

Open Government Alignment for Effective E-Participation

by

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DECLARATION

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Explore the extent of alignment of open government initiatives within the government

ecosystem in South Africa

I hereby guarantee that the aforementioned thesis is entirely my original creation and that every resources utilized or mentioned in it have been properly cited and acknowledged.



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DATE

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ABSTRACT

The introduction of electronic-participation initiatives in a form of involving community in various countries yielded positive results as compared to traditional mechanisms; more people are engaging government departments on various matters using technology. The South African government has implemented such initiatives to allow citizens to engage with various government departments. This study seeks to explore and discuss open government alignment for effective e-participation in South Africa.

Despite these initiatives by government, there is not enough literature detailing the extent alignment of open government for e-participation by its citizens. The study utilised institutional theory as a lens as it describes the normative, cognitive and the normative environment which captures the setting of government appropriately.

A purposive sample of employees at the BCMM were chosen. An interpretive inductive qualitative case study was the method selected to discover the alignment of open government initiatives within the government ecosystem in South Africa. Data was collected using interviews and with specific emphasis on government operating models that are supportive of open government initiatives, government mechanisms that enable effective strategic alignment of open government initiatives. To uncover specific subjects within the transcribed interviews, thematic and content analysis were used to examine the data that had been gathered. Identified themes infer that South African government still utilises traditional mechanisms to engage citizens. The information posted in government websites are reports meant to inform the public about what had happen in previous financial years but there isn't much participation from citizens. The study concludes that there is a lot of work that needs to be done to get government ready to fully support its citizens towards active citizenry

A practical contribution from this study is that the South African government can adopt e-participation tools that seeks to connect the ordinary citizens with government administrators. Theoretically institutional theory captured the complex nature of the government environment. The use of an interpretive qualitative case study captured the entire picture of how the alignment of open government initiatives with a government department happen.

KEYWORDS: Open Government Ecosystem, Transparency, Government Mechanisms, Strategic Alignment, and E-participation.

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DEDICATION

This dissertation is dedicated to God, my wife, and my children. I appreciate your ongoing help and encouragement.

ABBREVIATIONS

BCMM	Buffalo City Metropolitan Municipality
DAMODU	Democratic Activity Model of Open Data Use
DFFE	Department of Forestry, Fisheries and the Environment
DRDAR	Department of Rural Development and Agrarian Reform
GIS	Geographic Information System Mapping
GIFT	Global Initiatives for Fiscal Transparency
GODAN	The Global Open Data for Agriculture and Nutrition
ICT	Information and Communication Technology
IDP	Integrated Development Plans
ILC	International Land Coalition
NGO	Non Governmental Organisations
OBI	Open Budget Index
ODB	Open Data Barometer
OECD	Organisation for Economic Co-operation and Development
OGP	Open Government Partnership
SIC	Spatial Information Committee

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CHAPTER ONE: INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

This research is premised within the field of Information Systems and local government in South Africa and is focused on open government alignment for effective e-participation. The study starts by introducing the background, open government initiatives, definitions of dissertation topics, South African government, open government in Buffalo City Metropolitan Municipality, Background information on the research problem, Problem Statement, primary research question, and secondary questions are all included in this chapter, along with the aim, research objectives, contribution of the study, research technique, underpinning theory, and thesis outline. Over and above this, the chapter outlines the structure and flow of the dissertation. The background of the study is covered in the part that follows.

1.1.1 Background

The degree in which the general public can observe and influence governmental operations is referred to as open government (O'Connor, Janenova, & Knox, 2019).

In order to assist their citizens' and the business community's strategic goals, governments have begun implementing open government initiatives around the world (Henninger, 2018). For example the Brazilian government through the groundbreaking Agents of Open Government initiative in So Paolo, where citizens train civil workers in open government initiatives (Craveiro, Machado, & Machado, 2016). The Open Government Initiative serves as a hub for a variety of cutting-edge initiatives, such as efforts to boost public engagement through more transparent policy formation and open data, spending, and platforms. For instance, United States of America agencies upload their data to the new Data.gov website in machine-readable formats (Strandberg & Grönlund, 2018). Finland has something similar where an open government portal, links citizens with crowdsourced and government resources to develop fresh approaches to enhancing public programs (Young, 2019).

More and more nations are realizing that innovative ideas can come from outside the government and enable participation in government by citizens (Dardha & Ndou, 2004). This gives governments an opportunity to learn new strategies and ideas while fostering inclusivity and trust in society by encouraging citizen-driven innovation (Rosa, Kimpeler, Schirrmeister, & Warnke, 2021).

The South African government in efforts to encourage citizens to participate in government has implemented an open government initiative to advance transparency, give citizens more power, combat corruption, and use new technology to improve governance (Hunton, Arnold, Florida, Reck, & Florida, 2010). This is consistent to what other governments are doing in other parts of the world to promote openness and citizen engagement.

As per Open Government Partnership, the organization that spearheaded the unveiling of the world's first Open Government Data, only seven of the 11 African countries including South Africa had operational Open Government Portal online portals as of 2016 (Afful-Dadzie & Afful-Dadzie, 2017a).

1.1.2 South African Open Government Initiative

“The South African government supported the Open Government Partnership by promising to work with civil society to enhance transparency, public participation, and the eradication of corruption within the governmental and private spheres” (OGP, 2019). Therefore it is important to understand how these initiatives occur by documenting how, why, where and when things happen post the deployment of open government.

