the organisation's social media strategy is organised and coordinated. Employees are not experimenting with social media for their individual benefit, but have been trained to work as a "whole" for the organisation (Chikandiwa et al., 2013; Terpening et al., 2015).

The next process in implementing social media in an organisation is monitoring and analysis of its performance. The performance of the organisation's social media could be analysed using techniques that will be discussed in the next section.

4.4 Social Media Analysis

Social media analysis is concerned with collecting, monitoring, analysing, summarising and visualising social media data using informatics tools and frameworks (Zeng, Chen, Lusch, & Li, 2010). Many organisations are concerned with the return on investment (ROI) of their social media strategy and its effectiveness in reaching customers (Sponder, 2012). Social media analysis serves the purpose of extracting useful patterns and intelligence that can be used to plan future social media strategy, and evaluate ROI of the current strategy. The first step in analysing social media is to identify the business

goals that will benefit from monitoring social media. Once this is done, the KPIs that represent these goals need to be identified and monitored (TechTarget, 2012). For instance, customer reach and engagement can be measured using KPIs such as the number of followers, number of likes, and number of retweets.

Social media analysis can be challenging due to the nature of social media. Social media data are dynamic in nature, and the volume of data is increasing rapidly, which raises issues in analysing this data (Zeng et al., 2010). Social media applications are human-centred in nature, this implies that they are context-specific, and the needs/intentions of the users have to be considered when analysing data from such applications. Issues such as semantic inconsistencies, conflicting evidence, lack of structure, and difficulty in integrating the different kinds of data are raised due to information-overload and the noisiness of social media (Zeng et al., 2010). Businesses face the challenge of extracting valuable intelligence from the noise and excess information on social media. The international nature of social media also proves to be a challenge to organisations; there needs to be an understanding of different languages, regional idioms, misspellings, slangs and cultures (Sponder, 2012).

Social media monitoring and listening platforms started out as search engines that used keyword-based queries similar to the Google search engine. Most of these platforms, however, have advanced to incorporate machine learning algorithms using artificial intelligence and human interaction (Sponder, 2012). The field of social media analytics has advanced from simple online listening and monitoring, to social media intelligence, with the goal of extracting actionable information from social media, benefiting from the "wisdom of crowds", and supporting decision-making within organisations (Sponder, 2012; Zeng et al., 2010). Social media analytics methods include sentiment analysis, natural language processing, social network analysis, text analysis, and predictive modelling and recommendations. Sentiment analysis uses text analysis and natural language processing; therefore, the focus of this review will be sentiment analysis, social network analysis and predictive modelling and recommendations.

4.4.1 Sentiment Analysis

Sentiment analysis is the detection and extraction of opinions and emotions from online texts (Bucur, 2014). It is also referred to as "opinion mining" or "subjectivity analysis". Sentiment analysis involves using computational methods to analyse subjective information found online. With the proliferation of social media platforms that enable ratings, reviews, recommendations and other forms of online opinion expressions, there has been an increased interest in sentiment analysis (Pang & Lee, 2008). Most online users are influenced by opinions expressed by others; this means that organisations need to be aware of what is being said about their brand and products online (Bucur, 2014; Pang & Lee, 2008). Sentiment analysis helps organisations improve their customer relationship management, and research product/brand perception. It is applied by sociologists in studying population opinions, and by

governments in understanding citizens' opinions regarding adopted policies (Bucur, 2014). Sentiment analysis systems are also enabling technologies in recommendation systems, and anti-spam systems (Bucur, 2014; Pang & Lee, 2008).

Sentiment analysis uses data mining algorithms and natural language processing techniques (Bucur, 2014). Sentiment analysis tasks include polarity classification, and agreement detection. Polarity classification involves grouping text stating opinion on a topic into opposing sentiments, such as like or dislike, while agreement detection determines if a pair of text should receive the same label (Cambria, Schuller, Xia, & Havasi, 2013). Sentiment analysis approaches include keyword spotting, lexical affinity, statistical methods, and ontological methods.

- Keyword spotting: This method is the simplest approach, and is based on identifying specific words in a text with the strongest sentiment polarity (Bucur, 2014). The identified words are used to classify the text by affect categories; these high polarity words include happy, sad, angry, or bored (Cambria et al., 2013). In the development of this method several Affective Lexicons have developed that contain a list of popular affective words (Bucur, 2014; Cambria et al., 2013). A major issue in using this method is that negated text, such as "today is not a happy day", cannot be reliably recognised (Bucur, 2014; Cambria et al., 2013).

- Lexical Affinity: This method is similar to keyword spotting, but also assigns to words a probability of being either a negative or a positive opinion (Bucur, 2014). The assignment of probability is done using linguistic corpora which is a collection of linguistic data used as a starting point of linguistic description. Lexical affinity has the same issues with recognising negated words as is the case with keyword spotting, and the sentiment probability of words are domain dependent (Buczek & Harkins, 2009; Cambria et al., 2013).

- Statistical methods: These methods are based on machine learning algorithms, such as support vector machines and Bayesian algorithms (Bucur, 2014; Cambria et al., 2013). These methods involve feeding a training set of affect annotated text into a machine algorithm, which helps the algorithm with affect classifications. For these methods to be efficient, a large amount of text needs to be fed into the algorithm (Bucur, 2014).

- Ontological methods: These methods use web ontologies and semantic networks to analyse text rather than simple words. The approach relies on a large semantic knowledge base that can extract the implicit meaning/features of sentiments associated with expressions, even where these sentiments are expressed subtly. The accuracy of the analysis is dependent on the dimension and depth of the knowledge base (Bucur, 2014; Cambria et al., 2013).

4.4.2 Social Network Analysis

Social network analysis is the study of the structure of social networks (D'Andrea, Ferri, & Grifoni, 2010). This could involve the visualisation of social networks, or the analysis of relationships between

actors and links in social networks. Data visualisation of social networks makes it easy to analyse these networks by using graphs, maps, matrices, or a hybrid of any of the other visualisation methods (D'Andrea et al., 2010). Social network analysis focuses on methods and instruments for measuring relationships between actors and links in social networks (Marsden, 2005). Actors are usually referred to as "Nodes", and the relationships between these actors are known as "Ties" or "Edges". Social network analysis studies the characteristics of the relationships in the network, as opposed to studying the characteristics of the actors (D'Andrea et al., 2010; Otte & Rousseau, 2002). The analysis of the network aims to determine the network structure (whether tightly bound, diversified or constricted), the network's density and clustering, and how the nature of the network actors are affected by their position and connections (D'Andrea et al., 2010).

Social network analysis studies are of two types; the ego-centric studies and the socio-centric studies.

- Ego-centric: These studies focus on a central actor and the connecting relationships around this actor in the network. The focal actor is located in the network, then the actors to which this focal actor is linked are identified (D'Andrea et al., 2010). This study can be used to determine the centrality of an actor in a network based on the number of relationships maintained by the actor; the higher the number of relationships, the stronger the suggestion that the actor plays an important role in the network (D'Andrea et al., 2010).

- Socio-centric: These studies focus on a global network; that is the entire network rather than an individual actor within the network. It maps the relationships between actors in a tightly bound network, and is used for analytical purposes (D'Andrea et al., 2010; Marsden, 2005). Socio-centric studies are used to determine the flow of information in a network, and the concentration of power and status structures within a network. According to D'Andrea et al. (2010), there are three steps in collecting data in a socio-centric study. Firstly, the relationship between each actor and every other actor in the network is studied. Next, the types of relationships are analysed in terms of frequency and duration of contact, and the degree to which each actor reports in relation with each other. Lastly, the overall characteristics of the network is analysed; this includes measures like density and size of the network (D'Andrea et al., 2010).

4.4.3 Predictive Modelling and Recommendations

Predictive modelling and recommendations are also referred to as "Predictive Analytics". SAS Institute (n.d.) defines predictive analysis as the use of data, statistical algorithms and machine learning techniques to identify the possibility of future outcomes based on historical data. Predictive modelling and recommendations, in the context of this study, involves the analysis of social media and the collective wisdom embedded in it to make predictions about real-world outcomes (Asur & Huberman, 2010). The volume and variety of information available on social media presents an opportunity for harnessing the data into a form that can be used to make predictions and recommendations. The use of

social media data in making predictions and recommendations takes into account recent social events and trends, unlike traditional predictive modelling, which are based on historical data alone (Ahn & Spangler, 2014).

Social media predictive modelling and recommendations have been used by several researchers in different situations. Twitter has been used to predict seasonal influenza, research paper citations, German elections and box office revenues for movies (Lu et al., 2014). Yu and Kak (2012) identified, and discussed, some of the predictive modelling methods used in social media; such as the regression method, Bayes classifier, K-nearest neighbour classifier, artificial neural network, decision trees and model-based prediction.

The preceding sections have discussed social media in general terms, presented models on how they should be implemented in organisations of varying types, and discussed the analysis of social media. The next sections focus on how social media is used by government organisations.

4.5 Social Media and E-participation[5] [6]

Bonson et al. (2012) typify the role of social media in governance as introducing citizen-created content that augments the socio-political debate, increasing opinion diversity and encouraging the free flow of information which reflects their Web 2.0 characteristics. Social media has bolstered public participation by providing tools that support open communication and collaboration. Social media adoption has led to a paradigm shift in government; thus, a new paradigm of information-sharing exists. This paradigm is described as a shift from a need-to-know, to a need-to-share basis (Mergel, 2013d). Social media is an enabler in the shift towards an open, collaborative and cooperative government.

Friedman (2006, p. 19) asserts that people do not participate in governance because they are simply "unaware of how to do so because there is no link between them and the institutions of government". Friedman suggests that governments making contact with citizens in an environment where they are free to express themselves might encourage participation. Other research also proposes that successful participation and engagement strategies are enhanced by adopting technologies and channels citizens already use (Chang & Kannan, 2008; United Nations, 2014). Using these environments might increase

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[5] Some of the literature discussed in this section was obtained from research published as a full double-blind peer-reviewed conference paper at the European Conference on Social Media in July 2017. Fashoro, I. and Barnard, L. 2017. Motivations for Adopting Social Media as a Tool for Public Participation and Engagement in Nelson Mandela Bay Municipality. Proceedings of the 4th European Conference on Social Media ECSM 2017 (Vilnius, Lithuania, 2017), 106–114. (APPENDIX I)

[6] Some of the literature discussed in this section was obtained from research published as a full double-blind peer-reviewed conference paper at the South African Institute of Computer Scientists and Information Technologists Conference in September 2017. Ifeoluwapo Fashoro and Lynette Barnard. 2017. Challenges to the Successful Implementation of Social Media in a South African Municipality. In Proceedings of SAICSIT '17, Thaba Nchu, South Africa,September 26–28, 2017, 9 pages. (APPENDIX J)

the trust citizens have in government (Chang & Kannan, 2008). Therefore, governments adopting social media are not only providing a link to citizens, but are also meeting them on a platform they are familiar with, and have no reservations in expressing themselves.

Social media enables government agencies in making decisions in a timely fashion due to their ability to promote immediate dialogue (Bertot et al., 2010a; Lee & Kwak, 2012). Continuous and immediate dialogue may resolve the challenge of the drawn-out process of policy-making mentioned in Section 3.3. Innovation and rapid solution to issues are also possible in a cost-effective manner due to the crowdsourcing ability of social media (Chun et al., 2011; Lee & Kwak, 2012). Social media has been identified as the driving force behind recent transformation in public participation and engagement (Chun et al., 2011). Due to the ability to attract a large number of users, sustain interaction to a large degree, develop loosely coupled communities and provide forums for discussion, social media technologies are the ideal platforms for E-participation (Sæbø et al., 2009).

The use of social media in E-participation is predicated on access to technologies (Bertot et al., 2010a). Groups without access to ICTs will therefore be excluded from the participation and engagement process. This exclusion is known as the digital divide. It describes the disparity in accessing ICT; this could be a global, social or a democratic divide (Norris, 2001). In the context of this study, the focus is on the social and democratic divide. These represent the disparity between the information rich and poor in a nation, and the gap between those who engage in democratic life using ICT, and those who do not, respectively (Norris, 2001, p. 4).

Social media has the propensity to widen the digital divide; conversely, it has the ability to reach a wider audience through mobile technology platforms. The number of mobile phone subscriptions in 2016 exceeded 7 billion worldwide, and over 78% of this growth was accounted for in developing countries (International Telecommunication Union, 2016). Radovanovic (2014) reports on a growing trend in developing countries that involves the use of mobile enabled social media in empowering users on the disadvantaged end of the digital divide. Potentially, the penetration of Internet and mobile technologies with social media, could bridge the digital divide that exists in traditional participation and engagement technologies.

In order to successfully implement social media for E-participation, promote social inclusion and reduce the digital divide, governments are advised to simultaneously provide traditional engagement channels such as public meetings, printed media, radio and television (Dwivedi, Weerakkody, & Janssen, 2011; Porwol, Donoghue, Breslin, Coughlan, & Mulligan, 2012). Scherer and Wimmer (2010) have identified the combination of offline and online channels of engagement as a best practice in E-participation. Another way of promoting social inclusion is the provision of Internet public access centres in areas with digitally excluded groups (Bertot et al., 2010a; Norris, 2001).

Social media are being used in a variety of ways by governments around the world to enhance public participation and engagement. Three potential key opportunities offered by government use of social media have been posited (Bertot, Jaeger, Munson, et al., 2010a):

- Democratic participation and engagement involves the use of social media to stimulate participatory discussions, and to involve citizens in policy development and implementation.
- Co-production, which is the collaboration between government and citizens, in delivery of government services to improve quality and responsiveness of these services.
- Crowdsourcing solutions and innovations, strives to use public knowledge and talent to develop solutions to issues in the society.

Technologies from blogs, social network sites, to wikis have been implemented across Europe, South America and North America. In the US, The White House Open Government Initiative uses a Wiki to pose questions to the public, and solicit expert advice and opinion on issues they are working on (Nam, 2012). The US Department of Interior's US Geological Survey uses Twitter to monitor and report on earthquakes by gathering and summarising information the public has posted (Nam, 2012). The Transportation Security Administration (TSA) uses a blog to engage the public and defuse critiques (Bertot et al., 2010a). At the time of writing, all listed examples were still active.

4.5.1 The Role of Social Media in Public Participation[7]

Social media has the ability to alter the way the government and citizens interact, source for solutions and deliver services (Bertot et al., 2010a). Traditional channels of public participation that involve time-consuming, face to face meetings have led to a growing disinterest from citizens (Abelson, Forest, Eyles, Smith, Martin & Gauvin, 2003). Social media transcends the time and space barriers of traditional channels, however, and allows citizens to participate at their convenience; anytime and anywhere (Phang & Kankanhalli, 2008). The interaction between the government and citizens using social media is open and immediate; the government provides information on a platform the citizen prefers, and the citizen can respond directly by commenting, tagging, contributing content and sharing (Bonsón et al., 2012). Citizens are not obliged to search for information on a platform they might not be used to; such as the government's website. Since social media technologies are characterised by user-generated content, citizens can be encouraged to produce content by sharing ideas, providing feedback, and sharing their experiences. The time and effort required to physically distribute information and mobilize citizens to participate in policymaking, is reduced.

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[7] Some of the literature discussed in this section was obtained from research published as a work-in-progress double-blind peer-reviewed conference paper at the International Conference on Information Resources Management in May 2016. Fashoro, I. and Barnard, L. 2016. Social Computing as an E-Participation Tool in South Africa: An Exploratory Study. CONF-IRM 2016 Proceedings (Cape Town, South Africa, 2016), 9. (APPENDIX H)

Information and knowledge have been used as a tool to influence political debates by restricting its dissemination to all citizens (Gaventa & Cornwall, 2001). Citizens with more information and knowledge are given priority in public participation spaces, and have more influence during deliberations. With the use of social media, information and knowledge can be dispersed to a larger audience, and therefore empower more citizens to engage in the political debates. Citizens are also provided with a platform to share and form opinions, as well as articulate and debate differing views using social media (Shirky, 2011). Unlike traditional public participation channels, there is no limitation to the number of participants in deliberations using social media. Traditional channels 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 limitation in number of participants 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 media expands the voices involved in political debates and deliberations, and thereby levels the playing field for all concerned.

Social media enhances service delivery through the inclusion of citizens in the service delivery process. Using social media technologies, citizens are able to collaborate with the government in sourcing solutions to service delivery issues (Bertot et al., 2010a). Crowdsourcing is a possibility due to the large number of users available on social media platforms; expert opinions can be sought and innovative solutions formulated in less time and with less money (Nam, 2012). Solutions and policies created through crowdsourcing might have the benefit of appealing to the majority of the community since they reflect the citizens' opinions, and are backed by the power of the crowd (Nam, 2012; Sæbø et al., 2009). Some citizens and non-governmental organisations take up the initiative and create services for the public using social media technologies, for instance, in Cape Town, Lungisa is created as a community monitoring tool that allows the public to report service delivery issues to local government authorities (United Nations, 2014). The role of citizens in service delivery through social media is described as "Prosumer", as they are now both producers and consumers of services (Nam, 2012; Sæbø et al., 2009).

Transparency and accountability in government, which helps reduce corruption, can be achieved with social media. Through these technologies the government can be made accountable to citizens by providing information on spending, and citizens can track government activities and monitor the behaviour of government employees (Bertot et al., 2010c). As a result, government spending becomes more effective and efficient since an account has to be presented to citizens. Through citizen journalism that is made possible by social media platforms like blogs, citizens can report corruption in the government; especially in situations where traditional media are controlled by the government (Bertot et al., 2010c).

The next session discusses some of the global, technological, and economic factors that have served as drivers for the adoption of social media by the government.

4.5.2 Opportunities for the Use of Social Media for Public Participation

Social media has become widely accepted in governments around the world (Mergel, 2012). Several global, technological, and economic factors drive its acceptance. These factors are discussed in the following sub-sections.

4.5.2.1 Rising citizen participation demands

In recent years, there has been an increase in the demand by citizens to be involved in matters of government (Coleman & Gøtze, 2002; United Nations, 2014). Citizens are demanding accountability and transparency from governments, and are less passive in their interactions with governments. They expect to be included in policy developments and informed of the government's activities. Furthermore, citizens are used to having instant access to information, and faster responses to requests, due to the use of Internet technologies in their personal and business lives (Baumgarten & Chui, 2009; O'Reilly, 2010; United Nations, 2014). These expectations have now been extended to their interaction with the government.

4.5.2.2 Pervasiveness of Social Media

Social media has become a prevalent technology worldwide. The number of individual and business users on social media has increased exponentially since its inception. Social media statistics have been presented in Section 4.3. Governments can leverage the opportunities provided by social media for engaging citizens and encouraging their participation in public debates, policy creation and service provision. Governments adopting social media will be meeting citizens in a space they are familiar with and capable of navigating, which has been identified as a success factor for E-participation initiatives (Friedman, 2006; United Nations, 2014).

4.5.2.3 Ubiquity of Mobile Technologies

The increase in the number of mobile technologies (such as cellular phones and tablets) used worldwide has been an enabler in social media and Internet technology adoption. Citizens who do not have broadband Internet connections in their homes are able to use social media through their mobile devices. According to Radovanovic (2014), mobile technologies and social media are playing a crucial role in giving voices to previously excluded groups in the democratic process. Mobile technologies are bridging the digital divide in both developed, and developing nations (Radovanovic, 2014). Governments are enabled to reach more citizens through platforms that support mobile technologies.

4.5.2.4 Worldwide shift towards participatory governance

Governments in most democracies have identified the need to develop new relationships with citizens in a bid to avert a crisis of democratic legitimacy and accountability (Bonson et al., 2012; Coleman & Gøtze, 2002). In a bid to become more accountable and transparent to citizens, governments are embracing social media technologies as a way of engaging with them, and encouraging citizen participation in public affairs. There has been a worldwide shift towards an open, collaborative, and co-

operative government. This has been termed Government 2.0, and is characterised by open data, shared knowledge, and open consultation (AGIMO, 2009). With this view, a multilateral initiative known as the Open Government Partnership (OGP) was established in 2011; consisting of governments from about 65 countries, four multilateral organisations, The World Bank Group, the Inter-American Development Bank, the Organisation for Economic Cooperation and Development and United Nations Development Programme and civil society organisations (OGP, 2015). OGP's vision is to establish more transparent, accountable and responsive governments with the purpose of improving the quality of government, and the quality of services received by citizens (OGP, 2015). The use of innovative technologies to ensure dialogue and collaboration between government and civil society is an essential part of their strategy.

Participatory governance has also been adapted due to economic challenges faced by many governments that have impacted their capacity to address many of the issues in society (O'Reilly, 2010). By encouraging participation, the burden of providing services can be shared by the government and citizens thereby promoting sustainable development.

4.5.3 Challenges in Using Social Media for Public Participation

The adoption of social media technologies by governments will involve challenges and risks due to the open nature of these technologies. These technologies are easily accessible to anyone, and often have minimal security measures in place. Consequently, organisations are cautious in their adoption of social media. Social media challenges and risks include information, security, legislative, administrative, and social inclusion issues.

Social media are information intensive; it involves the dissemination of information which entails a number of risks. The risks relate to privacy, security, management and accuracy of the information exchanged (Bertot, Jaeger, & Hansen, 2012; Falco & Kleinhans, 2018). Governments adopting social media have to ensure personal identifiable information, or other forms of sensitive information, are not revealed, and information provided should be accurate (Bertot et al., 2012; Picazo-Vela et al., 2012). When using public social media platforms such as Facebook and Twitter, governments should also consider the ownership of the information exchanged on these platforms. The ownership of this information might not be clear, and the government might not have control over the information and its storage by third-party users (Picazo-Vela et al., 2012). The exchange of information on social media platforms involves security risks such as the introduction of viruses and malware to government systems or similar attacks intended to gain access to sensitive information (Bertot et al., 2012). In terms of management issues, governments need to be aware of what is required by law regarding the storage of the information exchanged over social media, and how policies such as the Promotion of Access to Information Act in South Africa, affect information that can be exchanged with citizens (Picazo-Vela et al., 2012).

Administrative issues that should be considered, include the responsibility of managing the selected social media platform. Governments need to decide what department, or person, will be responsible for updating the platform, what information will be provided to the public, and the frequency at which this information will be provided (Falco & Kleinhans, 2018; Picazo-Vela et al., 2012). The issue of information accuracy should be considered in terms of equipping the person/department responsible for social media with access to valid, quality and reliable information (Bertot et al., 2012). Another issue in assigning responsibility for social media is the lack of skills that might exist within the government agency (Zheng, 2013). This, because the use of social media technologies is a relatively new skill that government employees might not have acquired. Social media are also fast paced in nature and therefore poses a challenge for government agencies that are known to be bureaucratic and slow in their processes (Mergel, 2012). This conflict in nature makes it difficult for governments to respond and keep pace with issues raised by the public. Social media technologies also change rapidly, and governments are expected to keep up with the changes made to third-party platforms by their providers. Due to the bureaucratic nature and lack of resources to train employees on these new technologies, it is nearly impossible for government departments to stay abreast of these technological developments (Mergel, 2012).

For the successful adoption of social media by the government, citizens must be able to access and use these technologies. Governments should ensure that citizens have access to technology and are provided with resources and services to help with their civic and technology literacy (Bertot et al., 2012; Falco & Kleinhans, 2018; Picazo-Vela et al., 2012; Zheng, 2013). The issue of the digital divide mentioned in Sections 3.2.2 and 4.5, raises a challenge for governments, since one of the aims of social media is to include more voices in the democratic process. Where the government can provide access to technology, exclusion through civic illiteracy should be avoided by educating citizens on the democratic process, legislations and laws. Some social media technologies, especially those provided by third-parties, are inaccessible to people with disabilities, thus serving as a source of social exclusion for these citizens (Bertot et al., 2012; Falco & Kleinhans, 2018). Wentz and Lazar (2011) studied the accessibility of Facebook for blind users, and found that the accessible version of the social media website had less features and reduced usability and functionality. Media Access Australia also conducted research into the accessibility of social media tools and platforms, and found that people with disabilities find it challenging to use these tools and platforms (Hollier, 2012). Improvements are continuously being made, however, to the accessibility of social media tools and platforms for the disabled (Media Access Australia, 2016).

Governments adopting social media are faced with the challenge of identifying already existing legislations, regulations, policies and laws that could influence the use of social media technologies, as well as drafting new policies to govern the use of these technologies (Bertot et al., 2012; Picazo-Vela et al., 2012). This challenge is due to the openness and lack of control the government has over such

technologies. Furthermore, these legislations, regulations, policies and laws were not created for the purpose of social media, thus their implementation for this purpose might be challenging for governments.

4.5.4 Criticisms of Social Media for Public Participation

The claims that social media furthers public participation is seen as idealist by some researchers, who believe that this participation is only superficial, but does not foster real engagement (Hand & Ching, 2011; Zavattaro & Sementelli, 2014). Many government organisations find it difficult to go beyond the one-way communication strategy on social media, even though the technology provides the capacity for dialog with citizens. Interactions on social media platforms are described as fickle with most citizens liking, sharing or retweeting posts without genuine dialog taking place (Zavattaro & Sementelli, 2014).

Social media has also been discounted as having the power to overcome people's passivity (Romero & Huberman, 2011). This passivity is due to the amount of information propagated on social media. Users are inundated with an ever-increasing amount of information which competes for their attention, and overall, produces passivity. Research has shown citizens are equally passive towards the government with a decline in citizens' political engagement over the last two decades (Coleman, Lieber, Mendelson, & Kurpius, 2008; Coleman & Gøtze, 2002; Sæbø, Rose, & Molka-Danielsen, 2010). This decline is the reason governments are looking to other forms of engagement with citizens. The assumption made by most proponents of social media is that once the capacity to interact with the government is provided, citizens will exploit the opportunity.   If citizens remain passive towards the government, however, their engagement on social media is not a guarantee.

Another criticism of social media for public participation is related to the improper use of the technology. According to Hand and Ching (2011), social media has been designed for many-to-many communications, but is instead being used for one-to-many communications. The use of social media by most governments is described as top-down, from the government to citizens. This type of communication is criticised as lacking support for bi-directional information exchange (Hand & Ching, 2011). Top-down communication strategies are noted to reinforce the notion of the government having power over citizens, as opposed to a sharing of power which might be reflected when citizens are involved in the information sharing and policy-making process. Social media, therefore, presents a false sense of power sharing and citizen involvement. The ability of governments to provide one-sided information enables them to control the narrative about their organisation, thereby producing an image that might be false to the public (Pedro & Bolívar, 2016; Zavattaro & Sementelli, 2014). This biased narrative will likely lead to false decisions being made by the public, and will impede the process of transparency and accountability. Chang and Kannan (2008) suggest that a successful implementation of social media in government will require a relinquishing of control over content and services to citizens, and third-party organisations.

The level of participation and engagement is dependent on the strategies employed by government organisations. These strategies can either hamper the effectiveness of social media for participation and engagement, or make it the idealistic tool heralded by users. The strategies commonly adopted by government organisations are described in the subsequent section.

4.5.5 Social Media Engagement Strategies

Different tactics are employed by government organisations in their engagement with citizens. These tactics have specific goals and result in either a superficial, or a genuine engagement. Mergel (2013b) identified three tactics used by government agencies; representation of agency, engagement of citizens and networking with the public. The representation tactic is used by most organisations that are at the early stages of social media use. The purpose of this tactic is to have a presence on social media to maximise all possible interactions with citizens (Mergel, 2013c; Pedro & Bolívar, 2016). Social media are recognised as popular platforms with citizens and government organisations who want to be where the citizens are. Engagement at this stage is one-way, and takes the form of a "push strategy". In a push strategy, information such as memos and reports are broadcast to citizens much in the way of traditional interaction techniques like websites, or online newsletters. This is similar to the informative model of E-government where the government produces and distributes information to citizens (Halpern & Katz, 2012). Interaction is characterised by a lack of comments on posts made either by citizens, or the government organisation (Mossberger, Wu, & Crawford, 2013), disabling of comments on the page, or a lack of response to comments from citizens.

Engagement of citizens tactic employs a "pull strategy", where interactivity is the goal. Organisations have recognised the need for bi-directional interactions and encourage citizens to co-create content (Mergel, 2013c; Pedro & Bolívar, 2016). This tactic is similar to the consultative model of E-government; governments define issues for consultation, present them to citizens while inviting them to contribute their views and opinions, and manage the process of consultation (Halpern & Katz, 2012). Although the degree of interaction is low using this tactic, there is some back and forth between the organisation and citizens (Mossberger et al., 2013). Messages from the government are shared and retweeted by citizens, comments are made on posts and citizen produced content are used on the organisation's website (Mergel, 2013c; Mossberger et al., 2013).

The final tactic, networking with the public employs a "networking strategy". The goal of this tactic is collaboration between citizens and the government. Social media are used as tools to facilitate conversation and mingling among stakeholders (Mergel, 2013c; Pedro & Bolívar, 2016). The voice of the government is not heard often, but they are present on these platforms listening to citizens. This is aligned with the participative model of E-government where citizens are actively involved in defining policies (Halpern & Katz, 2012). Social media is seen as a facilitator for public deliberation. Mossberger et al. (2013) describe this tactic as having noticeable back and forth conversations between the

government and citizens; individual comments are responded to, and citizens proactively providing their own content.

The next section discusses the phases in adopting social media in the government sphere.

4.5.6 Social Media Adoption Process in Government

Mergel and Bretschneider (2013) recommended the three-stage adoption model for social media in government organisations. According to the authors, similar to all new ICT adoption in government, social media adoption passes through three phases (Mergel & Bretschneider, 2013; Nepal et al., 2015). These phases are depicted in Figure 4-7, with each phase leading into the next.
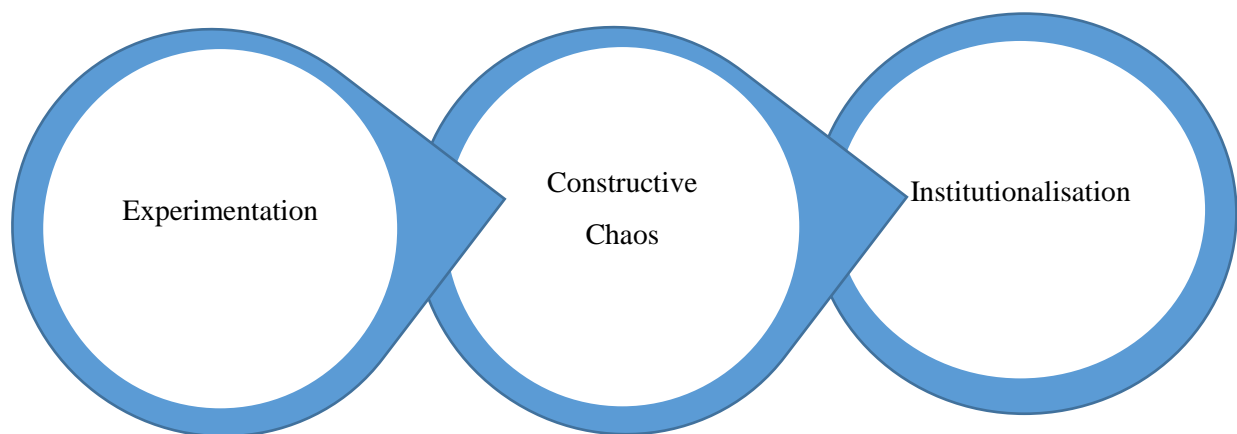
Figure 4-7: Social Media Adoption Process. (Nepal et al., 2015)

Experimentation

According to Nepal et al. (2015), this phase entails the informal experimentation by government agencies. It usually begins with someone who likes to explore technology, and begins experimenting on their own. This person eventually becomes the champion of social media within the agency. The use of social media in this phase does not go through standard internal processes, and is usually trialled for a single product or service.

Constructive Chaos

In this phase, the agency sees the benefit of social media and develops a business case for it (Nepal et al., 2015). Since social media use within the agency started informally, there would be several accounts on different social media platforms that are run without proper policies and guidelines. The main goal of the government agency in this phase is to accrue the benefits and overcome the negative effects of social media (Mergel & Bretschneider, 2013; Nepal et al., 2015).

Institutionalisation

This phase involves the development of policies and guidelines for using social media in the government agency (Mergel & Bretschneider, 2013). Social media becomes an official channel for communication and an official team is assigned responsibility for social media (Nepal et al., 2015).

The next section explores best practices in adopting social media in the government sphere. It will highlight how some of the challenges discussed above can be navigated, and strategies for addressing the risks identified.

4.6 Government Agencies on Social Media

Digital government aims to alter the relationship between government and citizens by potentially improving interactions and dialogue. Social media platforms present new opportunities that could reinvigorate local governance (Ellison & Hardey, 2014). Social media is used in different ways by government agencies around the world. These uses range from disaster management, service delivery, and legislation crafting to enabling citizens petitioning. Examples of social media use around the world are discussed in the subsequent sub-sections. Some of the examples presented will be linked with the E-participation activities discussed in Section 3.4.1.

4.6.1 Disaster Management

Social media have become the dominant source of news and information for most adults. In times of crises, information on social media becomes even more crucial because it is provided by individuals at the location of the disaster with first-hand experience. Government agencies have consequently taken to social media during times of natural disasters and crises to provide information and avoid mass panic and hysteria. The Calgary police department in Canada is a best practice example of how Twitter was used during a period of disaster to inform the public, solicit help from off duty officers, and redirect queries to appropriate agencies (Mergel, 2013b). The police department kept a steady stream of updates going for two consecutive night shifts, responding to queries, informing the public and diffusing rumours. Some of these tweets can be seen in Figure 4-8, Figure 4-9 and Figure 4-10. The department continued with these activities, even after their official Twitter account reached its daily limit of tweets, by moving communication to the personal account of the department's Digital Communication officer (Mergel, 2013b).

Figure 4-8: Calgary Police Twitter Use (1) (Mergel, 2013b)

Figure 4-9: Calgary Police Twitter Use (2) (Mergel, 2013b)
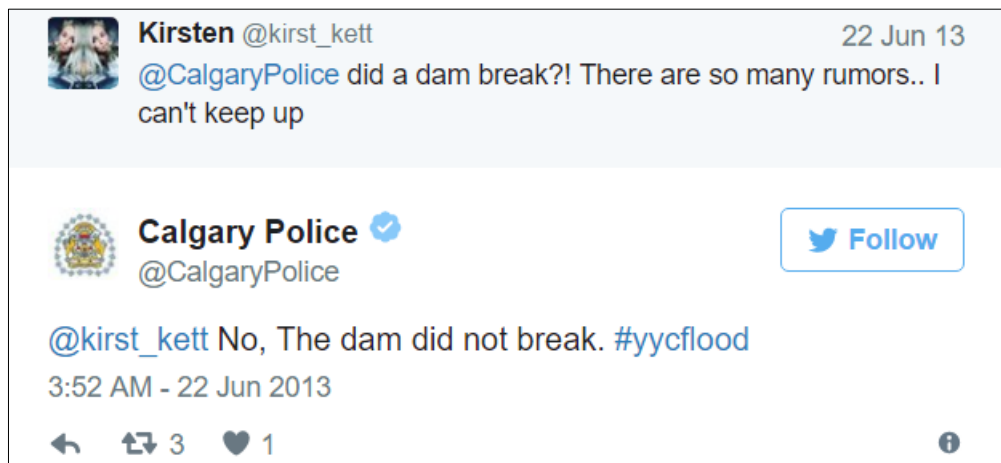
Figure 4-10: Calgary Police Twitter Use (3) (Mergel, 2013b)

4.6.2 Crafting Legislation

Crowdsourcing is one of the opportunities offered by social media to government. One way in which crowdsourcing has been implemented is in the drafting of legislation and policies. This use of social media encompasses both the eConsultation and online political discussion activities explored in Section 3.4.1. Social media is used to seek citizens' opinions in rule making and feedback from the process is presented to citizens, either through the same social media channels, or other online platforms.

Iceland and Brazil are examples of countries who have used social media in this way. Iceland's constitutional council sought the input of citizens through social media in a bid to reform their constitution in 2011 (Ferenstein, 2011). The government used Facebook, Twitter, YouTube, Flickr and a dedicated website to solicit citizen participation in the reformation process. Citizens were also kept informed daily about the process by live meeting broadcasts and interviews with members of the council (Stjornlagarad, 2011).

In Brazil, federal legislators set up an online wiki system to crowdsource citizen expertise in legislating. The initiative was set up to reach a broader segment of the country's population because historically the legislative process was strongly influenced by special interest groups (Ferenstein, 2010). The process involved constructing an online town hall of chats, forums and online libraries with the help of congressional experts. This was followed by a wiki-style consensus that presented a finished proposal to government representatives (Ferenstein, 2010).

4.6.3 Service Delivery

Social media have transformed public service delivery by increasing the channels through which public information, goods and services are delivered, by identifying collaboration opportunities for delivering services, and redesigning the delivery process (Mickoleit, 2014). The Spanish police are engaged with citizens on social media to deliver effective service as can be seen in Figure 4-11. Twitter, Facebook and YouTube are used by the department to support their primary mission, as opposed to sending out corporate messages, or press releases (Mickoleit, 2014). In 2014, social media was used in an attempt to apprehend a murderer; a social media campaign was launched with his photos and information posted. These posts went viral and led to his arrest the same day.

The German government employs social media in public employment services. The employment agency Bundesagentur für Arbeit, collaborated with the professional social media platform Xing, to cross-post job vacancies advertised by companies on the Xing platform, on the agency's website. Job seekers are then directed to the social media platform where they can interact with other users and enquire about the vacancy or employer (Mickoleit, 2014).
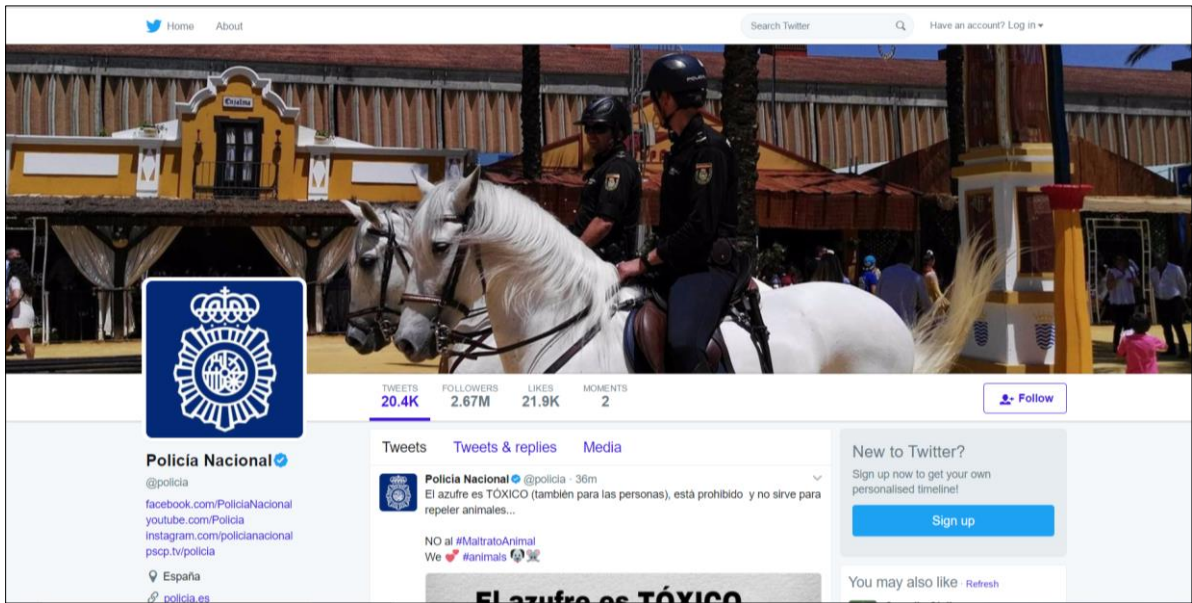
Figure 4-11: Spanish Police's Twitter Page

4.6.4 Citizen Petitioning

Social media websites have been employed by citizens and governments for the purpose of ePetitioning which is an E-participation activity discussed in Section 3.4.1. Governments such as the US and UK have dedicated social platforms for citizens to submit petitions for the government's consideration. Figure 4-12 displays the petitions platform for the UK Government and Parliament. The petitions listed in this figure have received response from the government.

Citizen-run platforms such as Change.org also exist, and have garnered millions of users and have over 4000 successful petitions (Dumas et al., 2013). The majority of ePetitions are reported to attract few supporters, however, while social media platforms like Twitter and Facebook are used to boost the popularity of some petitions using hashtags such as the #BringBackOurGirls petition (Dumas et al., 2013).
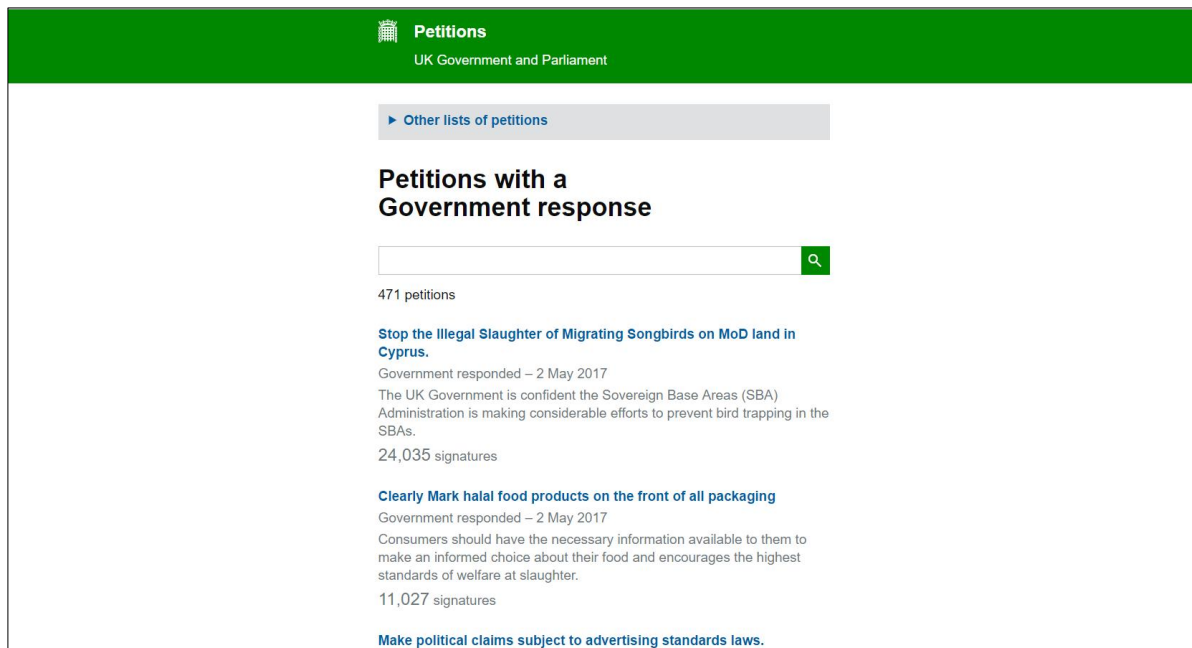
Figure 4-12: UK Government Online Petition website

4.6.5 Campaigning

Social media have been used successfully in political campaigns by candidates around the world. The most prominent and popular example is its use by President Barack Obama during his 2008 and 2012 campaigns (Gil de Zúñiga et al., 2012; Kreiss, 2012). Social media have been credited for the success of the Obama campaign by networking and mobilising volunteers, canvassing for funds, enabling peer-to-peer political campaigning, educating the public on issues, and enabling voters to make informed decisions (Cogburn & Espinoza-Vasquez, 2011). The campaign strategy was centred on social media, using Facebook, Twitter, YouTube, and Flickr (Cogburn & Espinoza-Vasquez, 2011). Facebook and Twitter have also been credited for tipping the scales in the 2016 elections by helping President Trump's team generate over $250 million in online fundraising (Lapowsky, 2016). Following the success of these campaigns, social media are seen as a necessary eCampaign tool.