Despite the implementation of open government, ordinary South African citizens, particularly those from impoverished and black working-class neighborhoods, have limited access to essential services including water, housing, sanitation, power, sufficient food, and health care (Seri, 2018). Considering that other needs are given precedence over fundamental human needs, open government appears to be pointless. This open government initiative by the SA government was implemented in

hopes of encouraging e-participation by these marginalised communities unfortunately, this has not been the case (Masango, 2001).

The implementation of the open government initiative was supposed to reach these under resourced communities, however, this remains a challenge. Based on these development the study looked at the extent of open government initiatives within the government of South Africa to enhance citizen e-participation

1.2 Definition of the Dissertation Topic

This section describes the keywords that make up the dissertation topic "Open Government Alignment for Effective E-Participation in South Africa" is provided in the section that follows.

1.2.1 Open Government

Open government is defined as the level of government transparency, accountability, and participation of citizens in socio-cultural, political, economic and government processes (Harrison and Sayogo, 2014).

1.2.2 Alignment

Alignment entails discovering similarities between words and phrases in a parallel context (Mihalcea and Pedersen, 2007). The term alignment in the context of open government describes programs that use information technology (IT) to enable open government where IT strategy is in line with government strategy to encourage citizen e-participation (Cui et al., 2015).

1.2.3 E-Participation

E-participation refers to the utilization of information technology tools to promote two-way interaction involving citizens and local governments (Shihab & Hidayanto, 2021).

1.2.4 Effective E-Participation

Through the use of proper ICT technologies, effective e-participation involves including citizens in the decision-making process to achieve a variety of objectives to engage with its population (Smith, Macintosh, & Millard, 2011).

1.2.5 Corruption

The definition of corruption is the willful performance or neglect of a recognized obligation or the unjustified use of power with the goal to obtain a more or less personal advantage (Rose, 2018). The fairness, stability, and effectiveness of these services are all threatened by corruption, which also damages the public agencies' reputations and portrays the government as unjust and predatory (Rajshree & Srivastava, 2012).

1.3 STUDY CONTEXT

This section discusses the study context.

1.3.1 SOUTH AFRICAN GOVERNMENT

The government of South Africa, which has three levels of authority (national, provincial, and local), is a constitutional multiparty democracy (Republic of South Africa, 1996). Figure 1 depicts the three spheres of government.

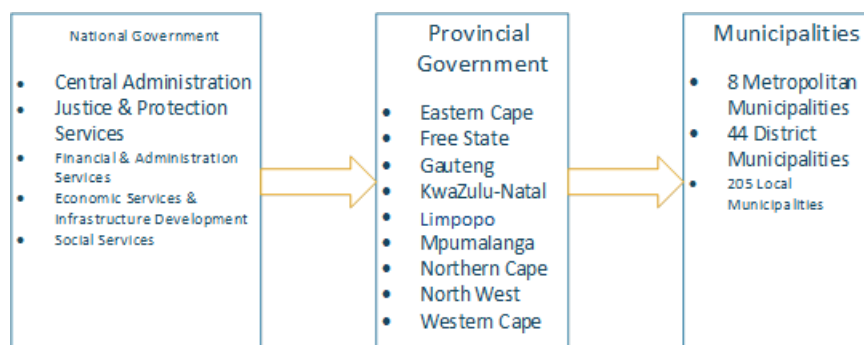


Figure 2: Three Spheres of South African Government

Three parliamentary organizations, nine judicial institutions, twelve independent constitutional bodies, and forty-four national government departments make up the South African national government (South African Government, 2022). The national government is in charge of formulating laws and regulations defining citizen rights and responsibilities as well as delivering government services (<https://www.etu.org.za>, 2022). Each government department is required to implement the policies and laws decided upon by Parliament or the Cabinet.

South Africa is divided into nine provinces and premiers are chosen to lead the executive branch, and each province has its own separate legislative assembly. A Provincial Growth and Development Strategy outlining plans for boosting each province's economy and services is their responsibility.

There are 257 municipalities in South Africa, with eight of them being metropolitan, forty-four being district, and 205 being local. The level of government that is most accessible to the public is local government. Buffalo City is one of the eight metropolitan municipalities. The ten provinces of South Africa are home to around 59.62 million people, and each province contains municipalities that provide certain basic services to its citizens. To enable service delivery, increase government openness, and provide societal benefits, open government processes are more important than ever (Bonina & Eaton, 2020).

(Municipalities.co.za,2012) estimates that there are 6 996976 people living in the Eastern Cape alone, which has a land area of 168966 km². The Eastern Cape, South Africa's second-largest province, has 31 local municipalities, six district municipalities, and two metropolitan municipalities which is Buffalo City Metropolitan Municipality and Nelson Mandela Bay Metropolitan Municipality. BCMM is required to offer its citizens high-quality services and use integrated development plans to respond to community requirements (IDP). The City of Cape Town works with nonprofits to involve the public in municipal affairs (Moreno-Carmona et al., 2020). Innovative approaches to include citizens in public organizations' operations are encouraged by open government.

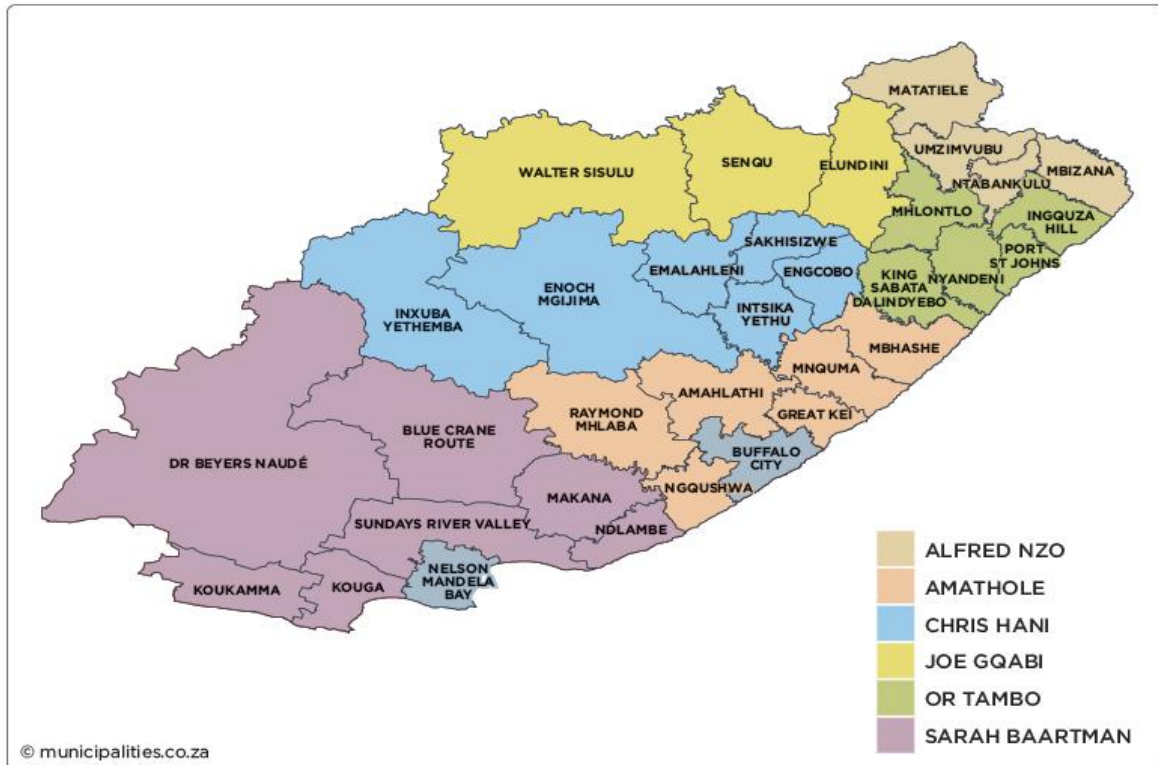


Figure 3: Eastern Cape Municipalities

The local governments are in charge of providing all local services, such as those pertaining to sewerage and wastewater, parks and other recreational areas, libraries, electricity, public health centers, garbage removal, municipal roadways, street trading, and local tourism.

1.3.2 OPEN GOVERNMENT IN BUFFALO CITY METROPOLITAN MUNICIPALITY

The Buffalo City Metropolitan Municipality uses its website to tell the public about its services, policies, papers, reports, public notifications, holidays, tenders, speeches, and awareness videos (Buffalo City Metropolitan Municipality, 2022). These includes the mobile app that allows citizens to buy electricity, log incidents, get financial statements, access news, documents, and get input from the citizens.

1.4 BACKGROUND TO THE RESEARCH PROBLEM

This section deliberates the background to the research problem identified in the research literature and written according to gaps.

Gap 1: *Stakeholder satisfaction*

Although many studies have examined open government, there is a lack of research on how open government alignment for effective e-participation influence citizen participation in government operations in order to continuously improve their services to satisfy all types of citizens' needs. In open governance, decisions are made with the goal of raising average stakeholder satisfaction, with a focus on improving the decision's acceptability to those stakeholder groups whose interests and preferences have not previously been adequately taken into account (Robertson & Choi, 2012). Some of open government portals do not satisfy the needs of all stakeholders or are used by citizens, and the majority of them do not adhere to the open information standards or take into account all aspects of open government (Abella, Ortiz-De-urbina-criado, & De-Pablos-heredero, 2022). Due to the complexity of many current social issues, there has been an increase in the use of collaborative approaches, which try to create policy solutions that will take into account the interests and concerns of various stakeholders.

Gap 2: *Political Interference*

The existing open government research shows that open data might be misused to political reasons. In the article where MAGA used open data on fertilizer delivery for the years 2012 to 2015 as part of its participation to the Zero Hunger Pact. The 340 municipalities in Guatemala received bags of fertilizer as part of the Open Government initiative, and these records include the recipients' names as well as a list of those municipalities. Politicians utilized fertilizer as a prize for their followers once open data stopped being used from 2012 to 2014 and was clearly different in 2015, alternatively they might use fertilizer to win over voters who supported a different party (Müller, Blom, Mora, & Etten, 2021). Open government aims to fight corruption among other things but this initiative was used by political connected people to benefit their

constituences only. In Kenya, the policy climate was characterized by a lack of public consultation, with decrees, circulars, and political exaggerations taking the place of actual policy-making tools (Amutabi, 2003).