4.6.6 Activism

Activism (Section 3.4.1) entails the promotion of viewpoints and agendas by members of the public and voluntary organisations. This is usually done in a bid to inform the government and public, and to bring a change in the political process. Social media is a popular medium for activists to garner support and bring issues to the public eye. The "Never Enough" blog is a successful example of how social media was used to bring an issue to the government's attention. The blog was set up by a nine-year old schoolgirl, Martha Payne and her parents in Scotland, to bring attention to the low nutritional value of food served in public school cafeterias (Mickoleit, 2014). The blog was set up in 2012 after attempts to reach school administrators and local authorities failed. The blog posted daily pictures of the food offered by the school and rated the quality of each meal. The blog gained popularity, nationally and

internationally, including the UK Prime Minister and ensured an improvement in the quality of food served at her school (Mickoleit, 2014).

4.6.7 Community Decision-Making

Social media support online decision-making in communities. An example of this is the Wikiplanning project in the city of San Jose, California. The project uses social media to solve the problem of citizen engagement in urban city planning (Mergel, 2013d). The city set up a wiki platform with the aim of including the values of the community in decisions regarding major changes in the city's architecture. The city involved different neighbourhood groups, businesses and stakeholders within the community. The process included an initial survey and a collaborative session on the wiki, where designers were asked to draft solutions to the city design problems. This was followed by multiple online discussion sessions about these drafts (Mergel, 2013d). The inclusion of the community in the planning process ensured their support for the final solutions.

4.6.8 Citizen Sourcing

Citizen sourcing involves government agencies and departments engaging with citizens to obtain solutions to mission delivery problems (Nam, 2012). Some of the ways this has been achieved through social media are wikis, social voting and social networking sites. An example of citizen sourcing through wikis is ExpertNet, which is a tool that allows government officials in the US to pose questions to the public on topics they are currently working on, in a bid to gain expert advice and knowledge (Nam, 2012). Social voting enables citizens to rate solutions by other citizens on platforms such as IdeaStorm and IdeaScale. This overcomes the bias of traditional voting mechanisms, as the power of decision is placed with citizens (Nam, 2012). Social networking sites become a tool for citizen sourcing when dialogue and discourse is encouraged. Posts from citizens become valuable information for government agencies. An example of this is the use of Twitter by the Department of Interior's US Geological Survey (USGS) to gather earthquake information (Nam, 2012).

4.7 South African Government Social Media Use

In South Africa, social media is used by the national, provincial, and municipal government in varying degrees. The national government is present on Facebook, YouTube, and Twitter, and enables RSS subscriptions. The push strategy is employed; information is broadcast to citizens with paltry engagement in the form of comments, shares and likes on the posts. At the provincial level, engagement employs a push strategy as well. At the time of writing, a few of the provincial governments have social media pages that are inactive, such as the Free State province, shown in Figure 4-13. The official website for the Free State province has links to social media accounts in the name of the ex-Premier. The information posted on provincial social media pages relates to events in the provinces, initiatives launched by the provincial government, and activities of the Premier of the province as can be seen in Figure 4-14.

Figure 4-13: Inactive Twitter Page of the Free State Province

Figure 4-14: Facebook post from the Eastern Cape province showing posts related to the Premier's activities.

Category A, or metropolitan municipalities, are the focus of this study because the case study is based on a Category A municipality. The social media pages for the eight Category A municipalities in South Africa, are the focus of this section. At the municipal level, all municipalities have a presence on social media. Although the municipalities engage with the same strategy as the national and provincial government, there is an increase in the level of interactions between municipalities and citizens. These municipal social media pages also have more followings and subscriptions compared to pages at the other two levels of government. This is probably because municipal governments are closer to citizens, and are responsible for direct interaction with citizens and community development. Information posted by the municipalities include service delivery disruptions, invitations to town hall meetings and other community stakeholder meetings, job vacancies as well as information on events, initiatives and activities of municipal leaders. The most common platforms in use are Facebook and Twitter, while Google+ is the least used platform. Municipalities that initially adopted Google+ were found to be no longer active on this platform.

Table 4-2: South African National Government Social Media Presence (as at 08/07/2018)

Province/Municipality	Platform	Status: Number of followers
National	YouTube	Active: 24,722 subscribers, 12,064,305 views
	Facebook	Active: 283,659 followers
	Twitter	Active: 154K followers, 47.9K posts

Table 4-3: South African Provincial Governments' Social Media Presence (as at 08/07/2018)

Province/Municipality	Platform	Status: Number of followers
Eastern Cape	Facebook	Active: 4991 followers
	YouTube	Inactive: 13 subscribers, last post 2015
Free State	Facebook	Inactive: 4328 followers, Last post in 2013
	Twitter	Inactive: 8129 followers, 469 posts, Last post 2013
Gauteng	Facebook	Active: 126,391 followers
	Twitter	Active: 119K followers, 28.8K posts
KwaZulu-Natal	Facebook	Active: 12,246 followers
	Twitter	Active: 11.6K followers, 7,666 posts
	YouTube	Active: 30 subscribers
	Instagram	Active:1,211 followers, 371 posts
Limpopo	Facebook	Active: 18,847 followers
	Flickr	Active: 4 followers
	Twitter	Active: 5,161 followers, 582 posts
Mpumalanga	Facebook	Active: 8,424 followers
	Twitter	Active: 690 followers, 205 posts
Northern Cape	Facebook	Active: 7,171 followers
North West	Facebook	Active: 48,072 followers
	Twitter	Active: 3964 followers, 2244 posts (Account suspended as at July 2018)
	YouTube	Active: 662 subscribers
Western Cape	Facebook	Active: 71,445 followers
	Twitter	Active: 22.6K followers, 13.1K posts

The information presented in Table 4-2, Table 4-3 and Table 4-4 indicate that social media has been adopted by the national, provincial and Category A municipalities in South Africa. It is evidenced that social media diffusion is high among provincial and municipal government, but with varying degrees of use. Social media use is evidenced more in the larger provinces and municipalities, which is akin to literature (Mossberger et al., 2013; Pedro & Bolívar, 2016). Social media has not been assimilated into the everyday functioning of these government organisations, however, as it has around the world. Only a handful of South African government organisations go beyond information provision to citizens.

Those organisations that do, have employed social media in the areas of service delivery, discourse and consultation.

Table 4-4: South African Municipal Governments' Social Media Presence (as at 08/07/2018)

Province/Municipality	Platform	Status: Number of followers
Buffalo City (East London)	Facebook	Active: 11,023 followers
	Twitter	Active: 574 followers, 373 posts
City of Cape Town	Facebook	Active: 160,397 followers
	Google+	Inactive: 35 followers, Last post in 2015
	LinkedIn	Active: 29,177 followers
	Twitter	Active: 322K followers, 81.1K posts
	YouTube	Active: 421,321 views
Ekurhuleni Metropolitan Municipality (East Rand)	Facebook	Active: 90,762 followers
	Twitter	Active: 24.3K followers, 31.7K posts
City of eThekwini (Durban)	Facebook	Active: 159,335 followers
	Twitter	Active: 98.4K followers, 16.5K posts
	YouTube	Active: 388 subscribers
City of Johannesburg	Facebook	Active: 43,711 followers
	Instagram	Active:7,872 followers, 2,981 posts
	LinkedIn	Active: 14,329 followers
	Twitter	Active: 833K followers, 200K posts
	YouTube	Active: 164 subscribers
Mangaung Municipality (Bloemfontein)	Facebook	Active: 6,204 followers
	Twitter	Inactive: Joined 2012, 402 followers, No posts
Nelson Mandela Metropolitan Municipality	Facebook	Active: 15,873 followers
	Twitter	Active: 9,066 followers, 2,243 posts
City of Tshwane (Pretoria)	Facebook	Active: 82,805 followers
	Twitter	Active: 359K followers, 57.4K posts

The City of Cape Town and Ekurhuleni Metropolitan Municipality have dedicated Twitter pages for reporting service delivery issues and updating the community on service delivery. Figure 4-15 shows posts from @CityofCTAlerts, the City of Cape Town's service delivery account. A number of the social media pages explored, have posts related to service delivery problems, such as power cuts in certain neighbourhoods. Figure 4-16 is an example of such service delivery posts on the Nelson Mandela Bay Municipality (NMBM) Twitter account. Citizens also post comments with their service delivery issues. Another service delivery area that is supported by social media is employment services. Job openings are posted on these social media platforms as seen in Figure 4-17. The City of Cape Town and City of

Johannesburg also use the LinkedIn platform for employment services. Information posted on these social media pages generally lead to another area of participation, which is Discourse. The area of discourse can be observed through thread posts as citizens go back and forth in the comments section on the performance of the government, and sometimes make suggestions on how issues can be resolved.
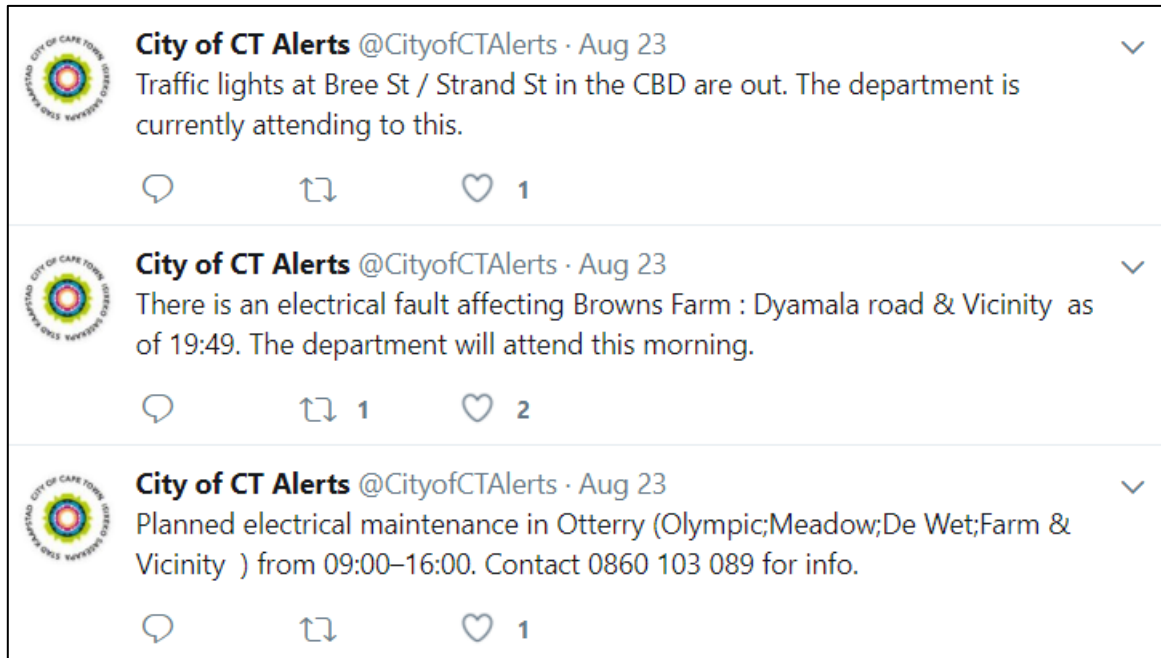
Figure 4-15: City of Cape Town dedicated Twitter account for service delivery

Figure 4-16: Service delivery information posts on NMBM Twitter account

Figure 4-17: Employment services post on Western Cape province Twitter account

Although consultation is not directly executed on the social media pages, information of public consultation opportunities within the provinces and municipalities are posted. These posts generally have details of the time and venue of the consultation event, or a link to the form on a website, if it is an online consultation process as can be seen in Figure 4-18. Social media is also used in disaster management by the South African government. During these disasters, information on safety, road closures, relief efforts, and how citizens could help, are posted on social media pages of municipalities and provinces. Figure 4-19, Figure 4-20 and Figure 4-21 show posts from the Nelson Mandela Bay municipality, City of Cape Town and Western Cape province on their social media pages during fires and droughts in these regions.
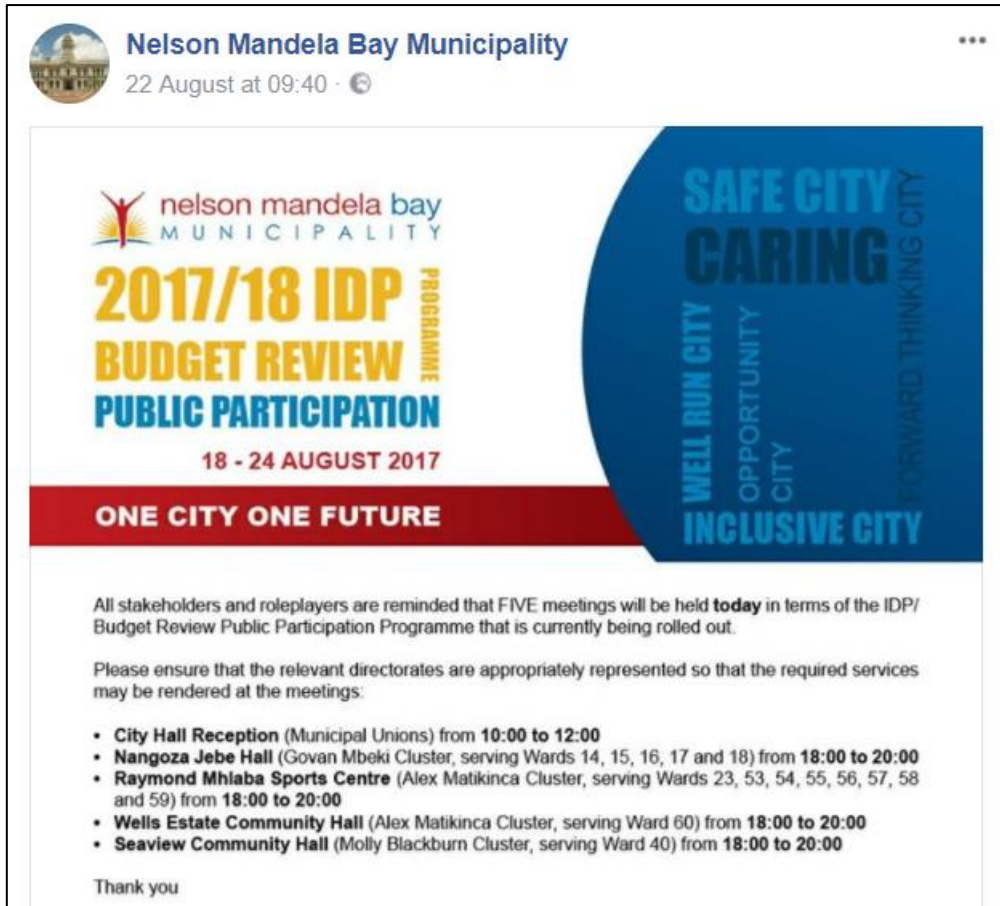
Figure 4-18: Invitation to budget review session posted on NMBM Facebook page

Figure 4-19: City of Cape Town Twitter post on water crisis in the region.

Figure 4-20: Western Cape province Twitter update during Knysna Fires
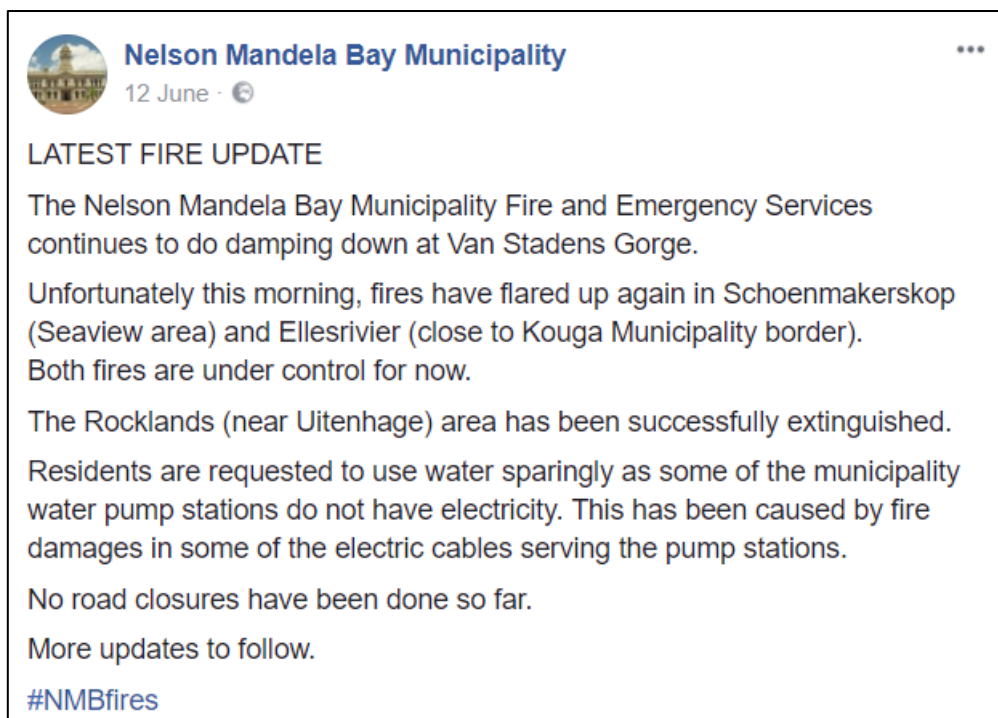
Figure 4-21: Nelson Mandela Bay municipality Facebook updates during fires in the municipality

Using the E-participation Scoping Framework discussed in Section 3.4.3.2, the following table presents a characterisation of E-participation using social media in South Africa. The democratic process encompasses all participatory activities aimed at achieving democracy. In terms of social media, the participation areas, categories of tools and technologies map directly to examples provided by Tambouris, Liotas, Kaliviotis, et al. (2007). However, the participation techniques are not easily mapped, but seem to be online versions of newsletters and public hearings/enquiries. These techniques provide information to citizens in the case of newsletters, while public hearings/inquiries are presentations by government agencies regarding plans and policies which are open to members of the public (Rowe & Frewer, 2000).

Table 4-5: Scoping E-participation using Social Media in South Africa.

Participation Area	Participation Techniques	Categories of Tools	Technologies
• Information Provision • Service Delivery • Discourse • Consultation	• Online Newsletters • Online Public Hearing/Inquiries	Social networking sites – • Facebook • Flickr • Google+ • Instagram • LinkedIn • Twitter • YouTube	• Web 2.0 • Social Media

4.8 Best Practices

Best practices, according to Rabinowitz (n.d.), are methods, or programs, that have been proven to be successful in accomplishing their goals, and can be adapted and used for your goals. These methods or programs are notably successful and replicable in nature. The best practices identified in this section have been applied around the world, and are also applicable to the South African municipal context.

4.8.1 Aligning objectives

Government departments and agencies that are considering social media should establish an objective for their social media strategy. This objective should be aligned with the agency, or the department's overall objectives (Lee & Kwak, 2012; Mergel, 2013c; Schaffer, 2013). Having a social media objective ensures that there is a purpose to the use of social media and its adoption is not for the sake of popularity or trend. The need for aligning objectives is highlighted in Section 4.3.2 in the discussion on implementation models. Each of these models has an element that focuses on aligning, or setting social media objectives. An important part of aligning objectives to the department, or the agency's strategy, is selecting the appropriate social media platform based on content available, technical capacity and the presence of a community that will engage with your content (Harper, 2013).

4.8.2 Policy revision

Picazo-Vela et al. (2012) discuss the need for a concerted effort to revise legislations, regulations, laws and policies that are not compatible with the use of social media. The policy issue has been discussed in Section 4.5.3. Government agencies that have been identified as being successful in their use of social media by Lee and Kwak (2012), such as the Office of Management and Budget in the US, have successfully issued and implemented memorandums to clarify how certain rules and policies apply to social media use.

4.8.3 Support for mobile devices

Government agencies and departments should deploy social media tools that are compatible with mobile phones and tablets, so that users' access to these services is not restricted (Lee & Kwak, 2012). This is especially true in regions where most users can only afford to access the Internet through their mobile devices. Although the cost for using data enabled mobile devices are high, these costs are comparably cheaper than the cost of setting up broadband in homes. In addition, mobile devices provide ubiquitous access to government agencies (Mergel, 2013d). This means that citizens can interact with the government wherever they are, citizens do not need to wait until they are at home or at work, therefore limiting the risk of the interaction not happening at all.

4.8.4 Integration of offline and online channels

The combination of offline and online channels of engagement has been identified as a best practice in E-participation (Dwivedi et al., 2011; Lee & Kwak, 2012; Porwol et al., 2012). Using both online and offline channels of engagement addresses the concern of digital literacy (Mergel, 2013d). Citizens that do not have the capability of using social media would be catered for using offline channels. Mickoleit (2014) presents an example of this multi-channel strategy; the Chilean government's "ChileAtiende" uses social media in combination with other online and offline channels, to provide services to citizens at a lower cost, by redirecting requests received on social media to the right channels.

4.8.5 Engaging in a pull strategy

In the Organization for Economic Co-operation and Development (OECD) working paper on social media, Mickoleit pointed out that governments that use a pull or networking strategy in engaging with citizens, reach a much larger audience, and have better engagement than governments using a push strategy (Mickoleit, 2014). For governments to succeed in this strategy, they should have evolved to the new information-sharing paradigm that accompanies the use of social media.

4.8.6 RESPECT Principle

Lee & Kwak (2012) highlighted the need for government employees to be educated on best practices for using social media. They present a set of guiding principles for the effective use of social media with the acronym RESPECT. These refer to:

- **R**eply promptly to public comments
- **E**nhance public value when posting messages
- **S**implify your message
- **P**rotect public privacy and agency reputation
- **E**nsure validity of information sources
- **C**orrect problems immediately and effectively
- **T**ell the truth all the time

4.8.7 Measuring Social Media Impact

Social media should be constantly monitored, and its impact measured, to ensure the set objectives are met (Andrews, 2014; Krzmarzick, 2013; Picazo-Vela et al., 2012; Schaffer, 2013). Many government organisations have not gone beyond using social media for broadcasting information, hence it is difficult for them to measure the impact, or outcome, of their social media use. Measuring social media impact provides evidence, however, to justify its use to top-management, build a business case and make informed decisions on the future direction of the social media strategy (Andrews, 2014; Mergel, 2014). Decisions on the indicators to be measured need to be made. These indicators should be linked to the objectives of social media (Schaffer, 2013). Some of the general metrics measured are breadth of interaction, depth of interaction, loyalty and sentiments (Mergel, 2014). The measurement of sentiments has been discussed in terms of sentiment analysis in Secion 4.4.1. The breadth of the interaction describes surface characteristics of the audience, such as who the audience is, and the number of interactions each month. The depth of interaction tries to go beyond the surface. This type of metric seeks insight such as how the information provided is being used, tracing conversations and responses by citizens, and monitoring cross-posting of information to other platforms (Mergel, 2014). Loyalty tries to determine how often citizens return to the social media platforms; this helps determine the worth of the information posted to citizens (Mergel, 2014).

4.9 Conclusion

Social media are embedded in the daily lives of most citizens, becoming a common feature in citizens' personal and business lives. With the advancement of technologies and corresponding lifestyle changes, such as the constant need to be online and informed of current events, there are opportunities for the development of new social media applications. The social media landscape is continually changing and adapting. This chapter has described social media extensively, including a discussion of the different social media technologies currently available (Section 4.3.1).

Although social media are being adopted at a fast rate by organisations and governments, there should be consideration for the strategy used in implementation. Several implementation models have been developed, and these have been discussed in Section 4.3.2. Even though these models are different, there are key elements that are common to them. Most important of these elements is the definition of

the organisation's social media strategy, which should be aligned with the overall strategy of the organisation. Other elements include the customers who are the target of any implementation of social media, the choice of social media channel/technology to be implemented and finally, the content to be disseminated through social media.

In order to ensure the implemented social media meets the intended strategic objective, organisations need to develop KPIs to measure social media performance. Some of these KPIs were discussed in Section 4.4. The measurement of social media performance should go beyond peripheral descriptive numbers to the analysis of relationships in social media networks, analysing the sentiments of customers, and predicting future customer behaviour. The techniques for analysing social media have also been discussed in Section 4.4.

The discussion on E-participation continued in this chapter with a view on social media. Social media has the potential to improve E-participation by providing a platform that encourages two-way communication between citizens and government. The government can reach citizens in a space where they already are comfortable, and do so in a timely and cost-effective way. Social media can potentially play a huge role in the public participation process (Section 4.5.5). Factors that have contributed to the adoption of social media by governments include; rising citizen participation demands, pervasiveness of social media, ubiquity of mobile technologies, and a worldwide shift towards participatory governance (Section 4.5.1). While there are several opportunities supporting the adoption of social media by governments, there are challenges that governments face in their bid to adopt social media. Some of these include issues of the digital divide, privacy, security, information accuracy and administration of social media (Section 4.5.3).

Research questions RQ_2 (How can social media be used for public participation?) and RQ_4 (What are the best practices in the use of social media for public participation?) have been answered in this chapter. This chapter also addressed RO_2 by highlighting social media best practices (Section 4.8) from governments in other countries. Another aspect of this objective was to investigate the use of social media by governments in other countries (Section 4.6). This was followed by an analysis of social media use by the South African government (Section 4.7). The analysis revealed that the South African government uses social media in similar ways as other governments in areas that require information provision to citizens. There is no substantial evidence of a pull strategy being implemented, or the involvement of citizens beyond service delivery complaints, where social media is concerned.

This chapter explored the use of social media in South Africa as a whole via an assessment of the social networking sites used by certain municipalities and provinces. The focus of this study is the Nelson Mandela Bay Municipality. The next chapter presents a more in-depth analysis of this municipality through interviews and a survey.

Chapter 5 : Social Media Use in Nelson Mandela Bay Municipality

| Chapter 1 | Chapter 2 | Chapter 3 | Chapter 4 | Chapter 5 | Chapter 6 | Chapter 7 | Chapter 8 |

Introduction | Research Design | E-government and Public Participation | Social Media and E-government | **Social Media Use in Nelson Mandela Bay Municipality** | Social Media Model for Public Participation | Evaluation and Reflection | Conclusion and Recommendations

5.1: Introduction

5.2: Nelson Mandela Bay Municipality

5.3: Nelson Mandela Bay Municipality as the Case Study

5.4: Social Media Use in Nelson Mandela Bay Municipality

5.5: Interview Study

5.6: Discussion of Interview Findings

5.7: Uses and Gratifications Survey

5.8: Discussion of Survey Findings

5.9: Conclusion

Research Objectives

Deliverables

Motivation for citizen use of Social Media for participation

RO₃: To investigate the use of social media in the selected municipality by interviews and Uses and Gratification surveys.

Municipal challenges in using Social Media

Opportunities for using Social Media in the municipality

Municipal benefits of using Social Media

Figure 5-1: Chapter Overview

5.1 Introduction

Social media have been advocated as a transformative ICT in government, presenting opportunities that allow their use in different government processes. Chapter 4 presented a discussion on social media technologies, its implementation and adoption models, and social media analysis. It also assessed social media use by governments around the world, and highlighted best practices in social media use from existing literature. An assessment of how the South African government currently uses social media was presented in the previous chapter. It was noted that social media use in South Africa is not as extensive as the rest of the world. Currently, social networking sites are used in interaction with citizens in South Africa, as shown in Table 4-2, Table 4-3 and Table 4-4. However, the use is restricted to a few participation activities.

The Nelson Mandela Bay Municipality (NMBM) is the selected case for this case study research, therefore this chapter would be analysing the use of social media for public participation in the NMBM through interviews, and a survey to achieve the second part of RO_3 and answer RQ_3.

RO_3: To understand the use of social media in the selected municipality through interviews and the Uses and Gratifications Theory surveys.

RQ_3: What are the factors that affect the public's adoption of social media for engaging with the municipal government?

The case study is designed to explore the extent to which social media is used by both citizens and employees of the municipality. An exploratory case study is used to understand a problem, and clarify its precise nature (Saunders et al., 2009). The case study at the NMBM will be exploratory in nature, since it is used to explore the nature of the problem encountered by employees when using social media for public participation, as well as to explore citizens' motivations for using social media for the same purpose.

A case study is an inductive approach where no hypothesis is formulated, but where certain expectations, theories or questions act to guide the empirical research (Saunders et al., 2009; Yin, 2014). The case study in this research will guide the development of a social media model for public participation. There will be no hypothesis testing in this research.

The chapter presents a background on the NMBM, discusses its selection as the case study, and the current state of social media in the municipality (Sections 5.2, 5.3 and 5.4).The chapter also discusses interviews with the NMBM's communications department about their current use of social media (Section 5.5). The findings from these interviews are presented and discussed in Sections 5.5.4 and 5.6. The chapter will also discuss the Uses and Gratifications Theory survey which assesses citizens' motivations for using social media to interact with government in the NMBM (Sections 5.7, 5.7.4 and 5.8). Section 5.9 concludes the findings of the chapter. The chapter overview is presented in Figure 5-1.

5.2 Nelson Mandela Bay Municipality

The NMBM is located in the Eastern Cape province of South Africa. It is one of the eight Category A, or metropolitan municipalities, in the country. Metropolitan municipalities are responsible for all functions of local government in cities, as opposed to district municipalities that hold responsibilities for rural areas (South African Government, n.d.). According to the South African constitution, metropolitan municipalities are set up in "centre[s] of economic activity", areas "for which integrated development planning is desirable", and areas with "strong interdependent social and economic linkages" (Constitution of the Republic of South Africa, n.d.).

NMBM was formed as an administrative area covering Port Elizabeth, the neighbouring towns of Uitenhage and Despatch, and the surrounding agricultural areas (Statistics South Africa, n.d.). IsiXhosa is spoken by 53,2% of the residents as their mother tongue, Afrikaans is the mother tongue of 28,9%, and English 13,3% (Statistics South Africa, n.d.). According to the 2011 census, the NMBM has a population of 1, 152,115 with 69.04% of the population being between the ages of 15 and 69. This demographic falls within the base age of social media users which has been identified as 16-64 years old (Chaffey, 2015).

5.3 Nelson Mandela Bay Municipality as the Case Study

An assessment of the websites for all municipalities in South Africa was carried out at the beginning of this study to identify municipalities with social media accounts. The choice of municipalities was narrowed down based on their proximity to the researcher. The NMBM is based in the Eastern Cape which is where the researcher is based. Furthermore, the extent of use of social media was a determining factor, since several municipalities had accounts that were inactive. NMBM is active on social media which meant they were likely to be more receptive towards the study, as they recognised the value of social media already, and had a team in place running social media.

An email was sent to the municipality's communications department requesting a meeting to discuss the research proposal, and the possibility of carrying out the case study at NMBM. A positive response was received, and a meeting was set up with the Acting Director of the municipality. The purpose of the research was discussed, and a formal letter seeking permission to carry out the research in the municipality was presented to the Acting Director. Due to changes in personnel within the department, an official response was not received for about eight months when the Director post was made permanent. In the period before initial contact, and receiving official consent, there were many changes to the personnel holding the Acting Director post. This hampered the progress of the study, but also highlighted some of the issues that hindered the use of social media within the municipality.

5.4 Social Media Use in Nelson Mandela Bay Municipality

Social media adoption in the municipality is currently in the "Constructive Chaos" phase of the adoption model discussed in Section 4.5.6., and shown in Figure 5-2. However, it is rapidly moving into the "Institutionalisation" phase. Policies are being developed, responsibility has been assigned to a single department, and the use of social media is official. The municipality uses the "Centralised" organisation model for social media as discussed in Section 4.3.3. This organisation model has been identified as the most commonly used model for organisations starting out in social media.

The communications department of the NMBM is responsible for their social media platforms. Social media was implemented in the municipality in 2010. The NMBM currently uses Facebook, Twitter and YouTube as standard social media platforms to engage citizens in the municipality, and is further exploring the use of Instagram in the future. The municipality employs a push strategy in their engagement which entails broadcasting information on social media (Mickoleit, 2014).

Social media is used to broadcast information to citizens about service delivery, community initiatives and disaster management, to advertise events that occur in the municipality, post updates on activities involving the mayor, post job vacancies and inform the public about upcoming public meetings. Similar information is posted on Twitter and Facebook. Most of the posts provide a link to the municipality's website. The subsequent sections describe the data collection methods from employees of the municipality and citizens. The data collected will give a deeper insight into the use of social media within the municipality.
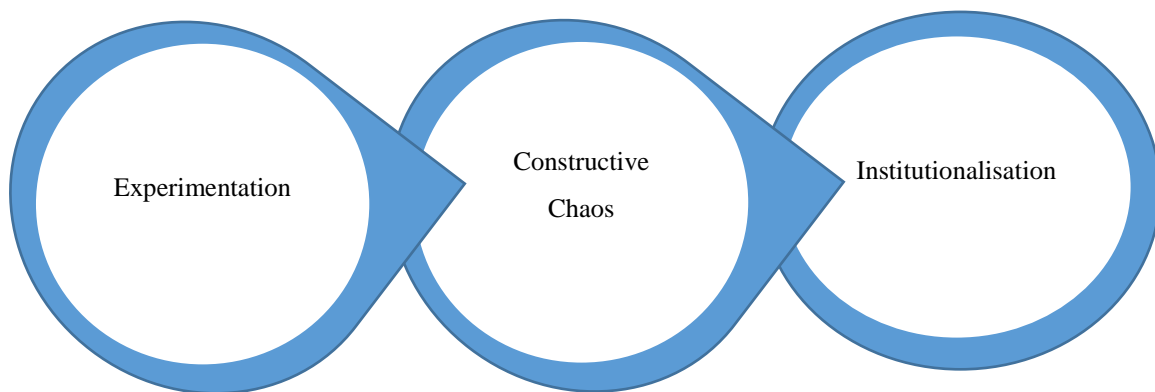
Figure 5-2: Social Media Adoption Process (Nepal et al., 2015)

5.5 Interview Study[8]

Face-to-face, one-on-one, semi-structured interviews were used as part of the collection instrument for this case study. The purpose of the interviews was to assess the current situation regarding the use of

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[8] The results reported in this section were obtained from research published as a full double-blind peer-reviewed conference paper at the South African Institute of Computer Scientists and Information Technologists Conference in September 2017. Ifeoluwapo Fashoro and Lynette Barnard. 2017. Challenges to the Successful Implementation of Social Media in a South African Municipality. In Proceedings of SAICSIT '17, Thaba Nchu, South Africa, September 26–28, 2017, 9 pages. (APPENDIX J)

social media in the NMBM. The interview addressed the present use of social media, the roles of the communications department employees, challenges and risks faced while using social media, benefits of using social media, and opportunities that have led to its use. Thematic analysis, in combination with coding techniques, was used to analyse the interview data. The outcomes of the interview study, together with the results of Chapter 3 and Chapter 4, will explain the design of a social media model.

5.5.1 Participant Profile

The selected participants are employees of the NMBM, employed in the communications department who are responsible for all social media posts in the municipality. The Director of Communications identified these employees and granted the researcher access to them. The Director briefed the employees about the research, and the purpose of the interviews. This ensured that the employees were available when contacted by the researcher. Five members of the team, who directly interact with social media, were interviewed. The roles of the interviewees are Municipality Spokespersons, Public Relations and Events Management officers. These five employees oversee all municipal communications, both offline and online.

5.5.2 Interview Setup and Procedure

A member of the communications team provided the emails and phone numbers of all participants. Emails and text messages were sent out to participants requesting their participation in the interviews. All selected participants agreed to take part in the interview process. The interviews were carried out over a three-week period in February 2017. The interviews took place in the offices of each employee. The duration of the interviews was approximately twenty-five minutes. The purpose of the interview was explained verbally to participants at the beginning of the process. The interview schedule was also presented to participants prior to the interview for the main purpose of reducing their anxiety. The participants were given a consent form to sign once they had read the interview schedule, and had agreed to participate. The interviews were recorded using a voice recorder. The interview schedule is provided in Appendix C.

5.5.3 Data Analysis

The recorded interviews were transcribed. Computer-assisted qualitative data analysis using Atlas.ti version 8 was employed to organise the data, facilitate coding and identify themes. A combination of inductive and deductive thematic analysis was done following steps outlined by Braun and Clarke (Braun & Clarke, 2006).

The process started with data familiarisation followed by coding of the transcripts. The transcripts were coded in two stages to discover themes and patterns in the data. The first stage involved exploratory coding to gain first impressions, while the second stage identified, synthesised and interpreted themes and patterns. Initial codes based on existing literature were identified at the outset, and additional codes were identified from interviewees' comments in subsequent exploration of the transcripts.

The transcripts and results were sent to all participants for member checking. However, only one participant responded and provided feedback. The participant was satisfied with the transcript and agreed with the results. The results were forwarded to the Director of Communications who was not a participant in the interviews. He stated that the results mirrored the exact context of the communications department and their use of social media.

5.5.4 Interview Results and Findings

The content analysis of the interview transcripts revealed three main themes surrounding the use of social media at NMBM. These themes and related sub-themes are presented in Table 5-1. A discussion of the findings is provided along with literature that supports these findings.

Table 5-1: Themes discovered from municipal interviews

Theme	Sub-themes	
Challenges and Risks	Information	Confidential/sensitive information
		Availability and accuracy of information
	Legal	Lack of policy
	Administrative	Red tape and government bureaucracy
		Resistance from leadership and politicians
		Difficulty in developing a persuasive business case
		Lack of dedicated officials
		Lack of budget
		Costs and Training
		Lack of skills
		Lack of collaboration between departments
	Social	Internet access
		Language Barrier
		Verbal aggression and excessive criticism
	Technology	Fast pace of change on platforms
		Miscommunication
Opportunities	Technology	Mobile phone penetration
		Public Access Internet
	Social	Youth population
Benefits		Effectiveness
		Cost-Effective
		Immediate
		Wider audience reach
		Personal

5.5.4.1 Challenges and Risks

This section explores the challenges identified from the interviews. Quotes highlighting the issues revealed in the interviews will be presented in each of the subsequent sub-sections.

1. Information

Information encompasses issues related to the information to be posted on social media platforms, such as the quality and availability of information.

a. Confidential/sensitive information

Some of the interviewees were concerned with the possibility of disclosing confidential, or sensitive information, to the public that might lead to mass panic, or endanger government officials and politicians. An instance of such a situation was described:

"We had once a case, just to give you an example, the Executive Director of Public Health called me, she said 'Listen at one of the points where we collected samples we found out there's cholera in the water sample and it's quite a lot and people can get sick.' But I'm a communicator, what I know is you have to do more than one sample to make sure the person who actually did the sample washed his or her hands after using the bathroom, that the actual bottle where the sample was taken was clean and all of those things. There are many factors involved in this case the second sample came back a day later negative but throughout the night, the Communications Director and this E.D. were sitting on my head and I refused to…I said 'No, you're going to create mass panic, let's wait for the second sample'. When the second sample came then all of a sudden they were relaxed too because they realised they could have told people there was cholera in the water meanwhile it was one of our officials that wasn't careful enough." - (Municipal spokesperson 1, Interview Transcript, p.3)

The municipality should ensure that the information posted is accurate, and presented in a way that instils confidence in the government. A process of moderation should be established to ensure that information provided to citizens has been approved by a senior member of the team. Bertot et al. (2012) recommend that government agencies should decide on the level of transparency to pursue to achieve balance between openness and information security. This should not be taken as an opportunity, however, to selectively post information that paints the municipality in a good light, as noted by Zheng (2013), and also corroborated by a municipal employee:

"At least they will see whatever the municipality is doing; whatever problem we have, because we're not only posting good stories. Sometimes we need to acknowledge that we have a problem." - (Public relations and Events management Officer 2, Interview Transcript, p. 6)

b. Availability and accuracy of information

The availability of information was raised by several of the interviewees, especially in relation to collaboration from horizontal departments. Since the communications department is solely responsible for social media posts, they rely heavily on other departments to provide information. The information

needs to be pertinent and provided on time for it to be beneficial to citizens in the municipality. As municipal employees put it:

"The only problem we have is constantly getting instant messages from the relevant department. They don't understand that if ever you are constantly updating the community at least it's [with] current and relevant information." - *(Public relations and Events management Officer 2, Interview Transcript, p. 3)*

"Because we…to a large degree are very reliant on those service delivery departments for information but if they don't see the value of this platform they are not going to give us the information we need to communicate with the public." - *(Municipal spokesperson 1, Interview Transcript, p.1)*

The importance of information for effective social media adoption by government has been highlighted by Picazo-Vela et al. (2012). According to these authors, a lack of high-quality information may cause failure in the adoption process. Citizens expect queries to be answered on time, and with information that is accurate. The municipality would require a liaison with the different horizontal departments to ensure their access to timely and accurate information. The importance of social media has to be made explicit to departments that service the communications department with information. It might also be helpful if these departments see the social media agenda getting support from senior leadership.

2. **Legal: Lack of policy**

The municipality does not have a social media policy in place. It relies on the policy from the Government Communications and Information Systems (GCIS) which guides all communications from the national government to the local government. The need for a localised policy has been recognised, and the municipality has put together a draft policy that is in the process of approval. The previous policies used within the NMBM had no reference to social media. Policies provide a regulatory framework for employees and guide their daily activities. All respondents recognised the absence of a formalised policy:

"In fact, we didn't have a…we had a draft coms policy. And it posed a problem to us as officials that are implementing, because you…if something is in draft form it has to be final for you to do your job and for you to be certain that each and every day this is the SOP [Standard Operating Procedure] according to the policy because you are guided by that." - *(Public relations and Events management Officer 1, Interview Transcript, p. 2)*

"We had a communications policy for a number of years; that communications policy didn't speak to social media specifically. Last year, we sat together as the communications office, we took that old policy and we reviewed it. We worked in social media as well as national policy frameworks and so on." - *(Municipal spokesperson 1, Interview Transcript, p.2)*

"We are guided by Government Communications and Information Systems (GCIS)… But currently if I am correct, we have a draft policy on social media that is guiding all government communicators, nationally up until local government. So, we are following that policy as things stand, it's still a draft policy, it's in the process of being approved as a working policy. We've not yet had our own as a city."
- (Municipal spokesperson 2, Interview Transcript, p.2)

Without a social media policy in place, employees are left to make personal judgement calls when interacting with citizens. This might lead to a lack of consistency in the way issues are handled and responses are provided to citizens. Government agencies are required to act within the limits of the law, and are therefore left liable without policies in place. Bertot et al. (2012) observed that many government agencies do not consider existing policies, or how they relate to social media prior to establishing these platforms, as an interaction tool.

3. Administrative

Administrative issues comprise characteristics and capabilities of the organisation, and the people in the organisation. These issues include the level of skill of employees, how easily the managers and leaders accept change, and policies regarding employee training.

a. *Red tape and government bureaucracy*

The nature of government agencies to respond slowly to change and, in some instances, reject change, was highlighted as a challenge to social media adoption in the municipality.

"Things take a long time to be phased in because there's a lot of red tape, there's a lot of processes that need to unfold for certain things to happen. So that is also a problem, even if we see that is a challenge it takes time for it to be resolved because of the systems that are in place in local government."
- (Public relations and Events management Officer 1, Interview Transcript, p. 3)

"If ever we have a dedicated person in which is something we are trying to accommodate within the organogram but it's long, the process, it's government processes." *- (Public relations and Events management Officer 2, Interview Transcript, p. 4)*

Mergel (2012) describes the nature of social media platforms and government agencies as contradictory; social media platforms are fast changing with innovations happening often, while processes in government are slow moving. Government agencies are slow to adapt to the changes required for social media adoption because of the hierarchical, top-down decision-making culture. Government agencies need to adjust organisational procedures to keep up with the pace of social media, and achieve speedy responsiveness (Mergel, 2012). Organisational change management is a major issue that hinders successful social media adoption in governments (Alotaibi, Ramachandran, Kor, & Hosseinian-Far, 2016).

b. Resistance from leadership and politicians

Social media adoption is met with resistance within the municipality; politicians and senior government officials are hesitant to try unfamiliar technologies.

"We're not there yet, it's very difficult to sit with a politician and explain to him or her that you need to be creative." - (Municipal spokesperson 1, Interview Transcript, p.4)

"I think it's simply stranger-danger type of attitude, where it's a different thing- don't know it, don't go there and because I don't know it I can't make an informed decision about it." - (Municipal spokesperson 1, Interview Transcript, p.4)

These platforms expose government agencies to criticism and unpredictable behaviour of citizens, and therefore make senior government officials wary. Despite these risks, Mergel (2012) advocates senior government officials getting behind social media initiatives in order to facilitate a change process within their agencies. If these officials are seen to support social media, there will be less resistance from their employees, and a higher tendency for successful adoption (Zheng, 2013). The successful implementation of ICT projects in government necessitates the support of political leaders (Furuholt & Wahid, 2008).

c. Difficulty in developing a persuasive business case

The need to make a business case for social media was recognised as a challenge in the municipality. The value for social media has not been recognised.

"The major, the biggest challenge is that outside of communications people don't really...I mean in the municipality they don't really see the value of social media" - (Municipal spokesperson 1, Interview Transcript, p.1)

This failure to develop a persuasive business case may be the reason behind the resistance to accept social media from senior government officials and politicians within the municipality. Outside of the communications department, social media is still seen as a new and unfamiliar technology, and its benefits are not understood. The municipal officials interviewed believe if they are able to market social media to other directorates and departments, and there will be an increased support for its use.

d. Lack of dedicated officials

The lack of a dedicated official, or team of individuals, came across as the biggest challenge facing the municipality. All interviewees referenced this as an important issue, and a hindrance to their successful use of social media. At the NMBM, officials currently dedicated to social media are also responsible for every other media communication; such as radio, newspaper, meetings, and newsletters. This means their time is split across numerous tasks which detracts from their interaction on social media. In many

situations, these officials are out of the office, and have no access to the Internet, so they can only check on social media updates when they return to the office, which may be hours later.

"We are trying our best, as I said before we need to get a dedicated person because communication is evolving." - (Public relations and Events management Officer 2, Interview Transcript, p. 4)

"Sometimes I'm in meetings, sometimes I'm at an event, ...and so the turnaround time to answer some queries it can take days or it can be immediate" - (Public relations and Events management Officer 1, Interview Transcript, p. 2)

"because we don't have dedicated officials but it is still done. You know, it's not left by the way side." - (Municipal spokesperson 1, Interview Transcript, p.1)

"...a lot of companies, private companies would have a designated person or a social media specialist of whatever. We don't have that, so sometimes people have queries, we can't respond immediately" - (Public relations and Events management Officer 3, Interview Transcript, p. 1)

With the fast pace of social media, it becomes necessary to have someone working full-time on monitoring posts. However, there is still a lack of trust in these platforms on the part of leadership, so they are hesitant to create a permanent social media management role within the municipality. Many government agencies assign this role to current staff because they are not willing to fund the human capital needed for effective social media adoption (Alotaibi et al., 2016; Zheng, 2013).

e. Lack of budget

A lack of budget was recognised as a major issue in the NMBM. The budgetary issues surrounding social media have a knock-on effect on its adoption within the municipality. Without a budget, it becomes difficult to hire dedicated officials, market social media use within the municipality, and offer training to social media staff. These resulting issues were highlighted by interviewees.

"My personal view is budget must be made available specifically for marketing social media in the institution. There is no budget, never been any budget, I've been pleading for one for years, it doesn't come." - (Municipal spokesperson 1, Interview Transcript, p.2)

A lack of funding is not unique to social media, but is a common problem with the adoption of ICTs in government. ICT managers are plagued with the burden of working around limited budgets by turning to open source software, or using general administrative budgets (Mawela, Ochara, & Twinomurinzi, 2016; Zheng, 2013). Prioritising social media in the municipality's ICT agenda might highlight the need to provide a budget for social media adoption.

f. Costs and Training

The interview process revealed that NMBM has never provided social media training for its staff. The social media team have all learned on the job, or made personal efforts to learn how to interact on these platforms, by buying books with their own resources. The only member of the team who received official training did so from a previous employer. The municipality receives invitations from organisations for training, but is hesitant to spend on social media training.

"I still feel that we still need to have more capacity in terms of training in this area, on how more can we capitalise or how more can we take advantage of social media platforms that are there." - (Municipal spokesperson 2, Interview Transcript, p.2)

"Like for instance, social media, you will get many invitations coming in but you know the expenditure will be quite big because you go to Joburg, you'll be there for two days you have to pay up to R15, 000 for those two days and then accommodation and then travel costs and expenditure so it's a lot of cost that the municipality is very hesitant to incur." - (Municipal spokesperson 1, Interview Transcript, p.2)

"No, learning on the job but it's only fair to be trained. Then everyone is clear on the dos and don'ts" - (Public relations and Events management Officer 1, Interview Transcript, p. 5)

"On the job learning I guess, still learning. But we can't not do the work because you haven't been trained." - (Public relations and Events management Officer 3, Interview Transcript, p. 2)

Professional training on how to grow followers, how to respond in times of emergencies, and language styles are among the skills that are necessary for effective and efficient use of social media by government employees (Zheng, 2013). However, many government institutions take up social media because it is trendy and expect employees to figure out its use on their own (Mergel, 2012; Nam, 2012). In the case of NMBM, respondents are committed to using social media and learning on their own. Even though social media has been used by these employees for several years, they still desire formal training to enhance their knowledge and skills.

g. Lack of skills

The NMBM social media team are mostly experienced in terms of communicating with the public, they are nevertheless concerned about posting on social media because these platforms require a different skillset.

"The other thing is, you would have people not skilled enough, they will make spelling errors, it's not good for your brand." - (Municipal spokesperson 1, Interview Transcript, p.3)

"Social media brought challenges to communications in the sense that yes, it's now two-way communication and then secondly, when you write for instance on Twitter you have 140 characters,

you cannot write in the business-like way you normally do." - (Municipal spokesperson 1, Interview Transcript, p.1)

This challenge is closely linked with the issue of training; social media platforms have unique characteristics that make it difficult to transfer skills built in other areas of communication. Communication on these platforms needs to be concise, while providing important information. The need for speed in responding to citizens also hampers rigorous information vetting processes, thereby requiring highly skilled communicators.

h. *Lack of collaboration between departments*

Several of the respondents mentioned the issue of collaboration with other departments. This is a major issue because the communications department is solely responsible for posting information on behalf of the municipality, and is therefore reliant on every other department and directorate.

"There is a department that works with electricity and so if they don't provide us with information we can't communicate that information." - (Public relations and Events management Officer 3, Interview Transcript, p. 1)

"to a large degree are very reliant on those service delivery departments for information but if they don't see the value of this platform they are not going to give use the information we need to communicate with the public." - (Municipal spokesperson 1, Interview Transcript, p.1)

The value of social media should be made evident across all directorates and departments within the municipality. The importance of providing reliable and timely information to the public should also be emphasised. Traditionally, government organisations function in silos, which inhibits information sharing. Mawela et al. (2016) explain that this silo culture developed from the need to address backlogs in the system, and from pressures to deliver on service causing segregation in departments for better managerial efficiency. These organisations should adopt a networked structure which would facilitate quicker responses to citizens (Picazo-Vela et al., 2012).

4. Social

Social issues describe factors related to the external environment in which the municipality operates. These challenges arise from the challenges of operating in the South African society.

a. *Internet access*

One of the predicates of social media use is access to the Internet (Bertot et al., 2010a). This is, however, a major challenge for the municipality, because the majority of the population have no Internet access in their homes. This challenge was identified by one of the representatives:

"…you know it's an African country we have issues around connectivity, we have issues around access to data, we have issues around the correct communication tools…" - (Municipal spokesperson 1, Interview Transcript, p.2)

One way of overcoming this challenge is to provide public Internet access points (Bertot, Jaeger, Munson, et al., 2010a). The municipality has several programmes that provide free Internet access to citizens around the city, and these subsequently also ensure access to social media platforms.

"What we've done, we started a few years ago, we have a project called NMBM B-Connected, partly to address that… Because in the township we have a number of hotspots, where young students can access the internet where they are even if it's in a shack, they will be able to get it as long as they have a phone. And that NMBM B-Connected programme is ongoing, we have in addition to that, we have E-connected, that's we have municipal facilities like libraries, customer care centres that actually provide free internet daily where you can go…free wi-fi, you and go and connect three devices at a time; cell phone, tab [tablet] and a laptop." - (Municipal spokesperson 1, Interview Transcript, p.2)

b. *Language Barrier*

South Africa is a multilingual nation with 11 official languages; this means citizens are permitted to interact in any of these languages. However, municipal employees might not understand the language used by citizens which leads to a breakdown in communication, a delayed response, or miscommunication. The municipality caters to citizens who speak different languages, but this is only done for important messages that need to be broadcast. Respondents referred to this issue in the following statements:

"I think language as well because a lot of stuff we put out, we put out in English and so automatically you're cutting out people regardless of…" - (Public relations and Events management Officer 3, Interview Transcript, p. 2)

"Unfortunately, I cannot speak other languages…Afrikaans, I will ask my other colleague to translate for me or I'll ask Facebook to translate for me so that I can be able to assist." - (Public relations and Events management Officer 2, Interview Transcript, p. 3)

One of the objectives of social media use in government is to include more voices in government processes, it is therefore necessary for all members of the public to be able to access and use these platforms. Bertot et al. (2012) describe a similar situation in the US, where most Latinos are excluded from accessing government platforms due to a language barrier. The government has established policies, however, that ensure information is provided in non-English formats. Similar steps need to be adopted by the NMBM to ensure inclusion of all citizens.

c. *Verbal aggression and excessive criticism*

The open nature of the platform gives citizens liberty to be abusive towards municipal representatives and other citizens. The municipal representatives are often exposed to racism, political intolerance and personal abuse. Citizens also use the platform to express their dislike for politicians, and this is done even when posts made by the municipality are positive in nature. Statements made by municipality representatives below describe such situations:

"Another thing is sometimes other people, the language they use, we try to hide those posts, we don't want to…we always promote as a municipality that people have political tolerance." - (Public relations and Events management Officer 2, Interview Transcript, p. 2)

"Sometimes the language that is used by the residents is such that it can make you feel very bad or hurt" - (Public relations and Events management Officer 1, Interview Transcript, p. 3)

"…if you don't like somebody or something it doesn't matter what positive information they post…if a certain grouping of people do not appreciate. It doesn't matter if it's a good story, if they want to bash, they will bash." - (Public relations and Events management Officer 1, Interview Transcript, p. 4)

The municipality hides comments that they perceive to be offensive, but they have no policies in place that restrict what can be posted on their social media platforms. Some government agencies have social media guidelines describing what can be posted on their platforms, and any post contradicting these guidelines are usually deleted. Chang and Kannan (2008) encourage the establishment of guidelines that state clear rules for participation and commenting. Some researchers have indicated that participation occurs mainly when citizens are dissatisfied (Mossberger et al., 2013). This means that criticism will always be experienced, especially because social media is an open platform. Chang and Kannan (2008) suggested that including the names of content contributors be required to each post, as a way of increasing civility and self-restraint on the part of commenters.

5. Technology

Issues discussed in this section are based on the characteristics of social media as a technology, such as the character-length of Twitter posts, and the speed at which information posted can be shared by users of these platforms.

a. *Fast pace of change on platforms*

Social media platforms are dynamic; content gets updated by the second. It becomes difficult for municipality employees to keep track of current requests, especially where there is no dedicated individual, as is the case with NMBM.

"Sometimes, on Facebook, you open your phone you see this and you want to reply but you can't find that status. And like you're looking at the date you can't it, you open another phone, you find the status and like, okay I've been searching a whole hour trying to find that status but I couldn't find it because it's constantly updating itself and it's…sometimes it can be confusing but other than that, that's my feeling." - (Public relations and Events management Officer 2, Interview Transcript, p. 6)

The Internet and social media are public and permanent in nature, therefore, information posted cannot be deleted, or retracted. Social media platforms make it easy for users to share information to people in their networks, meaning even the wrong information is called-out and spread quickly (Mergel, 2012). The following statements support this issue:

"It's immediate, it's very difficult to take, not even to take away…it's very difficult to correct a message that is already there" - (Municipal spokesperson 2, Interview Transcript, p.1)

"For me the danger is putting out information and it being interpreted incorrectly…. Then it quickly spirals out of control…" - (Public relations and Events management Officer 3, Interview Transcript, p. 1)

The municipality should have dedicated staff to keep track of social media updates, and should train staff in appropriate ways of communicating (Zheng, 2013). There should also be verification of information to be published on social media.

b. Miscommunication

It was noted during discussions that communication through social media is different from regular media, such as newspapers and newsletters. Due to the nature of social media platforms, especially Twitter with the limitation of characters that can be posted, it is easy for information to be miscommunicated in an attempt to be brief and precise.

"Miscommunication, that's the biggest thing. In writing, you can't really tell the tone." - (Public relations and Events management Officer 3, Interview Transcript, p. 1)

"So when you're sending such messages you have to be careful, phrase it correctly, pick the right words to use, so that you cannot be misquoted" - (Municipal spokesperson 2, Interview Transcript, p.1)

Proper training on how to communicate on social media will be beneficial to the municipal staff (Zheng, 2013). Posts should go through a vetting process to make sure the right information is being conveyed. However, this process should not be allowed to impede the speed of responses to queries.
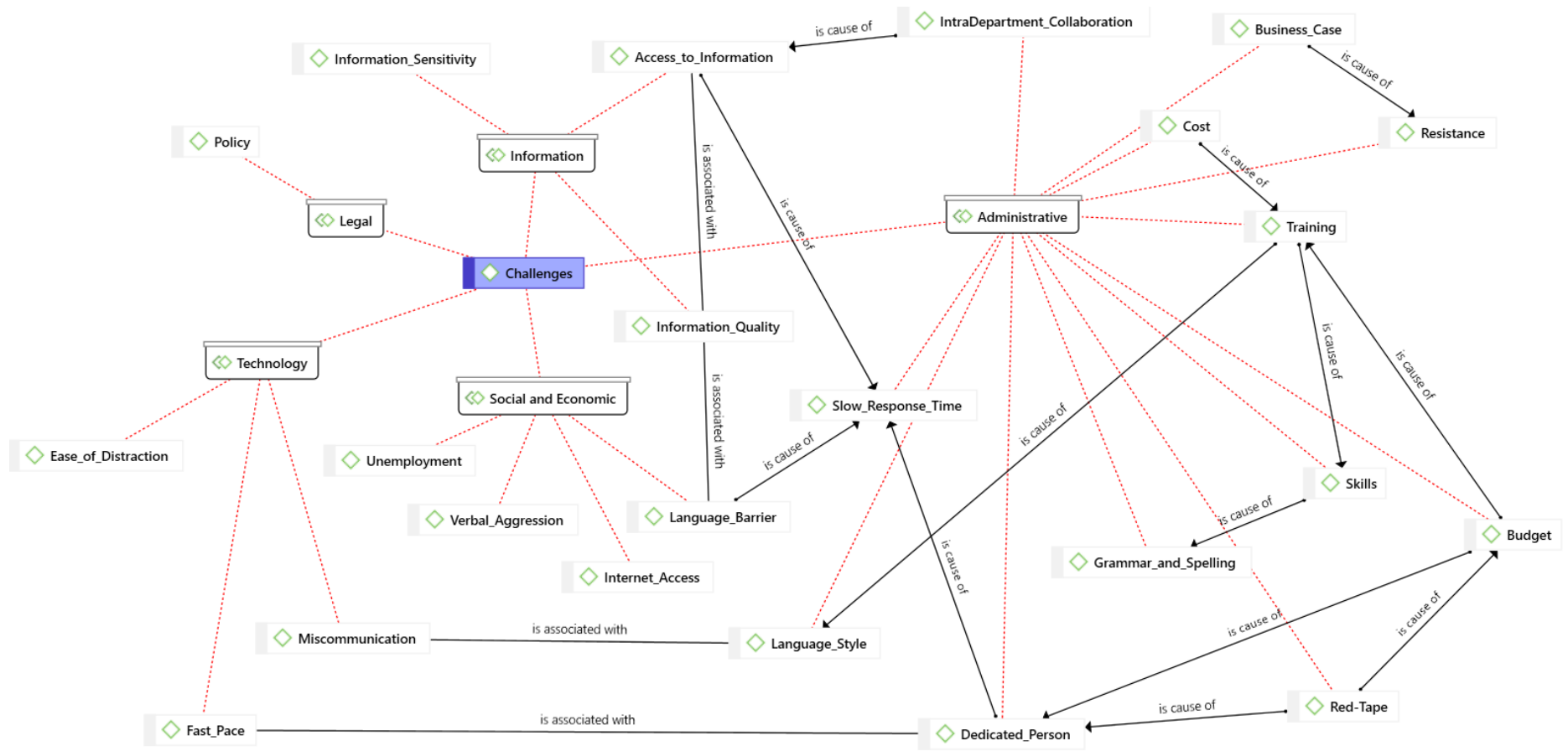
Figure 5-3: Atlas ti. network diagram showing relationships in the Challenges theme

Many of the challenges discussed above are interconnected with one issue having an effect on the other. Figure 5-3 shows these relationships using an Atlas.ti network diagram. The diagram depicts "Challenges" as the central theme, with interlinks between the sub-themes. The black arrows depict the nature of the relationships between these sub-themes.

5.5.4.2 Opportunities

The opportunities identified in the interviews will be discussed and specific quotes that relate to each of these opportunities will be highlighted.

1. Technology

The opportunities provided by technology that were identified by the interviewees will be discussed in this section.

a. *Mobile Phone Penetration*

The increasing access to mobile phone technologies with Internet access features was highlighted as an opportunity that can be explored by the municipality in using social media.

"The cell phones that have social media capability so more people have access to us than before" - (Public relations and Events management Officer 1, Interview Transcript, p. 2)

This corresponds to findings in literature (Section 4.5.2.3). Many of the residents in the municipality do not have access to broadband at home, and therefore rely on their mobile phones to provide Internet access.

b. *Public Access Internet*

The municipality has implemented several initiatives that provide free access to the Internet for citizens, creating opportunity for social media use within the municipality. Bertot, Jaeger, Munson, et al. (2010a) recommended the provision of such public access Internet to promote the use of technologies in citizen-government interactions. The services provided by NMBM were highlighted by one interviewee.

"What we've done, we started a few years ago, we have a project called NMBM B-Connected, partly to address that… Because in the township we have a number of hotspots, where young students can access the internet where they are even if it's in a shack, they will be able to get it as long as they have a phone. And that NMBM B-Connected programme is ongoing, we have in addition to that, we have E-connected, that's we have municipal facilities like libraries, customer care centres that actually provide free internet daily where you can go…free wi-fi, you and go and connect three devices at a time; cell phone, tab and a laptop." - (Municipal spokesperson 1, Interview Transcript, p.2)

2. Social: Youth population

NMBM has a 69% youth population (Statistics South Africa, 2016). According to literature, this is the demographic that makes up the largest number of social media users (Chaffey, 2015). The municipality therefore has a large target audience for their social media outreach. This was noted by one of the interviewees.

"it is important because as you understand that the population in general more than 50% is young people. That then means that us as government, that is our biggest audience." - (Municipal spokesperson 2, Interview Transcript, p.1)

5.5.4.3 Benefits
The benefits identified by interviewees are presented along with direct quotes from interviews that highlight each benefit.

a. Effectiveness

It was noted that in terms of getting information out to the public, social media is more effective than other methods such as radios, posters and flyers. The information is readily available, wherever and whenever, citizens need it; they do not need to be aware of a specific time of radio broadcast, or be in the vicinity of poster distributions. Social media gives the communications team control over the dissemination of information; they are not reliant on third-parties for information dissemination.

"what I've found with social media is, instead of handing out flyers and posters it's more effective to do social media posts… It's very effective. Of course, not on its own but it's very effective." - (Public relations and Events management Officer 1, Interview Transcript, p. 2)

"Providing status regarding the interruption of electricity, you cannot go to radio cos already that area does not have electricity so they cannot hear your notice. At least with social media everyone has got a phone, they can share your status." - (Public relations and Events management Officer 2, Interview Transcript, p. 2)

b. Cost-effective

Similar to findings from literature (Coleman & Gøtze, 2002), the cost-effectiveness of social media was highlighted by a member of the communications team. The amount of money that would have been spent reaching out to citizens through other forms of engagement has been reduced. Citizens are also saved the expense of calling municipality call centres, or visiting the municipal offices.

"previously we focused a lot on posters, printing and it was costly and we had to rely on somebody to deliver those posters and stick them" - (Public relations and Events management Officer 1, Interview Transcript, p. 2)

"other people can't afford to call the call centre and hold, so it's assisting a lot in many instances." - *(Public relations and Events management Officer 2, Interview Transcript, p. 2)*

c. Immediate

Social media platforms are live, and therefore information posted gets delivered to the public immediately. Several interviewees noted this as a benefit of using social media. The municipality is able to disseminate information and also get responses quicker.

"It's instant and the messaging, it's correct and it's now." - *(Public relations and Events management Officer 2, Interview Transcript, p. 2)*

"It will definitely make it much easier… but I think social media because it's immediate." - *(Public relations and Events management Officer 3, Interview Transcript, p. 3)*

"It's immediate" - *(Municipal spokesperson 2, Interview Transcript, p.1)*

d. Wider audience reach

The ability of social media to reach a larger population group than other engagement mechanisms was noted as a benefit by some interviewees. Social media enables information to be rebroadcast by users through shares and retweets, ensuring that even citizens who are not directly connected to the municipality will receive information from friends and family. Social media transcends physical locations, meaning that individuals who are not currently located in the municipality can also receive information posted on these platforms.

"it helps to increase the reach and it's more of a now kind of impact" - *(Public relations and Events management Officer 3, Interview Transcript, p. 3)*

"It reaches more audience than you would have reached through radio, through newspapers" - *(Municipal spokesperson 2, Interview Transcript, p.1)*

e. Personal

Social media platforms allow bi- and multi-directional communication which makes them more personal than traditional engagement mechanisms. Posting on these platforms can be conversational, encouraging responses from citizens. This was highlighted in the statement below.

"And that…it also makes the experience that they have much more personal." - *(Municipal spokesperson 1, Interview Transcript, p.1)*

5.6 Discussion of Interview Findings

The initial adoption of social media within NMBM was unplanned, and not properly executed. At that time, social media use was experimental. There was no authorisation for its use by senior management.

The purpose of using social media was to keep-up-to-date with governmental agencies around the world. This meant that there was no strategy, guideline, or policy in place, that steered social media use. This lack of structure and purpose has permeated its continued use. The municipality is currently attempting to establish this structure and institutionalise social media as a communications tool. This institutionalisation will follow a process similar to that of initial adoption. Essentially, NMBM will have to go through an organisation change process. The need for change has been recognised by NMBM, and steps are being executed to bring about this change. The interview carried out during this research highlighted many of the issues that need to be addressed by the municipality.

The themes that emerged from the interviews reflect constructs from the Technology Organisation Environment (TOE) framework. The TOE framework is an organisational level adoption theory that posits that three elements of an organisation's context, influences its adoption of technological innovation (Baker, 2012). These elements are the technological context, the organisational context and the environmental context. The technological context comprises all technologies relevant to the organisation; those currently in use and those available in the market place (Baker, 2012). In the case of this study, the municipality's use of social media is positively affected by the availability of public Internet points where citizens can gain access to the Internet and ergo social media. The proliferation of Internet enabled mobile phones has a similar positive effect for the municipality. Aspects of social media perceived to have a negative effect on its use by the municipality are the potential for miscommunication, and its fast pace of change.

The organisational context refers to the characteristics of the organisation as well as resources available within the organisation (Baker, 2012). The Administration and Information sub-themes embody the organisational context of the framework. These sub-themes encompass the characteristics of the municipality that hamper social media use, as well as characteristics of the information resource within the municipality.

The environmental context refers to the structure of the industry the organisation operates in, the presence, or absence of technology service providers and the regulatory environment of the organisation (Baker, 2012). The environmental factors in this study are the Legal and Social sub-themes. These are external to the municipality but influence its adoption and use of social media either positively or negatively.

This section discussed the findings of interviews in relation to the TOE framework. The themes that emerged from the interviews are closely linked to the factors that affect technology adoption in organisations, as determined by the TOE framework. The contexts of the TOE framework are viewed as antecedents to the adoption and assimilation of technologies in organisations (Lippert & Govindrajulu, 2006; Pudjianto, Zo, Ciganek, & Rho, 2011; Schaupp & Bélanger, 2014). In this study,

the themes that emerged from the interviews with employees are also identified as antecedents to social media use in the municipality.

Section 5.5.4 highlighted the views and optimism of municipal employees regarding their use of social media in engaging with citizens. However, their views do not always reflect the views of the citizens they are targeting. Therefore, it is necessary to understand what motivates citizens' use of social media in public engagement. In order to achieve this, a survey based on the Uses and Gratifications Theory was conducted. The next section focuses on understanding citizens' motivations for using social media in the NMBM using the Uses and Gratifications Theory survey. The Uses and Gratifications Theory has been discussed in Section 2.5.3., including the motivations for using this theory in the current research.

5.7 Uses and Gratifications Survey

The research instrument was developed to measure participants' gratification for using social media to engage with their local government, based on uses and gratifications scales obtained in reviewed literature. Other sections of the questionnaire measured social media use, interaction with the municipality, as well as demographic information. The uses and gratifications constructs measured in the survey are surveillance, diversion, personal identity and convenience utility. These measures have been used in several social media and political gratifications studies. Table 5-2 presents descriptions of each construct and the items measured under each with the different studies where they have been previously used.

Table 5-2: Uses and Gratifications theory survey items

Gratification	Description	Items
Surveillance (Gil de Zúñiga et al., 2012; Whiting & Williams, 2013)	Social media use for monitoring other people's activity and being informed on what others are doing.	To keep up with current issues and events
		To understand what's going on in local government
		To keep up with legislation
		To keep up with other people's opinion on local government
Diversion (Ko et al., 2005; Quan-Haase & Young, 2010)	Social media use for entertainment, passing time or diverting attention.	To be entertained
		To pass the time when I don't feel like doing anything else
		Because I am curious about it
		Because it is trendy
		Because it is enjoyable
Personal identity (Gil de Zúñiga et al., 2012; Ko et al., 2005;	Social media use for reputation building and enhancing others' opinions of you.	To broaden my knowledge base
		To give me interesting things to talk about
		To get support for my ideas

		To share my feelings, views, thoughts and experiences
		To meet people with the same interests (e.g. same political party)
Convenience utility (Ko et al., 2005; Papacharissi & Rubin, 2000)	Social media use based on its expediency for interacting with the municipality compared to other options of interaction.	Because it is easier than other methods of engagement (e.g. town hall meetings)
		Because I can express my opinions freely
		Because I can get what I want for less effort
		Because I can use it anytime, anywhere
		Because it is cheaper
Intentions to use social media (Venkatesh et al., 2003)	Individual's perceived intention to use social media	I intend to interact with the municipality using social media
		When I need to interact with the municipality I predict I will do so using social media
		I plan to interact more frequently with the municipality using social media

5.7.1 Pilot Study

The purpose of the pilot study was to get feedback from respondents regarding the design of the questionnaire. The feedback was expected to assess the clarity of the questions, the design of the questionnaire, and the relevance of questions included in the questionnaire. The survey in this research will be carried out both electronically and paper-based Therefore, the pilot study was also carried out electronically and paper-based.

The paper-based questionnaires were distributed to four respondents who were targeted based on their perceived access to computers and presence on social media. The intention was to approach respondents in lower LSM groups, hence, respondents included taxi drivers and shop keepers in the Summerstrand area of the NMBM. Some of the respondents could not speak English fluently, and found it difficult to understand the purpose of the survey when the interviewer explained it. This highlighted the need for the interviewer to be accompanied by a Xhosa speaker when possible.

Some of the respondents did not understand the phrasing of some questions, and selected multiple answers where a single answer was required. This highlighted the need for rephrasing of the questions, and explicit instructions on the number of answers that were supposed to be selected. Some questions that served as branching questions (excluding the succeeding questions based on the answer selected) were not made explicit and therefore respondents answered the questions, following them even when they were not supposed to. These questions were also reworded and made more explicit as branching questions.

The changes made to the paper-based questionnaires had to be reflected in the online questionnaire, and vice versa. The online questionnaire was piloted with three respondents. The respondents targeted for the online survey were lecturers of the Nelson Mandela University, and colleagues of the researcher. These respondents highlighted the need to reword some questions, as well as redesigning the survey in such a way that personal questions were moved to the end of the survey, so that they would not deter respondents at the beginning. The need to also highlight that these personal questions were not mandatory, was emphasised by the respondents.

The pilot study underscored the need to carefully word questions included in the questionnaire, and the need to make respondents comfortable enough to participate in the survey, either by approaching them with someone that speaks their language, or by placing personal questions at the end of the survey.

5.7.2 Participant Profile

The sampling method applied was convenience sampling due to the inaccessibility of a sample frame. A randomly selected sample of the NMBM population was targeted. The targeted sample size was 165, but the survey yielded 121 responses, representing a response rate of 73%. Responses from 14 people were eliminated because they did not answer the uses and gratifications questions. This resulted in a total sample of 107 participants.

5.7.3 Data Collection and Analysis

An exploratory study was conducted to measure the perceptions of citizens regarding the use of social media for interacting with the government. This was done by administering a questionnaire to citizens in the NMBM where the use of social media is being extended beyond propagating government information. The questionnaires were self-administered, online and in person. The questions were the same for both methods of administration.

The data was entered into an Excel spreadsheet and coded. Blank responses on the uses and gratifications section were assigned to the mid-point of the 5 Likert scale (Neutral) prior to coding. The coded data was imported into Statistica version 13 for analysis. Descriptive statistical analysis of the data was carried out because a non-probability sampling method was used. The reliability of the uses and gratifications items and intention to use items were measured and presented a Cronbach's alpha of 0.87.

5.7.4 Survey Results and Findings

Most participants (99%) use one form of social media with WhatsApp (94.0%), Facebook (80.4%), Google+ (37.4%), LinkedIn (34.6%), Twitter and YouTube (both 31.8%) being the most common platforms as seen in Figure 5-4. Participants are technology literate and have access to the Internet; 40% of participants reported that they had been using social media for more than seven years, followed closely by 29% of participants who reported that they have used social media for 5-7 years, as seen in

Figure 5-5 where "Other" represents participants who do not use social media. Mobile phones (71%) are the most popular device and location for accessing social media; this is shown in Figure 5-6.

Regarding interaction with the municipality, only 59% of respondents report ever interacting with the municipality. The most popular reasons for interaction are seeking information (47%), paying bills (44%) and lodging complaints (35%) as seen in Figure 5-7. Interaction with the municipality occurs mostly through the municipal office (42%), and electronically, either by email (29%), or the municipal website (31%), as seen in Figure 5-8.
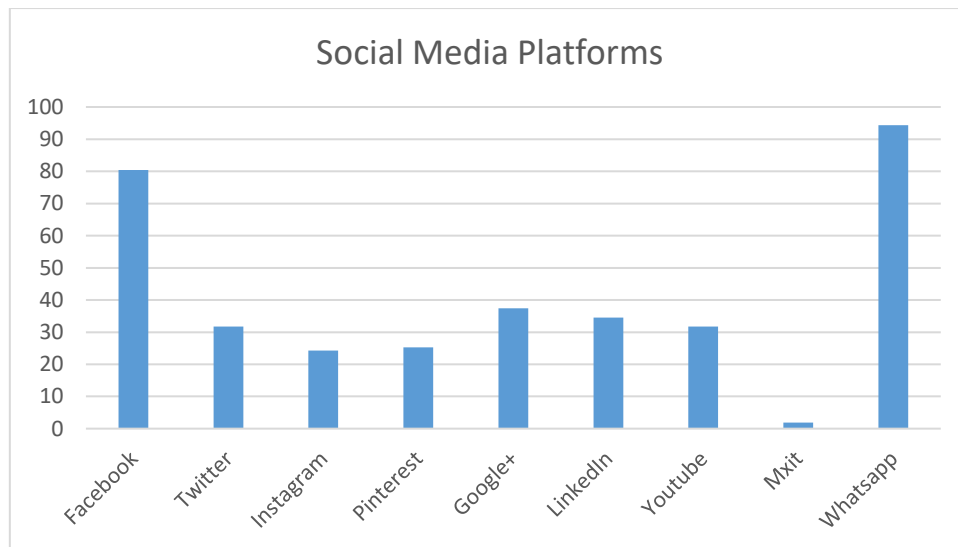
Figure 5-4: Most common social media platforms used, n=106
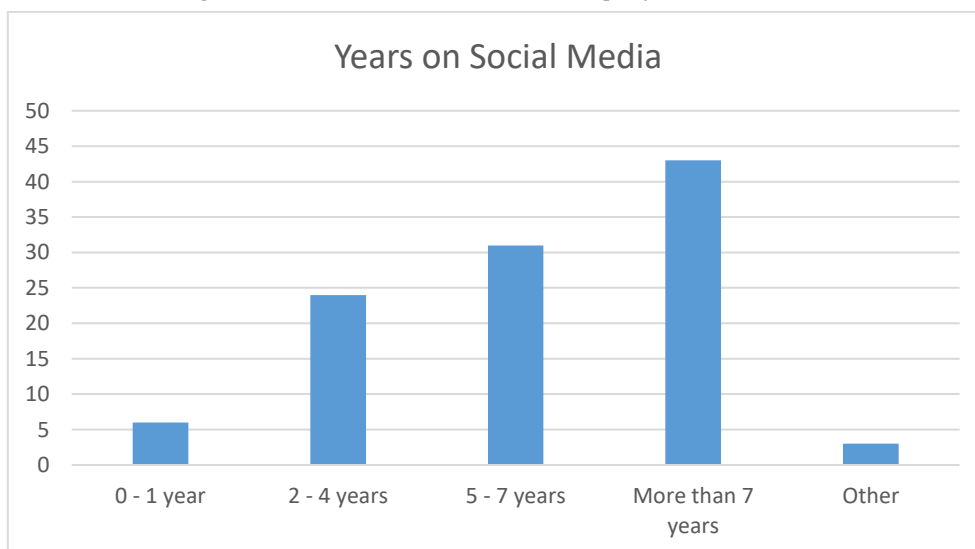
Figure 5-5: Number of years of social media use, n=107
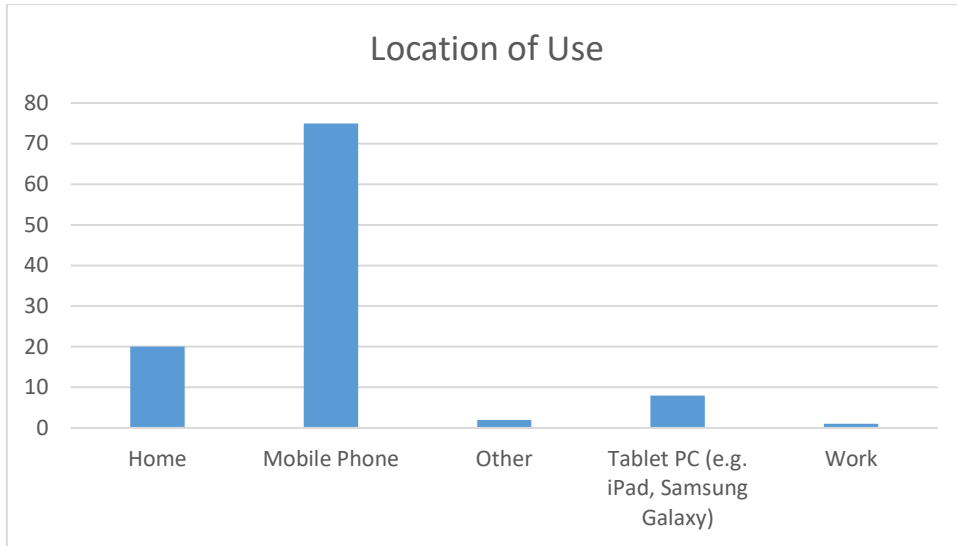
Figure 5-6: Methods of accessing social media, n=106
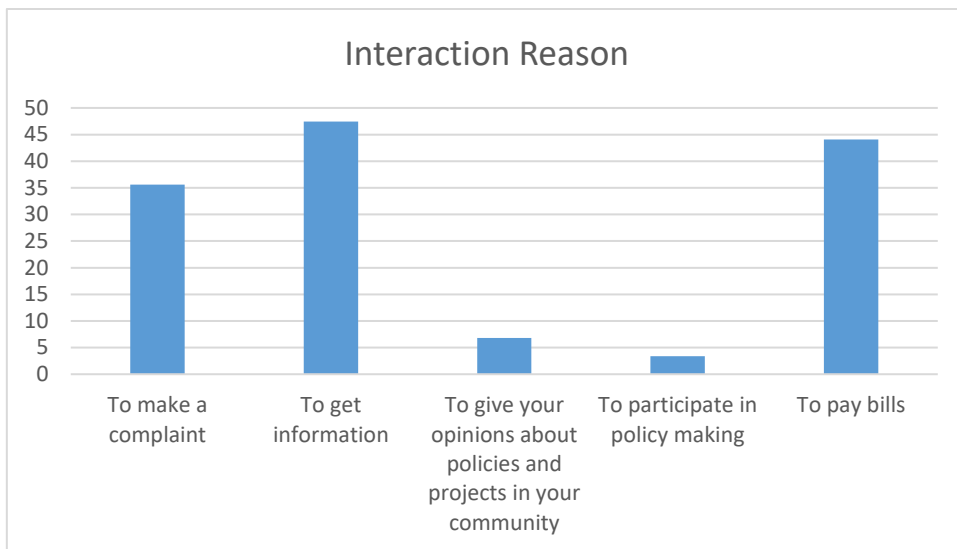
Figure 5-7: Reasons for interacting with the municipality, n=59
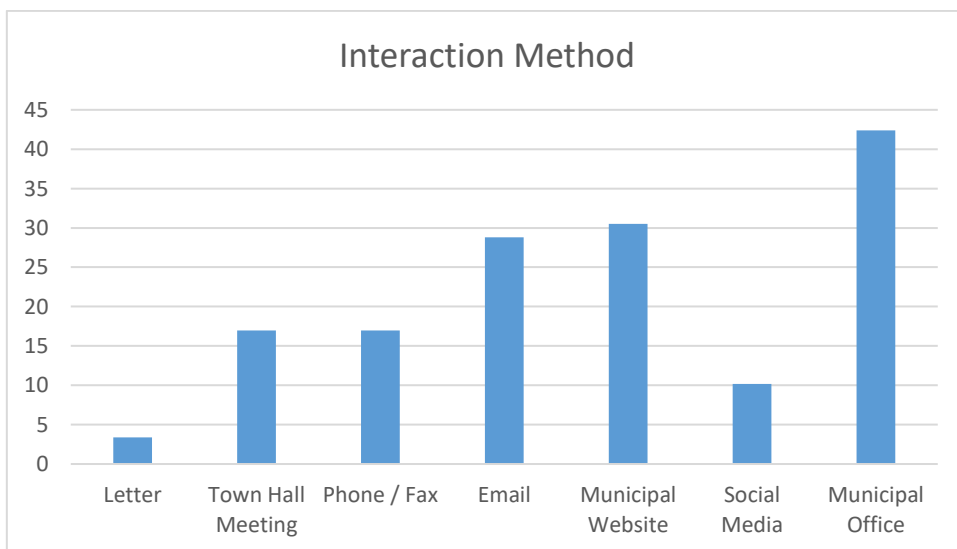
Figure 5-8: Methods of interacting with the municipality, n=59

Cross-tabulations were used to analyse the relationships between the uses and gratifications items in the survey, and citizens' intention to use social media. Table 5-3 to Table 5-6 present the cross-tabulations for each uses and gratifications variable against the intention variable.

Based on Table 5-3, the highest percentage of participants (48.60%) "agree" that they intend to use social media for public participation, 28.97% "strongly agree", 17.76% are "neutral", 2.80% "disagree" and 1.87% "strongly disagree", regarding their intentions to use social media. Most participants (68.22%) "agree" that surveillance is a gratification for using social media for public participation, while 21.50% of participants "strongly agree" about participation being a gratification, 8.41% are "neutral" and 0.93% "disagree" and "highly disagree" respectively. The highest percentage of participants from the cross-table (38.32%) who "agree" that surveillance is a gratification for using social media for public participation, also "agree" that they intend to use social media for this purpose, and this is followed by those who "agree" on surveillance, but "strongly agree" about their intentions to use social media (15.89%). The percentage of participants who "strongly agree" on surveillance being a gratification, and who "strongly agree" on their intentions to use social media, are 12.15% and 11.21% of participants are "neutral" about their intentions to use social media, but "agree" surveillance is a gratification for its use.

Table 5-3: Surveillance vs. Intention Cross-tabulation

Surveillance	2-Way Summary Table: Observed Frequencies					
	Intention Strongly Disagree	Intention Disagree	Intention Neutral	Intention Agree	Intention Strongly Agree	Row Totals
Strongly Disagree	1	0	0	0	0	1
Row %	100.00%	0.00%	0.00%	0.00%	0.00%	
Total %	0.93%	0.00%	0.00%	0.00%	0.00%	0.93%
Disagree	0	0	1	0	0	1
Row %	0.00%	0.00%	100.00%	0.00%	0.00%	
Total %	0.00%	0.00%	0.93%	0.00%	0.00%	0.93%
Neutral	0	0	4	4	1	9
Row %	0.00%	0.00%	44.44%	44.44%	11.11%	
Total %	0.00%	0.00%	3.74%	3.74%	0.93%	8.41%
Agree	1	2	12	41	17	73
Row %	1.37%	2.74%	16.44%	56.16%	23.29%	
Total %	0.93%	1.87%	11.21%	38.32%	15.89%	68.22%
Strongly Agree	0	1	2	7	13	23
Row %	0.00%	4.35%	8.70%	30.43%	56.52%	
Total %	0.00%	0.93%	1.87%	6.54%	12.15%	21.50%
Totals	2	3	19	52	31	107
Total %	1.87%	2.80%	17.76%	48.60%	28.97%	100%

The highest number of participants (44.86%) are "neutral" about diversion being a gratification for using social media for public participation, 31.78% "agree", 15.89% "disagree", 4.67% "strongly agree" and 2.80% "strongly disagree" regarding diversion as a gratification as seen in Table 5-4. Of the participants who are "neutral" regarding diversion, 45.83% and 35.42% "agree" and "strongly agree" about their intention to use social media respectively, while 12.50% are "neutral" and 6.25% "disagree" regarding their intent to use social media. Of those who "agree" on diversion, 52.94% also "agree", 23.53% "strongly agree", 20.59% are "neutral" and 2.94% "strongly disagree" about their intention to use social media. Of the percentage that "disagree" on diversion being a gratification, 47.06% "agree" they intend to use social media, 23.53% are "neutral" and "strongly agree" respectively, and 5.88% "strongly disagree" that they intend to use social media.