Gap 3: *Lack of data integrity*

The literature on open government demonstrates data silos, where just a few or a relatively small amount of datasets are addressed by open government initiatives, and where data movement from one system to another necessitates human involvement. Automate data flow between systems to boost output to ensure open data integrity while accelerating data dissemination to enhance open data quality, speed up procedures, and preserve data integrity, directly pull information from reliable sources (Ubaldi, 2013). Open data systems can be employed as a resource to find pertinent data, identify relationships, and analyze hundreds of millions of lines of data in a split second (Pereira, Macadar, Luciano, & Testa, 2017).

Gap 4: *Lack of Stakeholder Collaboration*

The development of open government initiatives suffers from a lack of stakeholder participation, and every government organization has its own method for making data available to the public. The necessity of making data sets accessible through specialized web portals and for co-creation of services and their use by a variety of stakeholders, including the general public, media, web developers, and academic community, is beginning to be recognized by governments. There is a need for local governments' to comply with laws promoting the right of relevant stakeholders to information freedom of access and democratizing the use of open data among the stakeholders without excluding other stakeholders (Donald Shao & Saxena, 2019). In order to solve specific community issues pertaining to the local setting, the London Borough of Lewisham developed "pull" services utilizing technology (Prendiville, 2009). These services created new avenues of communication between citizens, council members, and other municipal stakeholders.

1.5 PROBLEM STATEMENT

According to the aforementioned gaps, the literature is inadequate to address the issue of open government alignment for effective e-participation in South Africa. These gaps further highlight the importance of this study in addressing the lack of literature in the field especially in developing countries such as South Africa

1.6 RESEARCH QUESTIONS

The problem statement highlighted in the background and the context of this research looks to address the following main research question:

1.6.1 Main research question

How are open government initiatives aligned for effective E-participation within the government of South Africa?

1.6.2 Research sub-questions

The following are the secondary questions that will help answer the primary question:

1. What open government initiatives in South Africa are there for e-participation by citizens?
2. How does effective alignment of open government initiatives in South Africa happen?
3. How does e-participation that enables effective alignment with open government initiatives in South Africa happen?

1.7 RESEARCH AIM

This study seeks to explore and discuss the open government alignment for effective e-participation in South Africa.

1.8 RESEARCH OBJECTIVES

To achieve this main aim, the study's objectives have been developed as follows:

1.8.1 Main research objective

To explore the alignment of open government initiatives for effective E-participation within the government ecosystem of South Africa.

1.8.2 Research sub-objectives

To explore open government Initiatives in South Africa for effective e-participation by citizens

- To determine how the effective alignment of open government initiatives in South Africa happen
- Determine how e-participation enables effective alignment with open government initiatives in South Africa happen

1.9 UNDERPINNING THEORY

The underpinning theory for this study is Institutional Theory. Institutional theory examines how structures, such as schemas, rules, expectations, and practices, are produced over time and space and how they are divided into deterioration and abandonment. It concentrates on the most durable and intricate features of social structure and regards the procedures in which these components are created as the supreme moral codes for social conduct (Scott, Smith, & Hitt, 2005).

The implementation of OGD by Saudi Arabia was studied using institutional theory and government agencies looked into the motivations for open government data adoption (Altayar, 2018). Institutional theory contends that making data publicly available will only strengthen current institutions rather than transform them to fully benefit from new advances (Janssen, Charalabidis, & Zuiderwijk, 2012)

1.10 RESEARCH METHODOLOGY

The study follows an interpretive qualitative inductive approach. As a component of the research strategy, a case study of Buffalo City Metropolitan Municipality was used; hence, BCMM is the unit of analysis. The population is the employees in BCMM who interact with the open government strategy, a purposive sample of these employees was selected. The sample is made up of operational employees and management. The semi-structured interviews and documents as the data collecting methods are

used, the time horizon is cross sectional. The empirical data were analyzed using content and thematic analysis methods.

1.11 CONTRIBUTIONS OF THE STUDY

This section discusses the study's theoretical and practical contributions to the OGD phenomenon..

1.11.1 Theoretical contribution

The study's theoretical contribution is the Institutional theory for Open Government Alignment for Effective E-Participation in a South Africa. The study's foundation is the alignment of open government for effective e-participation and the usage of Institutional Theory helped the researcher comprehend how to align open government for effective e-participation in a government department.

Since most open government research focuses on intentions for using open data, this study's focus is on alignment of open government for effective e-participation. This study is interpretive and uses a case study as its research strategy. It provides an alternative viewpoint on how open government was used and, as a result, how it might be successfully applied in South African government departments.

Since institutional theory predicts that existing structures would be strengthened rather than altered by the availability of data, transformation is required in order to profit from open data (Janssen et al., 2012). The second most popular theory used by government organizations to examine the motivations and actions behind the disclosure of accessible open data is institutional theory (Khurshid et al., 2020).

1.11.2 Practical contribution

The thesis presented a different conceptual framework for aligning open government for effective e-participation in South Africa and offers an insightful implication to practice on how managers, practitioners, and policy makers can implement open government in South Africa.

Government management should be aware of this research's practical application and open up their departments to allow all stakeholders to engage in decision-making about policy, service delivery planning, implementation, and follow-up, open government initiatives, and online involvement.