Table 5-4: Diversion vs. Intention Cross-tabulation

Diversion	2-Way Summary Table: Observed Frequencies					
	Intention Strongly Disagree	Intention Disagree	Intention Neutral	Intention Agree	Intention Strongly Agree	Row Totals
Strongly Disagree	0	0	1	2	0	3
Row %	0.00%	0.00%	33.33%	66.67%	0.00%	
Total %	0.00%	0.00%	0.93%	1.87%	0.00%	2.80%
Disagree	1	0	4	8	4	17
Row %	5.88%	0.00%	23.53%	47.06%	23.53%	
Total %	0.93%	0.00%	3.74%	7.48%	3.74%	15.89%
Neutral	0	3	6	22	17	48
Row %	0.00%	6.25%	12.50%	45.83%	35.42%	
Total %	0.00%	2.80%	5.61%	20.56%	15.89%	44.86%
Agree	1	0	7	18	8	34
Row %	2.94%	0.00%	20.59%	52.94%	23.53%	
Total %	0.93%	0.00%	6.54%	16.82%	7.48%	31.78%
Strongly Agree	0	0	1	2	2	5
Row %	0.00%	0.00%	20.00%	40.00%	40.00%	
Total %	0.00%	0.00%	0.93%	1.87%	1.87%	4.67%
Totals	2	3	19	52	31	107
Total %	1.87%	2.80%	17.76%	48.60%	28.97%	100%

Personal identity is regarded as a gratification for using social media by 59.81% of participants who "agree", and 13.08% who "strongly agree" as depicted in Table 5-5. However, 23.36% are "neutral" about personal identity being a gratification, and 3.74% "disagree" on personal identity being a gratification. Of those who are "neutral" about personal identity as a gratification 60% "agree" on their

intention to use social media, 28% are "neutral", 8% "disagree" and 4% "strongly agree" about their intention to use social media. The percentage of respondents who "agree" personal identity is a gratification and also "agree" on their intention to use social media is 48.44%, 32.81% "strongly agree" on their intention to use social media, 15.63% are "neutral", 1.56% "strongly disagree" and "disagree" respectively about their intention to use social media. The percentage of those that "strongly agree" that personal identity is a gratification for using social media for public participation, and also strongly agree about their intention to use social media, is 8.41% of the total participants, while those that "strongly agree" personal identity is a gratification, but "agree" about their intention to use social media, is 4.67% of the total population.

Table 5-5: Personal Identity vs. Intention Cross-tabulation

Personal Identity	2-Way Summary Table: Observed Frequencies					
	Intention Strongly Disagree	Intention Disagree	Intention Neutral	Intention Agree	Intention Strongly Agree	Row Totals
Disagree	1	0	2	1	0	4
Row %	25.00%	0.00%	50.00%	25.00%	0.00%	
Total %	0.93%	0.00%	1.87%	0.93%	0.00%	3.74%
Neutral	0	2	7	15	1	25
Row %	0.00%	8.00%	28.00%	60.00%	4.00%	
Total %	0.00%	1.87%	6.54%	14.02%	0.93%	23.36%
Agree	1	1	10	31	21	64
Row %	1.56%	1.56%	15.63%	48.44%	32.81%	
Total %	0.93%	0.93%	9.35%	28.97%	19.63%	59.81%
Strongly Agree	0	0	0	5	9	14
Row %	0.00%	0.00%	0.00%	35.71%	64.29%	
Total %	0.00%	0.00%	0.00%	4.67%	8.41%	13.08%
Totals	2	3	19	52	31	107
Total %	1.87%	2.80%	17.76%	48.60%	28.97%	100%

Table 5-6 shows that the highest number of participants (58.88%) "agree" about convenience utility being a gratification for using social media for public participation, 28.97% "strongly agree", 10.28% are "neutral", 0.93% "strongly disagree" and 0.93% "disagree" regarding convenience utility as a gratification. Of those who "agree" convenience utility is a gratification 55.56% "agree" on their intention to use social media, 22.22% are "neutral", 20.63% "strongly agree" and 1.59% "disagree" about their intention to use social media. Of those who "strongly agree" convenience utility is a gratification, 58.06% "strongly agree" on their intention to use social media, 38.71% are "agree", and 3.23% are "neutral" about their intention to use social media. Of those who are "neutral" about convenience utility being a gratification, 45.45% "agree" on their intention to use social media, 36.36%

are "neutral", 9.09% "strongly disagree" and "disagree" respectively about their intention to use social media.

Table 5-6: Convenience Utility vs. Intention Cross-tabulation

Convenience Utility	2-Way Summary Table: Observed Frequencies					
	Intention Strongly Disagree	Intention Disagree	Intention Neutral	Intention Agree	Intention Strongly Agree	Row Totals
Strongly Disagree	1	0	0	0	0	1
Row %	100.00%	0.00%	0.00%	0.00%	0.00%	
Total %	0.93%	0.00%	0.00%	0.00%	0.00%	0.93%
Disagree	0	1	0	0	0	1
Row %	0.00%	100.00%	0.00%	0.00%	0.00%	
Total %	0.00%	0.93%	0.00%	0.00%	0.00%	0.93%
Neutral	1	1	4	5	0	11
Row %	9.09%	9.09%	36.36%	45.45%	0.00%	
Total %	0.93%	0.93%	3.74%	4.67%	0.00%	10.28%
Agree	0	1	14	35	13	63
Row %	0.00%	1.59%	22.22%	55.56%	20.63%	
Total %	0.00%	0.93%	13.08%	32.71%	12.15%	58.88%
Strongly Agree	0	0	1	12	18	31
Row %	0.00%	0.00%	3.23%	38.71%	58.06%	
Total %	0.00%	0.00%	0.93%	11.21%	16.82%	28.97%
Totals	2	3	19	52	31	107
Total %	1.87%	2.80%	17.76%	48.60%	28.97%	100%

Surveillance, personal identity and convenience utility are the most important gratifications for interaction with the municipality. These motivations have the highest number of participants who "agree" and "strongly agree" (surveillance = 96, personal identity = 78 and convenience utility = 94), diversion on the other hand has the most participants who are "neutral" (48), followed by those who "agree" and "strongly agree" (39), and several who "disagree" and "strongly disagree" (20) about it gratifying their interaction with the municipality.

5.8 Discussion of Survey Findings

Interaction with the government through social media has the major purpose of information seeking and propagation, which is what surveillance is all about. This explains why surveillance is the highest gratification indicated by participants. The surveillance gratification capitalises on social media's support of information seeking and voyeurism (Kaplan & Haenlein, 2011). Social media have become the preferred source of information for users. This information could be of a personal nature where individuals keep up-to-date with the happenings in the personal lives of friends and family, or general

news in areas like politics, business, and the environment. In the political setting, social media allows surveillance of government agencies and government employees. This has the potential to improve transparency and make government accountable to citizens (Bertot, Jaeger, & Grimes, 2010; Guillamón et al., 2016; United Nations, 2014). The analysis of social media use in the South African government discussed in Section 4.7, also highlighted the use of social media mainly for surveillance. This finding is similar to studies that have linked surveillance and information seeking as the strongest motivations for political use of social media and traditional media (Garramone et al., 1986; Kaye & Johnson, 2002; Lee & Ma, 2012). Men & Tsai (2013) also found surveillance and information seeking to be a major motivation for public engagement with corporate social networking sites in China.

Convenience utility is supported by social media's ability to overcome time and cost barriers (Bertot, Jaeger, Munson, et al., 2010a). Literature discussed in Section 4.5.2, highlights the increased use of social media through mobile technologies making it more convenient than other forms of participation. Social media is also cheaper and allows interaction in a space where citizens already are. Most social media platforms are free to use if Internet connectivity is available. Using social media for participation will reduce the burden on citizens to appear physically at government agency offices for purposes such as service delivery complaints. Whiting and Williams (2013) also found convenience to be a motivation for social media use.

Similar to Lee and Ma (2012), personal identity is found to be a motivator for social media use in this study. Gil de Zúñiga et al. (2012) also identify personal identity as an explanation for the positive relationship between social networking sites usage, social capital and civic engagement. Personal identity as a gratification can be explained by the ability of social media to foster identity management allowing users to represent themselves in a favourable way within their online communities. Belonging to a community requires that users identify with the members of this community and share similar interests with them. Citizens can keep track of what others in their community think, and can join in ongoing discussions within their community, adding their voice and building their online reputation. Citizens that seek personal identity as a gratification will be quick to respond to posts made by government agencies, and to enhance political discourse on social media.

Diversion describes using social media for entertainment, relaxation and passing time. These platforms allow uploading of media of various types like images, videos, and audio files; these make an ideal source of entertainment for users. Interactions between government and citizens on social media are intentional, they serve the purpose of providing information, or a service to citizens. This might explain why diversion is not as highly rated as a gratification by participants. Other studies (Men & Tsai, 2013; Whiting & Williams, 2013) have found diversion to be a strong motivation for social media and Internet use, but these have been in terms of general use as opposed to political public participation. Similar to

this study, Lee and Ma, (2012) also found that diversion was not a motivation for social media use in for the purpose of news sharing.

5.9 Conclusion

In seeking to promote public participation through social media, the municipality should consider citizen motivations for using social media. These motivations were established through the Uses and Gratifications survey covered in Section 5.7. The strategies employed for public participation should be focused on these motivations to ensure citizen satisfaction is met. The motivations should therefore be the outcome of the public participation process and should be the basis for determining the success of the process. These motivations are directly linked to the public participation activities the municipality decides to adopt while using social media.

The interviews and survey reveal that social media is used extensively within NMBM by its citizens. The communications department is aware of this and has tried to take advantage thereof, but they are hindered mainly by a lack of support from municipal leaders, and resistance from politicians who still struggle with the idea of social media. NMBM's efforts are currently aimed at providing information to the public, which is a major motivation for citizen's use of social media, as indicated by the statistics on surveillance from the survey (Table 5-3). Public participation and engagement encompass a two-way exchange and creation of information and knowledge (Zavattaro & Sementelli, 2014). Even though the current strategy is in line with citizens' motivations for using social media, the municipality aims to increase engagement with citizens, which means they need to employ strategies that will require information provision by citizens.

NMBM should engage in strategies that will give citizens a chance to voice their opinions and include them in decisions about their community. This strategy will be taking advantage of the personal identity motivation by providing a space for citizens to get to know each other, meet people with the same ideas as them and foster discourse surrounding issues that plague the community. Social networking platforms provide features that can be used to achieve this goal such as opinion polls, voting systems, and comment sections on posts. If NMBM can provide these options to citizens, then it eliminates the need for citizens to be physically present at meetings, or visiting the municipal office to participate in polls. Social media, if monitored regularly, can also reduce the cost of running call centres for the public to make complaints, thereby leading to the next motivation, which is convenience utility. The municipality's provision of free Wi-Fi to citizens is another way in which the convenience utility gratification is achieved.

For NMBM to use social media in the ways suggested above, the challenge of the lack of dedicated officials needs to be resolved. Due to the fast pace of these platforms, constant monitoring of the comments on posts will be needed. The municipality will need to store records of citizen contributions

for posterity and future reference. This means that whoever is employed by NMBM must be adequately skilled in not just communicating on social media, but also in analysis and storage of social media data.

There needs to be a feedback process employed that uses the information provided by citizens in the democratic process. In other words, if NMBM seeks citizens' opinions on social media, they must ensure that it is including those opinions in whatever decisions that need to be made. This is a major challenge for the E-participation domain as a whole (Macintosh & Whyte, 2008). The use of social media by the municipality cannot be treated as a separate process, but must be included as part of the municipality's participation processes. By reflecting the opinions on social media, the personal identity gratification of citizens is met.

This chapter answered research question RQ_3, namely; what are the factors that affect the public's adoption of social media for engaging with the municipal government? It also addressed a subset of research objective RO_3: To understand the use of social media in the selected municipality through interviews and Uses and Gratifications Theory surveys.

Based on the results of the interviews and quantitative survey, several factors that affect the use of social media for public participation have been identified. These factors will be implemented in developing the social media model in the next chapter.

Chapter 6 : Social Media Model for Public Participation
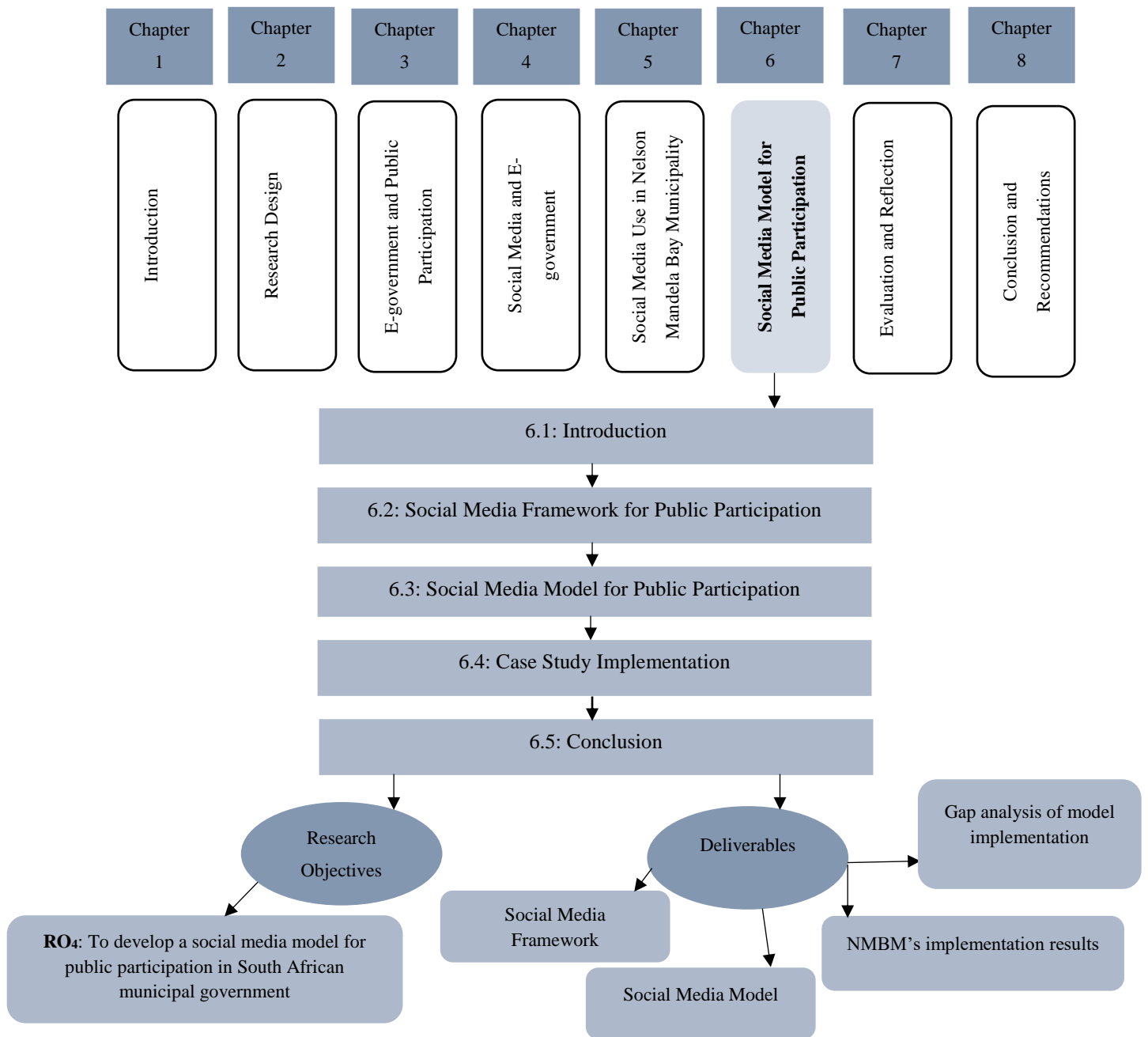
Figure 6-1: Chapter Overview

6.1 Introduction

The goal of this research was to develop a social media model for public participation in the Nelson Mandela Metropolitan Municipality. The previous chapter assessed the current implementation of social media within the municipality. The analysis revealed that social media has been in use since 2010. The municipality's social media efforts, however, are yet to receive buy-in from politicians and municipal leadership. This, in turn, has resulted in a lack of support for basic resources such as budgets, staff and training. These drawbacks have not hindered the communications department, however, from using social media. The use of social media is thus stagnant in its progress, with little participation. Currently, social media is used as an information broadcasting mechanism. The analysis also revealed citizen's intention to use social media is mainly for surveillance, a convenience utility and personal identity. These motivations could be used as a foundation for the municipality's social media strategy.

In this chapter, a theoretical social media framework based on combined elements from organisational and individual adoption theories namely; the Technology Organization Environment (TOE) framework and Uses and Gratifications Theory will be presented. This chapter will discuss the proposed model for public participation based on best practices and literature reviewed in Chapter 4, and findings from the analysis presented in Chapter 5. The chapter also describes the implementation of the model in the NMBM. The chapter addresses research objective RO_4 and research question RQ_5. Figure 6-1 presents an overview of the chapter.

RO_4: To develop a social media model for public participation in a South African municipal government

RQ_5: What elements should be included in a social media model that facilitates an effective and structured approach to public participation?

6.2 Social Media Framework for Public Participation

A theoretical social media framework for public participation is proposed which integrates the findings of the employee interviews and the citizen's survey as antecedents and outcomes of social media use for public participation. The themes discussed in Section 5.5.4 have been established as precursors to the municipality's effective use of social media, while the gratifications discussed in Section 5.7.4 are outcomes of social media use for citizens. These gratifications are the values that citizens expect when they use social media. The framework therefore combines factors of social media adoption from the organisational perspective (NMBM employees), and the individual perspective (citizens of the municipality). Figure 6-2 shows the details of the proposed framework.

The framework proposes that the ability of the municipality to meet the antecedents established will lead to the structured and effective use of social media for public participation. This will, in turn lead to the citizens' ability to get gratification from their social media use. Therefore, the municipality needs to understand what these gratification requirements are so that their social media use is pertinent to

citizens. A major issue faced by governments implementing e-government is their ability to match the services provided to the needs of citizens (Al Athmay et al., 2016). In this context, the framework focuses on citizens' gratification using social media.
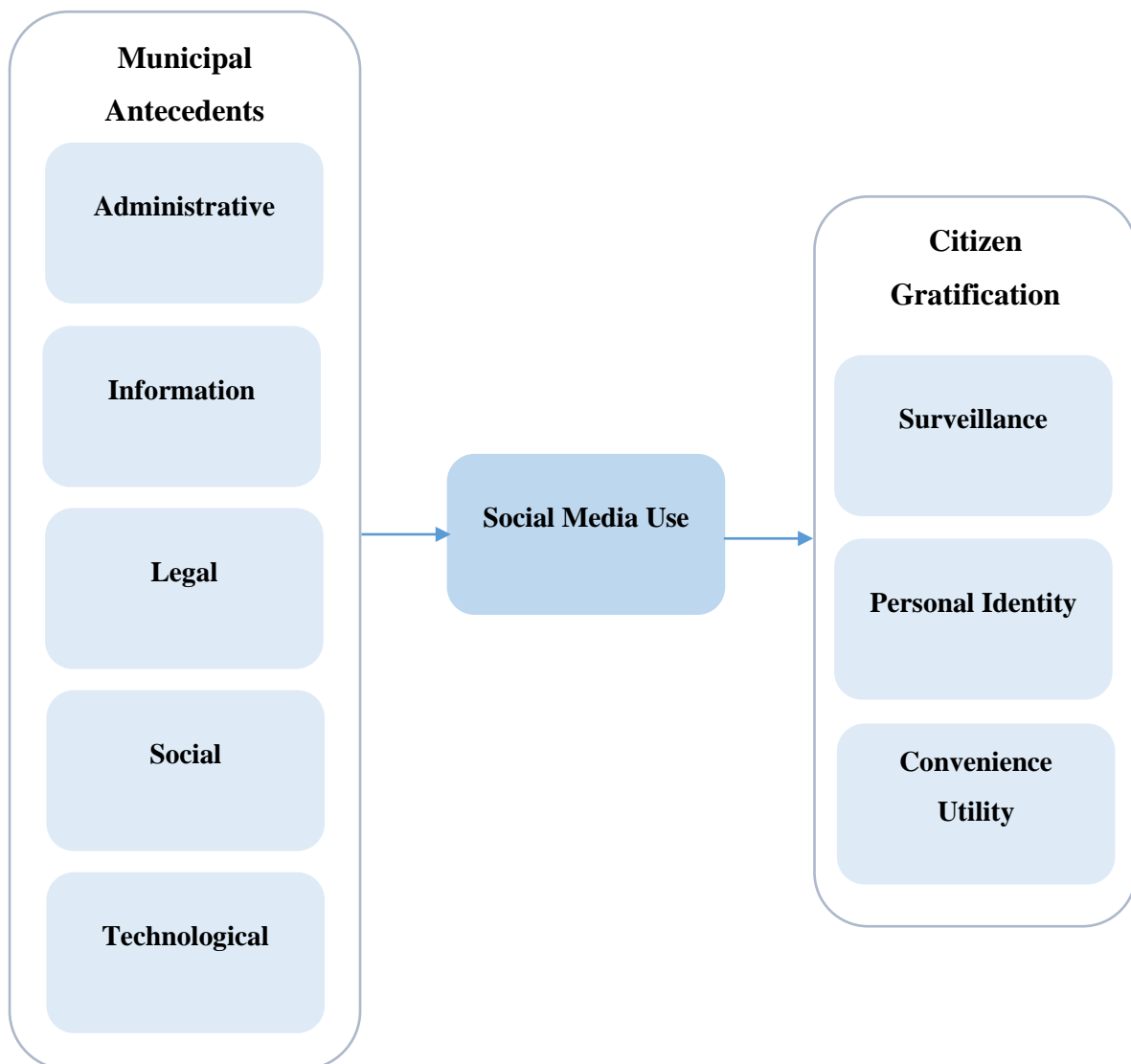
Figure 6-2: Proposed Social Media Framework for Public participation

6.3 Social Media Model for Public Participation

Based on the theoretical framework above, a model for public participation using social media is proffered. The goal of this model is to operationalise the framework as well as present a structured and effective approach towards using social media for public participation. The framework represents the theoretical perspective through which the model is approached. This section discusses the model, while the implementation of the model will be discussed in Section 6.4. The model involves a phased approach which will ensure proper planning and execution that meets the municipality's public participation objectives. A phased or staged approach is prescribed in the introduction of a new system to ensure change can be managed. In this way, changes are achieved in small, noticeable steps rather than in one

drastic step that upheaves the day-to-day operations of the organisation (Open Data Institute, n.d.) The phases for the model are Initialisation, Setup, Organisation, Institutionalisation, and Maintenance.

6.3.1 Model Implementation Phases

Initialisation: The focus of this phase is to raise awareness of social media within the municipality, and to gain support from management, politicians and other departments that provide information to the social media team.

Setup: The purpose of this phase is to provide the foundation required for an effective, well-executed social media implementation. Decisions regarding the municipality's social media objectives should be made at this stage.

Organisation: This phase focuses on the internal organisation structure required to successfully implement and maintain social media, while meeting the objectives established in the Setup phase.

Institutionalisation: Institutionalisation involves the embedding of social media into the everyday activities of the organisation. For this to happen, guidelines and policies that encourage and direct social media use, need to be established. Communications on social media should be aligned with all other traditional channels even though it is different in its nature.

Maintenance: The goal of this phase is to ensure consistency in the municipality's social media use after the complete implementation of the model. The maintenance phase requires the social media team to keep abreast of best practices, and to put them to use and train staff continually thereon. The education of citizens should also be a focus of this phase.

The process of implementing the model requires specific steps to be taken in each of the phases described. Section 6.3.3 describes the alignment of the phases, and the steps required to achieve alignment.

6.3.2 Model Implementation Process

The elements that make up the social media model are categorised into Administrative, Information, Legal, Social, Technological and Participation Tactics. These are related to the sub-themes in Table 5-1. Figure 6-2 graphically presents the elements of the model and their relationship.

6.3.2.1 Administrative

The steps categorised as administrative are related to the characteristics, competencies and set up of the organisation. These address the Administrative challenges that emerged during interviews with the municipal employees (Section 5.5.4.1).

A1: Get social media champion

A social media champion is needed to promote social media within and outside the municipality. In order to get social media assimilation throughout the organisation a top-level government official needs to serve as the champion, especially where resistance from individuals within the organisation has been identified. This person should ideally be familiar with social media and have a passion for the technology. The champion should also be familiar with the organisational hierarchy and personnel that need to be involved with social media.

A2: Acquire buy-in from top management and politicians

Top-management buy-in is a necessity for successful IT adoption (Furuholt & Wahid, 2008; Zheng, 2013). This is also true for social media in organisations. For governmental organisations, buy-in from politicians and top government officials is also necessary (Mergel, 2012). According to Mergel and Bretschneider (2013), building a business case for social media is required to get buy-in from top management and politicians. Therefore, at this point, the current users of social media need to build a business case.

A3: Market social media to horizontal departments

The effectiveness of the social media efforts of the organisation is dependent on horizontal collaboration between departments. Government agencies especially need a transition from traditional hierarchical, silo-based structures to collaborative, networked structures where information is shared (Picazo-Vela et al., 2012). The importance of social media must be made explicit to all departments.

A4: Define social media organisation

In Section 4.3.3, the different social media organisation structures available to the municipality are discussed. The organisation needs to decide on how to integrate social media into its daily operations. The individual, department, or mix of departments responsible for social media, should be appointed. Assigning responsibility for social media ensures accountability for posts made on these platforms.

A5: Assign dedicated staff to social media

The fast pace of social media platforms requires constant monitoring of the organisation's social media accounts to keep abreast of updates. This means that a dedicated staff member, or team, needs to be assigned to social media (Schaffer, 2013; Zheng, 2013). This might mean creating a schedule for one person from the team to always be online monitoring the platforms, while other members of the team perform other tasks that do not involve social media.

A6: Train staff on social media

Training is essential for staff members responsible for social media, because these platforms are unique in their features and are constantly changing. The world of social media changes at a fast pace; new platforms are developed; new features are added to existing platforms, and new interfaces are designed for existing platforms. These constant changes mean that training cannot be done as a one-time event. Continuous training programmes are needed to build the capacities of government employees and keep them up-to-date with new developments (Picazo-Vela et al., 2012). Current on-the-job training tactics are not sufficient for employees to navigate the social media environment effectively.

6.3.2.2 Information

The steps in the Information section are related to the provision of reliable, relevant, accurate and timely information to citizens. These steps address the Information challenges discussed previously (Section 5.5.4.1).

I1: Plan content

Planning content for social media ensures availability and accuracy of information, as well as relevance of this information to citizens. Posts should no longer be at the discretion of an individual team member, but must be consolidated and aimed at achieving the organisation's objectives, and addressing citizens' gratifications (Schaffer, 2013). The content provided should give citizens a reason to engage with these social media platforms (Kaplan & Haenlein, 2010). The organisation can either decide to reuse content from other sources, or curate original content for social media (Mergel, 2017).

I2: Consistency across all platforms

Government organisations need to ensure that activities across all platforms are aligned where multiple social media platforms are in use (Kaplan & Haenlein, 2010). It is paramount to reduce confusion and uncertainty among citizens by ensuring that broadcasted messages are not contradictory. Integration with traditional participation channels is also necessary to ensure consistency throughout the organisation (Kaplan & Haenlein, 2010). The message going out on all fronts should be reliable, consistent and reduce citizens' uncertainty.

I3: Collaborate with horizontal departments

As mentioned earlier, horizontal collaboration between municipal departments is important for the success of social media in public participation. At this stage, support from other departments must be obtained to ensure accurate and reliable information is provided to citizens.

6.3.2.3 Legal

Legal steps must ensure that the municipality is compliant with national policies and guidelines, while guaranteeing that the availability of local policies, and guidelines, are in place to direct the day to day

social media operations of the communications team. These steps would address the Legal challenges that emerged during interviews with the municipal employees (Section 5.5.4.1).

L1: Create guidelines and policies

To embed social media into the organisation as an everyday tool, guidelines and policies regarding its use need to be established. According to Mergel and Bretschneider (2013), the existence of standard guidelines and policies encourage the dissemination of the technology to a wider set of users in the organisation. Formalised policies and rules reduce the risk and uncertainty that comes with using new technologies in an organisation. This is achieved by providing structure and support in using these technologies (Bretschneider & Parker, 2016). Some of these structures include stating the roles and responsibilities of the users which will promote accountability in using the technology. Policies to guide citizen interactions should also be provided (Mergel, 2015; Picazo-Vela et al., 2012). Citizens should be informed of the organisation's rules of interaction and penalties for not abiding by them.

L2: Keep abreast of national guidelines and policies

Due to the rapidly changing nature of social media, the guidelines and policies will need to be continually updated to address these changes. The municipality should continually monitor national guidelines and policies to ensure compliance.

6.3.2.4 Social

These antecedents address issues related to the external environment of the municipality, and the social capabilities of the community that affect social media use. The steps deal with the Social challenges discussed in Section 5.5.4.1.

S1: Language accessibility

In multicultural environments, it is necessary to provide information in multiple languages to avoid exclusion (Bertot, Jaeger, Munson, et al., 2010b; Picazo-Vela et al., 2012). To avoid offence and miscommunication, responses should be offered in the language used by the citizen. This will ensure the response is understood by citizens and engender their trust.

S2: Citizen education

Research has shown that citizen knowledge of e-government services is vital to their adoption and use (Carter, Weerakkody, Phillips, & Dwivedi, 2016). Therefore, public awareness of social media needs to be addressed through marketing campaigns on other communication channels. Technology literacy is also essential for citizens' use of social media once awareness has been addressed (Bertot, Jaeger, & Grimes, 2010). The municipality should develop education programmes focused on enhancing the technology skills of citizens, especially their social media skills. The provision of such training programmes will encourage citizens' use of social media.

S3: Provide access to the Internet

The digital divide is a major challenge for E-government implementations (Almarabeh & AbuAli, 2010; Mutula & Mostert, 2010; Picazo-Vela et al., 2012). Citizens need access to the Internet as a first step towards using social media (Bertot et al., 2010a). This could be mitigated by providing public Internet access points.

6.3.2.5 Technological

The technological antecedents are related to social media technologies and how they are operationalised within the municipality. These antecedents deal with the Technological challenges discussed in Section 5.5.4.1.

T1: Create social media strategy

The social media strategy provides an all-embracing guideline for social media use. It lays down the objectives of social media use, the target audience, and type of content to be shared (Li & Bernoff, 2011; Safko & Brake, 2009; Schaffer, 2013). In creating a strategy, the existing communications strategy and organisation's mission needs to be considered (Lee & Kwak, 2012; Mergel, 2013c, 2015; Schaffer, 2013). Social media is a tool for achieving the goals of the organisation, so its use must be in line with achieving said goals.

T2: Decide on platforms

Deciding on the right social media platforms is one of the most important decisions to be made. The organisation needs to ensure they are where their audience is (Kaplan & Haenlein, 2010; Li & Bernoff, 2011; Safko & Brake, 2009; Schaffer, 2013). Another issue to consider is the type of content the organisation has to provide (Harper, 2013); for example, if the organisation does not have video content, then YouTube would be a wrong choice for their social media strategy.

T3: Continually monitor all platforms

Social media is immediate and constantly changing; this is one of the reasons for its mass appeal (Bertot et al., 2012). However, this means these platforms need to be monitored constantly. Responses to citizens' queries must be swift, accurate and relevant to encourage dialogue and feedback. This monitoring is especially important in the period after a post is published by the organisation, because most responses occur soon after information has been posted (Mergel, 2016).

6.3.2.6 Participation Tactics

The participation techniques are the steps required by the municipality to ensure citizen gratifications identified through the Uses and Gratifications Theory survey (Section 5.7.4), are met. These steps are targeted at fostering citizen participation through social media.

P1: Invite citizens to be content producers

Social media allows citizens to co-create content with organisations due to the user-generated content characteristic of these technologies. This is unlike other platforms, such as websites, where the information provided is one sided. Local governments can take advantage of this feature of social media to engage citizens in information provision. Citizens could be invited to produce blog content, provide pictures and share personal stories related to the local government. Allowing citizens to provide content will fulfil the personal identity gratification, as citizens' reputations will be built as they contribute regularly.

P2: Include a call to action with every post on social media

Information posted on social media platforms should include a call to action. A call to action is an instruction to an audience to provoke them to respond to a message by taking specific actions (HubSpot Academy, 2016). These might include a link to a website, poll, pictures or videos, that provide additional information related to the post.

P3: Assimilate social media into existing participation tools

Institutionalising social media in the organisation involves incorporating it into regular public participation activities. Social media features such as online polls and surveys make it possible to execute some of the public participation activities previously discussed on these platforms (Section 3.4.1) For example, online polls could be used alongside offline citizen's satisfaction surveys and deliberative polling, and live streaming features of social media platforms could be used to broadcast council and public meetings. The convenience gratification will be fulfilled by enabling social media as an option to other offline forms of participation.

Social media integration with traditional participation channels will ensure the digital divide does not become a hindrance to participation. Social media cannot replace all other channels but should be a way of supporting them (Mawela, 2017; Picazo-Vela, Fernandez-Haddad, & Luna-Reyes, 2016). Therefore, organisations should ensure audiences without access to the Internet are reached in other ways.

P4: Respond to feedback from citizens

Social media enables bi-directional interaction with citizens, allowing organisations to provide a conversation style response to feedback provided on these platforms. This response could foster participation from citizens because they would not feel ignored in their efforts to communicate. It could also move the organisation from a push strategy into a pull strategy, as citizens could begin to post information without solicitation from the organisation.

P5: Measure social media impact

The objectives of social media should be the deciding factor on what metrics need to be measured by the organisation (Mergel, 2014; Schaffer, 2013). If social media impact is not measured, then the organisation could never know if they are achieving their objectives, or see the outcomes expected of their social media activities.

6.3.3 Alignment of Model Phases and Steps

The steps categorised under each antecedent are required to be performed during the different phases of the model implementation process. Performing these steps in sequence will ensure a structured approach towards implementing social media using the proposed model. Some steps are prerequisites for others, and therefore need to have been completed, or be underway, before subsequent steps are taken. For instance, without marketing social media within the municipality (A3: Market social media), it would be difficult to obtain collaboration from horizontal departments (I3: Collaborate with horizontal departments). Figure 6-3 shows each phase and the steps that occur in it.

Phases:	Steps:			
Initialisation	**A1: Get social media champion**	**A2: Acquire buy-in**	**A3: Market social media**	
Setup	**S3: Provide Internet access**	**T1: Create social media strategy**	**T2: Decide on platforms to use**	
Organisation	**A4: Define social media organisation**	**A5: Assign dedicated staff**	**A6: Train staff on social media**	**I3: Collaborate with horizontal departments**
Institutionalisation	**L1: Create guidelines and policies** / **P1: Invite citizens to be content producers** / **P4: Respond to feedback from citizens**	**I1: Plan content** / **P2: Include a call to action with every post** / **P5: Measure social media impact**	**I2: Consistency across all platforms** / **P3: Assimilate social media into existing participation tools** / **T3: Continually monitor all platforms**	**S1: Language accessibility**
Maintenance	**S2: Citizen Education**	**L2: Keep abreast of national guidelines and policies**	**A6: Train staff on social media**	

Figure 6-3: Social Media Model Phases and Steps

6.4 Case Study Implementation

The proposed model was presented to the communications team at the municipality as a set of recommendations for their social media use. The implementation process occurred in the period of February 2017 to November 2017. The model was presented to the municipality along with recommendations on how to adapt the model to their specific context. This section describes the steps taken by the municipality to adopt the social media model discussed in Section 6.3.

6.4.1 Initialisation

The model made recommendations regarding raising awareness of social media. This phase is crucial because it highlights the importance of social media implementation to municipal employees and stakeholders. NMBM faced several challenges at this stage. These challenges were related to organisational and behavioural change.

6.4.1.1 Get a social media champion

This step entails identifying an executive champion who would obtain support for social media both within and outside the municipality. One of the municipal spokespersons was identified as the social media champion. The social media champion initiated the use of social media in 2010 and is enthusiastic about the progress of social media use in NMBM. The executive champion carries out the following actions:

- Obtains support from the Director of Communications: The social media champion reports to the Director of Communications at NMBM. Based on the findings of the interviews and recommendations made through the model, he was able to obtain support from the Director to implement the model.
- Promotes social media across the municipality: The social media champion organised meetings with the Metro Communicators Forum to promote social media across the municipality. The forum is made up of representatives from departments that feed information to the Communications department and interact directly with the community. The meetings included presentations on social media success stories from the Tourism department and recommendations from this research.
- Requests additional staff and training for staff. Based on the recommendations from the model, the social media champion requested additional staff be added to the social media team, and be trained to use social media.

6.4.1.2 Acquiring buy-in from top management and politicians

Acquiring buy-in from top management and politicians was the biggest hurdle the municipality had to overcome. Acquiring buy-in involves changing the mind-set of individuals who are averse to change and technology. There is a wariness in using social media in an official capacity. Officials and politicians would rather use social media in their personal lives, but not have it linked to their roles in the municipality. Some of the top management in the municipality are gradually taking up social media, and supporting its use by the municipality. These officials share and retweet information from the municipal social media pages on their personal pages.

While partial buy-in was achieved from top management, this was not the case with most politicians. The municipality experienced resistance from politicians who did not want to use social media in their political

careers, because many of these politicians are not familiar with technology. This is an ongoing trend within the municipality in the area of technology adoption. Many technology proposals have been hindered due to this resistance. The mayor of the municipality, however, has adopted social media and posts on a regular basis on both Twitter and Facebook.

6.4.1.3 Market social media to horizontal departments

Social media is a topic of discussion at every event planning meeting. These meetings occur before events organised by the municipality, and involve the communications department and the department that hosts the event. These events are generally organised by different departments within the municipality. The communications department uses these meetings as a forum for promoting social media to these departments.

6.4.2 Setup

The setup phase highlights the steps required to layout the infrastructure for social media. These include decisions regarding social media platforms, and the social media strategy the municipality will employ.

6.4.2.1 Provide Internet Access

The municipality currently offers Wi-Fi to citizens. There are two initiatives that provide Wi-Fi in public venues; the e-Connect and BConnected. The e-Connect service is an indoor service that provides free Wi-Fi for browsing the Nelson Mandela University learning website, as well as the municipality's website (Nelson Mandela Bay Municipality, n.d.). For browsing other websites, each person receives 100Mb per device per day, free. This service is provided at libraries and service centres within the municipality. The BConnected Wi-Fi service is a broadband service that delivers affordable wireless voice and Internet services to residents and businesses of the municipality (Nelson Mandela Bay Municipality, n.d.).

Municipal employees are also provided with laptops, mobile phones and tablets as well as Internet access to facilitate their online activities. This ensures they can monitor social media and respond to queries wherever they are.

6.4.2.2 Develop social media strategy

The Director of Communications drafted a social media strategy and presented this strategy to the communications team. The members of the communications team had the opportunity to provide their individual input in the drafting of the final social media strategy document.

6.4.2.3 Determine social media platforms

The municipality uses Facebook, Twitter and YouTube to communicate with citizens. The Uses and Gratifications Theory survey (Section 5.7.4) revealed these platforms as being the most popular with citizens, hence, the municipality has decided to continue using these platforms. The municipality is starting a blog in which content from both the officials of the municipality, and community stakeholders will be presented. The purpose of the blog is to provide community stakeholders with the opportunity to air their views regarding municipality run community initiatives.

6.4.3 Organisation

The organisation phase addresses challenges in the organisational characteristics and capabilities that would facilitate the effective use of social media.

6.4.3.1 Define social media organisation

The current social media organisation structure in the municipality is the "centralised" structure (Section 4.3.3.1). The communications department of the municipality is solely responsible for social media. Every other department that needs information posted on social media does this through the communications department.

6.4.3.2 Assign dedicated staff

Due to budget constraints, the municipality is unable to assign dedicated staff to social media. However, the municipality expanded the social media team to include seven additional staff from the communications department. The municipality also hired interns to help with monitoring social media and responding to enquiries. This recommendation ensured that there are more people monitoring the social media platforms and has led to an improved response time for enquiries.

6.4.3.3 Train staff on social media

Social media training for communications department staff involved with social media has begun in the municipality. The communications team attended social media training organised by Global Business Solutions, a business consulting firm based in Port Elizabeth. This was the first in a series of training events planned for the social media team. The communications department also trains staff through sharing of success stories at team meetings. The presenters are usually employees within the municipality who have worked successfully with social media in areas such as tourism. These presenters share strategies that have been effective in their use of social media.

6.4.3.4 Collaborate with horizontal departments

Collaboration with horizontal departments is dependent on the communications department's ability to get buy-in from the management and staff in these departments. At this point, collaboration is minimal; information about major events, or crises is sent to the communications department to post on social media. The communications department schedules bi-monthly meetings that include these departments, so information pertaining to the period after the meeting can be obtained.

There is a lack of content ownership by departments which raises issues when information needs to be posted on social media. This challenge usually pertains to obtaining time-sensitive, and unplanned information, such as updates on service delivery issues. The communications department is challenged with emphasising the importance of information in their quest to serve citizens.

6.4.4 Institutionalisation

The institutionalisation phase presents actions that ingrain social media within the communications department. These steps are the day-to-day actions that should be executed by the social media team, as well as the local policies and guidelines that direct these actions. The local policies and guidelines are adapted from

national policies and guidelines provided by the Government Communications and Information Systems department (GCIS). The GCIS directs the actions and policies for all public communications by South African government institutions. The GCIS creates guidelines and policies that all government institutions must abide by.

6.4.4.1 Create guidelines and policies

The NMBM revised its communications policy in January 2017. The new policy includes a section on social media. Guidelines from GCIS are used to guide the use of social media by the communications team. The policy covers crises response via social media, guidelines for responding to aggressive and abusive posts from citizens, and guidelines for social media monitoring. The policy current at the time of writing is available in Appendix E.

6.4.4.2 Plan content

The content for social media is planned according to events taking place in the municipality. Once the communications department is notified of events by horizontal departments, the members of the team plan an appropriate schedule for posting this information. Content is also planned around public holidays and seasons of the year. For instance, safety warnings are posted regularly on weeks preceding Guy Fawkes Day, instructing citizens on how to handle fireworks.

Apart from regular content that is planned weeks ahead, the municipality also posts information based on recent circumstances around the country, or province, such as the water shortage due to the drought experienced in the province in 2016/2017.

6.4.4.3 Consistency across all platforms

The municipality cross posts information between its Facebook and Twitter accounts. Most posts also have links to the municipality's website to provide additional details when the message posted on social media is constrained due length. Figure 6-4 and Figure 6-5 present evidence of cross posting across the municipality's social media platforms.

Figure 6-4: NMBM Twitter post showing cross posting

Figure 6-5: NMBM Facebook post showing cross posting

6.4.4.4 Language accessibility

According to the social media champion, the NMBM has a language policy that requires communication in all languages spoken in the municipality. This policy is not yet fully operational on social media, and most posts are in English, and comments from citizens in other languages do not get a response from the municipality. Figure 6-6 shows one of the few posts in the local isiXhosa language. The communications department is responsible for operationalising this policy across all communication platforms. There are plans currently in place to operationalise the policy on social media.
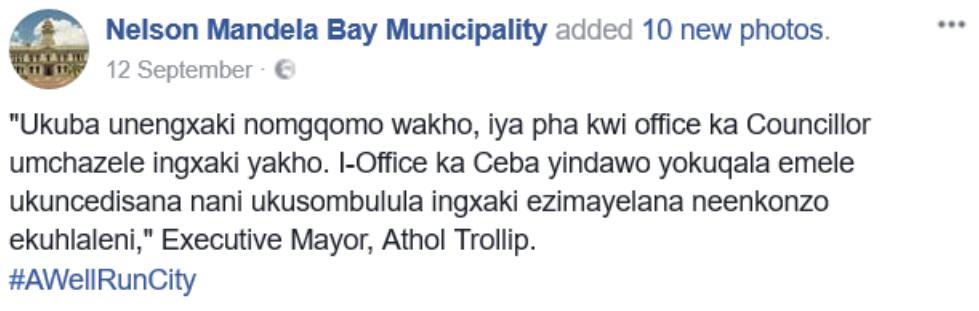
Figure 6-6: NMBM Facebook post in isiXhosa

6.4.4.5 Invite citizens to be content producers

As of November 2017, the municipality has been making plans to introduce citizen and stakeholder content onto their blog. The initial plan was to get three stakeholder views on the trial of a gunshot police alert system which was recently launched in the NMBM. This will be the first step towards including citizen and other stakeholder voices on the municipality's social media platforms in a bottom-up approach.

6.4.4.6 Include a call to action with every post

The municipality's posts on social media seldom include a call to action because the information posted rarely requires a response from citizens. The majority of these posts are purely for information provision. However, where an action is required, it is always explicitly stated. In addition, links are provided to the municipality's website where more comprehensive information can be found.

6.4.4.7 Assimilate social media into existing participation tools

Social media is used alongside other traditional participation mechanisms. The municipality uses social media to support these other mechanisms by posting links to them, or information about them, on social media pages.

For instance, links to citizen surveys hosted on the municipal website are posted on Twitter and Facebook, and information on public participation meetings are also posted. The municipality has not been able to directly assimilate social media into participation processes, such as live streaming of meetings, due to insufficient mobile data resources. Although municipal employees are provided with a specific quota of data monthly, this allocation is not sufficient to handle live broadcasts. The social media team has requested an increase in the budget for mobile data quota but has met with resistance from top management.

6.4.4.8 Respond to feedback from citizens

The communications team prioritises responses based on the need for an action to be taken. Comments that include queries, or reporting a service delivery issue, are always answered, whereas generic comments are not responded to. Queries and service delivery issues are forwarded to the appropriate departments within the municipality, and feedback from these departments is relayed back to citizens by the communications team. Figure 6-7 shows an example of the communications team responding to service delivery queries in a relatively short period of time. The municipality is currently in talks with Microsoft to deploy an automated system that would respond to queries by citizens. The system is a programmable "bot" that will monitor social media activities, and provide automatic responses to queries.

Figure 6-7: Facebook post showing response by communications team

6.4.4.9 Measure social media impact

The municipality is aware of the built-in insight tools provided by Facebook and Twitter to measure quantitative social media impact, but they have not deployed these tools. These tools provide metrics such as number of followers, comments, and likes or retweets of posts. A decision has been made to sign a three-year contract with Microsoft for a bot that will automatically monitor their social media platforms, and provide deeper insights into social media impact than those provided by these built-in tools.

6.4.4.10 Continually monitor all platforms

With the additional staff added to the social media team, the NMBM can monitor their social media platforms more closely and respond quicker to queries from citizens. Interns have also been assigned to this role to ensure continual monitoring.

6.4.5 Maintenance

The actions in this phase should happen continuously to ensure citizens and the municipality are up-to-date on current social media practice.

6.4.5.1 Citizen education

The municipality runs public participation programmes to educate citizens. Integrated Development Plan public participation sessions are an example of such programmes. These sessions run for a period of one week at various venues across the municipality. Plans are in place to align social media education to participation programmes. This will raise awareness of social media as a public participation tool, and encourage citizens to participate.

6.4.5.2 Keep abreast of national policies and guidelines

The NMBM bases their policies and guidelines on those created by GCIS. The municipality keeps up-to-date with GCIS policies and guidelines. These guidelines are available to interested parties on the GCIS website (https://www.gcis.gov.za/content/resource-centre/guidelines).

6.4.5.3 Regularly train staff on social media

The municipality has not started regular training programmes for communications staff. Initial social media training has started for municipal staff, however, for the first time since its inception in 2010 (Section 6.4.3.3). The municipality plans to employ regular training programmes in the next year.

This section presented results of the municipality's implementation of the social media model. The concluding section will present a gap analysis on the implementation of the model within the NMBM.

6.5 Conclusion

A gap analysis is used to compare the current performance of an organisation against a potential, or expected performance, assuming the continued use of a current strategy (Simple Strategic Planning, 2017). The gap analysis is designed to clarify what elements of the model have been implemented, what elements have been partially implemented, and what elements have not been implemented. The Status column in Table 6-1 indicates the state of the implementation of each step in the model. Green indicates steps that have been completed, yellow indicates steps that are partially completed, and red indicates steps that have not been completed. The Action column describes the steps that will be taken by the municipality in the future to achieve complete implementation of the model. The results of the model implementation indicate the successful implementation of thirteen steps, partial implementation of six steps, and four steps that are yet to be implemented.

This chapter addressed research objective RO_4, and research question RQ_5, by presenting the elements of the social media model, and the results of its implementation in the NMBM. The model implementation should be done in phases, and each phase should involve several actions that need to be executed. The phases and steps were presented in Sections 6.3.1 and 6.3.2.

The next chapter discusses the evaluation of the model and presents a reflection on the research.

Phases	Steps	Status	Action
Initialisation	Get a social media champion	A champion has been identified from within the communications department.	
	Acquiring buy-in from top management and politicians	Partial buy-in has been acquired from some top management and some politicians.	The social media champion is developing a business case for social media and will continue to push the social media agenda to top management and politicians.
	Market social media to horizontal departments	Social media has been marketed to other departments at strategic meetings but must be marketed to individual departments heads to acquire their buy-in.	At the time of writing, meetings have been scheduled with department heads to present the social media business case.
Setup	Provide Internet access	Internet access is provided to both citizens and employees of the municipality.	
	Develop social media strategy	The communications department has a draft strategy in place, but this needs to be approved before it can be executed.	The draft strategy needs to be approved by top management and then implemented within the communications department.
	Determine social media platforms	The municipality has adopted Facebook, Twitter and YouTube.	
Organisation	Define social media organisation	The municipality uses a centralised organisation model.	
	Assign dedicated staff	There have been additional employees and interns assigned to the social media team.	
	Train staff on social media	Initial training has been provided to the employees involved in social media.	
	Collaborate with horizontal departments	Collaboration still needs to be achieved especially in terms of content provision.	The communications team needs to keep highlighting the importance of collaboration

			between departments. This must be a continual process because of the lack of ownership of information by these departments.
Institutionalisation	Create guidelines and policies	The municipality has an updated policy in place that covers social media use (Appendix E).	
	Plan content	Content is planned monthly, seasonally, based on public holidays and according to events within the municipality.	
	Consistency across all platforms	Information is cross-posted among all social media platforms to ensure consistency.	
	Language accessibility	The municipality's language policy has not been operationalised on social media.	The social media team is currently exploring ways to achieve accessibility on social media to ensure the language policy is adhered to.
	Invite citizens to be content producers	The municipality is the only content producer for social media posts.	Plans for citizen content production on the municipality's blog are in place but not operational yet.
	Include a call to action with every post	Not every post includes a call to action. This is because most of the posts are videos or photos of past events within the municipality. The posts that require action from citizens always include an explicit call to action.	
	Assimilate social media into existing participation tools	Social media is used together with other participation mechanisms; however, the municipality has not started using social media for participation activities such as citizen polls and surveys.	The NMBM must identify ways of offering public participation activities on social media. Suggestions have been made which are being considered by the social media team (Appendix F).
	Respond to feedback from citizens	Queries and service delivery issues posted by citizens are responded to by the social media team.	

Maintenance	Measure social media impact	Social media impact is not monitored.	The measurement of social media impact will be automated and become a focus of the communications team.
	Continually monitor all platforms	The increased number of employees assigned to the social media team has made the constant monitoring of the platform a possibility.	
	Citizen education	There are public participation programmes that educate citizens on laws and public participation mechanisms, but they do not currently include social media.	The municipality has plans in place to include social media education for citizens during public participation programmes.
	Keep abreast of national policies and guidelines	The municipality keeps informed of national policies and guidelines via the GCIS website.	
	Regularly train staff on social media	Regular training for the social media team has not begun.	Plans should be put in place to have regular training sessions for the social media team to keep them updated on changes in social media technologies.

Chapter 7 : Evaluation and Reflection

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 8
Introduction	Research Design	E-government and Public Participation	Social Media and E-government	Social Media Use in Nelson Mandela Bay Municipality	Design and Implementation	**Evaluation and Reflection**	Conclusion and Recommendations

7.1: Introduction

7.2: Measuring Social Media Effectiveness

7.3: Evaluation

7.4: Reflections

7.5: Summary

Research Objectives

Deliverables

Evaluation results

RO5: To determine what measures and metrics will be used to evaluate the effectiveness of the developed model

RO6: To evaluate the developed model using measures and metrics determined in RO5

Social Media Effectiveness Metrics

Figure 7-1: Chapter Overview

7.1 Introduction

The goal of the proposed model is to provide an effective and structured approach to using social media for public participation. The importance of measuring the effectiveness, or impact, of social media cannot be understated. One of the most vital reasons is to gain support from top management and politicians (Mergel, 2014) by showing them its value. By providing evidence on the impact of social media, the continued and additional investment in social media activities can be justified to management. Another reason for measuring social media effectiveness is to verify the alignment of the organisation's objectives with its social media activities. However, Mergel (2013a) found that many government agencies do not actively measure their social media impact.

This chapter discusses the measurement and impact of social media for public participation, while presenting impact metrics identified in literature (Section 7.2). The evaluation of the proposed model is described, and the results of the evaluation presented (Section 7.3.3). The chapter also presents a reflection on the research study and findings made by the researcher throughout the study. This chapter aims to fulfil research objectives RO_5 and RO_6, as well as answer research questions RQ_6 and RQ_7. The chapter overview is shown in Figure 7-1.

RO_5: To determine what measures and metrics will be used to evaluate the effectiveness of the developed model.

RO_6: To evaluate the developed model using measures and metrics determined in RO_5.

7.2 Measuring Social Media Effectiveness

Government agencies that measure their social media impact use built-in tools on social media platforms, or third-party applications designed for social media analytics, such as TweetDeck and SocialMention. Some of the aspects of interaction that are measured are Breadth, Depth, Loyalty, and Sentiments (Hao et al., 2016; Mergel, 2014). The measurement of breadth focuses on who the organisation's audience is, and if they are reaching the right audience. Breadth metrics include number of followers, and demographic data. Depth measures the nature of interaction of citizens, how information from the agency is used by citizens, and their perceptions of this information. Metrics for depth include likes, shares and retweets, and comments. Loyalty measures the willingness of citizens to return to the organisation's social media platform. It is an indication of the worth of the content the organisation produces to citizens (Mergel, 2014). Loyalty can be measured with subscriptions to social media accounts and blogs, and requests for membership on LinkedIn. Sentiment measurement has been discussed in Section 4.4.1.

Measuring the Effectiveness of Proposed Social Media Model

The goal of the model is citizen participation, therefore the metrics collected by the municipality should measure participation in its many forms. Mergel (2013a) presents a framework for measuring social

media interactions. The framework shows metrics that measure different levels of citizen interactions. The metrics relevant to the proposed model include the following:

Table 7-1: Metrics for Measuring Social Media Model Effectiveness (Mergel, 2013a)

Social Media Strategy	Metrics
Push strategy	• Number of followers • Number of likes • Unique visits to blogs • Views on YouTube or Flickr • Livestreaming views
Pull strategy	• Shares and Retweets • Comments • Demographic data • Ratings and reviews • Response to polling
Networking strategy	• Membership requests on LinkedIn • Subscriptions to blogs and YouTube • Downloads of videos and documents • Direct messages to social media accounts • Content contribution

The metrics listed in Table 7-1 will provide quantitative insight to municipalities about trends in their interaction and helps them understand their audience. These metrics have been recommended to the Nelson Mandela Bay Municipality (NMBM). A comparison of the number of followers on the municipality's Facebook and Twitter platform from July 2017 to July 2018 reveal an increase of over 2000 followers on both platforms. This increase might suggest that the municipality's social media strategy is having an impact on their reach to citizens. Table 7-2 shows the difference in numbers in the period stated above.

Table 7-2: Comparison of Social Media Statistics for NMBM

Platform	July 2017	July 2018
Facebook	Active: 11 150 followers	Active: 15,873 followers
Twitter	Active: 7 141 followers, 1 649 posts	Active: 9,066 followers, 2,243 posts

The next section discusses the evaluation of the model. The purpose of the evaluation was to assess its fitness for purpose and effectiveness in public participation. The original method for evaluation based

on research objective RO$_6$, was to evaluate the model based on the metrics determined in Table 7-1. The NMBM had not started collecting these metrics, however, at the time of evaluations. The evaluations were carried out by social media practitioners with knowledge of the South African government context. The evaluations were conducted based on OECD development programme evaluations.

7.3 Evaluation

Evaluation is defined as the systematic and objective assessment of an ongoing, or completed project (Australian Development Cooperation, 2009). These assessments include the design, implementation and results of the project. The aim of evaluations is to determine the relevance, fulfilment of objectives, efficiency, effectiveness, impact and sustainability of the project. Evaluations that occur during the lifecycle of the project can be mid-term, or formative evaluations (Australian Development Cooperation, 2009; Tullis & Albert, 2013). As the name implies, mid-term evaluations occur at the middle point of the implementation process. Formative evaluations have the purpose of improving the performance of the project during the implementation phase. End of project evaluations include ex-post evaluation, final evaluation, impact evaluation and summative evaluation (Australian Development Cooperation, 2009). An ex-post evaluation occurs right after or long after the project is completed, while the final evaluation occurs towards the end of the project. An impact evaluation assesses the long-term effect of a project, whether intended or unintended, directly or indirectly. Summative evaluations are used to determine the degree to which the expected outcomes of the project were produced (Australian Development Cooperation, 2009; Tullis & Albert, 2013).

7.3.1 Evaluation Method and Criteria

The assessment of the social media model was done through summative evaluations. The evaluations were based on the criteria of relevance, effectiveness, efficiency, impact and sustainability of the developed model. These criteria are based on the OECD development programme evaluation criteria (Australian Development Cooperation, 2009). These criteria are described in Table 7-3.

Table 7-3: Evaluation Criteria

Criteria	Definition
Relevance	The extent to which the objectives of the project are consistent with the requirements of organisation, or environment of implementation.
Effectiveness	The extent to which the objectives of project are achieved or expected to be achieved.
Efficiency	The degree to which the objectives of the project are met in a cost-effective manner.

Impact	The positive and negative long-term effects produced by a project, directly or indirectly, intended or unintended.
Sustainability	The degree to which the project continues to provide benefits long after implementation.

7.3.2 Evaluation Participants

The evaluations were carried out by subject matter experts; these were individuals who are familiar with the South African context and work with social media in their job roles. The identified individuals oversee social media use in their organisation. The evaluators included officials from three metropolitan municipalities in South Africa, and their job roles are; Deputy Digital Director, Director of Communications and Media Management Officer. The evaluations took the form of telephonic interviews, face-to-face interviews and email interviews. The evaluators were provided with documentation of the proposed social media model and given the opportunity to provide feedback on the model. Subsequently, the evaluators were provided with questions relating to the relevance, effectiveness, efficiency, impact and sustainability of the model. The evaluation questions are provided in Appendix G.

7.3.3 Evaluation Results

The results of the evaluation are discussed in terms of the evaluation criteria described in Table 7-3.

7.3.3.1 Relevance

All evaluators agreed to the relevance of the social media model. According to the evaluators, social media has become critical in interacting with citizens, but many municipalities in South Africa struggle to integrate social media into their daily routines. One evaluator attributed the municipality's success with social media to the use of a third-party social media expert. This municipality plans to move their social media practices in-house; this would require acquisition of skills that are currently in deficit. The proposed model is deemed ideal as a guideline for this situation.

"Social media is the preferred mode of communications in the world. It is used for engagement, interaction and communication. It must be a part of daily lives. The model is critical for South African municipalities." – Evaluator 1

"The model is relevant to the use of social media in interacting with citizens because it has become critical to meet citizens where they are. The model addresses issues that have been encountered in the adoption of social media by our municipality." – Evaluator 2

"The social media model is essential to South African local municipalities who are still struggling to get social media integrated into their daily routines." – Evaluator 3

7.3.3.2 Effectiveness

The proposed model was said to be effective in the South African context. Due to its sequential nature the model was easy to follow as it was well structured. The evaluators had no new contributions to make to the model based on their experience using social media in their individual organisations. However, the evaluators noted that most municipalities would need to customise some of the steps to suit their audience and organisation structure.

"There is not [no] stiff standard. Every town, service and product has its own context. What works for our followers may not work for your followers." – Evaluator 1

"The model provides an approach to social media adoption in the municipality that considers issues from the onset of adoption such as acquiring a social media champion and getting buy-in from politicians within the municipality." – Evaluator 2

"The approach proposed provides sequential guidelines that provides structure to implementing social media for public participation." – Evaluator 3

7.3.3.3 Efficiency

This criterion was based on the economic efficiency of the model. All evaluators described the model as being efficient because it could be suited to the budget of each municipality.

"The approach presented by the model makes it possible for municipalities to work within their individual budget and still achieve their goals." – Evaluator 2

"The model fits into the municipality budget and is scalable." – Evaluator 3

7.3.3.4 Impact

In terms of the model's impact on public participation, the evaluators could not provide conclusive answers because social media is not used extensively for public participation. In the participation areas, that have been implemented, such as service delivery and information provision, the model has been described as impactful.

"The municipality has not fully implemented social media in its public participation activities, however, the few public participation activities it engages in can be achieved using the social media model proposed." – Evaluator 2

"Yes, the model helped the municipality achieve some of its public participation goals. Not every aspect of the model has been implemented but the proposed approach would be adequate to meet the municipality's goal." – Evaluator 3

7.3.3.5 Sustainability

The evaluators noted that the ability of the model to be customised, based on the needs of the municipality, makes it sustainable. One evaluator noted that having existing policies might restrict the

sustainability because the organisation might not be able to respond to changes in the social media environment.

"This will suffocate creativity. Make it social media guidelines instead of a policy." – Evaluator 1

"The model includes a phase that address sustainability through continuous staff training and keeping abreast of changes in social media technology as well as national policies and guidelines." - Evaluator 2

"The model has presented steps that would address the continuous use of social media in the municipality and therefore makes it sustainable." – Evaluator 3

Based on the results of the evaluation, the social media model developed in this research project is an essential requirement for South African governments. The nascent nature of social media means that many municipalities are still experimenting with its adoption. The social media model is therefore relevant and can serve as a guideline for municipalities. The model is effective in the sense that it presents step-by-step instructions that can be customised based on the needs of the municipality. The customisable nature of the model also means that it is efficient in terms of economics. There are no strict rules on resources to be used. This means that municipalities can work within their budget, and with the staff they have available.

The impact of the model cannot be conclusively demonstrated due to the time span between implementation and evaluation. The effects of implementing the model will only be seen after a longer period of time with the municipality continuously adhering to the recommended steps.

7.3.4 Limitations

The evaluation of the model is limited by the number of participants (n=3). Due to the fact that social media implementation is still in its infancy in South African municipalities and provinces, it was difficult to locate people with appropriate knowledge in this area. The process of locating a suitably responsible individual in municipalities and provinces was tedious, and required a lot of back and forth communication with employees in these organisations. Many of the subject experts identified and contacted did not respond to requests for participation, and some of those contacted declined to participate. This could be because social media implementation is still in the experimentation phase, and therefore no formal knowledge could be provided. Issues regarding staff appointments also make it difficult to locate a suitable employee due to unstable political environments within municipalities.

Ideally, the evaluation of the model should involve social media analytics, but the NMBM has not begun analytics on their social media accounts. Government agencies have been described as being reluctant to measure the impact of their social media interactions (Hao et al., 2016; Mergel, 2013a). In the case of NMBM, there is a deficit in the skills required to perform analytics. The municipality has acknowledged a need for performing such analysis and are working towards getting a third-party to

handle this task. The lack of social media analytics restricted the type of evaluations that could be performed, therefore, it was necessary to rely on subject matter expert evaluations only. Future evaluations should be carried out based on social media analytics.

7.4 Reflections

The case study revealed the importance of behaviour change in the adoption of social media by top management and politicians. The slow adoption and resistance to social media was not due to a lack of access to the technology, as might be expected in Sub-Saharan Africa. In the case of Nelson Mandela Bay Municipality, Internet access is not a deterrent to social media use because the municipality allocates mobile data capacity to staff and politicians on a monthly basis. The municipality also provides laptops, mobile phones, and tablets to encourage the use of technology by politicians and staff. Training is also provided on how to use these technologies.

The biggest obstacle faced by the municipality in implementing the model, however, was acquiring buy-in from top management and politicians which was due to a resistance to change. The ability of social media to shift power to citizens is the main cause for this resistance. Social media promotes transparency and accountability in the political process. This would require top management and politicians to be answerable to citizens who would have direct access to them. Although, this is regarded as an advantage by democratic proponents, there seems to be an opposing culture within the municipality that is averse to this transparency and accountability. Other projects that have been met with the same opposition include the decision to build an app that would rate councillors within NMBM based on their performance. The councillors and other politicians who would have been the subject of the ratings vehemently opposed the development of this app. These politicians also avoid using the laptops provided by the municipality and insist on getting all documents in hard copy. This points to a behaviour that is opposed to every kind of technology and not just social media.

A consequence of failing to obtain buy-in is the lack of budgets for implementing social media. This limits the operations of the communications department. Without a budget, it is difficult for the communications department to operationalise social media adequately. For instance, one of the ways the municipality plans on utilising social media to meet the convenience gratification of citizens, is by streaming town hall meetings, and other public participation meetings via YouTube. This streaming requires a substantial amount of Internet data, and even though the municipality provides Internet access to employees, the capacity is not adequate for streaming videos. The communications department has failed to get support for an increased budget allocation for Internet data.

In municipalities where social media is used for public participation more extensively, such as the City of Cape Town, they have been able to acquire buy-in from politicians and top management. This buy-in has led to the provision of a budget to outsource their social media operations to private companies

that specialise in running social media platforms. These municipalities recognised the importance of social media, and the lack of in-house skills required to handle social media.

The South African government environment also lacks stability in terms of job roles. Many employees are in their roles temporarily, and are unwilling to make changes to business processes because they want to remain in favour with politicians that appoint them. Unqualified individuals are also placed in roles based on favouritism by politicians. Another consequence of the frequent changes in staff in these organisations is a lack of continuity with development projects, as well as a lack of responsibility for these projects.

In the process of this research, the underlying reality is that in South Africa public participation can only be fully effective and reach a stage of collaboration when politicians are not afraid of the shift of power to citizens by allowing complete transparency and knowledge sharing. Participation will never advance beyond a pull strategy, with limited bi-directional interactions between the government and citizens.

7.5 Summary

Measuring the impact of social media is essential to its continued support from top management and politicians and ensures the social media objectives of the organisation are being met. Different aspects of measurement have been discussed in this chapter, and the metrics aligned to each aspect were highlighted. The metrics proposed for evaluating the effectiveness of the social media model have been presented from literature. The evaluation process for the model has been discussed, and the evaluation results presented. The evaluations were based on the criteria of relevance, effectiveness, efficiency, impact and sustainability. These criteria originated from literature. The evaluations were qualitative in nature and done by subject matter experts identified by the researcher.

This chapter addressed research objective RO_5 and RO_6, and research questions RQ_6 and RQ_7. This was achieved by identifying metrics for measuring the effectiveness of social media for public participation and presenting the results of the model's evaluation. The chapter was concluded by reflecting on the findings of the study. The next chapter concludes the research study.

Chapter 8 : Conclusion and Recommendations
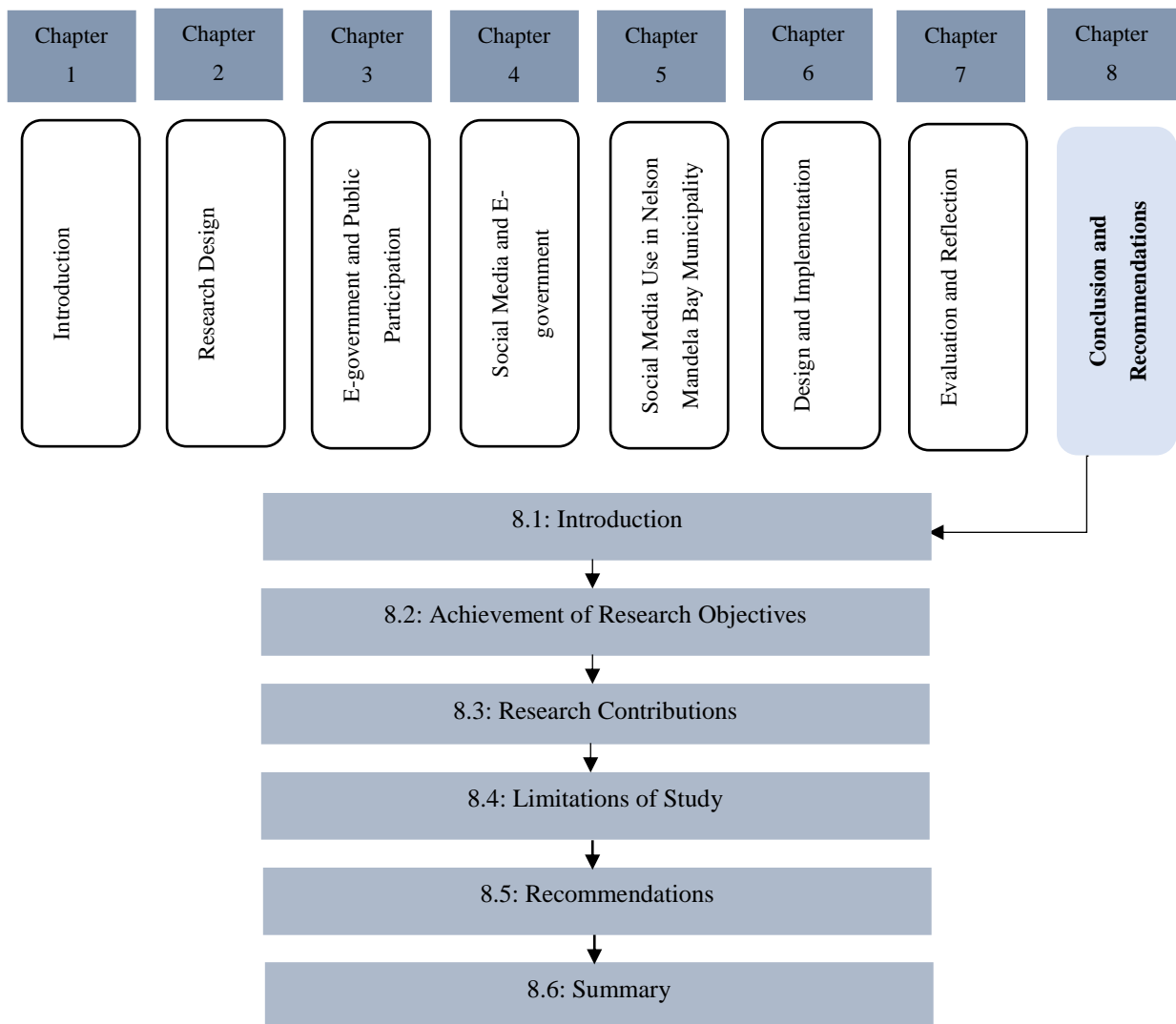
Figure 8-1: Chapter Overview

8.1 Introduction

Social media has been ingrained into our lives and become one of the most common mechanisms of communication. As citizens become more tech-savvy, their technological expectations from government increase (Andrews, Jarvis, & Pavia, 2014). Governments are therefore adopting new technologies in a bid to satisfy citizen expectations and have adopted social media in varying stages. In conjunction with the adoption of social media, public sector organisations have acknowledged the importance of citizen interaction and public participation. Public participation has become a major focus for governments who have come to realise that meeting citizens' needs is the main purpose of public service. This shift in prioritising citizens has led to a growing interest in how government can effectively, and efficiently, satisfy its customers through Information and Communication Technologies (ICT).

Several other factors have led to the increased use of social media for public participation by governments around the world (Section 4.5.2). South African municipal governments, in a bid to keep up with citizen expectations and trends, have set up social media accounts and begun corresponding with citizens through social media. These implementations are sometimes disorganised and have been done without an action plan or structure. Municipalities have also not considered the needs of citizens when interacting through social media.

No models or frameworks could be found that provide a guideline to how municipalities can implement social media in a structured way that is effective in achieving public participation. In addition, issues of E-government are different in every country due to factors unique to each country (Schuppan, 2009), so, the model development process needs to consider the context where it will be implemented. The purpose of this study was to propose a social media model for public participation in a South African municipality (Chapter 6). A secondary purpose of the study was to implement and evaluate the model (Chapter 6 and Chapter 7). This chapter provides a summary of the entire study by expounding on what was achieved, and presenting recommendations and insights based on the knowledge acquired through the research process. The research objectives achieved are presented (Section 8.2), the theoretical and practical contributions of the study are discussed (Section 8.3), the limitations and challenges of the study are highlighted (Section 8.4), and recommendations are made for practice and future research (Section 8.5). A summary is also presented (Section 8.6).

8.2 Achievement of Research Objectives

The research objectives listed below were identified at the outset of the study. These objectives have been achieved successfully.

RO_1: To understand the current implementation of public participation in South Africa.

RO$_2$: To investigate the use of social media for public participation through cases in other countries and organisations for best practice identification.

RO$_3$: To understand the use of social media in the selected municipality through interviews and Uses and Gratifications Theory surveys.

RO$_4$: To develop a social media model for public participation in a South African municipal government.

RO$_5$: To determine what measures and metrics will be used to evaluate the effectiveness of the developed model.

RO$_6$: To evaluate the developed model using measures and metrics determined in RO$_5$.

To achieve these research objectives, several research questions were derived and addressed in the different chapters of the research thesis. Table 8-1 presents the research objectives, questions and chapters in which each was addressed.

Table 8-1: Research Objectives, Questions and Chapters

Research Objectives	Research Questions	Chapters
RO$_1$	RQ$_1$: To what extent is public participation implemented in South Africa?	3
RO$_2$	RQ$_2$: How can social media be used for public participation? RQ$_4$: What are the best practices in the use of social media for public participation?	4
RO$_3$	RQ$_3$: What are the factors that affect the public's adoption of social media for engaging with the municipal government?	5
RO$_4$	RQ$_5$: What elements should be included in a social media model that facilitates an effective and structured approach to public participation?	6
RO$_5$	RQ$_6$: How should the effective use of social media by the municipal government be measured?	7
RO$_6$	RQ$_7$: To what extent is the social media model effective in enabling public participation?	7

The first research objective, **RO$_1$**, was achieved through a review of literature into public participation in South Africa (Section 3.5). The literature review discussed mechanisms of public participation

employed in South Africa, as well as the legal frameworks that encourage and, in some cases, mandate public participation. An assessment of public participation via social media was done (Section 4.7), presenting the status quo in South African municipalities. The assessment revealed that social media is used primarily for information provision by municipalities. Other E-participation areas that were evident include discourse, service delivery, disaster management and consultation.

Fulfilling research objective **RO₂**, entailed identifying best practices in using social media for public participation. A review of social media implementation models used by organisations (Section 4.3.2), and an assessment of social media use by governments in other countries (Section 4.6), highlighted some of these best practices. These best practices were discussed in Section 4.8.

Research objective **RO₃**, was achieved by interviews, a Uses and Gratifications Theory survey and an assessment of NMBM's social media pages. The interviews were conducted to assess the current state of affairs regarding the use of social media in the NMBM. The interviews addressed the present use of social media, the roles of the communications department employees, the challenges and risks faced while using social media, the benefits of using social media, and the opportunities that have led to its use. The interview results were presented and discussed in Sections 5.5.4 and 5.6. An assessment of the municipality's social media pages revealed the use of Facebook, Twitter and YouTube for broadcasting information to citizens about service delivery, community initiatives and disaster management, advertising events that occur in the municipality, posting updates on activities involving the mayor, posting job vacancies and informing the public about upcoming public meetings.

As part of **RO₃**, the study set out to understand the use of social media by the municipality's citizens. Motivations for using social media in political and governmental settings were derived from literature, and were validated through a survey of citizens in the NMBM. The survey also confirmed the social media and public participation habits of citizens. The results of the survey were presented and discussed in Sections 5.7.4 and 5.8.

Research objective **RO₄**, was achieved in Chapter 6. The chapter discussed the development of the proposed social media model based on identified best practices in Chapter 4 from results of the interviews in Chapter 5 and from the results of the Uses and Gratifications Theory survey in Chapter 5 Chapter 6 also described the implementation of the model in the NMBM, and presented a gap analysis that highlighted deficits in the municipality's implementation of the model.

Research objective **RO₅** was achieved in Chapter 7. The measurement of social media impact was discussed, and several metrics were proposed to measure this impact. The metrics were grouped according to the social media strategy employed by the municipality. Research objective **RO₆** was not achieved as initially planned in this study. This objective was set to evaluate the model based on metrics identified in RO5. These metrics, however, were not being captured by the municipality at the time of

writing. Therefore, subject matter experts did the evaluation of the model. The chapter presented a discussion on the evaluation of the model.

The thesis statement for this research was: *A model can be developed to leverage the opportunities provided by social media and present an effective and structured approach towards public participation in selected municipal E-government initiatives in South Africa.* The achievement of RO_M: *To develop a social media model that will facilitate an effective and structured approach to public participation in a selected South African municipal government* and RQ_M: *How should social media be used for facilitating an effective and structured approach to public participation in municipal E-government initiatives in South Africa?* proved that this statement can be confirmed to an extent. The model was developed and provided an effective and structured approach to using social media in government. The effectiveness of using social media for public participation is still mostly dependent on the extent to which the government organisation is willing to engage with citizens, and encourage shared power with them through knowledge-sharing via social media. Table 8-2 summarises the research objectives discussed above, plus the thesis chapters and deliverables of each chapter. The next section discusses the research contributions of this study.

Table 8-2: Research Objectives and Deliverables

Research Objectives	Thesis Chapters	Deliverables
RO_1	3	• Challenges and risks of E-government • Benefits of E-government • E-participation Evaluation Frameworks • E-participation mechanisms, activities and technologies
RO_2	4	• Best practices in using social media in government • Assessment of social media use in South African government • Challenges in using social media in government • Opportunities for using social media in government
RO_3	5	• NMBM challenges in using social media • NMBM's opportunities for using social media • NMBM's benefits of using social media • Motivations for citizen use of social media for participation
RO_4	6	• Social Media Model • NMBM's implementation results • Gap analysis of model implementation
RO_5	7	• Social Media Effectiveness Metrics
RO_6	7	• Evaluation Results

8.3 Research Contributions

The study makes several contributions to the E-government and social media field in South Africa. These contributions can be applied to E-government in other developing countries. The research contributions will be discussed in two categories; theoretical and practical.

8.3.1 Theoretical Contributions

This research proposed a social media model for public participation in a South African municipality. The research made several theoretical contributions; a best practice guide for using social media in government (Section 4.8); a Uses and Gratifications survey for assessing citizen motivations for using social media for public participation (Section 5.7); the social media framework for public participation (Section 6.2), the social media model (Section 6.3), and a gap analysis template for municipalities to measure their social media implementation progress (Section 6.5).

The best practice guide presented in this study is a compilation of best practices from an extensive literature review. These best practices combine practices from governmental organisations and non-governmental organisations. The guide presents recommendations for municipalities to successfully apply social media in interacting with citizens. The practices identified in the study include:

- Aligning objectives
- Policy revision
- Support for mobile devices
- Integration of online and offline channels
- Engaging in a pull strategy
- RESPECT principle
- Measuring social media impact

These principles have been discussed in Chapter 4 and integrated into the social media model developed as part of this study.

The next contribution the study made was a Uses and Gratifications Theory survey. The purpose of the survey was to determine citizen expectations from social media which, in turn, would direct municipalities' use of social media. The Uses and Gratifications Theory suggests that these motivations are the reasons one form of media is chosen over another. Therefore, the municipality's ability to meet and fulfil the gratifications will ensure the continued use of social media by citizens for public participation. The results of the survey revealed surveillance, personal identity and convenience utility as the most common motivations for citizens in the Nelson Mandela Bay Municipality. The participation tactics proposed by the social media model are geared towards fulfilling these gratifications.

The two major theoretical contributions of the study are a social media framework for public participation, and a social media model for public participation based on the framework. The framework combined elements from organisational and individual adoption theories namely; the Technology Organization Environment (TOE) framework, and the Uses and Gratifications Theory. The elements relating to organisational adoption emerged from the interviews with municipal employees, and were found to align with the TOE framework. These factors are described as antecedents to the municipality's effective use of social media. Once these antecedents are in place, the municipality's social media use can be strategically aligned to the citizen gratifications identified through the Uses and Gratifications Theory survey. The framework identifies these gratifications as outcomes of the municipality's effective use of social media.

The social media model implements the framework, providing an executable set of steps for municipalities to follow in their implementation of social media for public participation. The model's steps are implemented in phases to ensure a structured approach, and each of these phases have corresponding steps that need to occur in the phase (Section 6.3). There are five phases in the model; Initialisation, Setup, Organisation, Institutionalisation and Maintenance. The model can be thought of as a guideline, and as such municipalities should adapt the implementation of the model to fit their organisational characteristics.

The final theoretical contribution of the study is a gap analysis template. The template lists the phases and steps in the model with corresponding columns for "Status" and "Actions". The status column describes the progress that has been made in accomplishing each step in the model, while the actions column describes the activities that need to be executed in a future time to complete the step. The gap analysis can be used to monitor the model implementation progress and keep track of what is required by the municipality for complete implementation.

The study focused on the structured and effective adoption of social media for public participation in a South African municipality. This study has contributed to knowledge on how local municipalities can implement social media. This study is important, because local municipalities are closer to citizens and more familiar with their day-to-day community needs. The next section focuses on the practical contributions of the study.

8.3.2 Practical Contributions

The study made contributions to the municipal government and citizens in South Africa. Social media use is on the increase around the world, with organisations like the UN, UNDP, OGP and World Bank encouraging their use by government organisations. The study addressed the need for a structured and effective approach towards using social media in a municipal government.

- An identification of social media gratifications for citizens in the NMBM. These gratifications determine the strategies used by NMBM in interacting with citizens on social media.

- The interviews with the employees of the municipality done during the study revealed challenges that the social media team faced in their daily routines. The challenges identified can serve for other municipalities to understand the pitfalls to avoid when implementing social media.

- A set of recommendations, (Appendix F), were presented to the Communications Director at the municipality to highlight issues that need to be addressed to get a structured approach to NMBM's social media use.

- The model developed in this study was implemented by the NMBM. The model provided a step-by-step method on how to use social media effectively for public participation. The five steps of the model implementation ensured that the implementation was orderly, structured, and targeted towards citizens' gratifications. The model implementation addressed issues encountered by the municipality in their effort to use social media for public participation.

- Through the model implementation, a social media champion was appointed by the municipality. Additional staff were assigned to the social media team, and social media training commenced for the team. The municipality finalised their communication's policy and began developing their social media strategy.

- A gap analysis for the NMBM was performed and presented (Section 6.5), illustrating the current situation after the implementation of the model at the municipality, including the remaining objectives.

8.4 Limitations of study

A limitation of the study was that a single case study was conducted. The time-consuming nature of case studies restricted the study to a single case. The duration of this study was three years, and several challenges were encountered working with the selected municipality that would have made the study more complex had there been more than one case involved. These challenges will be discussed subsequently. However, the study should ideally be repeated in other municipalities, within South Africa, and in other developing countries where social media uptake is nascent.

The sample size and method of the Uses and Gratifications survey were also limitations of the study. Convenience sampling was used, which is a non-probability sampling technique. Non-probability sampling does not allow for generalisation based on statistics. The survey results are therefore non-inferential. The sample size also does not represent the entire population of citizens in the NMBM.

The evaluation of the developed model was limited because the municipality had not started collecting social media metrics data. This led to a qualitative evaluation by social media subject matter experts. However, the sample size of these experts (n=3) also presented as a limitation. As discussed in the

reflections section (Section 7.4), it is difficult locating individuals who are responsible for social media in provinces and municipalities in South Africa. The researcher received feedback from just these three participants.

Some of the challenges that were encountered during the study were related to the nature of the organisation where the case study was carried out. During the first year of the research, the municipality was going through a period of uncertainty with local elections scheduled. At that time, there were constant personnel changes within municipal departments, and no permanent appointments were made for director roles. As a result, it was difficult to identify and contact the individual responsible for social media during the first year and a half of the research. Each time contact was made, and appointments made to meet the acting-director, and /or the individual holding the role, had been changed. Consequently, the research was delayed for a period. The instability also made working with an outsider less of a priority for individuals   who were not appointed on a permanent basis.

8.5 Recommendations

The sections that follow present recommendations for practice and further research.

8.5.1 Recommendations for Practice

The findings from this research revealed a resistance to the use of technology by politicians in the municipality, and this resistance limited the initiation of various ICT projects within the municipality. The municipality should provide ICT training to these politicians to familiarise them and reduce their aversion to technology. The municipality should also find ways to promote transparency and accountability. If the municipality is able to establish policies that require politicians to be transparent in their actions, such as obligatory reporting of budgets and spending, this could get politicians familiar with transparent practices, and consequently address their resistance to technologies that promote transparency.

South African municipalities should consider using this model as a formalised implementation approach for social media. The Uses and Gratifications Theory survey can be used to determine citizens' motivations are for using social media to interact with the government, and thereby streamline the strategies employed by municipalities. This puts the expectations of the citizens at the centre of social media implementation, as opposed to their current reasons for implementation; its trendiness and ability to enhance the image of the organisation, keeping up with government regulations, or wanting to do what other organisations are doing.

Municipalities should also ensure they are monitoring their social media impact based on the objectives set out when developing their social media strategy. If the objectives set out are not being achieved, the municipality would need to reassess the strategy employed and ensure it is aligned with achieving the objectives set out, as well as citizens' motivations.

The municipality should ensure it educates citizens on using social media and public participation practices. Citizens should be able to use these technologies and be literate in order to understand information provided by the government, and be able to make informed decisions. Technology illiteracy is one of the reasons for the digital divide that exists in many societies. The municipality's ability to educate citizens is critical to its successful use of social media for public participation (Bertot, Jaeger, Munson, et al., 2010a). Educating citizens will also encourage their use of social media in public participation.

8.5.2 Recommendations for Future Research

The findings of this research have highlighted the opportunities and recommendations for future research. The study has presented a model that guides municipalities in their adoption of social media for public participation. A major finding of the study has been the need to incorporate theories of behavioural change to overcome some of the challenges faced by the municipality in acquiring buy-in for social media. Resistance from top management and politicians is a challenge facing the adoption of ICT in government settings in many countries. This resistance has a ripple effect on other factors of adoption such as staffing and budgeting. Therefore, extending the study to include theories of behaviour change will be beneficial for ICT adoption research in general. ICT adoption research has mainly focused on explaining behaviour change using theories such as Theory of Planned Behaviour, Social Cognitive Theory and Theory of Reasoned Action. However, theories that influence behaviour change need to be integrated into ICT adoption research.

As mentioned in the previous section, the study was limited to a single case study. Future research should extend the implementation of the model to other countries, and compare the results of implementation in their different contexts. According to Schuppan (2009), though the E-government discourse may be similar in every country, problems of E-government in developing countries differ due to factors unique to these countries, therefore, further research should implement the model in other countries.

The municipality studied in this research had a presence on social media at the outset of the study. The results of the study cannot be generalised to all municipalities. A possible future research direction will be to implement the model in a municipality with no social media presence. The steps outlined in the model will also apply to an organisation with no social media presence. Extending the study to such organisations will provide insights into the difference in outcomes between these two types of organisations. Questions such as how the municipality's existing presence on social media, prior to the study, influenced the implementation of the model will be answered.

Additionally, further research should investigate the evaluation of the model based on social media metrics identified in Table 7-1. This would help determine the impact of public participation tactics employed by municipalities and ensure the appropriate strategy is being used for social media.

8.6 Summary

The focus of this study was to develop a model for the effective and structured use of social media in public participation in South African municipalities. The research study was carried out to address a gap in government social media research, namely the non-existence of a model, or a framework, that addresses the social media implementation process. The research took on a holistic approach by considering adoption by citizens as well as government organisations. The research has produced a theoretical model that can be customised by municipalities in South Africa in their adoption of social media as a tool for public participation.

The research philosophy of this study was pragmatism, and a combination of deductive and inductive approaches were employed. The research methodology was a mixed methods research using a case study, and a survey strategy, to collect data and address the aims of the study. The case study was based in the Nelson Mandela Bay Municipality. The social media model was also implemented in this municipality.

A content analysis of South African government social media accounts (Section 4.7) revealed the current state of social media use in the country. The most common platforms used are Facebook and Twitter. Most of the accounts are used to provide information to citizens, mainly serving as an extension of the organisation's website. Other ways these accounts are used by the government include service delivery, consultation, discourse, and disaster management. Most communications are one-way; however, citizens could comment on posts. The findings of the content analysis confirmed that social media adoption has not progressed within South African municipalities, and seems to remain in an experimentation phase. This analysis confirmed the need for the social media model developed.