1.11.3 Methodological contribution

The study employed an interpretivist philosophy and a qualitative case study of a municipality as part of its evaluation of electronic participation in open government. The researcher was able to observe open government e-participation where it happens, this uncovered depth as compared to a positivist case study

The interpretivism describes research methodologies that, specifically excluding natural science techniques, hold that person's perceptions of life are products of human construction through various actors. It emphasizes the significance of an individual's actions and participation for both social and cultural life.. (Chowdhury, 2014). The interpretivist researchers examine not only whether a causal relationship exists or not, but also its precise characteristics and the environment in which it takes place and goes beyond what has already happened to understand how it has transpired (Chowdhury, 2014).

1.12 THE DISSERTATION OUTLINE

The research is broken up into seven chapters, each of which is described below.

1.12.1 Chapter 1: Introduction and overview

This chapter introduces the research, provides background to the research, explains the problem statement, and outlines the research questions, secondary research questions, including the objectives and aims of the research, the contribution of the study, Research Methodology, Underpinning Theory and Thesis Outline. This chapter also provides contexts and definitions for some important terms used throughout the study.

1.12.2 Chapter 2 : Literature review

A perspective on the open government literature is offered by the literature review. This chapter covers a discussion of government administration in general with reference to the Republic of South Africa. In this chapter, open government is investigated and addressed, along with related ideas like transparency, collaboration, and e-participation.

1.12.3 Chapter 3 : Underpinning Theory

The chapter explains the institutional theory commonly utilised in the IS and open government, especially those referenced and used to define the framework on which this research is based. Institutional theory looks at the processes and procedures through which structures, rules, schemas, and routines establish themselves as authoritative guides and stabilize social behavior within an organization.

1.12.4 Chapter 4 : Research methodology

Research methodology explains the methods utilized and the philosophical underpinnings of the study, enlightening the reader about alternative methodologies and philosophies that can be applied to open government research. The research strategy and approach, the data collection methods, sampling procedure and sample are explored

1.12.5 Chapter 5 : Data analysis and Interpretation of Findings

Chapter 5 discussed interpretation of findings, recommendations and theory building for open government use in municipalities. The study's findings were analyzed, discussed, and interpreted in this chapter in light of the literature. The themes and subthemes arising from the empirical evidence are followed in doing this.

1.12.6 Chapter 6 : Evaluation of the Research

The chapter deals with an assessment of the research in terms of each research objective and question and how they were answered; it also serves to remind the reader of the previous chapters and evaluates the research's contributions, limitations, and potential directions for further study.

1.12.7 Chapter 7 : Open Government Conceptual Framework

This chapter covers the proposed open government framework for efficient e-participation, where citizens will be involved in service creation, evaluation of reports, budgets, IDP, MPAC oversight, Policy formation, general consultation, decision-making sessions in municipalities.

1.12.8 Chapter 8 : Conclusion and Recommendations

The chapter outlines the conclusions and recommendations for improving citizen participation in municipalities and other government agencies.

1.13 Summary of the chapter

The chapter served as an introduction section of the study by first presenting the background of the study, Definitions of the dissertations, Study Context, Background to the research including the main research questions followed by sub-questions, and the research aim, research objectives and sub research objectives, underpinning theory, research methodology and contributions of the study. The chapter concluded by discussing the structure of the dissertation. The next chapter reviews literature relevant to this study.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter's primary goal is to review the research literature in relation to the study. The implementation of open government in South Africa is the main subject, particularly in the Buffalo City Metropolitan Municipality. In addition, this chapter contains the definition and analysis of open government, its concepts and benefits.

2.2 DEFINITION OF CONCEPTS

2.2.1 Open Government

Open government is defined as the level of government transparency, accountability, and participation of citizens in socio-cultural, political, economic and government processes (Harrison and Sayogo, 2014). The study seeks to explore the extent of open government for effective e-participation, hence, it is important to understand how South African government adopted open government. Citizens adopt an open government solution if they are likely to benefit from using it and government is ready to share information with citizens (Wang & Lo, 2016). The Open Government Partnership's (OGP) founding members include the South African government and eight additional nations and the aim of OGP is to reduce corruption and make government to be effective, however, since the establishment of OGP, there is no proof that putting the open government programs into practice has made corruption go down (Park & Kim, 2022). So, this highlights the importance of this study and find out what happens with e-participation as related to open government

2.2.2 Open government alignment

Alignment entails discovering similarities between words and phrases in a parallel context (Mihalcea and Pedersen, 2007). Aiming to achieve the intended results, alignment in the context of open government entails information Technology (IT) activities that are made possible by open government initiatives where IT strategy is matched with business strategy (Cui et al., 2015).

2.2.3 Citizen Participation

The participation of citizens can be conceptualized as an attempt to influence the government by trying to influence it to act in the manner that is desired by citizens (Lee & Schachter, 2019). Citizens participate in many government initiatives such as climate change campaigns where citizens' initiative on climate action is being actively promoted by the government to improve the resilience of the community to climate change, which increases citizens responsibility and influences the role of the government (Mees, Uittenbroek, Hegger, & Driessen, 2019).