A Uses and Gratifications Theory survey (Section 5.7) was carried out with the citizens of the municipality to determine personal motivations for using social media in interacting with the government. The identified motivations were incorporated into the developed model as the goals of social media use by municipalities. Interviews were carried out at the municipality (Section 5.5) that revealed challenges, opportunities and benefits identified by employees in using social media. These challenges, along with best practices identified in literature, are the elements that made up the social media model.

The implementation of the model as a case study within the NMBM (Section 6.4) resulted in a formalisation of social media within the municipality. Although not every aspect of the model was implemented, a social media champion was identified, partial buy-in was achieved, and collaboration with horizontal departments was started. A social media strategy has been developed, and the municipality has a social media policy in place. The municipality had also acquired additional staff to monitor their social media accounts and provided initial training to these employees. With the additional employees available, the municipality now has a shorter response time to comments by citizens. The

implementation of the model has ensured social media is recognised within the municipality as a formal tool for communication, and not an experimentation by the communications department. The study has achieved its main objective:

RO_M: *To develop a social media model that will facilitate an effective and structured approach to public participation in a selected South African municipal government.*

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APPENDIX A: University Ethical Clearance Letter

Nelson Mandela Metropolitan University

for tomorrow

Faculty RTI Committee (Faculty of Science)
Tel: +27 (0) 41 5042268
E-mail: lynette.roodt@nmmu.ac.za

Ref: H15-SCI-CSS-012
Dr L Barnard

Contact person: Mrs L Roodt

Date: 17 November 2015

Dear IO Fashoro (215283319)

TITLE OF PROJECT: A Social Media Model for Facilitating Public Engagement in South African Municipal Government

Your above-entitled application was considered and approved by the Sub-Committee for Ethics in the Faculty of Science on 6 November 2015.

The Ethics clearance reference number is **H15-SCI-CSS-012**, and is valid for three years. Please inform the Committee, via your faculty officer, if any changes (particularly in the methodology) occur during this time.

An annual affirmation to the effect that the protocols in use are still those, for which approval was granted, will be required from you. You will be reminded timeously of this responsibility, and will receive the necessary documentation well in advance of any deadline.

We wish you well with the project. Please inform your co-investigators of the outcome, and convey our best wishes.

Yours sincerely

Lynette Roodt
Manager: Faculty Administrator
Faculty of Science

APPENDIX B: Consent Letter from municipality

nelson mandela bay
M U N I C I P A L I T Y
PORT ELIZABETH | UITENHAGE | DESPATCH

C O M M U N I C A T I O N S

tel: +27(41) 5061555, fax: +27 (0) 86 5049387
PO Box 116, Port Elizabeth 6000
e-mail: communications@mandelametro.gov.za

11 November 2016

Dear Ms Fashoro

Permission is hereby granted for you to use the Nelson Mandela Bay Municipality as a case study and working with the Social Media team in the NMBM Communications towards your Doctoral studies on the use of social media in South African municipalities. The relevant staff members will give you all the assistance and input you require.

I trust that this will be a mutually beneficial arrangement, as discussed, as we are eager to receive your input on our evolving Social Media Strategy and practices. If at all possible, a copy of your finalised thesis would be highly appreciated.

We are looking forward to receiving you and assisting you in any way possible in your studies.

Yours sincerely

MZOBANZI JIKAZANA
DIRECTOR: COMMUNICATIONS

W O R K I N G   T O G E T H E R   F O R   U B U N T U

APPENDIX C: Interview Schedule

1. What are your main tasks as a municipal employee?

2. Do you ever interact with the citizens of the municipality?

3. How does this municipality currently interact with its citizens?

4. How do you think social media can help this municipality engage better with its citizens?

5. How does this municipality currently use social media to engage its citizens?

6. What are the barriers to using social media to engage with citizens of this municipality?

7. What challenges do the municipality face in using social media to engage its citizens?

8. What risks do you think are involved in using social media to engage with citizens?

9. What policies govern the use of the social media by employees of this municipality?

10. What policies govern the use of social media to communicate with citizens of this municipality?

11. How will you describe successful use of social media as a way of engaging citizens in this municipality?

12. Is there anything else you might want to add?

APPENDIX D: Uses and Gratifications Survey

Social Media as a tool for public participation in South African Municipalities

Instructions

This survey is carried out as a part of the requirement for the completion of a PhD degree in Computing Science at the Nelson Mandela Metropolitan University. The objectives of this study is to identify factors that motivate citizens in South Africa to use Social Media as a tool for interacting with their municipalities. This interaction can relate to receiving information from the municipality, reporting service delivery problems and contributing to policy making.

The study will also be determining the challenges and opportunities faced by municipal staff in adopting Social Media as a tool for facilitating public participation. The aim is to understand the environment within which Social Media will be implemented, identify people that will be responsible for this implementation and running the Social Media accounts, and determine policies and risks that might affect Social Media use.

The information provided will be used to develop a model that will facilitate the use of Social Media for public engagement by the municipality. This model could improve the interaction between citizens and the government in your municipality using Social Media.

Your answers will be anonymous and information provided will only be used for the purpose of this study. Any question marked with an asterisk (*) requires an answer in order to progress through the survey.

Below are descriptions of some terms used in the survey that you might be unfamiliar with:

Surveillance: is the use of Social Media to monitor other people's activity and be informed on what others are doing.

Diversion: is the use of Social Media for entertainment, passing time or diverting attention.

Personal Identity: is the use of Social Media to build your reputation and others opinions of you.

Convenience Utility: means using Social Media because it makes it easier to interact with the municipality than other options of interaction such as telephone, emails etc.

For inquiries or comments, please contact the researcher at s215283317@nmmu.ac.za. Thank you for your participation.

SECTION A: Social Media Use		
Please indicate your social media use habits:		
1	Do you have a social media account or intend to use social media? **If No, please skip to Section C.**		Yes
			No
2	What Social Media platform do you use? **Select all that apply.**		Facebook
			Twitter
			Instagram
			Pinterest
			Google+
			LinkedIn
			YouTube
			Mxit
			Whatsapp
			Other (Please Specify: _____)
3	How long ago did you start using social media? **Select one.**		0 - 1 year
			2 – 4 years
			5 – 7 years
			More than 7 years
4	Where do you most often access social media? **Select one.**		Home
			Work
			School
			Mobile phone
			Tablet PC (e.g. iPad, Samsung Galaxy)
			Internet Cafe
			Other (Please Specify:_____)
5	How often do you log into your social media account? **Select one.**		Never
			Daily
			Weekly
			Monthly

				Other (Please Specify:_____)
6	How many hours do you spend on social media weekly? **Select one.**			None
				Less than 1hr
				1hr – 4hrs
				5hrs – 10hrs
				11hrs – 20hrs
				21hrs – 40hrs
				More than 41 hours
SECTION B: Public Engagement Habits				
Please indicate details about your interaction with your municipality:				
7	Have you ever interacted with your municipality? **If No, please skip to Section D.**			Yes
				No
8	How often do you interact with your municipality? **Select one.**			Daily
				Weekly
				Monthly
				Yearly
				Other (Please Specify:_____)
9	What was the purpose for your interaction? **Select all that apply.**			To make a complaint
				To get information
				To give your opinions about policies and projects in your community
				To participate in policy making
				To pay bills
				Other (Please Specify:_____)
10	What method of interaction did you use? **Select all that apply.**			Letter
				Town Hall Meeting
				Phone / Fax
				Email
				Municipal Website

		Social Media				
		Municipal Office				
		Other (Please Specify:_____)				

SECTION C: Motivations For Using Social Media To Engage With The Municipality

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Surveillance						
11	To keep up with current issues and events					
12	To understand what's going on in local government					
13	To keep up with legislation					
14	To keep up with other people's opinion on local government					
Diversion						
15	To be entertained					
16	To pass the time when I don't feel like doing anything else					
17	Because I am curious about it					
18	Because it is trendy					
19	Because it is enjoyable					
Personal Identity						
20	To broaden my knowledge base					
21	To give me interesting things to talk about					
22	To get support for my ideas					
23	To share my feelings, views, thoughts and experiences					
24	To meet people with the same interests (e.g. same political party)					
Convenience Utility						
25	Because it is easier than other methods of engagement (e.g. town hall meetings)					
26	Because I can express my opinions freely					
27	Because I can get what I want for less effort					

28	Because I can use it anytime, anywhere					
29	Because it is cheaper					

SECTION D: Use Intention

Please indicate your intentions of using Social Media as a public engagement tool:

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
30	I intend to interact with the municipality using social media					
31	When I need to interact with the municipality I predict I will do so using social media					
32	I plan to interact more frequently with the municipality using social media					

Please note that it is NOT compulsory to provide your Name, Telephone number and Email address. Any personal details included will be used for the purposes of statistical analysis only. However, if you would like to be informed about the results from this survey you should provide your email address or phone number.

	SECTION E: Demographics		
33	Full Name:_____		
34	Telephone:_____		
35	Email:_____		
36	City/Town: _____		
37	Residential suburb/Township: _____		
38	Postal code: _____		
39	Please indicate your age **Select one.**		Less than 18
			18 – 29
			30 – 44
			45 – 59
			60 and over
40	Please indicate your gender		Male
			Female
41			Married
			Widowed

Which of these options best describes your marital status? **Select one.**		Divorced
		Separated
		In a domestic partnership or civil union
		Single, never married
		Other (Please Specify: _____)
42	Which of these options best describes your ethnicity? **Select one.**		Asian
		Black
		Coloured
		Indian
		White
		Other (Please Specify: _____)
43	Which of the following categories best describes your employment status? **Select one.**		Employed, working full-time
		Employed, working part-time
		Not employed, looking for work
		Not employed, NOT looking for work
		Retired
		Disabled, not able to work
		Other (Please Specify: _____)
44	Which of these options best describes your HOUSEHOLD earnings last year? **Select one.**		R0 – R2499
		R2500 – R4999
		R5000 – R7499
		R7500 – R9999
		R10000 – R19999
		R20000+
45	What is the highest level of school you have completed or the highest degree you have received? **Select one.**		Below Grade 12
		Grade 12
		Diploma
		Bachelor's Degree
		Postgraduate Degree
		Other (Please Specify: _____)

Thank you for taking out time to fill out this survey. Your participation is highly appreciated.

APPENDIX E: Revised Communications Policy

COMMUNICATIONS POLICY

POLICY HISTORY

TITLE OF POLICY	NMBM Communications Policy
POLICY OWNER	Corporate Services Directorate
POLICY CHAMPION	Director: Communications
	Tel: 041 506 1560
	E-mail: Mjikazana@mandelametro.gov.za

DOCUMENT HISTORY:

Policy Title	Status (draft; current, revised, no change, redundant)	Approving Authority	Decision date	Resolution No.	Ref No.	Doc No.	Pending date for next revision
Communications Policy	Draft	Council			6/2/2/P	N/A	

TABLE OF CONTENTS

1. DEFINITIONS

In this Policy, the following words, terms and expressions will bear the meanings assigned to them hereunder, unless the context indicates otherwise:

"City Manager" means the Accounting Officer as defined in terms of the Local Government: Municipal Finance Management Act 56 of 2003 in relation to a *municipality*.

"crisis" means a situation with a high level of uncertainty that disrupts the core activities and/or credibility of the Nelson Mandela Bay Municipality and requires urgent action.

"developmental communication" means the "art and science of human communication applied to the speedy transformation of a country and the mass of its people from poverty to a dynamic state of economic growth that makes possible greater social equality and the larger fulfilment of the human potential" (GCIS Handbook, 2010).

"developmental local government" means, as defined by the Municipal Systems Act 32 of 2003 elaborates the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of communities, and ensure universal access to quality services that are affordable to all.

"disaster" means a progressive or sudden, widespread or localised, natural or human-caused occurrence which -
(a) causes or threatens to cause-
   (i) death, injury or disease;
   (ii) damage to property, infrastructure or the environment; or
   (iii) disruption of the life of a community; and
(b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.

"mobile applications" are internet application systems that run on smartphones or mobile devices that make use of the municipal website and social media as a platform to disseminate information while simultaneously driving users to the various websites.

"Municipality" means the Nelson Mandela Bay Metropolitan Municipality, a Category A municipality established in terms of Part 2 of Schedule 1 of Notice 85 in the Eastern Cape Provincial Gazette No. 654 on 27 September 2000 promulgated in terms of Section 12(1) of the Local Government: Municipal Structures Act 117 of 1998, for the municipal area described in such Notice.

"Policy" means the Communications Policy of the *Municipality*.

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2. INTRODUCTION

2.1   Government communications is guided by the basic principles of transparency,   openness, accountability and consultation.

2.2   Effective communication leads to good governance, improves internal staff and external citizen/stakeholder morale, and contributes towards meeting government's aims and objectives. It further builds public trust and confidence in the integrity of government.

2.3   Poor communication, on the other hand, creates a perception that government is not delivering on its mandate of providing services to citizens. Effective communication can help to challenge these perceptions, improve accountability and get ordinary citizens involved and engaged in government programmes and activities. Government governs in partnership with the people.

2.4   Government communication is therefore a strategic service (not a support function), which is key for effective and efficient government. All strategic plans must therefore have communication as a core function.

2.5   Communications planning must be integrated into strategic directorate / departmental planning at management level. This means that when the institution conducts its planning, communication must form part of that planning.

2.6   Communication is a professional function, and the communicators' role should be seen as permanent, consistent and stable.

2.7   Communicators must participate in:
   a)   all strategic decision-making bodies at the political/administrative interface and in those communication structures set up internally within the institution to fulfil the Municipality's communication objectives.
   b)   those structures that integrate and coordinate communications related activities in support of the Municipality's service delivery objectives.

3. PURPOSE

3.1   The purpose of this *Policy* is to achieve an integrated, coordinated and coherent communication system in and between the *Municipality*, other spheres of government, business sector, organs of civil society and citizens to enable effective participation in the country's transformation process.

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3.2   This *Policy* sets out the rules, processes and procedures for determining communication in the *Municipality* and will serve as the framework for the developing communication strategies.

4.   REGULATORY FRAMEWORK

4.1   This *Policy* is informed by the following statutes:

a)   Constitution of the Republic of South Africa, Act 108 of 1996
b)   Intergovernmental Relations Framework Act 13 of 2005
c)   Local Government: Municipal Systems Act 32 of 2000, as amended, and Regulations
d)   Local Government: Municipal Structures Act 117 of 1998
e)   Promotion of Access to Information Act 14 of 2000
f)   Media Diversity and Development Agency Act 13 of 2002
g)   Promotion of Administrative Justice Act 3 of 2000

4.2   In addition, the following strategic documents/publications guide this *Policy*:
a)   The Government Communications Information Systems Handbook 2010
b)   Back to Basics Strategy 2014
c)   Government Communications Information Systems Social Media Guidelines – April 2011

4.3   This *Policy* must be read together with the following, and other applicable, municipal policies:
a)   Establishment of Ward Committees Policy;
b)   Intergovernmental Relations Policy;
c)   Petitions Policy;
d)   Public Participation Policy Framework; and
e)   Public Participation Policy Framework Manual.

5.   POLICY PRINCIPLES

5.1   This *Policy* proposes a professional two-way communication process between the institution and its various publics, underpinned by the *Batho Pele* principles:
a)   Courtesy and 'People First'
b)   Consultation
c)   Service excellence
d)   Access to services
e)   Promotion of access to information
f)   Public participation
g)   Openness and transparency
h)   Redress
i)   Value for money

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6.   **POLICY OBJECTIVES**

6.1   This *Policy* will assist the *Municipality* in delivering well-coordinated, effectively managed and responsive *developmental communication* to meet the needs of local communities by:

(a)   promoting the provisioning of timely, accurate, clear and complete information to the public about its policies, programmes, services and initiatives;.

(b)   ensuring that the Municipality's communication caters for all official languages, depending on the area;

(c)   continuously ensuring that the *Municipality* is visible and accessible to the public;

(d)   ensuring that the Municipality's communication messages reach the widest possible audience with diverse needs;

(e)   ensuring that important and crucial issues in communities are identified and that the implementation of the municipal projects and programmes contained in the Integrated Development Plan are addressed;

(f)   creating an effective feedback mechanism between the *Municipality* and its citizenry;

(g)   ensuring that the *Municipality* consults with the public, listens to and takes into account people's interests and concerns when establishing priorities, developing policies and planning programmes and services;

(h)   continuously ensuring that all information sharing is managed in a people-centred and client-focused manner;

(i)   continuing to build public trust and confidence in the integrity of the *Municipality* and government as a whole; and

(j)   ensuring that communication is integrated and coordinated across the three spheres of government.

7.   **POLICY APPLICATION AND SCOPE**

7.1   This *Policy* applies to the political leadership and administration of the *Municipality*, as well as the other spheres of government, business sector, organs of civil society and citizens and the media, including municipal entities, within its course and scope of authority.

8.   **LEVELS OF COMMUNICATION**

8.1   Communication will occur on two levels: internal (political leadership and administration) and external (other spheres of government, business sector, organs of civil society, citizens and the media) via various platforms.

8.1.1   **Internal communications**

8.1.1.1   Internal communication addresses those systems, procedures and platforms used to communicate to and with the administration and political leadership. These include the

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following:

a) **Brand management:** Ensuring the integrity of the brand and the enforcement of the NMBM Corporate Identity Manual.

b) **Internal Communicators Forum:** Establishing, coordinating and strengthening the Internal Communicators Forum comprising all internal role-players within directorates and entities to ensure integrated and consistent messaging that feed into the Metro Communicators Forum.

c) **Electronic messaging:** Utilising social media platforms and Groupwise for communicating messages of immediate and general importance to the administration and political leadership.

d) **Intranet:** Developing and managing a user-friendly, efficient and effective intranet, which is a key repository for internal communication and information sharing.

e) **Language Proficiency:** Reviewing the NMBM Language Policy (2007), of which the implementation ensures that the language usage in key municipal documents and advertisements is of a high standard and in the appropriate local language.

f) **Product Development:** Overseeing the production and archiving of promotional and events-related material, such as flyers and banners, as well as videography and photography.

g) **Publications:** Rise Online (electronic weekly staff newsletter covering topical events and developments); and Rise Staff Magazine, covering staff-related issues, progress made in respect of municipal programmes – serving as staff motivational tools.

h) **Public Relations and Events Management:** Providing relevant services to all municipal directorates around key programmes, projects and events, such as launches and road-shows.

i) **Research:** Conduct on a regular basis, quantitative or qualitative research on platforms, media, products and language preferences.

j) **Online applications:** Web environment, social media and NMBM website (refer Section 9).

8.1.2 External Communications

8.1.2.1 The *Municipality* must encourage two-way communication with its communities and their participation in local government planning and decision-making processes through the following strategies, platforms and products:

a) **Brand management**: Ensuring the integrity of the brand and the enforcement of the NMBM Corporate Identity Manual.

b) **Coordination and participation in external Communication Structures**: to ensure ongoing liaison between the structures to achieve integrated service delivery and consistent messaging.

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c) **Language Proficiency**: Reviewing the NMBM Language Policy, of which the implementation will ensure that the language usage in key municipal documents and advertisements is of a high standard and in the appropriate local language.

d) **Research:** Conducting on a regular basis quantitative or qualitative research (such as surveys, suggestion boxes and electronic feedback platforms) regarding preferred platforms, media, products and language preferences.

e) **New versus old media:** Using, where necessary, traditional forms of media in conjunction with new media so as to not exclude members of the public who for different reasons may not have access to new technology.

f) **Online applications:** Web environment, social media and NMBM website. Hosting a website and its applications in a secure environment, ensuring that they are accessible 24/7 and are updated regularly. Website content and branding are managed through the NMBM Communications Sub-directorate.

g) **Media Management and Engagement:** Establishing and strengthening links with the media (print, broadcast and online).

h) *Crisis* **Communication** (refer paragraph 10).

9. ONLINE COMMUNICATION PLATFORMS

9.1 Website and mobile applications

9.1.1 The municipal website and mobile applications must:
a) provide current, factual and official information to the public;
b) market the *Municipality* to external and internal stakeholders;
c) conform to the Government Communications Information Systems web content guidelines;
d) provide links to South African Government Online;
e) be annually reviewed to ensure that it accurately reflects branding requirements;
f) carry accurate messaging and is in line with governmental requirements;
g) only publish information suitable for the public (classified information and/or information intended for municipal officials must not be posted);
h) provide a feedback mechanism for receiving/acknowledging citizens' input and/or replying to queries.

9.2 Web Environment

9.2.1 The Communications Director or his/her designate must verify all content to be placed on the *Municipality's* website.

9.2.2 The *Municipality's* Website will provide a portal for all internal applications like: Interactive Voice Response (IVR) for online accounts enquiries and services, Geographical Information Services

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(GIS), property valuations, online books (library material), pay my fines, e-tenders, informal tenders and supply chain query portal, etc.

9.2.3   The Communications Director or his designate will review the M*unicipality's* website on an annual basis to ensure that it accurately reflects brand requirements, carry accurate messaging and is in line with governmental requirements and new technological developments.

9.3   Mobile Applications

9.3.1   Mobile applications are internet application systems that run on smartphones or mobile devices, that make use of the municipal website and social media as a platform to disseminate information while simultaneously driving users to the various websites.

9.3.2   The rules around the usage of mobile applications in the NMBM are the same as those applying to the NMBM website.

9.4   Social Media

9.4.1   Code of Conduct of municipal employees

9.4.1.1   Municipal employees, recognised as official spokespersons, may not comment on government activities and/or provide commentary that is contrary to the official government position on official/private social media sites. They may, however, relay the contents of press releases, conferences, and so on to the public by way of their private social media accounts.

9.4.1.2   Municipal employees using social media sites in their private capacity must be made aware of the Code of Conduct for Public Servants and relevant laws and regulations in respect of privacy and confidentiality issues. They must declare up front that they are writing in their personal capacity so that their comments are not interpreted as the official view of government or the *Municipality*.

9.4.1.3   Personal social media accounts or accounts unrelated to the government may not be registered using a government issued email address.

9.4.1.4   All content posted must reflect government values and be professional – whether on personal or official sites.

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9.4.1.5   Social media accounts must be monitored daily to check if comments on published content adhere to social-media guidelines; the enquiries received via comment or inbox/direct message; or if online sentiment is becoming increasingly topical.

9.4.2   Citizen Conduct

9.4.2.1   The *Municipality* will remove social media commentary by citizens on its social media platforms if it:

a)   defames, insults, abuses, harasses, threatens or attacks anyone;

b)   includes obscene and/or offensive language;

c)   contravenes the principles of the Constitution and leads to discrimination

d)   advertises or promotes commercial interests;

e)   promotes illegal or unethical activities; and

f)   Is in contravention of this *Policy*.

9.4.3   Continued breach of this *Policy* will result in the blockage/deletion and reporting of the offending individual or group.

10.   CRISIS COMMUNICATION

10.1   The *Municipality* will strive to avoid *crises*. This requires the Executive Mayor and City Manager to remain in touch with citizens, assess public mood, and conduct research/activities that may help to avert a *crisis*. Municipal communicators should be made aware of any potential *crisis* and should manage communication activities to avert or limit a potential *crisis*. The *Policy* provides the key communication actions and processes to follow in the event of crises.

10.1.1   Crisis Procedures

10.1.1.1   The *Municipality* must establish a Communication Crisis Committee.

10.1.1.2   The Communication *Crisis* Committee must formulate a *crisis* management strategy and plan.

10.1.1.3   A *crisis* communication plan must be attached to the local emergency operations plan so that there is a clear understanding of what steps to be taken in the event of a *crisis*, emergency or *disaster*.

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10.1.1.4   In instances where a *crisis* is transversal, no government institution should issue media statements that contradict another government department in the public domain.

10.1.1.5   A comprehensive set of *crisis* communication resources that can be used at the discretion of communicators to build, manage and maintain an effective issue and *crisis* management capability must be available.

10.1.2   Dealing with crises

10.1.2.1   Crises relating to the following transversal issues are classified as potential emergencies and must be immediately referred to the Executive Mayor and *City Manager:*
a)   Major emergencies and *disasters*.
b)   Issues affecting national security.
c)   Incidents impacting on the safety and well-being of local communities.
d)   Crises related to the communication of controversial issues or the unintended consequences of government communication or actions, including the actions of political/administrative structures/individuals.
e)   Crises emanating from the personal conduct of a municipal official.
f)   Early warning about possible crises or emergencies received relevant authorities which should be disseminated to key target audiences.

10.1.3   Crisis Protocol

10.1.3.1   The Director: Communications must: -

a)   Immediately be notified of an emerging or breaking *crisis* by the Executive Mayor/Speaker and/or City Manager of the *Municipality*;
b)   gather and verify information about the *crisis*, assess the severity of the *crisis*, and consider whether it should be escalated to another sphere of government (emergency/controversial issues) or managed at an institutional level;
c)   given the urgency of rapid communication, have the authority to begin taking action immediately with guidance, until a broader decision can be made about how the institution must proceed;
d)   form part of the *Crisis* Committee, Joint Operations Centre and establish a permanent representation;
e)   be responsible for developing the strategy and tactics on how information is to be released, who must speak for the institution on the issue, and which audiences are to be communicated with;
f)   identify the target audience, the multiple communication platforms, rapidly appoint a spokesperson and draft a holding statement;

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g)   communicate facts quickly, accurately and be open and accessible to all audiences, mindful of confidentiality, and legal and privacy considerations.

10.1.4   Crisis Spokespersons/s

10.1.4.1   The Executive Mayor (politically) and the *City Manager* (administratively) is the official spokesperson during a *crisis*.

10.1.4.2   The Executive Mayor and/or the *City Manager*, in consultation with the Communications Director, must identify competent spokesperson/s, with the requisite knowledge and/or technical expertise, to provide specialist input to media responses or to speak as official representatives of the institution.

10.1.5   Working with the Media

10.1.5.1   All media enquiries relating to the issue must be directed to the *City Manager/*Communications Director/Spokesperson. In any *crisis*, regular media briefings will be held, accompanied by regular interviews.

10.1.5.2   Depending on the severity of the *crisis*, the Crisis Committee must decide on the frequency of the media briefings, whether hourly, daily, weekly or monthly.

10.1.5.3   All media enquiries must ideally be acknowledged within 30 minutes of receipt and then a more comprehensive response after facts have been established should be prepared. The more comprehensive responses must be given within a 24-hour turnaround time.

10.1.5.4   After releasing information, the Communications Director must monitor the news coverage and respond appropriately, where necessary.

10.1.6   Communication Approval Processes

10.1.6.1   The Communications Director and Joint Operations Centre should establish an approval process to fast-track decision-making during a *crisis*, emergency or *disaster*.

10.1.6.2   All approvals should adhere to a strictly agreed turnaround time, bearing in mind the quality and accuracy of information that must be made available.

10.1.7   Employee Communication

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10.1.7.1   The *City Manager* / Communications Director, working with the Corporate Services Directorate must inform employees of the issues relating to the *crisis*, using established internal communication channels, before or simultaneously with the details being released to external audiences.

10.1.8   Integrity of Communication

10.1.8.1   In all crisis communication endeavours, a balance must be struck so that the relevant facts appear in the public domain but do not cause unnecessary panic.

10.1.9   Informing Other Government Stakeholders

10.1.9.1   The Communications Director will arrange a stakeholder forum to keep all abreast of the *crisis* and the way it is being managed.

10.1.10   Social Media Use in a *Crisis*

10.1.10.1   It is essential that the institution have advanced social media strategies in place to be in a better position to manage social media when a *crisis* arises.

10.1.10.2   The *Municipality* should allocate a person who will be responsible for managing social media as part of *crisis* management. This person will be required to:
a)   develop a social media plan aligned to the *Crisis* Management Plan;
b)   ensure that measurement tools are in place to monitor engagement on social media sites and prepare adequate responses;
c)   ensure that information and updates are placed on the institution's social media sites and web-pages in a timely manner and that these are used as alert/feedback mechanisms to citizens;
d)   timeously respond to any social media activity.

10.1.11   Media Monitoring

10.1.11.1   The Communications Director must monitor international, national and regional print, broadcast and online media daily and maintain regular contact with the political principals/accounting officers, advising the leadership on emerging issues and how government is being portrayed that may result in a reputational *crisis*.

10.1.11.2   The Communications Director must accordingly maintain or adjust the communication response as needed to limit rumours, correct errors and maintain confidence in the institution.

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10.1.11.3   Summaries of relevant media coverage must be provided to the relevant directorate's senior leadership and the *Crisis* Management Team at least twice a day during a *crisis* situation.

10.13   Evaluation and Follow-Up

10.13.1   When the *crisis* is past, the Director: Communications must:

a)   organise a debriefing session with members of the Crisis Committee/Joint Operations Centre and prepare a close-out report;

b)   supply the Crisis Committee/Joint Operations Centre with a summary of news coverage relating to the *crisis*.

10.13.2   Members of these structures must review this report and evaluate the institution's performance "under fire". The team must note:

a)   overall success or failure of the crisis communication effort;

b)   problems to be avoided in the future;

c)   appropriate follow-up measures.

10.13.3   Attention also must be focused on identifying and implementing measures to improve the action plan used during the *crisis*.

11.   MEDIA MANAGEMENT AND ENGAGEMENT

11.1   The media must have equal access to information and must be engaged in a professional manner. Engagement of select media must be determined by the target audience that the *Municipality* is to reach.

11.2   The Communications Director or designated are the official points of entry for media into the *Municipality* on issues that are of a technical nature or relate to *policy* that has been adopted.

11.3   The Communications Sub-directorate must design and implement a proactive media relations strategy and plan and build and maintain relations with the media.

11.4   The following persons are authorized as media spokesperson/s:

(a)   The Executive Mayor / *City Manager* or delegate may speak on:

(i)   any issue within the *Municipality*, with a focus on strategy, *policy* and performance

(ii)   all matters that my impact the Municipality's image and standing

(iii) a *crisis*, emergency or *disaster* (refer paragraph 10)

(b) A Technical spokesperson delegated by the Executive Mayor and/or *City Manager*, in consultation with the Communications Director may speak on issues of a technical nature for which they have particular expertise.

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12. MUNICIPAL EMPLOYEES AS PRIVATE CITIZENS

12.1   Any media communication emanating from municipal employees in their private capacity (blogs, social media posts; letters to the editor) must subscribe to the Public Service Act, 1994 (Act 103 of 1994) and the Code of Conduct for Public Servants, and information acquired while on duty must not be used when voicing personal opinions. Inappropriate media engagement is discouraged. This refers to engagement that:

a)   brings the *Municipality*, its directorates or stakeholders into disrepute.

b)   undermines the integrity and reputation of the *Municipality*, its leadership or its stakeholders.

c)   presents a personal viewpoint as a position that is held by the Directorate.

d)   discloses sensitive/classified institutional information without proper authority.

e)   comments on pending or current legal issues relating to the institution.

12.2   Media communication representing the opinion of an employee, as a private citizen, on any matter or issue not associated with the *Municipality*, does not require any approval.

12.3   The opinions and comments of municipal communicators at a senior level – even in a private space – are likely to be seen as official by the media. Government communicators at this level therefore cannot engage in private communication on any platform or express views/opinions that would be seen as contrary to the official municipal position.

12.4   Where the media practitioner's opinion/comment is likely to be seen as official, this representation will require official approval from the NMBM Communications Director before it is submitted. These communication pieces may require further approval at a political level, and sufficient advance planning and coordination time is required.

12.5   Municipal communicators may not contradict the communication messages of another department or sphere of government within the media space.

13. RESPONSE AND LIASON STANDARDS FOR MEDIA ENQUIRIES

13.1   Traditional Media Platforms (Print, Broadcast and Online).

13.1.1   The *Municipality* must respect media deadline requirements and endeavor to   provide open and equal access to all news media.

13.1.2   Agreement should be reached between the media and the municipal spokesperson on deadline delivery times, and all changes to these agreements communicated.

13.1.3   Communication channels should be kept open at all times and the media updated on any of their pending media enquiries.

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13.1.4   Designated municipal spokesperson must be available and accessible as to deal with media enquiries and return calls timeously.

13.1.5   Media statements must be approved in consultation with the Executive Mayor / *City Manager*.

14.   HOUSE STYLE AND STANDARD FORMATS

14.1   Media releases, statements and advisories need to adhere to an agreed standard.   All communication issued to the media must be presented in plain language, in one of the three key local languages (IsiXhosa, English and Afrikaans), without compromising the accuracy of the message, and in a way that is understood by the target audience.

14.2   All email correspondence to the media, whether intended for publication or as a private note to the recipient, should be written in such a way that the correspondence does not bring the institution into disrepute if published by the media.

14.3   The tone, content and standard of language (grammar, spelling, etc.) of electronic correspondence with members of the media should always be constructed from a perspective that the correspondence may find its way into the public domain.

14.4   Short Message Service (SMS) abbreviations should not be used in any official correspondence and/or when interacting with the media.

15.   COMPLAINTS ABOUT MEDIA COVERAGE OR BEHAVIOUR

15.1   Any complaints from within the *Municipality* regarding the performance of the media must be made to the Communications Director, who will decide if any action is to be taken regarding such a complaint, which may include the following:
a)   An official letter to be sent to the media institution outlining the nature of the complaint and the recommended remedial action.
b)   If the Communications Director is not satisfied with the response from the media institution and the matter concerns media content, a complaint may be logged with the:
(i)   Press Council in a print media environment
(ii)   Broadcast Complaints Commission of South Africa in a broadcasting environment
(iii)   Digital Media and Marketing Association (DMMA) Code for online publishers/marketers and advertisers.

16.   OFF-THE-RECORD COMMENTS

16.1   No municipal employee will speak to the media "off the record", except the Executive Mayor / *City Manager*, or their Delegated Official/s.

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17. ROLES AND RESPONSIBILITIES OF THE VARIOUS STAKEHOLDERS

17.1 Political Principals

17.1.1 Political principals include the Executive Mayor, Deputy Executive Mayor, Speaker, Chief Whip and Members of the Mayoral Committee. They will:

a) account to the public on municipal policy, aims and objectives and report back on deliverables;

b) take responsibility for municipal communication; and

c) interact with the public to solicit views and input into municipal activities.

17.2 City Manager

17.2.1 The *City Manager* is the final authority, administratively on municipal communications and his/her performance agreement must include communication deliverables.

17.2.2 The *City Manager* will:

a) appoint the Communications Director who will then be responsible for ensuring that all other communication functions are adequately staffed;

b) ensure that there is an adequate budget for communication activities;

c) advocate for communication to be recognised as a strategic function;

d) ensure communication strategies are approved and implemented;

e) ensure that the Communications Director has the adequate skills and knowledge for the post;

f) provide oversight to the Communications Director function; and

g) assist with the delivery of information to specific forums and the general public when called upon to do so.

17.3 Media Management Officer

17.3.1 The function of a spokesperson is a delegated responsibility, delegated by the political authority and the *City Manager*. A spokesperson can be appointed for that role, or the function can be delegated to an individual.

17.3.2 A spokesperson must be articulate and promote and defend the decisions of the Council.

17.3.3 Such Council spokespersons must:

a) articulate the decisions of the Council.

b) chair post-Council media briefings and liaise with all relevant parties to ensure that issues that might have arisen in the environment are clearly articulated.

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c) inform Council of current issues in the environment that require intervention.

d) lead the communication of transversal or crisis communication campaigns.

e) provide advice and make recommendations on communications to the Executive Mayor and *City Manager*.

17.5   The Communications Director

17.5.1   The Communications Director is the most senior communications official in the *Municipality*. She/he straddles the communication function across the political and administrative entities, and is accountable / responsible for the overall communications function.

17.5.2   The Communications Director reports to the *City Manager* or his/her delegate.

17.5.3   The Communications Director must be included in the executive structure (Mayoral Committee) in the *Municipality*, to better articulate government *policy*, ensure that *policy* and programmes are communicated effectively, to present current affairs and to advise on the communication implications of deliberations.

18.   NMBM COMMUNICATION STRUCTURES

18.1   The coordination and integration of communications activities of the Nelson Mandela Bay *Municipality* will be achieved through the following internal and external structures:

a) Internal Communicators Forum

b) Nelson Mandela Bay Communicators Forum (Metro)

c) Intergovernmental Communicators Forum

d) Local Government Communicators Forum

e) Provincial Government Communicators Forum

f) Government Communicators Forum

18.1.1   Internal Communicators Forum (LCF)

18.1.1.1   The NMBM Internal Communicators Forum is composed as follows:

a) Communications Director (Chairperson);

b) A representative from each of the municipal directorates;

c) A representative from the Municipality's entities.

18.1.1.2   The NMBM Internal Communicators Forum is a meeting platform for key communication role-players from the various directorates and municipality entities to share information in order to promote a common understanding and ensure consistency in the messaging.

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18.1.1.3   The NMBM Internal Communicators Forum will report to the *City Manager* in respect of its activities.

18.1.2   Nelson Mandela Bay Communicators Forum (Metro Communicators Forum)

18.1.2.1   The Nelson Mandela Bay Communicators Forum is a strategic meeting platform of government communicators that is coordinated by the *Municipality*, with the assistance of the Department of Local Government and Traditional Affairs (DLGTA), the South African Local Government Association (SALGA) and Government Communications and Information Systems (GCIS).

18.1.2.2   Membership of the Nelson Mandela Bay Communicators Forum will comprise:
a)   The Executive Mayor (Chairperson);
b)   The NMBM Communications Director of the *Municipality*;
c)   Representatives of parastatals and government departments in the municipal area;
d)   Representatives of NMBM Internal Communicators Forum;
e)   Community Development Workers (CDWs).

18.1.2.3   The Nelson Mandela Bay Communicators Forum is responsible for:
a)   Assisting the *Municipality* with capacity and communication strategies.
b)   Coordinating the calendar of events for the *Municipality*.
c)   Ensuring that all government communication activities are streamlined across the municipal area to avoid duplication and waste of resources.

18.1.2.4   The Nelson Mandela Bay Communicators Forum will meet and report at least quarterly to the Executive Mayor on its activities.

18.1.2.5   The aims of the Nelson Mandela Bay Communicators Forum are coordination and information sharing to enable rapid response to critical challenges and emergencies. The Forum agenda should, *inter alia,* include*:*
a)   Assessing the communications environment, the public mood and the media agenda.
b)   Providing feedback from the Government Communicators Forum, Provincial Communicators Forum and other forums (such as the Mayor's Forum).
c)   Conducting reviews of the NMBM Communications Strategy.
d)   Compiling the communications programme, including input from all three (3) spheres of government (usually guided by theme months and the communication cycle of each sphere).
e)   Hosting special discussions on iimbizo, Mayoral outreach programmes and Mayoral/Council meetings with the people.
f)   Distributing communication and information resource material.

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g) Assessing the status of key national, provincial and municipal programmes.

h) Providing capacity building assistance to members of the Forum.

i) Ensuring effective monitoring systems of such forums through the relevant municipal intergovernmental relations (IGR) /Mayor's Forums.

j) Sharing success stories for wider dissemination.

18.1.3   Intergovernmental Communicators Forum (IGCF)

18.1.3.1   The Intergovernmental Communicators Forum is responsible for the strategic meeting of communicators at Eastern Cape provincial level.

18.1.3.2   The IGCF is coordinated by the Office of the Premier of the Eastern Cape, with the assistance of the Eastern Cape Department: Local Government and Traditional Affairs, the South African Local Government Association (SALGA) and Government Communication and Information System (GCIS).

18.1.3.3   The IGCF is composed of Heads of Communications within provincial departments, parastatals and municipalities.

18.1.3.4   The IGCF carries the following roles and responsibilities:
Sharing information and ironing out communication problems in the Eastern Cape Province.

a) Assisting with capacity building and profiling case studies.

b) Assisting with strategising for communication.

c) Meeting twice a year.

d) Reporting to the Office of the Premier: Eastern Cape on its activities.

18.1.4   Local Government Communicators Forum (LGCF)

18.1.4.1   The Local Government Communicators Forum:

a) Comprises representatives from the Eastern Cape Department: Local Government and Traditional Affairs, Office of the Premier: Eastern Cape, South African Local Government Association, and Eastern Cape municipal Heads of Communications.

b) Will meet on a quarterly basis.

18.1.4.2   The Local Government Communicators Forum will:

a) Ensure the implementation of a *developmental local government* communications system (working in collaboration with COGTA – electronic newsletters);

b) Ensure that districts work with local municipalities and meet annually; presenting on the performance of Communicators Forum (action plans implemented) and reviewing communications the plans/strategies;

c) Share ideas between members;

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d) Invite delegates of the Government Communications Information Systems, and specialists as speakers within the media field with a view to enriching Forum members.

18.1.5 Public Participation Structures / Forums

18.1.5.1 The *Municipality* supports development communication that:
a) is responsive to the needs of the community
b) provides for a two-way communication process where information is delivered, consultation held and feedback received. Public participation and direct interaction with communities forms the cornerstone of a developmental approach.

18.1.5.2 The communicators of the *Municipality* must plan for and engage in a number of direct communication activities as part of community outreach programmes.

18.1.5.3 Established structures that support development communication initiatives include the following:
a) Thusong Service Centres
b) Izimbizo
c) Councillors/Ward Committees and Community Development Workers

19. COMMUNICATION ENABLERS

19.1 Council Memos

19.1.1 The Council of the *Municipality* meets regularly to deliberate on municipal policies and programmes, and to reflect on key issues emerging from within the environment.

19.1.2 A Communication Plan must be attached to the Council memo and must outline internal and external activities that support effective communication around the content contained in the memo.

19.1.3 Where Council makes a pronouncement that affects the *Municipality*, the Communications Director must manage the implementation of the Communications Plan.

20. POLICY REVIEW

20.1 This *Policy* will be reviewed every five years or sooner, if and when deemed necessary, in accordance with the monitoring and evaluation processes of the *Municipality*.

APPENDIX F: Recommendations to the Municipality

Introduction

The purpose of this report is to present recommendations to the municipality regarding the current state of social media and steps that could be taken to ensure a more effective use of social media in engaging citizens of the Nelson Mandela Bay Municipality. The recommendations have been made after interviews with employees in the communications department, who are responsible for social media within the municipality. Information provided during these interviews have been analysed in combination with results of a content analysis of the municipality's social media pages. These recommendations have been aligned to the needs of the Nelson Mandela Bay Municipality.

Recommendations

I proffer the following recommendations after carrying out a content analysis on the municipality's social media platforms and interviewing some members of the social media team.

Appointing a Social Media Champion

A social media champion is needed to promote social media within and outside the municipality. A top-level government official needs to serve as the champion, especially since resistance from individuals within the organisation has already been identified. This person should ideally be familiar with social media and have a passion for the technology. The champion should also be familiar with the organisational hierarchy and personnel that need to be involved with social media.

Obtaining Top Management and Political Support

To successfully implement social media in the municipality, it is necessary to obtain support from top management and politicians. This is because their support will ensure resources are provided for social media activities. Top management support will also encourage cooperation with horizontal departments such as service delivery departments which has been cited as an on-going challenge for the social media team.

Obtaining Support from Horizontal Departments

The most important feature of social media is the content it provides to citizens. Content must be accurate, relevant and timely; this requires collaboration between all departments in the municipality. The communications department must obtain support for their social media activities from horizontal departments, especially the service delivery department. To achieve this, the communications department will need to develop a marketing strategy for social media that targets these departments.

Training the Social Media Team

Interviews with the social media team revealed that there has been no formal training provided for social media. The world of social media changes at a fast pace; new platforms are developed; new features are added to existing platforms, and new interfaces are designed for existing platforms. Hence, the social media team should be provided with regular training to ensure the platforms are used effectively.

Developing a Social Media Strategy

The social media strategy provides an all-embracing guideline for social media use. It lays down the objectives of social media use, the target audience, and type of content to be shared. In creating a strategy, the existing communications strategy and municipality's mission need to be considered.

Create policies and guidelines

Formalised policies and rules reduce the risk and uncertainty that comes with using new technologies in an organisation. Policies and rules provide structure and support in using these technologies. Some of these structures include stating the roles and responsibilities of the users which will promote accountability in using the technology. Policies to guide citizen interactions should also be provided. Citizens should be informed of the organisation's rules of interaction and penalties for not abiding by them.

Plan Content

The content to be posted on social media needs to be planned and relevant to citizens. Posts should no longer be at the discretion of individual team member but must be consolidated and aimed towards achieving the municipality's objectives. The content provided should give citizens a reason to engage with these social media platforms. The municipality can either decide to reuse content from other sources or curate original content for social media (Mergel, 2017).

Make Posts Accessible to Local Language Speakers

The Nelson Mandela Bay Municipality is multi-cultural in terms of languages spoken. To ensure inclusion of all citizens, social media posts should be available in all of these languages. It might not be possible to translate all post but essential posts such as those related to service delivery should be translated. In addition, where citizens comment in their local language the municipality should respond in that language, so citizens are not inadvertently offended.

Involve Citizens as Content Producers

Social media allows citizens co-create content with organisations due to their user-generated content characteristic. This is unlike platforms such as websites where the information provided is one sided.

The municipality can take advantage of this feature of social media to engage citizens in information provision. Citizens could be invited to produce blog content, provide pictures and share personal stories related to the municipality.

Use Call to Actions in Every Post

A call to action prompts an action from citizens, thereby encouraging their engagement with the content posted on social media. Call to actions can include links to external websites, requests for comments, likes or shares and requests for subscriptions. These call to actions should be included in every post and made visible to citizens.

Assimilate Social Media into Public Participation Activities

Institutionalising social media in the municipality involves incorporating it into regular public participation activities. Several activities can be supported by social media such as using online polls alongside offline citizen's satisfaction surveys and deliberative polling, live streaming features of social media platforms can be used to broadcast council and public meetings. Social media integration with traditional participation channels will ensure the digital divide does not become a hindrance to participation.

Continually Monitor all Platforms

Based on the interviews held with some of the communications department employees, it has been noted that the social media platforms used by the municipality are not monitored all the time. The municipality should come up with a schedule that ensure at least one employee is responsible for monitoring these platforms at each point in time. This schedule should be organised around the daily responsibilities of each employee to prevent situations where the responsible employee is busy with other assignments.

In this regard, the municipality also needs to ensure that feedback is provided to every comment made by citizens, especially when a question is asked. This would endear the municipality to citizens, thereby increasing trust.

Keep Abreast of National Policies and Guidelines

The municipality's social media tactics need to be in line with the decisions made at the national level of government. This means that the municipality has to appoint an individual who will monitor policies and guidelines set out by the national government and ensure the municipality is compliant.

Measuring Impact

The purpose of measuring impact is to provide evidence to top management and politicians about the usefulness of social media in the municipality and encourage further investments in these platforms. Measuring impact also ensures the social media strategy being used produces the outcomes expected.

Social media platforms provide analytic tools (Google Analytics, Twitter Analytics and Facebook Insights) that allow organisations measure their social media impact. It is recommended that these tools are used on a regularly basis by the communication department. The metrics that can be measured are listed in Table F-1. The municipality can also invest in analytics software such as TweetDeck and Hootsuite. Training will need to be provided to the communications team on how to use these tools effectively.

Table F-1: Metrics for Measuring Social Media Model Effectiveness

Social Media Strategy	Metrics
Push strategy	- Number of followers - Number of likes - Unique visits to blogs - Views on YouTube or Flickr - Livestreaming views
Pull strategy	- Shares and Retweets - Comments - Demographic data - Ratings and reviews - Response to polling
Networking strategy	- Membership requests on LinkedIn - Subscriptions to blogs and YouTube - Downloads of videos and documents - Direct messages to social media accounts - Content contribution

Citizen Education

Technology literacy is essential to citizens' use of social media. The municipality should develop education programmes that will enhance the technology skills of citizens and encourage their use of social media.

Conclusion

The recommendations made in this report are essential for the municipality to use social media effectively in interacting with citizens. The recommendations are based on research carried out in support of a PhD research project and are based on information by academics and social media

professionals. The researcher will be working closely with the municipality in the future to ensure these recommendations are implemented.

Author: Ifeoluwapo Fashoro

Date: 06/07/2017

APPENDIX G: Evaluation Questions

What do you think of the social media model for public participation in relation to:

1. Relevance

How relevant is the model to the adoption of social media by local municipalities? How important is the relevance or significance of the social media model regarding public participation in local municipalities via social media?

2. Effectiveness

Are the objectives of the social media model achieved? Does the social media model address the objectives set out? Does it provide a structured and effective approach to using social media for public participation?

3. Efficiency

Are the objectives achieved economically by the social media model?

4. Impact

Does the social media model contribute to achieving the municipality's goals for public participation?

5. Sustainability

Are the positive effects or impact of the social media model sustainable?

APPENDIX H: Conf-IRM 2016 Conference Paper

2016

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

Ifeoluwapo Fashoro
Nelson Mandela Metropolitan University, s215283317@nmmu.ac.za

Lynette Barnard
Nelson Mandela Metropolitan University, lynette.barnard@nmmu.ac.za

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

Ifeoluwapo Fashoro
Nelson Mandela Metropolitan University
s215283317@nmmu.ac.za

Lynette Barnard
Nelson Mandela Metropolitan University
lynette.barnard@nmmu.ac.za

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 tele-centres 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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APPENDIX I: 4th ECSM 2017 Conference Paper

Motivations for Adopting Social Media as a Tool for Public Participation and Engagement in Nelson Mandela Bay Municipality

Ifeoluwapo Fashoro, Dr Lynette Barnard

Computing Sciences Department, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa
s215283317@nmmu.ac.za
lynette.barnard@nmmu.ac.za

Abstract: Social Media platforms have become ingrained in most aspects of life. These platforms have impacted individuals, businesses, and governments. Social Media is a driving force behind the move to open, collaborative government and transformations in public participation and engagement. Participation and engagement are key responsibilities for local governments since these responsibilities are concerned with the day-to-day needs of the community. To meet these community needs, it is therefore important for the local government to explore new avenues for interacting with citizens.

In Sub-Saharan Africa, local governments are slowly embracing the use of Social Media as a tool for public participation and engagement. This study explores the current interaction patterns of citizens and motivations for participation and engagement via Social Media in the Nelson Mandela Bay Municipality, in South Africa. The study is part of a larger research project that seeks to work with the municipality in adopting Social Media for public participation and engagement. A quantitative survey was done based on the Uses and Gratification Theory. A review of literature suggested possible gratifications for using Social Media; these are factors that meet user needs while they engage on Social Media. A randomly selected sample of 125 respondents participated in this study, 95% of whom indicated they had Social Media accounts. The result of this study indicates that surveillance, diversion and convenience are associated with citizens' intention to use Social Media while personal identity has no association to intention to use Social Media.

The results of this study will help the municipality align their Social Media strategy for participation and engagement with the motivations of citizens as well as current interactions between the citizens and the municipality.

Keywords: Social Media, Participation and Engagement, Uses and Gratifications Theory, E-government, E-participation

Introduction

In the past, interactions between the government and citizens were based on service delivery or providing information to citizens. The nature of these interactions has changed over time with the introduction of Information and Communication Technologies (ICT). Interactions have become bi-directional; citizens' voices are included in the political process in ways that go beyond voting; in some instances, citizens provide goods and services.

ICT in government has reformed public services, established responsive public administration systems and provided platforms for the involvement and empowerment of citizens (Chun, Shulman, Sandoval, & Hovy, 2010; United Nations, 2014). A technological trend that has been identified in the improvement of government-citizen interaction is Social Media (Nam, 2012; United Nations, 2014).

With the introduction of technology into a new environment there is a need to understand the driving force behind users' adoption and continuous use of that technology. Social Media acceptance and adoption have been studied extensively using a variety of theories like Technology Acceptance Model, Innovation Diffusion Theory, Theory of Reasoned Action, and Theory of Planned Behaviour. This paper will be looking at user adoption of Social Media for interaction with the local municipality through the lens of the Uses and Gratifications (U&G) Theory. This theory has been selected because it is rooted in media and mass communications studies and has been prescribed by several researchers (Lariscy, Tinkham, & Sweetser, 2011; Xu, Ryan, Prybutok, & Wen, 2012) in studying adoption of Internet applications, especially Social Media.

The primary aim of this paper is to investigate citizens' adoption of Social Media as a tool for engaging with their local government through the application of the U&G theory. The insight into why citizens adopt Social Media

for engagement with the government has the potential to help the municipal government focus their implementation efforts. The study focuses on citizens in the Nelson Mandela Bay (NMB) Municipality in South Africa. The U&G theory gratifications applied in this study are surveillance, personal identity, diversion, and convenience utility.

The rest of the paper is structured as follows: First, existing literature on Participation and Engagement, Social Media, and the Uses and Gratification Theory are reviewed. This is followed by a description of the study's research methodology. The result of the study is then presented. Finally, implications and directions for future research are identified.

Literature Review

Public Participation and Engagement

Public participation and engagement in the context of this study will refer to the two-way communication between governments and citizens; this will include information provision by both parties and extend to decision-making processes of local governments. Participation and engagement are defined 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 and service delivery.

In recent years, most democracies have experienced a shift in the paradigm of government, where citizens are provided access to government information, partake in government and are no longer just consumers of government services (Bonson, Torres, Royo, & Flores, 2012; Nam, 2012). This shift has been encouraged by agencies like the World Bank and UN; who have acknowledged participation and engagement as a medium for sustainable development (Piper & von Lieres, 2008; United Nations, 2014).

Participation and engagement makes democracy inclusive and accessible by broadening the range of citizens involved in governance (Friedman, 2006; Mzimakwe, 2010; Nam, 2012). Citizens are equipped to provide the government with ideas, collective knowledge and population expertise, as well as communicate to government about important issues in their communities (Chun et al., 2010; Mzimakwe, 2010). Consequently, government's focus on significant projects and policies in the community is guided by citizens and this improves government decision-making. Participation and engagement, therefore, makes the government more effective and "strengthens the legitimacy of the political process" (Galbraith et al., 2013).

Participation and engagement can be challenging to implement due to factors like poor implementation of policies, poverty, lack of education, time pressure, poor design of public spaces and lack of will among politically influential individuals (Denhardt, Terry, Delacruz, & Andonoska, 2009; Piper & von Lieres, 2008). ICT has been identified as a way to overcome some of these challenges by enabling communication on platforms that are interactive, inclusive and cost effective (Phang & Kankanhalli, 2008). ICT tools offer advantages over traditional participation and engagement channels by transcending the time and space barriers of offline channels and allowing citizens to participate at their convenience; anytime and anywhere (Phang & Kankanhalli, 2008). Participation and engagement through ICT broadens the range of voices involved in governance by the inclusion of new actors and creation of new spaces for engagement (Nam, 2012). These spaces reference technology platforms like chatrooms, online feedback forms, email, and blogs. Social Media have been identified as technological platforms that improve participation and engagement (Nam, 2012; United Nations, 2014).

Social Media

Social Media refer to a set of Internet-based applications and tools that allow efficient connections, relationship building and the creation and exchange of user generated content (Kaplan & Haenlein, 2010). These applications and tools are centred around communication and interactions on an individual, community and societal level. Social Media technologies include social networking sites, blogs, wikis, social tagging, social bookmarking, Really Simple Syndication (RSS) and other forms of collaborative tools. Social Media websites are some of the sites most visited around the world.

Social Media Affordances

Social Media offer several affordances that encourage their adoption and continuous use in different contexts. In this section, the affordances that have been linked to media use gratifications will be discussed.

- *Self-expression and Identity Management:* Social Media appeal to the innate nature of humans to belong to a community; it creates and strengthens connections (Erickson, 2014). Belonging to a community requires that users identify with the members of this community and share similar interests with them. Identity management through Social Media enables users to represent themselves in a favourable way within their online communities. Social Media also provide opportunities for identity management through features like profiles, pictures, comments, status updates and other shared information (Farnham & Churchill, 2011). Through Social Media individuals are empowered to express creativity and are given a voice.
- *Diversion:* Diversion describes using Social Media for entertainment, relaxation and passing time. These platforms allow uploading of media of various types like images, videos, and audio files; these make an ideal source of entertainment for users. The capacity of Social Media to provide a diversion from the real world and take up time is a major reason for their ban in many organisations.
- *Information Seeking and Surveillance:* Social Media give people the perfect opportunity to partake in anonymous voyeurism; observing what is going on in their online communities without contributing (Kaplan & Haenlein, 2011). Social Media have become the preferred source of information for users. This information could be of a personal nature where individuals keep up-to-date with the happenings in the personal lives of friends and family or general news in areas like politics, business, and the environment.
- *Convenient Communication:* Social Media overcome time and cost barriers, allowing citizens to interact at their convenience; anytime and anywhere (Bertot, Jaeger, Munson, & Glaisyer, 2010; United Nations, 2014). Most Social Media platforms are free to use if Internet connectivity is available. These platforms also conveniently provide support for mobile technologies (cellular phones and tablets).

Social Media in Government

Government agencies are under pressure to adopt Social Media due to expectations of citizens (Nam, 2012). This perceived pressure has led to a gradual adoption of Social Media by governments around the world, with 152 countries using Social Media in some capacity (United Nations Department of Economic and Social Affairs, 2016). The role of Social Media in governance is described as introducing citizen-created content that augments the socio-political debate, increasing opinion variety and encouraging free flow of information (Bonson et al., 2012).

Social Media are enablers in the move towards an open, collaborative, and cooperative government. These platforms enable government agencies in making decisions in a timely fashion due to their ability to promote immediate dialogue (Bertot, Jaeger, Munson, et al., 2010; Lee & Kwak, 2012). Social Media adoption has led to a paradigm shift in government; a new pattern of information-sharing. This is described as a shift from a need-to-know to a need-to-share basis (Mergel, 2013). Governments are voluntarily providing information to citizens without the need for requests or the compulsion of laws like the Freedom of Information Act (Mergel, 2013). Consequently, this shift has led to an increase in transparency and accountability in government and a reduction in corruption (Bertot, Jaeger, & Grimes, 2010).

Social Media provide cost effective and easy to use platforms for engagement. These platforms reduce time and effort required to physically distribute information and mobilise citizens to participate in policymaking. Citizens are comfortable using these platforms since they employ them in their private lives. It has been suggested that engaging with citizens on a platform where they are free and comfortable to express themselves might encourage their participation in governance (Bonson et al., 2012; Friedman, 2006; United Nations, 2014). The need for citizens to visit government websites, which have a reputation of being cumbersome, is eliminated. The success of Social Media as a tool for engaging with local government is dependent on certain factors which could be internal or external to the government organisation. These factors include;

- *Access to Internet:* The use of Social Media is predicated on access to the Internet (Bertot, Jaeger, Munson, et al., 2010). These technologies require high speed Internet for creating, uploading, and downloading information.
- *Demography:* Demographic factors like age and level of education influence use of Social Media. The younger generation are the core users of Social Media platforms and the level of education determines citizens' ability to use these platforms (Bertot, Jaeger, & Grimes, 2010).

- *Technology literacy:* Apart from having access to Internet technologies, citizens should also be able to use these technologies and be literate in order to understand information provided by the government and make informed decisions (Bertot, Jaeger, & Grimes, 2010).

Uses and Gratifications Theory

The U&G theory has its foundation in media and mass communications studies (Katz, Blumler, & Gurevitch, 1974; Ruggiero, 2000). The premise of U&G theory is that users seek out media that meets their social and psychological needs and leads to ultimate gratifications (Lariscy et al., 2011; Lee & Ma, 2012; Xu et al., 2012). These gratifications are what predict adoption and continuous use of one media over an alternative. The theory highlights that motives, attitudes and behaviours related to media use will vary based on individuals and groups (Papacharissi, 2008). Users are seen as being active in selecting the media they use and having an understanding of their needs (Ancu & Cozma, 2009).

One of the earliest applications of U&G theory is in the area of political research; it was used to study the motivations for seeking political information through media by Blumler and McQuail in 1969 and McLeod and Becker in 1974 (Lariscy et al., 2011). Gratification themes identified in past political research include surveillance, information seeking, guidance, social utility, convenience utility, entertainment, and personal identity (Gil de Zúñiga, Jung, & Valenzuela, 2012; Kaye & Johnson, 2002; Whiting & Williams, 2013).

With the advent of Social Media and computer mediated communication systems, there has been a rise in the application of U&G theory in research. U&G theory has been prescribed for the study of these systems based on one of its premises; that audiences are active in their use and selection of media. Internet and Social Media use require the active engagement of users by clicking on links, scrolling, or searching unlike media like television where users simply passively engage with the televised content (Kaye & Johnson, 2002).

The U&G research process has been streamlined to only include the survey process, using modified instruments from past research. This is due to the extensive number of gratifications that have been identified since the onset of U&G research (Sundar & Limperos, 2013). In reviewing U&G research of both old and new media, Sundar and Limperos (2013) found that there are overlapping gratifications, hence the reuse of survey instruments from past research.

Research Method

Based on findings from literature, this study followed the quantitative research technique for collecting and analysing data. An exploratory study was conducted to measure perceptions of citizens regarding the use of Social Media for interacting with the government. This was done by administering a questionnaire in the NMB Municipality in South Africa where the use of Social Media is being extended beyond propagating government information. The questionnaires were self-administered online and in person. The questions were the same for both methods of administration. The first objective was to understand the citizens' use of Social Media in general as well as their interaction with the government while the second objective was to explore the motivations for using Social Media to interact with the government. The following hypothesis will be tested regarding the association with the selected gratifications and citizens' intention to use Social Media for participation and engagement:

Gratification	Hypotheses
Surveillance	H_0 There is no association between surveillance and intention to use Social Media. H_1 There is an association between surveillance and intention to use Social Media.
Convenience	H_0 There is no association between convenience and intention to use Social Media. H_1 There is an association between convenience and intention to use Social Media.
Diversion	H_0 There is no association between diversion and intention to use Social Media. H_1 There is an association between diversion and intention to use Social Media.
Personal Identity	H_0 There is no association between personal identity and intention to use Social Media. H_1 There is an association between personal identity and intention to use Social Media.

Table 1: Gratifications and research hypotheses

Sampling

The sampling method applied was convenience sampling due to inaccessibility of a sample frame. A randomly selected sample of the NMB municipality population was targeted. The targeted sample size was 165, but the survey yielded 125 responses, representing a response rate of 76%. Responses from 16 people were eliminated because they did not answer the uses and gratifications questions. This resulted in a total sample of 109 participants.

Instrument

The research instrument was developed to measure participants' gratification for using Social Media to engage with their local government based on uses and gratifications scales obtained in reviewed literature. Other sections of the questionnaire measured Social Media use, interaction with the municipality, as well as demographic information. The uses and gratifications constructs measured in the survey are surveillance, diversion, personal identity and convenience utility. These measures have been used in several Social Media and political gratifications studies. Table 2 presents descriptions of each construct and the items measured under each.

Gratification	Description	Items
Surveillance (Gil de Zúñiga et al., 2012; Whiting & Williams, 2013)	Social Media use for monitoring other people's activity and being informed on what others are doing.	To keep up with current issues and events
		To understand what's going on in local government
		To keep up with legislation
		To keep up with other people's opinion on local government
Diversion (Ko, Cho, & Roberts, 2005; Quan-Haase & Young, 2010)	Social Media use for entertainment, passing time or diverting attention.	To be entertained
		To pass the time when I don't feel like doing anything else
		Because I am curious about it
		Because it is trendy
		Because it is enjoyable
Personal Identity (Gil de Zúñiga et al., 2012; Ko et al., 2005; Whiting & Williams, 2013)	Social Media use for reputation building and enhancing others opinions of you.	To broaden my knowledge base
		To give me interesting things to talk about
		To get support for my ideas
		To share my feelings, views, thoughts and experiences
		To meet people with the same interests (e.g. same political party)
Convenience Utility (Ko et al., 2005; Papacharissi & Rubin, 2000)	Social Media use based on its expediency for interact with the municipality compared to other options of interaction.	Because it is easier than other methods of engagement (e.g. town hall meetings)
		Because I can express my opinions freely
		Because I can get what I want for less effort
		Because I can use it anytime, anywhere
		Because it is cheaper

Table 2: Social Media Gratification Items

Data Analysis

Statistical analysis was carried out to examine the relationship between the identified gratifications and user intention to use Social Media in interacting with the municipality. The gratifications are therefore the independent variables and user intention is the dependent variable. Data analysis was done using the Pearson Chi-square test. Figures 1 – 4 and Table 3 present the contingency tables and chi-square statistics for tests conducted. The results of these tests will be discussed in the next section.

Findings and Discussion

Most participants (95%) use one form of Social Media with WhatsApp (94.5%), Facebook (78.9%), YouTube (45%), Twitter and Google+ (both 39.5%) being the most common platforms. This is a positive result for NMB municipality as they currently focus their Social Media efforts on Facebook, Twitter and YouTube. Participants are technology literate and have access to the Internet, since 37% of participants reported they had been using Social Media for more than seven years, followed closely by 36% of participants who reported that they have used Social Media for 5-7 years; technology literacy and Internet access are factors affecting Social Media use in government as discussed above. Mobile phones (64%) are the most popular device for use; this supports reports by Radovanovic (2014) on mobile enabled Social Media empowering users to overcome the digital divide that exists in traditional participation and engagement.

Regarding interaction with the municipality, only 26% of respondents report ever interacting with the municipality. The most popular reasons for interaction are seeking information (26%), paying bills (16%) and lodging complaints (8%). Interaction with the municipality occurs electronically (38%) either by email, the municipal website or phone/fax. Although interaction with the municipality is not prevalent among respondents, there might be an opportunity for the municipality to change this since the most popular reasons for interaction can be supported by Social Media. Respondents also prefer to interact electronically and since most respondents are active on Social Media they may be open to this avenue of interaction.

Using a table of critical values, the critical chi-square statistic values for surveillance, convenience, personal identity and diversion are 17.53, 7.34, 5.53 and 26.12. These values are based on the p values and df (degrees of freedom) in Table 3. Comparing these values to Table 3, the null hypothesis for surveillance is rejected, therefore there is an association between surveillance and intention to use Social Media. The null hypothesis for convenience is also rejected, signifying a relationship between convenience and intention to use Social Media. The null hypothesis for personal identity is accepted, suggesting there is no association between personal identity and intention to use Social Media. Finally, the null hypothesis regarding diversion is also rejected, signifying an association between diversion and intention to use Social Media.

Statistic	Chi-square	df	p
Surveillance			
Pearson Chi-square	18.30423	df=8	P=0.01906
M-L Chi-square	16.12656	df=8	P=0.04060
Convenience			
Pearson Chi-square	7.86570	df=8	P=0.44960
M-L Chi-square	10.78075	df=8	P=0.21443
Personal Identity			
Pearson Chi-square	5.943560	df=8	P=0.65355
M-L Chi-square	8.527809	df=8	P=0.38368
Diversion			
Pearson Chi-square	20.82233	df=8	P=0.00763
M-L Chi-square	18.80853	df=8	P=0.01592

Table 3: Statistics for gratifications by user intentions

The results indicate that personal identity is not an important factor when using Social Media for interaction with the government. Although this gratification was significant in other studies, the contrary result might be because the audience in this situation is impersonal and users are not seeking to build their personal reputation. The findings regarding surveillance, convenience and diversion are like past research. Based on the cross tabulations, 27.52% of respondents who "strongly agree" that *convenience* is a gratification, "agree" they *intend to use* Social Media for public participation and engagement, 20.18% who "agree" about *convenience* as a gratification also "agree" they *intend to use* Social Media and 12.84% who "strongly agree" that *convenience* is a gratification are "neutral" about their *intention to use* Social Media. Of the respondents who "strongly agree" *diversion* motivates their use of Social Media, 48.62% "agree" they have *intentions to use* Social Media, 16.51% "strongly agree" and 12.84% are neutral about their *intention to use* Social Media. *Surveillance* was indicated as a motivation to use Social media by 37.61% of respondents and these respondents "strongly agree" and "agree" they *intend to use* Social Media, 14.68% of respondents are "neutral" about *surveillance* but "agree" they *intend to use* Social Media and 11.93% "strongly agree" about *surveillance* but are "neutral" about their *intention to use* Social Media.

2-Way Summary Table: Observed Frequencies (CodedAggregate in CodedData) Marked cells have counts > 10			
IntentionAggregate2	ConvenienceAggregate2 Neutral	ConvenienceAggregate2 Agree	ConvenienceAggregate2 Strongly Agree	Row Totals
Strongly Disagree	0	0	1	1
Total %	0.00%	0.00%	0.92%	0.92%
Disagree	0	0	7	7
Total %	0.00%	0.00%	6.42%	6.42%
Neutral	3	7	14	24
Total %	2.75%	6.42%	12.84%	22.02%
Agree	6	22	30	58
Total %	5.50%	20.18%	27.52%	53.21%
Strongly Agree	3	7	9	19
Total %	2.75%	6.42%	8.26%	17.43%
Totals	12	36	61	109
Total %	11.01%	33.03%	55.96%	100.00%

Figure 1: Cross tabulation of Convenience by user intention to use Social Media

2-Way Summary Table: Observed Frequencies (CodedAggregate in CodedData) Marked cells have counts > 10			
IntentionAggregate2	DiversionAggregate2 Neutral	DiversionAggregate2 Agree	DiversionAggregate2 Strongly Agree	Row Totals
Strongly Disagree	0	0	1	1
Total %	0.00%	0.00%	0.92%	0.92%
Disagree	0	2	5	7
Total %	0.00%	1.83%	4.59%	6.42%
Neutral	3	7	14	24
Total %	2.75%	6.42%	12.84%	22.02%
Agree	0	5	53	58
Total %	0.00%	4.59%	48.62%	53.21%
Strongly Agree	0	1	18	19
Total %	0.00%	0.92%	16.51%	17.43%
Totals	3	15	91	109
Total %	2.75%	13.76%	83.49%	100.00%

Figure 2: Cross tabulation of Diversion by user intention to use Social Media

2-Way Summary Table: Observed Frequencies (CodedAggregate in CodedData) Marked cells have counts > 10			
IntentionAggregate2	IdentityAggregate2 Neutral	IdentityAggregate2 Agree	IdentityAggregate2 Strongly Agree	Row Totals
Strongly Disagree	0	0	1	1
Total %	0.00%	0.00%	0.92%	0.92%
Disagree	0	0	7	7
Total %	0.00%	0.00%	6.42%	6.42%
Neutral	2	7	15	24
Total %	1.83%	6.42%	13.76%	22.02%
Agree	3	20	35	58
Total %	2.75%	18.35%	32.11%	53.21%
Strongly Agree	2	6	11	19
Total %	1.83%	5.50%	10.09%	17.43%
Totals	7	33	69	109
Total %	6.42%	30.28%	63.30%	100.00%

Figure 3: Cross tabulation of Personal Identity by user intention to use Social Media

2-Way Summary Table: Observed Frequencies (CodedAggregate in CodedData) Marked cells have counts > 10			
IntentionAggregate2	SurveillanceAggregate2 Neutral	SurveillanceAggregate2 Agree	SurveillanceAggregate2 Strongly Agree	Row Totals
Strongly Disagree	0	0	1	1
Total %	0.00%	0.00%	0.92%	0.92%
Disagree	0	2	5	7
Total %	0.00%	1.83%	4.59%	6.42%
Neutral	6	5	13	24
Total %	5.50%	4.59%	11.93%	22.02%
Agree	1	16	41	58
Total %	0.92%	14.68%	37.61%	53.21%
Strongly Agree	1	9	9	19
Total %	0.92%	8.26%	8.26%	17.43%
Totals	8	32	69	109
Total %	7.34%	29.36%	63.30%	100.00%

Figure 4: Cross tabulation of Surveillance by user intention to use Social Media

The municipality should prioritise strategies for transparency and accountability on Social Media by encouraging reporting of corrupt officials, posting information like budgets and government spending which allow citizens to track government activities. This plays up to citizens' *surveillance* and *convenience* gratifications. Engagement strategies that involve disseminating important information to citizens online could eliminate the need for physical visits to municipal offices, distribution of fliers, posters and even town hall meetings. With features, like Facebook live streaming and Twitter's Periscope citizens could have access to public, stakeholder and council meetings thereby meeting the *diversion, convenience* and *surveillance* gratification. The results show that NMB municipality can foster public participation and engagement through the implementation of Social Media focusing on strategies that meet citizens' needs.

Conclusion

This paper sought to identify motivations for adopting Social Media as a tool for public participation and engagement in the NMB municipality in South Africa using the Uses and Gratifications theory. A literature review carried out identified the most common gratifications in political and Social Media research. Based on these a quantitative survey was administered amongst citizens of the municipality. The study identified surveillance, diversion and convenience as gratifications related to intentions to use Social Media while personal identity was not related to intention to use. Electronic channels were identified as preferences for respondents which might be a positive indicator for Social Media adoption. Survey respondents indicated their use of Facebook, Twitter and YouTube which are the platforms NMB municipality efforts are currently focused on.

By identifying gratifications for Social Media adoption, the municipality can focus on participation and engagement strategies that are aligned to these gratifications. This ensures that citizens utilise Social Media in interacting with the municipality and the municipality's efforts are not futile. Further studies will entail developing participation and engagement strategies that are aligned to gratifications identified in this study.

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APPENDIX J: SAICSIT 2017 Conference Paper

Challenges to the Successful Implementation of Social Media in a South African Municipality

I. Fashoro
Department of Computing Sciences
Nelson Mandela University, P. O. Box 77000
Port Elizabeth 6031
+27 (0) 41 504 2088
s215283317@nmmu.ac.za

L. Barnard
Department of Computing Sciences
Nelson Mandela University, P. O. Box 77000
Port Elizabeth 6031
+27 (0)41 504 2859
lynette.barnard@mandela.ac.za

ABSTRACT

Social Media has been embraced by government agencies around the world as a tool to transform interaction with citizens and enhance public participation. The selected municipality has adopted Social Media in such a capacity, however, it has been faced with challenges in their efforts. This paper explores the challenges in Social Media adoption in this municipality based on interviews with the Communications department who are responsible for both offline and online communications. Using thematic analysis, five categories of challenges were identified; Information, Administrative, Legal, Social and Economic, and Technological. The study reveals a lack of leadership support at the municipality being the biggest obstacle to change; other challenges are closely linked to this issue. This study contributes to the current discussion on Social Media adoption in South African government and is a positive step towards developing a solution to its successful and effective implementation.

CCS CONCEPTS

• Information systems ~ Information Systems application ~ Collaborative and Social Computing systems and tools

KEYWORDS

Social Media; E-government; public participation and engagement; E-participation

1 INTRODUCTION

Local government is at the forefront of understanding the needs of citizens and communities, it is therefore tasked with delivering primary services directly to citizens and developing communities. Service delivery entails the provision of public goods and services such as safety and security, health, and social welfare to citizens [14].

These services are aimed at improving the quality of life of citizens. In order to enhance public service delivery, the government needs to establish a way to communicate with citizens and engage citizens in discussions about what services are relevant to them. Interaction with the public is necessary to achieve responsiveness in service delivery [14]. Consequently, mechanisms that allow direct citizen involvement are employed more by local governments than any other level of government [27].

Social Media are currently employed by local governments around the world to engage with citizens. These technologies allow two-way interaction online which enhance dialogue between citizen and government. Social Media have been identified as the driving force behind recent transformation in public participation and engagement [11] and have bolstered public participation and engagement by providing tools that support open communication and collaboration. However, the effective implementation and adoption of Social Media can be challenging and like many Information and Communication Technology (ICT) implementations in government, can be perceived as not delivering on expectations.

Some of the challenges faced in implementing ICT in government are problems of poverty, ICT skills shortage, digital divide, lack of ICT infrastructure, language barriers and lack of usability of E-government systems [4–7]. This is especially true for South Africa with its population diversity and history. South Africa has eleven official languages and a diverse racial composition; made up of Blacks, Whites, Coloureds and Asians. These are further divided into groups based on language with the black population having nine dominant ethnic groups and the white population made up of two groups; the Afrikaans speaking and the English speaking groups [17]. A large portion of the South African population live in rural areas with limited access to ICT infrastructure, the gap between the rich and poor is continuously increasing and there exists a shortage in ICT skills [4], [8–10].

Social Media implementation has been studied extensively in developed countries. Nevertheless, according to Schuppan [33], though the eGovernment discourse may be similar in every country, problems of eGovernment in developing countries differ due to factors unique to these countries. The research project which this study is linked to is a case study research that explores Social Media use from both the citizen and municipal perspectives using surveys, interviews and content analysis of municipal Social Media pages. The scope of this paper is however limited to the perspectives of the municipality. Findings on motivations for citizens using Social Media within the selected municipality can be found in the paper [16]. This study aims to understand the challenges encountered by South African municipalities in implementing Social Media for engagement with their citizens from the perspective of municipal employees.

The rest of this paper provides a background to the study which is followed by a literature review that further contextualises the study. The research methodology will be presented and the findings discussed. The last section of the paper draws conclusions from the findings.

2 BACKGROUND

The case study municipality is one of the eight Category A or metropolitan municipalities in South Africa. Metropolitan municipalities are responsible for all functions of local government in cities as opposed to district municipalities that hold responsibilities for rural areas [34]. According to the South African constitution metropolitan municipalities are set up in "centre[s] of economic activity", areas "for which integrated development planning is desirable", and areas with "strong interdependent social and economic linkages" [12].

This municipality was selected based on an initial analysis of all South African municipal web pages. The presence of the municipality on Social Media and the extent of its use were deciding factors coupled with the proximity of the municipality to the researcher. Some of the municipalities considered either did not have Social Media accounts or these accounts were inactive. The selected municipality is active on Social Media but has not gone beyond the information dissemination stage.

According to the most recent official census in 2011, the municipality has a population of 1, 152,115 with 69.04% of the population being between the ages of 15 and 69. This demographic falls within the base age of Social Media users which has been identified as 16-64 years old [13].

The Communications department of the municipality is responsible for their Social Media platforms. The municipality currently uses Facebook and Twitter as standard Social Media platforms to engage citizens in the municipality and is further exploring the use of YouTube and Instagram in the future. The municipality employs a push strategy in their engagement which entails broadcasting information on Social Media [26].

3 LITERATURE REVIEW

Existing literature will be explored in this section in order to provide context to the study presented in this paper. The section will include discussions on Social Media, giving examples of Social Media applications, and describing its characteristics (Section 3.1). The discussion will proceed to Social Media use in Government, focusing on opportunities and challenges experienced by governments around the world while using Social Media (Sections 3.2 and 3.3).

3.1 Social Media

Social Media refer to a set of Internet-based applications and tools that allow efficient connections, relationship building and the creation and exchange of user generated content [21]. Social Media applications and tools include social networking sites, blogs, wikis, social tagging, social bookmarking, Really Simple Syndication (RSS) and other forms of collaborative tools. These tools connect people and enable them to draw power from this connection, essentially, empowering people through technology [23]. Social Media enables the convergence of communication and information, allowing people to break through traditional barriers and creating new ways of interaction and information dissemination.

Social Media has been embraced by individuals and businesses at a rapid pace since the 2000s [22]. The use of Social Media is reported as common practise within organisations [36]. Businesses are leveraging Social Media for improved communication, collaborative problem solving, innovation and knowledge management [1]. Tools such as wikis, blogs, social networking sites and RSS are seeing increasing use by organisations both internally and externally to engage employees, customers, suppliers and partners [9].

Governments have recognised the potential Social Media has in redefining relationships with citizens and society. This has led to a gradual global government adoption of Social Media with 152 countries using Social Media in some capacity [37]. Some government agencies have admitted to adopting Social Media simply so they can seem attractive to the public while others indicated these tools foster collaboration, allows the instant sharing of information, and the building of an online community [29]. Whatever the reasons given by government agencies, the adoption of Social Media is encouraged by researchers, who advocate governments engage with citizens on platforms where they are, rather than expect them to visit government websites and portals [24–27].

3.2 Social Media and Digital Government

Digital government aims to alter the relationship between government and citizens by potentially improving interactions and dialogue. Social Media platforms present new opportunities that could reinvigorate local governance [15]. The role of Social Media in governance has been typified as introducing citizen-created content that augments the socio-political debate, increasing opinion diversity and encouraging the free flow of information. Furthermore, Social Media is an enabler in the shift towards an open, collaborative and cooperative government [7].

Three potential key opportunities offered by government use of Social Media have been posited [4]:

- Democratic participation and engagement involves the use of Social Media to stimulate participatory discussions and involve citizens in policy development and implementation.
- Co-production, which is the collaboration between government and citizens in delivery of government services, to improve quality and responsiveness of these services.
- Crowdsourcing solutions and innovations strive to use public knowledge and talent to develop solutions to issues in the society.

Social Media have the ability to bring citizens into the process of governance allowing them to focus government efforts on issues that are most pressing in the community or, as described by Bertot et al., resolving these issues themselves [4]. For instance, in Cape Town, a service called "Lungisa" has been deployed as a community reporting and monitoring tool for reporting problems to local authorities, such as broken street lights, to government entities [38]. Barriers that previously existed between government and citizens are eradicated due to the open, interactive and collaborative nature of Social Media.

Social Media platforms enhance accessibility by being readily available and cost effective. Physical constraints of time and space are overcome through these platforms. The pervasiveness of mobile technologies which have accompanied the adoption and use of Social Media enable citizens to remain constantly connected online [15]. Government is hence provided with a way of communicating and interacting with citizens that is timely, convenient and interactive. The interactiveness of these platforms is based on their ability to foster bi- and multi-directional communication between government and citizens which is in contrast with earlier tools which only allowed for one-way communication.

Social Media are important in building trust and accountability by fostering transparency in government. Through these tools the government can be made accountable to citizens by providing information on spending, and citizens can track government activities and monitor the behaviour of government employees [6]. In due course, government spending becomes more effective and efficient since an account has to be presented to citizens. Through citizen journalism that is made possible by Social Media platforms like blogs, citizens can report corruption in the government, especially in situations where traditional media is controlled by the government [6].

Although Social Media have been credited for many governance revolutions and paradigm shifts in government, there still remains a misperception as to why government adopters have not been able to achieve meaningful collaboration and engagement [39]. Government agencies that have been able to take the use of Social Media beyond simple two-way information exchange are infrequent even among early adopters and governments in developed countries. Some of the challenges that have been cited as reasons for the slowness to adopt Social Media

and struggle to go beyond one-way communication are discussed in the next section of this paper.

3.3 Challenges and Risks of Social Media in Government

Despite the promises of enhanced government efficiency and effectiveness, transformed citizen and government relationships and improved transparency and accountability through the adoption of Social Media, many government agencies are still hesitant in their adoption thereof. Issues surrounding the adoption of Social Media in government are alleged as reasons for this hesitancy. Several issues have been identified by researchers ranging from security to administrative issues.

3.3.1 Access and Inclusion. For successful adoption of Social Media by the government, citizens must be able to access and use these technological tools. Governments should ensure that citizens have access to technology and are provided with resources and services to help with their civic and technology literacy [31–33]. The issue of digital divide raises a challenge for governments since one of the aims of Social Media is to include more voices in the democratic process. Where the government can provide access to technology, exclusion through civic illiteracy should be avoided by educating citizens on the democratic process, legislations and laws.

3.3.2 Security. The exchange of information on Social Media platforms involves security risks such as the introduction of viruses and malware to government systems or similar attacks intended to gain access to sensitive information [5].

3.3.3 Management. In terms of management issues, governments need to be aware of what is required by law regarding the storage of the information exchanged over Social Media and how policies like the Promotion of Access to Information Act in South Africa affect information that can be exchanged with citizens [30].

3.3.4 Information. The issue of information accuracy should be considered in terms of equipping the person or department responsible for Social Media with access to valid, quality and reliable information [5]. This means there needs to be horizontal collaboration between all departments in the agency.

3.3.5 Skills. Another issue in assigning responsibility for Social Media is the lack of skills that might exist within the government agency [40]. This is because the use of Social Media tools is a relatively new skill that government employees might not have acquired. Social Media are also fast paced in nature and therefore poses a challenge for government agencies that are known to be bureaucratic and slow in their processes [25]. This conflict in nature makes it difficult for governments to respond and keep pace with issues raised by the public. Social Media tools also change rapidly and governments are expected to keep pace with the changes made to third-party platforms by their providers, which is near impossible due to their bureaucratic nature and lack of resources to train employees on these new tools [25].

3.3.6 Legal. Governments adopting Social Media are also faced with the challenge of identifying already existing legislations, regulations, policies and laws that could influence the use of

Social Media tools as well as drafting new policies to govern the use of these tools [5, 30]. This challenge is due to the openness and lack of control the government has over such tools. Furthermore, these legislations, regulations, policies and laws were not created for the purpose of Social Media, thus their implementation for this purpose might be challenging for governments.

4 METHOD

The study is interpretive in its philosophical approach and employs a qualitative methodology involving several interviews. The interviews were conducted as part of a larger research project on Social Media use by the selected municipality. The purpose of the interviews was to gain an understanding of the current use of Social Media within the municipality; the extent of use, challenges, risks and benefits obtained.

4.1 Participant Selection

The sampling method employed was purposive sampling; this involves selecting cases that will best enable the research question to be answered or objectives to be met such as in case study research [32]. The municipality is the case studied in this research, therefore, the selected participants are employees of the Communications department who are responsible for all Social Media posts in the municipality. Five members of the team who directly interact with Social Media were interviewed. A couple of the interviewees are spokespersons for the municipality and have worked in the capacity of Acting-Directors of Communications at some point in their careers while the other employees are Public Relations and Events Management officers. These employees have varying experience in the area of Social Media communication.

4.2 Data Collection and Analysis

As mentioned above, primary data was collected through interviews of five municipal employees who are responsible for posting on Social Media on behalf of the municipality. These employees interviewed oversee all municipal communications, both offline and online. The interviews were carried out over a three-week period. The interviews were recorded and transcribed. Transcriptions were verbatim. Computer-assisted qualitative data analysis using Atlas.ti version 8 was employed to organise the data, facilitate coding and identify themes. A combination of inductive and deductive thematic analysis was done following steps outlined by Braun and Clarke [8].

The process started with data familiarisation through transcribing the interviews and reading the transcripts. The transcripts were coded in two stages to discover themes and patterns in the data. The first stage involved exploratory coding to gain first impressions while the second stage identified, synthesised and interpreted themes and patterns. Initial codes based on existing literature were identified at the outset and additional codes were identified from interviewees' comments in subsequent exploration of the transcripts. The key themes identified are presented in Table 1.

Table 1: Challenges to Social Media Adoption from interviews

Theme	Sub-themes
Information	Confidential/sensitive information
	Availability and accuracy of information
Legal	Lack of policy
Administrative	Red tape and government bureaucracy
	Resistance from leadership and politicians
	Difficulty in developing a persuasive business case
	Lack of dedicated officials
	Lack of budget
	Costs and Training
	Lack of skills
	Lack of collaboration between departments
Social and economic	Internet access
	Language Barrier
	Verbal aggression and excessive criticism
Technology	Fast pace of change on platforms
	Miscommunication

5 FINDINGS & RECOMMENDATIONS

The five categories of challenges identified from the interviews will be explored in this section. Quotes highlighting the issues revealed in the interviews will be presented in each of the subsequent sub-sections.

5.1 Information

Information encompasses issues related to the information to be posted on Social Media platforms, such as the quality and availability of information.