2.2.4 E-participation

E-participation refers to the utilization of information technology tools to promote two-way interaction involving citizens and local governments (Shihab & Hidayanto, 2021). The e-Participation model is seen as a technology-enabled effort between citizens and government administration, integrating a bottom-up approach with social media channels for knowledge gathering and sharing. (Porwol, Ojo and Breslin, 2016). Government has been researching citizen participation in governance for more than 50 years, and current theories of public participation are increasingly focusing on good governance, the function of participatory governance in open government, and information and communication technology (ICT) like legislative wikis, online discussion forums, and platforms for public consultation as well as e-petitions, online complaint systems, platforms for crowdsourcing, and one-stop participation portals (Lember, 2022).

A well-known global project that supports transparent and open governments is the Open Government Partnership (OGP). These include initiatives to inculcate the standards of citizen engagement in governmental institutions, focusing closely on

open government and participation discourse. OGP membership is correlated with increased participation rates, which can be attributed to national political reasons as well as to the alignment of national customs and institutions with standards for civil society participation in OGP. It has been demonstrated to have an advantageous mitigating effect. OGP consistently has a stronger impact on collaborative decision-making than it does on general involvement. This backs up the argument that OGP membership socializes participation norms in state institutions, and that the impacts of this socialization are more prominent in nations with higher levels of democracy and participation standards (Wilson, 2020).

Public institutions need to better understand the interactions of eParticipation platforms that influence public policy decisions due to the impact of eParticipation practices and the mechanisms that drive change in public policy development, but you also need to be aware of the interactions and mechanisms that are actually implemented. (Coelho, Cunha, & Pozzebon, 2022). A current global movement aims to increase access to information and public services by rapidly expanding eParticipation as a mechanism for enhancing engagement and collaboration between government and citizens. E-Participation tools improves participation in policy making through the utilization of Information Technology tools and the processual model of

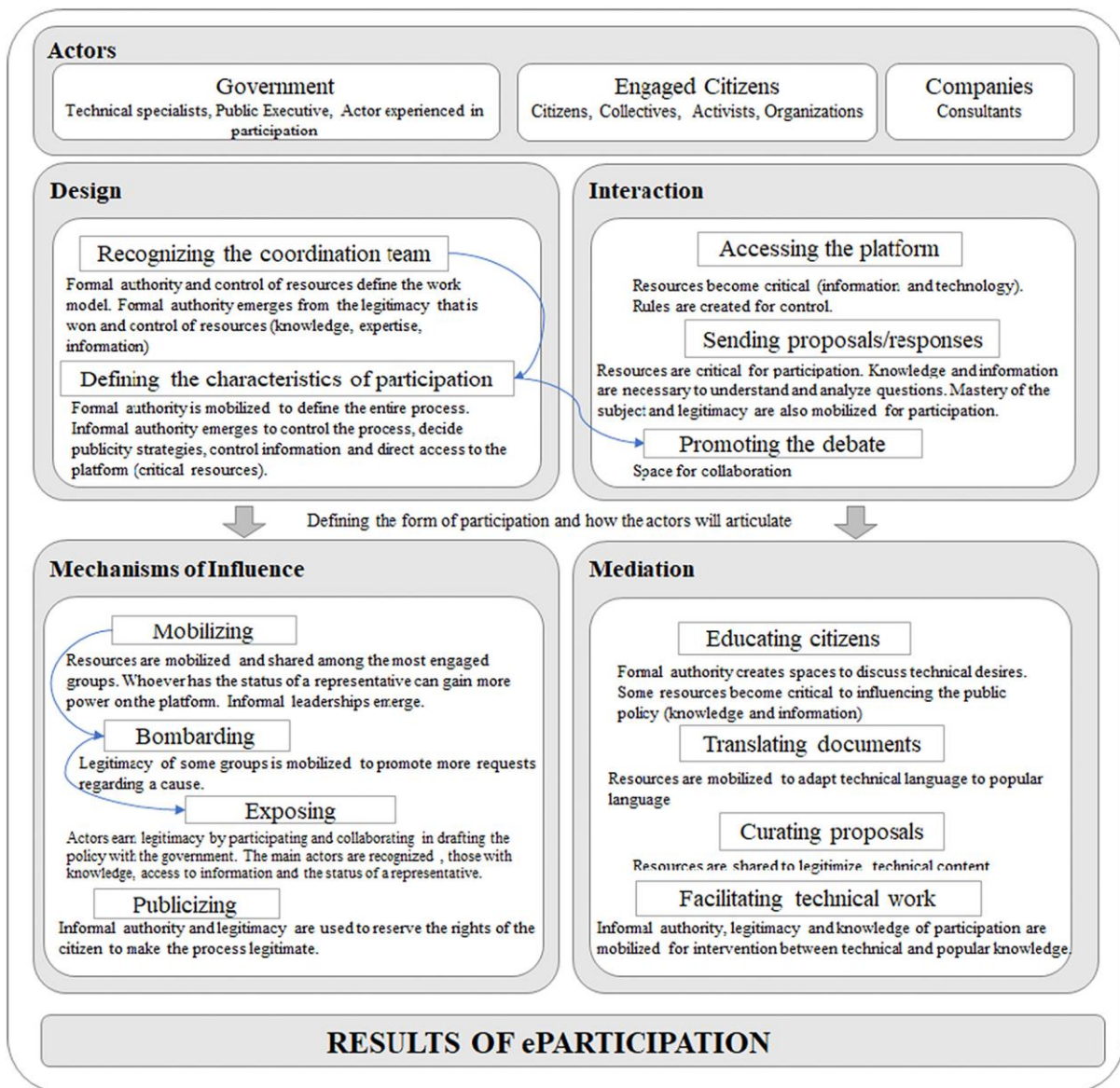


Figure 4: Processual model of eParticipation practice (Coelho et al., 2022)

eParticipation practice is the example of an eParticipation tool as illustrated in figure 3 below

In addition to providing a procedural framework for e-participation practices, Figure 3 extends this model for power and e-participation approaches, explores the actors involved in the process, explains and describes the design tools, platform interactions, including mediation actions, analyzes the influencing mechanisms, and deliberates the effect of e-participation on the development of public policy. The framework aids in our comprehension of a number of eParticipation process steps and how they are interconnected (Coelho et al., 2022).