5.1.1 Confidential/sensitive information. Some of the interviewees were concerned with the possibility of disclosing confidential or sensitive information to the public that might lead to mass panic or endanger government officials and politicians. An instance of such a situation was described:

"*We had once a case, just to give you an example, the Executive Director of Public Health called me, she said 'Listen at one of the points where we collected samples we found out there's cholera in the water sample and it's quite a lot and people can get sick.' But I'm a communicator, what I know is you have to do more than one sample to make sure the person who actually did the sample washed his or her hands after using the bathroom, that the actual bottle where the sample was taken was clean and all of those things. There are many factors involved in this case the second sample came back a day later negative but throughout the night, the Communications Director and this E.D. were sitting on my head and I refused to...I said 'No, you're going to create mass panic, let's wait for the second*

sample'. When the second sample came then all of a sudden they were relaxed too because they realised they could have told people there was cholera in the water meanwhile it was one of our officials that wasn't careful enough." - (Participant 4, Interview Transcript, p.3)

The municipality should ensure information posted is accurate and presented in a way that instils confidence in the government. A process of authorisation should be established to ensure information provided to citizens has been approved by a senior member of the team. Bertot et al. [5] recommend government agencies decide on the level of transparency to pursue in order to achieve balance between openness and information security. However, this should not be taken as an opportunity to selectively post information that paints the municipality in a good light as noted by Zheng [40] and also corroborated by a municipal employee:

"At least they will see whatever the municipality is doing; whatever problem we have, because we're not only posting good stories. Sometimes we need to acknowledge that we have a problem." - (Participant 2, Interview Transcript, p. 6)

5.1.2 Availability and accuracy of information. The availability of information was raised by several of the interviewees, especially in relation to collaboration from horizontal departments. Since the Communications department is solely responsible for Social Media posts they rely heavily on other departments to provide information. The information needs to be pertinent and provided on time for it to be beneficial to citizens in the municipality. As municipal employees put it:

"The only problem we have is constantly getting instant messages from the relevant department. They don't understand that if ever you are constantly updating the community at least it's [with] current and relevant information." - (Participant 2, Interview Transcript, p. 3)

"Because we...to a large degree are very reliant on those service delivery departments for information but if they don't see the value of this platform they are not going to give us the information we need to communicate with the public." - (Participant 4, Interview Transcript, p.1)

The importance of information for effective Social Media adoption by government has been highlighted by Picazo-Vela et al. [30]. According to these authors, a lack of high-quality information may cause failure in the adoption process. Citizens expect queries to be answered on time and with information that is accurate. The municipality would require a liaison with the different horizontal department to ensure their access to timely and accurate information. The importance of Social Media has to be made explicit to departments that service the Communications department with information. It might also be helpful if these departments see the Social Media agenda getting support from senior leadership.

5.2 Legal: Lack of policy

The municipality does not have a Social Media policy in place. It relies on the policy from the Government Communications and Information Systems (GCIS) which guides all communications from the national government to the local government. The need

for a localised policy has been recognised and the municipality has put together a draft policy that is in the process of approval. The previous policies used within the municipality had no reference to Social Media. Policies provide a regulatory framework for employees and guide their daily activities. All respondents recognised the absence of a formalised policy:

"In fact, we didn't have a...we had a draft coms policy. And it posed a problem to us as officials that are implementing, because you...if something is in draft form it has to be final for you to do your job and for you to be certain that each and every day this is the SOP [Standard Operating Procedure] according to the policy because you are guided by that." - (Participant 1, Interview Transcript, p. 2)

"We had a communications policy for a number of years; that communications policy didn't speak to SM specifically. Last year, we sat together as the communications office, we took that old policy and we reviewed it. We worked in SM as well as national policy frameworks and so on." - (Participant 4, Interview Transcript, p.2)

"We are guided by Government Communications and Information Systems (GCIS)... But currently if I am correct, we have a draft policy on Social Media that is guiding all government communicators, nationally up until local government. So, we are following that policy as things stand, it's still a draft policy, it's in the process of being approved as a working policy. We've not yet had our own as a city." - (Participant 5, Interview Transcript, p.2)

Without a Social Media policy in place, employees are left to make personal judgement calls when interacting with citizens. This might lead to a lack of consistency in the way issues are handled and responses are provided to citizens. Government agencies are required to act within the limits of the law and are therefore left liable without policies in place. Bertot et al. [5] observed that many government agencies do not consider existing policies and how they relate to Social Media prior to establishing these platforms as an interaction tool.

5.3 Administrative

Administrative issues comprise characteristics and capabilities of the organisation and the people in the organisation. These issues include the level of skill of employees, how easily the managers and leaders accept change, and policies regarding employee training.

5.3.1 Red tape and government bureaucracy. The nature of government agencies to respond slowly to change and in some instances, reject change was highlighted as a challenge to Social Media adoption in the municipality.

"Things take a long time to be phased in because there's a lot of red tape, there's a lot of processes that need to unfold for certain things to happen. So that is also a problem, even if we see that is a challenge it takes time for it to be resolved because of the systems that are in place in local government." - (Participant 1, Interview Transcript, p. 3)

"If ever we have a dedicated person in which is something we are trying to accommodate within the organogram but it's long, the process, it's government processes." - (Participant 2, Interview Transcript, p. 4)

Mergel [25] describes the nature of Social Media platforms and government agencies as contradictory; Social Media platforms are

fast changing with innovations happening often while processes in government are slow moving. Government agencies are slow to adapt to the changes required for Social Media adoption because of the hiearchical, top-down decision-making culture. Government agencies need to adjust organisational procedures to keep up with the pace of Social Media and achieve speedy responsiveness [25]. Organisational change management is a major issue that hinders successful Social Media adoption in governments [2].

5.3.2 Resistance from leadership and politicians. Social Media adoption is met with resistance within the municipality; politicians and senior government officials are hesitant to try a technology they are not familiar with.

"We're not there yet, it's very difficult to sit with a politician and explain to him or her that you need to be creative." - (Participant 4, Interview Transcript, p.4)

"I think it's simply stranger-danger type of attitude, where it's a different thing- don't know it, don't go there and because I don't know it I can't make an informed decision about it." - (Participant 4, Interview Transcript, p.4)

These platforms expose government agencies to criticisms and unpredictable behaviour of citizens and therefore make senior government officials wary. Despite these risks, Mergel [25] advocates senior government officials getting behind Social Media initiatives in order to facilitate a change process within their agencies. If these officials are seen to support Social Media there will be less resistance from their employees and a higher tendency for successful adoption [40]. The successful implementation of ICT projects in government necessitates the support of political leaders [19].

5.3.3 Difficulty in developing a persuasive business case. The need to make a business case for Social Media was recognised as a challenge in the municipality. The value for Social Media has not been recognised.

"The major, the biggest challenge is that outside of communications people don't really...I mean in the municipality they don't really see the value of SM" - (Participant 4, Interview Transcript, p.1)

This failure to develop a persuasive business case may be the reason behind the resistance from senior government officials and politicians within the municipality. Outside of the Communications department, Social Media is still seen as a new and unfamiliar technology and its benefits are not understood. The municipal officials interviewed believe if they are able to market Social Media to other directorates and departments, there will be an increased support for its use.

5.3.4 Lack of dedicated officials. The lack of a dedicated official or team of individuals came across as the biggest challenge facing the municipality. All interviewees referenced this as an important issue and a hindrance to their successful use of Social Media. At the municipality, officials currently dedicated to Social Media are also responsible for every other media communication; such as radio, newspaper, meetings, and newsletters. This means their time is split across numerous tasks which detracts from their interaction on Social Media. In many situations, these officials are out of the office and have no access to the Internet, they can only check on Social Media updates when they return to the office, which may be hours later.

"We are trying our best, as I said before we need to get a dedicated person because communication is evolving." - (Participant 2, Interview Transcript, p. 4)

"Sometimes I'm in meetings, sometimes I'm at an event, ...and so the turnaround time to answer some queries it can take days or it can be immediate" - (Participant 1, Interview Transcript, p. 2)

"because we don't have dedicated officials but it is still done. You know, it's not left by the way side." - (Participant 4, Interview Transcript, p.1)

"...a lot of companies, private companies would have a designated person or a SM specialist of whatever. We don't have that, so sometimes people have queries, we can't respond immediately" - (Participant 3, Interview Transcript, p. 1)

With the fast pace of Social Media, it becomes necessary to have someone working full-time on monitoring posts. However, there is still a lack of trust in these platforms on the part of leadership so they are hesitant to create a permanent Social Media management role within the municipality. Many government agencies assign this role to current staff because they are not willing to fund the human capital needed for effective Social Media adoption [2, 40].

5.3.5 Lack of budget. Lack of budget was recognised as a major issue in the municipality. The budgetary issues surrounding Social Media have a knock-on effect on its adoption within the municipality. Without a budget, it becomes difficult to hire dedicated officials, market Social Media use within the municipality, and offer training to Social Media staff. These resulting issues were highlighted by interviewees.

"My personal view is budget must be made available specifically for marketing SM in the institution. There is no budget, never been any budget, I've been pleading for one for years, it doesn't come." - (Participant 4, Interview Transcript, p.2)

A lack of funding is not unique to Social Media but is a common problem with the adoption of ICTs in government. ICT managers are plagued with the burden of working around limited budgets by turning to open source software or using general administrative budgets [24, 40]. Prioritising Social Media in the municipality's ICT agenda might highlight the need to provide a budget for Social Media adoption.

5.3.6 Costs and Training. The interview process revealed that the municipality has never provided Social Media training for its staff. The Social Media team have all learned on the job or made personal efforts to learn how to interact on these platforms by buying books with their own resources. The only member of the team who received official training did so from a previous employer. The municipality receives invitations from organisations for training but is hesitant to spend on Social Media training.

"I still feel that we still need to have more capacity in terms of training in this area, on how more can we capitalise or how more can we take advantage of Social Media platforms that are there." - (Participant 5, Interview Transcript, p.2)

"Like for instance, SM, you will get many invitations coming in but you know the expenditure will be quite big because you go to Joburg,

you'll be there for two days you have to pay up to R15, 000 for those two days and then accommodation and then travel costs and expenditure so it's a lot of cost that the municipality is very hesitant to incur." - (Participant 4, Interview Transcript, p.2)

"No, learning on the job but it's only fair to be trained. Then everyone is clear on the dos and don'ts" - (Participant 1, Interview Transcript, p. 5)

"On the job learning I guess, still learning. But we can't not do the work because you haven't been trained." - (Participant 3, Interview Transcript, p. 2)

Professional training on how to grow followers, how to respond in times of emergencies, and language styles are among the skills that are necessary for effective and efficient use of Social Media by government employees [40]. However, many government institutions take up Social Media because it is trendy and expect employees to muddle through [25, 29]. In the case of this municipality, respondents are committed to using Social Media and learning on their own. Even though Social Media has been used by these employees for several years, they still desire formal training to enhance their knowledge and skills.

5.3.7 Lack of skills. The municipal Social Media team are mostly experienced in terms of communicating with the public, they are nevertheless concerned about posting on Social Media because these platforms require a different skillset.

"The other thing is, you would have people not skilled enough, they will make spelling errors, it's not good for your brand." - (Participant 4, Interview Transcript, p.3)

"SM brought challenges to communications in the sense that yes, it's now two-way communication and then secondly, when you write for instance on Twitter you have 140 characters, you cannot write in the business-like way you normally do." - (Participant 4, Interview Transcript, p.1)

This challenge is closely linked with the issue of training; Social Media platforms have unique characteristics that make it difficult to transfer skills built in other areas of communication. Communication on these platforms need to be concise while providing important information. The need for speed in responding to citizens also hampers rigorous information vetting processes thereby requiring highly skilled communicators.

5.3.8 Lack of collaboration between departments. Several of the respondents mentioned the issue of collaboration with other departments. This is a major issue because the Communications department is solely responsible for posting information on behalf of the municipality and is therefore reliant on every other department and directorate.

"There is a department that works with electricity and so if they don't provide us with information we can't communicate that information." - (Participant 3, Interview Transcript, p. 1)

"to a large degree are very reliant on those service delivery departments for information but if they don't see the value of this platform they are not going to give use the information we need to communicate with the public." - (Participant 4, Interview Transcript, p.1)

The value of Social Media should be made evident across all directorates and departments within the municipality. The importance of providing reliable and timely information to the public should also be emphasised. Traditionally, government organisations function in silos which inhibit information sharing. Mawela et al. [24] explain that this silo culture developed from the need to address backlogs in the system and pressures to deliver on service causing segregation in departments for better managerial efficiency. These organisations should adapt a networked structure which would facilitate quicker responses to citizens [30].

5.4 Social and Economic

Social and economic issues describe factors related to the external environment in which the municipality operates. These challenges arise from the challenges of operating in the South African society.

5.4.1 Internet access. One of the predicates of Social Media use is access to the Internet. This is, however, a major challenge for the municipality because the majority of the population have no Internet access in their homes. This challenged was identified by one of the representatives:

"...you know it's an African country we have issues around connectivity, we have issues around access to data, we have issues around the correct communication tools..." - (Participant 4, Interview Transcript, p.2)

One way of overcoming this challenge is to provide public Internet access points [4]. The municipality has several programmes that provide free Internet access to citizens around the city and these subsequently also ensure access to Social Media platforms.

"What we've done, we started a few years ago, we have a project called ... [withheld], partly to address that... Because in the township we have a number of hotspots, where young students can access the internet where they are even if it's in a shack, they will be able to get it as long as they have a phone. And that programme is ongoing, we have in addition to that, we have E-connected, that's we have municipal facilities like libraries, customer care centres that actually provide free internet daily where you can go...free wi-fi, you and go and connect three devices at a time; cell phone, tab [tablet] and a laptop." - (Participant 4, Interview Transcript, p.2)

5.4.2 Language barrier. South Africa is a multilingual nation with 11 official languages; this means citizens are permitted to interact in any of these languages. However, municipal employees might not understand the language used by citizens which leads to a breakdown in communication, delay in response or miscommunication. The municipality caters to citizens who speak different languages but this is only done for important messages that need to be broadcast. Respondents referred to this issue in the following statements:

"I think language as well because a lot of stuff we put out, we put out in English and so automatically you're cutting out people regardless of..." - (Participant 3, Interview Transcript, p. 2)

"Unfortunately, I cannot speak other languages...Afrikaans, I will ask my other colleague to translate for me or I'll ask Facebook to translate for me so that I can be able to assist." - (Participant 2, Interview Transcript, p. 3)

One of the objectives of Social Media use in government is to include more voices in government processes, it is therefore

necessary for all members of the public to be able to access and use these platforms. Bertot et al. [5] describe a similar situation in the US where most Latinos are excluded from accessing government platforms due to a language barrier, however, the government has established policies that ensure information is provided in non-English formats. Similar steps need to be adopted by the municipality to ensure inclusion of all citizens.

5.4.3 Verbal aggression and excessive criticism. The open nature of the platform gives citizens liberty to be abusive towards municipality representatives and other citizens. The municipality representatives are often exposed to racism, political intolerance and personal abuse. Citizens also use the platform to express their dislike for politicians and this is done even when posts made by the municipality are positive in nature. Statements made by municipality representatives below describe such situations:

"Another thing is sometimes other people, the language they use, we try to hide those posts, we don't want to...we always promote as a municipality that people have political tolerance." - (Participant 2, Interview Transcript, p. 2)

"Sometimes the language that is used by the residents is such that it can make you feel very bad or hurt" - (Participant 1, Interview Transcript, p. 3)

"...if you don't like somebody or something it doesn't matter what positive information they post...if a certain grouping of people do not appreciate. It doesn't matter if it's a good story, if they want to bash, they will bash." - (Participant 1, Interview Transcript, p. 4)

The municipality hides comments that they perceive as offensive but they have no policies in place that restrict what can be posted on their Social Media platforms. Some government agencies have Social Media guidelines describing what can be posted on their platforms and any post contradicting these guidelines are usually deleted.

5.5 Technology

Issues discussed in this section are based on the characteristics of Social Media as a technology, such as the character-length of Twitter posts and the speed at which information posted can be shared by users of these platforms.

5.5.1 Fast pace of change on platforms. Social Media platforms are dynamic; content gets updated by the second. It becomes difficult for municipality employees to keep track of current requests, especially where there is no dedicated individual, as is the case with this municipality.

"Sometimes, on Facebook, you open your phone you see this and you want to reply but you can't find that status. And like you're looking at the date you can't it, you open another phone, you find the status and like, okay I've been searching a whole hour trying to find that status but I couldn't find it because it's constantly updating itself and it's...sometimes it can be confusing but other than that, that's my feeling." - (Participant 2, Interview Transcript, p. 6)

The Internet and Social Media are public and permanent in nature, therefore, information posted cannot be deleted or retracted. Social Media Platforms make it easy for users to share information to people in their networks, meaning even the wrong information is called-out and spread quickly [25]. The following statements support this issue:

"It's immediate, it's very difficult to take, not even to take away...it's very difficult to correct a message that is already there" - (Participant 5, Interview Transcript, p.1)

"For me the danger is putting out information and it being interpreted incorrectly.... Then it quickly spirals out of control..." - (Participant 3, Interview Transcript, p. 1)

The municipality should have dedicated staff to keep track of Social Media updates as well as train staff in appropriate ways of communicating [40]. There should also be verification for every information to be published on Social Media.

5.5.2 Miscommunication. It was noted during discussions that communication through Social Media is different from regular media such as newspapers and newsletters etc. Due to the nature of Social Media platforms, especially Twitter with the limitation of characters that can be posted, it is easy for information to be miscommunicated in an attempt to be brief and precise.

"Miscommunication, that's the biggest thing. In writing, you can't really tell the tone." - (Participant 3, Interview Transcript, p. 1)

"So when you're sending such messages you have to be careful, phrase it correctly, pick the right words to use, so that you cannot be misquoted" - (Participant 5, Interview Transcript, p.1)

Proper training on how to communicate on Social Media will be beneficial to the municipal staff [40]. Posts should go through a vetting process to make sure the right information is being conveyed. However, this process should not be allowed to impede the speed of responses to queries.

The analysis indicates that the municipality faces several challenges, most of which are related to organisational change. Although the Communications department is currently using Social Media, they seem to be facing an uphill battle in gaining support from leadership, politicians and other departments who remain closed and risk-averse. Citizens are embracing Social Media, but are also experiencing challenges due to a lack of relevant information and dedicated Social Media officials. The benefits of Social Media need to be explicated in order to garner support and aid adoption.

6 CONCLUSIONS

Social Media, like other ICTs in government, have been hailed as revolutionary tools which would alter government processes. However, the closed, bureaucratic and risk-averse nature of government agencies make such assertions unrealistic and idealised. For Social Media use to go beyond simply broadcasting information to actual citizen participation, there should be an organisational change process and the value of Social Media should be affirmed by municipal leadership and politicians. This will further the cause for Social Media and enable the resolution of many of the challenges faced, such as lack of budget and dedicated officials.

This study examined the challenges to adopting Social Media as an engagement and participation tool within a South African Category A municipality based on interviews with employees of the Communications department. The challenges identified are similar to those found in existing literature from other countries [32], [33], [37–39] and are common to adoption of ICTs in

government. This may indicate that experiences in government adoption of Social Media is independent of geography.

This study was limited to a single municipality. Further studies might consider comparing adoption across municipalities in South Africa.

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APPENDIX K: AJIS Journal (Submitted for Publication)

Assessing South African Government's Use of Social Media for citizen participation

The African Journal of Information Systems

Fashoro, Ifeoluwapo
Nelson Mandela University
Port Elizabeth, South Africa
S215283317@mandela.ac.za

Barnard, Lynette
Nelson Mandela University
Port Elizabeth, South Africa
Lynette.barnard@mandela.ac.za

ABSTRACT

Social media have been commended as a tool that would reform E-participation, consequently, governments around the world have adopted social media in a variety of ways. South Africa is not exempt from this adoption trend, however, the extent to which social media is used for public participation is yet to be understood. This paper presents a qualitative study that explored the use of social media as an E-participation tool in South Africa through content analysis of the social media pages of the provincial and metropolitan municipal governments. The study found that although all provinces and municipalities have a presence on social media, these platforms are mainly used for information broadcasting, viz., an extension to their websites. There is limited engagement and participation, and where these exists it is due to the municipality posting information relevant to citizens' lives and being intentional in responding to comments made by citizens. The study contributes to the discussion about social media use in the South African government context and is a first step towards actualising effective public participation through social media in South Africa.

Keywords

E-government, E-participation, Social Media, Public Participation, Citizen Engagement

INTRODUCTION

Social media have been ingrained into our lives and become one of the most common mechanisms of communication. These technologies are used regularly in our personal and business lives. As citizens become more tech-savvy, their technological expectations from government increase (Andrews, Jarvis, & Pavia, 2014). Governments are therefore adopting new technologies in a bid to satisfy citizen expectations. Resources are being devoted to social media adoption in a bid to meet citizens' needs and achieve democratically legitimate citizen engagement. Nam (2012) remarks about government agencies being under pressure to adopt social media due to the expectations of citizens and businesses. Governments around the world have adopted social media in different capacities in the past few years. The UN's E-government survey reported an increase in the number of governments using social media from 71 in 2014 to 152 in 2016 (United Nations Department of Economic and Social Affairs, 2016).

In conjunction with the rapid adoption of social media, public sector organisations have acknowledged the importance of citizen interaction and public participation. In recent years, there has been an increase in the demand of citizens to be involved in matters of government (Coleman & Gøtze, 2002; United Nations, 2014). Citizens are demanding accountability and transparency from governments and are less passive in their interactions with governments. They expect to be included in policy developments and informed of the government's activities. Public participation has subsequently become a major focus for governments who have come to realise that meeting citizens' needs is the main purpose of public service and to achieve this purpose citizen involvement is required (Mainka, Hartmann, Stock, & Peters, 2015). This shift in prioritising citizens has led to a growing interest in how government can effectively and efficiently satisfy its customers through Information and Communication Technologies (ICT). Digital government, thus, aims to alter the relationship between government and citizens by potentially improving interactions and dialogue.

South African municipal governments, in a bid to keep up with citizen expectations and trends around the world, have set up social media accounts for interacting with and engaging citizens. One factor that has encouraged the South African government's Internet and social media adoption is the rapid and continuous adoption by citizens. Citizen use of social media in South Africa has seen a steady increase in use year on year. Current statistics show that Facebook users have increased to 16 million in 2017, from 14 million in 2016. Twitter users increased to 8 million in 2017, from 7.7 million in 2016, YouTube users increased to 8.7 million users in 2016, from 8.2 million in 2015, and LinkedIn has 6.1 million subscribers (BusinessTech, 2017; Wronski & Goldstuck, 2016).

These social media implementations by South African governments are sometimes disorganised and have been done without an action plan or structure. Most of these accounts have been started by individual government employees that felt the need to be on-trend. In the process of setting up these social media accounts, municipalities have therefore not considered the needs of citizens. Understanding the needs of citizens in e-government adoption has been established as an essential factor for providing effective services through ICT (Al Athmay, Fantazy, & Kumar, 2016). The aftermath of these impromptu implementations are interactions that are intangible, superficial and have no impact on public participation.

Presence on social media has been deemed insufficient to assure participation from citizens; municipalities, consequently, require a strategy for social media that will enhance citizen participation (Bonsón, Royo, & Ratkai, 2015; Mainka et al., 2015). In a bid to develop an appropriate strategy for local municipalities in South Africa, there is a need to understand the status quo of social media use by these municipalities. The purpose of this paper is to analyse the use and impact of social media by the South African government, specifically provinces and metropolitan municipalities. The paper will therefore be investigating the following research questions:

RQ1: What social media platforms are used by South African provincial and metropolitan government?

RQ2: How are these platforms used for participation activities?

The subsequent sections of this paper describe the context of the study, a review of existing literature relating to social media and e-government, and the methodology of the study. A discussion of the content analysis results will follow, and the final section of this paper presents concluding thoughts and reflections.

SOCIAL MEDIA IN GOVERNMENT

Social media have evolved into the favoured method of engagement with individuals, businesses and even celebrities. Governments had initially been slow to adopt social media but have increasingly invested in these tools as a cost-effective way of engaging citizens. In the context of government, Mergel (2015, p. 3018) defines social media applications as "online platforms and services that are developed by third-party providers and adopted by government organizations to increase their interactivity and exchanges with citizens". These applications include social networking sites, blogs, wikis, social tagging, social bookmarking, and other forms of collaborative tools.

Social media have become a prevalent technology worldwide. The number of individual and business users on social media has increased exponentially since its inception. According to the web analytic company, Alexa (Alexa, n.d.), social media websites are some of the most visited around the world. Social media websites like Facebook, Twitter, YouTube and LinkedIn report millions of users. Governments adopting Social Media will be meeting citizens in a space citizens are familiar with and capable of navigating, which has been identified as a success factor for E-participation initiatives (Friedman, 2006; United Nations, 2014).

With social media and other Web 2.0 technologies, citizens can contribute to the service delivery process by becoming what has been termed "prosumers". Using social media technologies, citizens are able to collaborate with the government in sourcing solutions to service delivery issues (Bertot, Jaeger, Munson, & Glaisyer, 2010). Crowdsourcing is a possibility due to the large number of users available on social media platforms; expert opinions can be sought and innovative solutions formulated in less time and with less money (Nam, 2012). These solutions and policies created through crowdsourcing might have the benefit of appealing to the majority of the community since they reflect the citizens' opinions, and are backed by the power of the crowd (Nam, 2012; Sæbø, Rose, & Nyvang, 2009). Some citizens and non-governmental organisations take up the initiative and create services for the public using social media technologies, for instance, in Cape Town, Lungisa is created as a community monitoring tool that allows the public to report service delivery issues to local government authorities (United Nations, 2014).

Social media are also expected to improve transparency and accountability while increasing trust of citizens in government (Abdelsalam, Reddick, Gamal, & Al-shaar, 2013; Bertot, Jaeger, & Grimes, 2010). Transparency and accountability have become an important issue for governments in a bid to fight corruption and restore citizens' trust and confidence in governments (Bonsón, Torres, Royo, & Flores, 2012; Chun, Shulman, Sandoval, & Hovy, 2010; Mzimakwe, 2010). The waning interest of the public in politics, and low election turnouts, have made it imperative for governments to improve transparency and accountability. In a bid to build trust and curb corruption, governments have taken to posting information on spending, budgets and activities of officials on social media, so citizens can monitor government action.

Information dissemination is one of the predominant ways in which governments use social media. The dissemination of information to citizens is done in a bid to overcome what is referred to as information asymmetry. Information asymmetry arises when one party, in this case the government, has more or better information than the other (citizens). This asymmetry can lead to a lack of trust from citizens and results in their low engagement with government (Bonsón et al., 2015). The potential of social media to increase engagement between government and citizens is one of the reasons why it has been taken up by many governments around the world.

Digital government aims to alter the relationship between government and citizens by potentially improving interactions and dialogue. Social media platforms present new opportunities that could reinvigorate local governance (Ellison & Hardey, 2014). Government use of social media has gone beyond connecting and sharing information with citizens, and now encompasses integration into core business functions such as emergency management, service delivery, and policy feedback (Krzmarzick, 2013). Social media have been employed in E-participation activities and areas, some of these identified in literature (Kalampokis, Tambouris, & Tarabanis, 2008; Sæbø, Rose, & Skiftenes Flak, 2008; Tambouris, Liotas, Kaliviotis, & Tarabanis, 2007) are:

Activism: The efforts made by voluntary organisations, or interest groups to influence the political process using social media. This is done by promoting their viewpoints and agendas to the government and public, while presenting more objective information to the public than the government generally provides.

Deliberation: Involves the inclusion of citizens in political discourse for agenda setting, and rulemaking. Unlike traditional public participation channels, there is no limitation to the number of participants in deliberations using social media.

Campaigning: The use of social media to campaign for candidates, involving the recruitment of volunteers, gathering information on potential voters, and raising money to support political candidates.

Consultation: Focuses on using social media to increase the input on government set agendas from the different E-government stakeholders (citizens, businesses and the government). The consultation process is usually a two-way feedback mechanism process.

Petitioning: Online petition signing to propose an issue for government consideration. In some cases, a certain number of signatures force the government to discuss the issue.

Service delivery: This involves the use of social media for providing community services and information about these services to citizens.

Information Provision: Focuses on providing information to the public through social media.

Polling: Involves the use of social media surveys such as Facebook polls, to measure public opinion and/or sentiment.

The extent to which these activities are successful in achieving genuine engagement is determined by the strategy employed by the governmental organisation. Different strategies are employed by government organisations in their engagement with citizens and have specific goals which result in either a superficial, or a genuine, engagement.

Social Media Strategies

Mergel (2013) identified three tactics used by government agencies; representation of agency, engagement of citizens and networking with the public. The representation tactic is used by most organisations that are at the early stages of social media use. The purpose of this tactic is to have a presence on social media to maximise all possible interactions with citizens (Mergel, 2013; Pedro & Bolívar, 2016). Social media are recognised as popular platforms with citizens and government organisations who want to be where the citizens are. Engagement at this stage is one-way, and takes the form of a "push strategy". In a push strategy, information such as memos and reports are broadcast to citizens much in the way of traditional interaction techniques like websites, or online newsletters. This is similar to the informative model of E-government where the government produces and distributes information to citizens (Halpern & Katz, 2012). Interaction is characterised by a lack of comments on posts made either by

citizens, or the government organisation (Mossberger, Wu, & Crawford, 2013), disabling of comments on the page, or a lack of response to comments from citizens.

Engagement of citizens tactic employs a "pull strategy", where interactivity is the goal. Organisations have recognised the need for bi-directional interactions and encourage citizens to co-create content (Mergel, 2013; Pedro & Bolívar, 2016). This tactic is similar to the consultative model of E-government; governments define issues for consultation, present them to citizens while inviting them to contribute their views and opinions, and manage the process of consultation (Halpern & Katz, 2012). Although the degree of interaction is low using this tactic, there is some back and forth between the organisation and citizens (Mossberger et al., 2013). Messages from the government are shared and retweeted by citizens, comments are made on posts and citizen produced content are used on the organisation's website (Mergel, 2013; Mossberger et al., 2013).

The final tactic, networking with the public, employs a "networking strategy". The goal of this tactic is collaboration between citizens and the government. Social media are used as tools to facilitate conversation and mingling among stakeholders (Mergel, 2013; Pedro & Bolívar, 2016). The voice of the government is not heard often, but they are present on these platforms, listening to citizens. This is aligned with the participative model of E-government where citizens are actively involved in defining policies (Halpern & Katz, 2012). Social media is seen as a facilitator for public deliberation. Mossberger et al. (2013) describe this tactic as having noticeable back and forth conversations between the government and citizens; individual comments are responded to, and citizens proactively providing their own content.

METHODOLOGY

The larger research study is a case study research based in the Eastern Cape province of South Africa. The focus of this paper is the analysis of social media participation activities of South African provinces and municipalities. The method used in achieving this goal is a qualitative content analysis of the social media accounts of these government organisations. The sample for the analysis comprises of the 9 provinces and 8 metropolitan municipalities in South Africa. These organisations were selected because they are larger and believed to be more innovative with technology, have more resources and infrastructure to support social media and have a larger citizen base for interaction (Bonsón et al., 2015).

Content Analysis Method

The content of the social media websites of provincial and metropolitan municipal governments were analysed for activities associated with E-participation. The analysis period was between January 2017 and June 2017. Most of these social media websites were accessed from the web portal of these government authorities, while others were discovered through Internet searches. The analysis was based on the Tambouris E-participation Scoping Framework (Tambouris, Liotas, Kaliviotis, et al., 2007a), focusing on the participation area layer.

The framework contains five layers that can be viewed from a top-down, or bottom-up approach, as depicted in Figure 1 (Tambouris et al. 2007a).

The layer at the top of the framework is democratic processes, which refers to activities that are involved in the democratic process such as voting, public debates, and campaigning. The next layer is the participation area; this refers to areas in the democratic process that engage and involve citizens (Tambouris, Liotas & Tarabanis, 2007b). Some of these areas are deliberations, consultations, campaigning, information provision service delivery, discourse and participatory policy-making. Participatory techniques are the third layer of the framework,
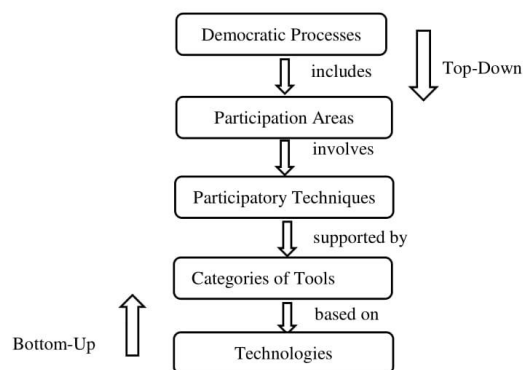
Figure 1: E-participation Scoping Framework (Tambouris et al. 2007a)

and represent methods used to engage citizens and other stakeholders in the democratic process. Techniques include focus groups, scenario workshops, public hearings and deliberative polling. The next layer is the category of tools that represent ICT tools, used to support and enhance E-participation. Some of these tools include chatrooms, virtual communities, podcasts, bulletin boards, web portals and survey tools. The bottom layer of the framework represents technologies, which are the backbone of ICT tools used in E-participation.

RESULTS

Using the E-participation Scoping Framework discussed above, Table 1 presents a characterisation of E-participation using social media in South Africa. The democratic process encompasses all participatory activities aimed at achieving democracy. In terms of social media, the participation areas, categories of tools and technologies map directly to examples provided by Tambouris et al. (2007a). However, the participation techniques are not easily mapped, but seem to be online versions of newsletters and public hearings/enquiries. These techniques provide information to citizens in the case of newsletters, while public hearings/inquiries are presentations by government agencies regarding plans and policies which are open to members of the public (Rowe & Frewer, 2000).

Participation Area	Participation Techniques	Categories of Tools	Technologies
• Information Provision • Service Delivery • Discourse • Consultation	• Online Newsletters • Online Public Hearing/Inquiries	Social networking sites – • Facebook • Flickr • Google+ • Instagram • LinkedIn • Twitter • YouTube	• Web 2.0 • Social Media

Table 1: Scoping E-participation using Social Media in South Africa.

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The social media platforms used by these government organisations are presented in Tables 2 and 3. The tables also indicated whether the platform is currently active and the number of followers and posts on these government accounts.

Province/Municipality	Platform	Status: Number of followers
Eastern Cape	Facebook	Active: 2530 followers
	YouTube	Inactive: 11 subscribers, last post 2015
Free State	Facebook	Inactive: 3801 followers, Last post in 2013
	Twitter	Inactive: 7304 followers, 469 posts, Last post 2013
Gauteng	Facebook	Active: 12109 followers
	Twitter	Active: 87.5K followers, 22.4K posts
KwaZulu-Natal	Facebook	Active: 9363 followers
	Twitter	Active: 7680 followers, 6172 posts
	YouTube	Active: 25 subscribers
	Instagram	Active:771 followers, 174 posts
Limpopo	Facebook	Active: 7350 followers
	Flickr	Active: 3 followers
	Twitter	Active: 1424 followers, 414 posts
Mpumalanga	Facebook	Active: 5548 followers
	Twitter	Active: 63 followers, 63 posts
Northern Cape	Facebook	Active: 5833 followers
North West	Facebook	Active: 23912 followers
	Twitter	Active: 3964 followers, 2244 posts
	YouTube	Active: 67 subscribers
Western Cape	Facebook	Active: 46,950 followers
	Twitter	Active: 17.8K followers, 11 000 posts

Table 2: South African Provincial Governments' Social Media Presence (January to July 2017)

Province/Municipality	Platform	Status: Number of followers
Buffalo City (East London)	Facebook	Active: 5548 followers
	Twitter	Inactive: 79 followers, 47 posts, Last post in 2015
City of Cape Town	Facebook	Active: 135 838 followers
	Google+	Inactive: 35 followers, Last post in 2015
	LinkedIn	Active: 23,476 followers
	Twitter	Active: 229K followers, 60.5K posts
	YouTube	Active: 150,762 views
Ekurhuleni Metropolitan Municipality (East Rand)	Facebook	Active: 68 578 followers
	Twitter	Active: 21.8K followers, 11.5K posts
City of eThekwini (Durban)	Facebook	Active: 45125 followers

	Twitter	Active: 45K followers, 13.5K posts
	YouTube	Active: 124 subscribers
City of Johannesburg	Facebook	Active: 16 452 followers
	Flickr	Inactive: 150 followers, Last post 2016
	Google+	Inactive: 523 followers, Last post 2014
	LinkedIn	Active: 10 049 followers
	Twitter	Active: 528K followers, 158K posts
	YouTube	Active: 126 subscribers, 26, 032 views
Mangaung Municipality (Bloemfontein)	Twitter	Inactive: Joined 2012, 280 followers, No posts
Nelson Mandela Metropolitan Municipality	Facebook	Active: 11 150 followers
	Twitter	Active: 7 141 followers, 1 649 posts
City of Tshwane (Pretoria)	Facebook	Active: 63 167 followers
	Twitter	Active: 278K followers, 44.4K posts

Table 3: South African Municipal Governments' Social Media Presence (January to July 2017)

DISCUSSION

The social media accounts of 17 provincial and municipal government organisations in South Africa were analysed. All 17 of these organisations have a presence on at least one social media platform. The most common platforms used are Facebook (94%) and Twitter (88%). The Eastern Cape Province has been inactive on these platforms since 2013 (this was the date of the last post), while the Mangaung municipality has never posted on its Twitter account since it joined the social network. The two municipalities that have accounts on Google+ are currently inactive on the platform. The slight disparity in platforms adopted and inactivity hint at an experimentation within these individual organisations. It seems like accounts are created on these platforms based on the current day trend and there is no continuity in use because social media implementation has not been strategically planned.

In terms of content posted, the provinces focus on posting information on activities of the premier, projects carried out by the province and events within the province. Most of these posts are in the form of press releases, videos and photographs of speeches made by government officials and invitations to events around the province. These organisations seem to be focused on highlighting their achievements rather than interacting with citizens. Similar to provinces, municipalities post information on local government officials, events and projects. Nevertheless, municipalities focus their posts on informing the public on service delivery issues, employment services, disaster management and invitations to public participation meetings.

The most popular forms of engagement were liking post, commenting on post, sharing, and retweeting posts. Engagement was higher on posts with content relevant to citizens' daily lives, such as those related to service delivery interruptions, as opposed to information about the activities of community leaders. Picazo-Vela, Gutiérrez-Martínez, & Luna-Reyes (2012) highlighted the importance of relevant information to the adoption of social media in government.

With regards to engagement strategies of municipalities, all 17 municipalities allow comments on their social media pages. Although this is a characteristic of organisations using the pull strategy (Mergel, 2013; Mossberger et al., 2013), these municipalities employ a combination of pull and push strategy. The focus of communications on these platforms involve broadcasting information to the public which is the main feature of the push strategy. While comments from citizens are allowed, the municipalities make no effort to solicit information from the public; their interactions are only in response to a comment. The analysis of the posts also revealed that not all comments receive a response. The responses are sporadic and seem to be based on the discretion of municipal staff. The municipalities do not seem to have policies that require responses for all comments. Most of the comments that got responses were related to service delivery complaints by citizens. Citizens have taken up social media as a channel for making complaints about service delivery. Other participation activities identified are discussed next.

Information Provision

Social media is used primarily for information provision by all provinces and municipalities. Information provided include pictures and videos of activities by leaders of the provinces and municipalities, events in the area, initiatives launched by the government, public health or safety tips and in some cases budgetary information. The method of posting and type of information posted seem to affect the response received from citizens. Posts with pictures of events and activities of leaders receive little engagement in terms of likes, shares and comments whereas post that have a call to action or directly affect the lives of citizens such as weather warnings, traffic information and public safety information achieve a higher level of engagement.

Service Delivery

Service delivery is an area of participation that has been achieved by provinces and municipalities using social media. The City of Cape Town and Ekurhuleni Metropolitan Municipality have dedicated Twitter pages for reporting service delivery issues and updating the community on service delivery. Several of the social media pages explored have posts related to service delivery problems such as power cuts in certain neighbourhoods. The Bitou municipality in the Western Cape Province recently used social media to warn citizens of road closures due to protest actions in the region. Citizens also post comments with their service delivery issues. Another service delivery area that is supported by social media is employment services. Job openings are posted on these social media platforms and City of Cape Town and City of Johannesburg use the LinkedIn platform for employment services. These posts generally lead to another area of participation, which is Discourse.

Discourse

In some cases, the posts made by the municipalities lead to discourse between citizens on these social media platforms. Citizens make comments on the post and respond to comments from other citizens. This usually leads to a back and forth discussion on the original content posted by the government.

Consultation

Although consultation is not directly executed on the social media pages, information of public consultation opportunities within the provinces and municipalities are posted. These posts generally have details of the time and venue of the consultation event or a link to the form on a website if it is an online consultation process.

Social media is also used in "Emergency Management" by the South African government. Nelson Mandela Bay Municipality, City of Cape Town and Western Cape Province recently used social media to keep citizens updated on fires, storms, floods and droughts in their regions. Information on safety, road closures, relief efforts and how citizens could help was posted on the respective pages of these organisations. Emergency management is a core business function of the government and is one way social media has been integrated into government around the world (Krzmarzick, 2013).

The participation of citizens in issues of government in South Africa can be described as superficial based on the analysis of provincial and municipal social media platforms. Most communication is one-to-many. This form of communication using social media is described as top-down, from the government to citizens and is criticised as lacking support for bi-directional information exchange (Hand & Ching, 2011).

RECOMMENDATIONS AND CONCLUSION

A cursory exploration of social media use by the South African government might give the impression that implementation is well underway and successful. This is because all provincial and metropolitan municipalities have a social media presence. On closer inspection, some of these accounts are inactive or are inadequately used. Social media for participation is still in its infancy and ideological. Even though social media has been touted as a tool for public engagement and participation, it is currently being used mainly as an information-broadcasting medium. This inability of government organisations to go beyond the information broadcasting phase has been highlighted in research (Zavattaro & Sementelli, 2014). Opportunities to use social media in more participation activities exist through features of some platforms such as online surveys and polls. Using these features, public deliberation, consultation and participatory spatial planning would be impactful and substantial. Social media platforms also support live streaming whereby citizens have access to town hall meetings, council meetings and other stakeholder meetings that would keep them informed.

Regarding information posted, government organisations should post content relevant to community living which was seen to attract higher levels of engagement from citizens. A lack of relevant information hampers the process of adoption. One way of ensuring content is relevant to citizens is to engage in a pull strategy where citizens are encouraged to produce content. Mickoleit (2014) pointed out that governments that use a pull or networking strategy in engaging with citizens reach a much larger audience and have better engagement than governments using a push strategy.

Government organisations should be selective about the platforms they use. Engaging with citizens on a platform that resonates with them has been identified as a best practice for social media in government (Harper, 2013). It was evidenced from this study that government organisations in South Africa create profiles on several platforms but eventually abandon some of these platforms. This could be due to a lack of staff expertise in running these platforms, a lack of content for the platforms or a lack of engagement from citizens. Government organisations should endeavour to research what platforms their constituents are most familiar with and then utilise those platforms.

This study set out to explore the ways in which government organisations in South Africa currently use social media. The exploration involved determining what social media platforms are most commonly used and what participation activities these platforms are used for. The exploration was done using the Tambouris et al.'s (Tambouris et al., 2007a) E-participation framework to review the social media pages of the provincial and metropolitan municipal governments. The most commonly used social media platforms in South African government

organisations are Facebook, Twitter and YouTube. These platforms have the largest user base in the country. These platforms are mostly used for information provision; however, participation areas such as service delivery, consultation and discourse were also identified.

The paper contributes to the discussion of social media as a tool for E-participation in South Africa by presenting an outlook on the current situation of social media use. An understanding of social media use within South Africa lays a foundation for developing a better strategy for public participation. The study was limited to larger government organisations and therefore presents best cases within the country. Further studies could explore if and how smaller municipalities in rural areas of the country use social media. It should also be noted that the study presents a snapshot of provincial and municipal activities on social media at a moment in time. One way the study could be extended is by comparing government practices over an extended duration.

This paper is part of a larger research study that aims at developing a model for a more effective and structured approach to public participation using social media. The development and implementation of the model will be presented in a future research paper.

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