Participation in Indonesia was not effective due to the gap between participating services and community expectations. Participation was also ineffective due to poor interactive format, grievance, and community involvement. The effectiveness of this participation is related to motivation. Formal worker group societies have not experienced barriers to education and skills to use ICT. From this, it is known that efforts to improve ICT community skills can be encouraged from an early age, however, the group's e-ready barriers include revenue, network infrastructure, and motivation for e-participate (Susanti, Harta, Diana, & Utami, 2021).

Through ICT, participation is the promotion of open, participatory governance and public participation. It is a mechanism for enhancing engagement and cooperation between the government and the populace for both the interests of society as a whole and the empowerment of individual citizens. Improving access to information and public services, as well as awareness and involvement in management and other governance processes, is the overarching purpose of participation in policymaking. Governments in democracies are not omnipotent, but their actions have an impact on the lives of millions of citizens. Therefore, participation, including eParticipation, is crucial because citizens need to know how government institutions make decisions, who is involved in their preparation, who is funded, and what information is generated; otherwise, the risk is very high, and high levels of corruption and lack of trust in the government undermine their ability to act effectively (Millard, Thomasen, Cvetkovic, & Pastrovic, 2018).

Governments all around the world are adopting participatory techniques at an increasing rate, and the administration is crucial to this development as they are frequently in charge of organization and management. Governments often find it difficult to provide participation chance and analyse the spread of participation in government and identified barriers, promoters, and strategies (Steinbach, Sieweke, & Süß, 2019).

The eParticipation model is seen as a technology-enabled effort between citizens and government administration, integrating a bottom-up approach with social media channels for knowledge gathering and sharing (Porwol, Ojo, Breslin, 2016). Participation includes application, quality government response, fostering participants through participation, recognizing the impact of participation on decision making, and assessing government transparency as key elements of participation (Soonhee and Jooho, 2012). A new phenomenon of government that promotes a higher level of transparency and public involvement is seen as a way to increase public confidence in the government (Bonsón et al., 2012).

There are three levels of participation: empowerment, engaging and enabling, the Portuguese government allows citizens to participate in e-participation initiatives, and local governments encourage participation (Fedotova, Teixeira, Alvelos, 2012).

The effectiveness and value of citizen participation will determine whether both citizens and governments will participate in the e-participation initiative (Alathur, Vigneswara Ilavarasan, and Gupta, 2016), and infrastructure and human capital will also be determinants of government to implement e-participation (Krishnan, Teo, and Lymm, 2017). Another key factor in adopting e-participatory initiatives is recognized trust in government and ease of use, and positive attitude (Zolotov, Oliveira & Casteleny, 2018).

E-Participation tools are powerful in policy-making processes; however, the layout of e-participation tools ought to take into account the precise users' desires and mental factors to inspire user's participation (Lee, Tsohou and Choi, 2017). The achievement of the e-participation initiative ought to now no longer be at the technological infrastructure alone, however the corporation ought to be an inclined partner (Jho and Song, 2015). Collaborative democracy, citizen sourcing, and citizen ideation & innovation encourage residents to take part in e-participation initiatives (Wijnhoven, Ehrenhard and Kuhn, 2015). The splendor of e-participation initiatives, advantages that include an open government initiative and the experience of someone who's use the e-participation platform contributes to the adoption of an e-participation initiative by citizen (Schmidhuber et al., 2017). Young human beings view e-participation as a very good platform for the joint expression of ideas (Rexhepi, Filiposka and Trajkovic,

2018). Social media furnished a platform for government establishments to increase transparency and citizen participation for a whole lot of democratic functions (DePaula, Dincelli and Harrison, 2018). Harrison, 2018).

2.5 TRANSPARENCY

Transparency is a fundamental requirement of democratic governance, and while transparency policy is associated with public sector reforms that are often important to be on the agenda of government, it is drawing attention. Transparency, which includes a wide range of public policies like anti-corruption, digital administration, transparency, authenticity, transparent government, honesty, and better governance, has an effect on the majority of governmental tasks (Lampropoulou & Spanou, 2022). Financial openness and efficiency can both be improved with an open online budgeting system that allows users to use financial data efficiently on online platforms (Jung, 2022). Governments can open the door to budget processes that have been specialized in bureaucrats by encouraging disclosure of the fiscal system and participation in budget processes that can contribute to the realization of fiscal democracy. Data disclosure is valued by increasing transparency and providing insights into how governments work, but the relationship is actually complex and mere disclosure of data does not always lead to transparency (Matheus & Janssen, 2020) and 48 determinants of transparency were identified as presented in figure 4 below.

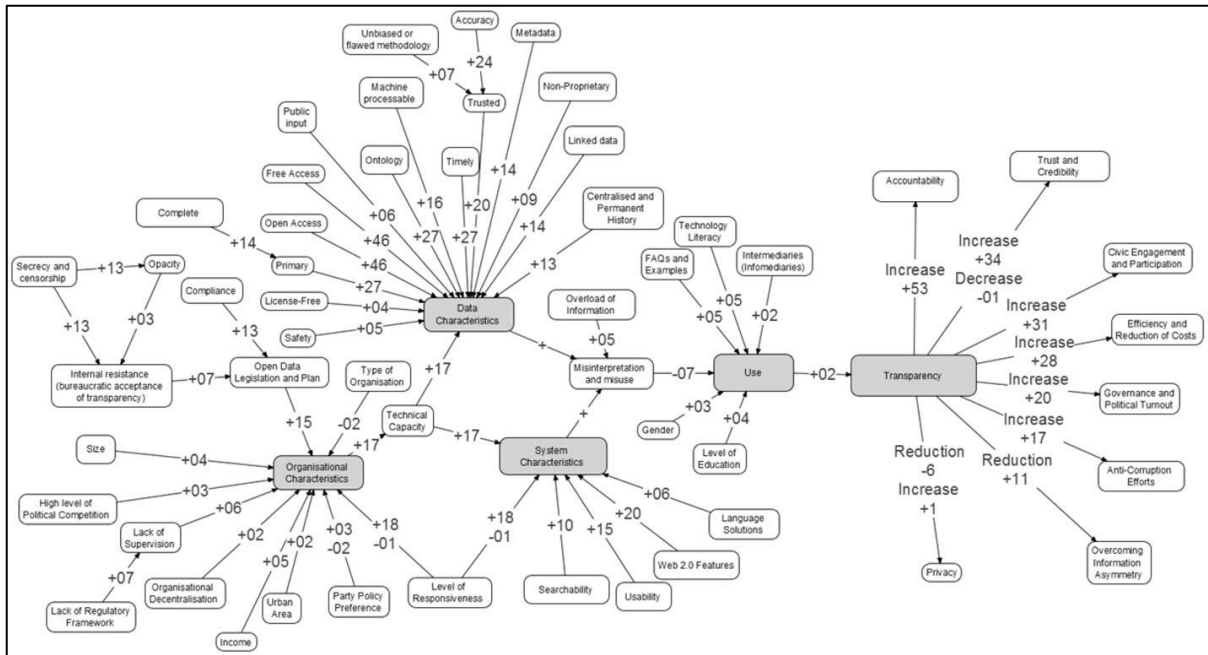


Figure 4: Determinants of transparency (Matheus & Janseen,2020)

According to Matheus & Janssen (2020), there are 48 determinants that affect the transparency of open government data: data quality, system quality, organizational characteristics, personal characteristics, and accountability, trust, public participation, efficiency and the effects includes overcoming voter turnout, fighting corruption and fraud, information asymmetry and data protection.

Administrative transparency plays a fundamental role in democratic governance because it conveys intangible values such as credibility and reputation. An important parameter for transparency needs to serve citizens, promote effective accountability, and this knowledge enables informed political participation (Muñoz Lalinde & Peña Orozco, 2022). The UK Government has reinforced its commitment to enhancing algorithm openness in the public sector with the release of the Algorithmic Transparency Standard. The standards demonstrate that the UK government is pushing the development of AI standards and making sure that they are supported by empirical research and facilitate consistent and broad implementation (Kingsman et al., 2022). The Algorithmic Transparency Standard's two-tier approach facilitates the incorporation of transparency into a diverse audience and promotes trust among the stakeholders of the algorithm. In addition, the implementation of the standard in the

UK public sector can be expected to have a broader and greatest impact on the standard practice in the private sector (Kingsman et al., 2022) .

The need of transparency in good governance is now recognized. Since the movement of open data has emerged and had a significant impact on government policy, such as an increase in public trust and citizen participation, it is debatable that this concept has drawn attention in academics and practice (Cahlikova & Mabillard, 2020). Institutions are responsible for making stakeholders accountable to achieve better results, and accountability is the result of verifiable transparency and is associated with building trust among stakeholders, therefore, accountability arises from the responsibility of the institution or company to its stakeholders (Brooks, Knatz, Pallis, & Wilmsmeier, 2022). This responsibility is a way of developing for improvement by empowering stakeholders, and the changing nature of the resulting relationship of power between actors helps to focus management on better results. Figure 5 illustrates the links between transparency, accountability, improvement and outcomes.



Figure 5: Links

Figure 5 makes the case that accountability results from verifiable transparency and is related to the development of trust with stakeholders. As a result, accountability stems from a company's or institution's duty to its stakeholders. This duty is related to the idea that empowering stakeholders is one approach to seek and create changes, and that the resulting changed nature of existing power dynamics between actors helps managers focus on better results.

Sustainable systems that are data-oriented offer a way to conduct intelligent data analysis that can be applied to decision- and policy-making (Alsukhayri, Aslam, Saeedi, & Malik, 2020). As shown in figure 6 below, sustainable systems that are linked open data (LOD) oriented are one step ahead in terms of providing a way to encourage transparency, trust, and accountability for governments and other public institutions in a variety of domains.

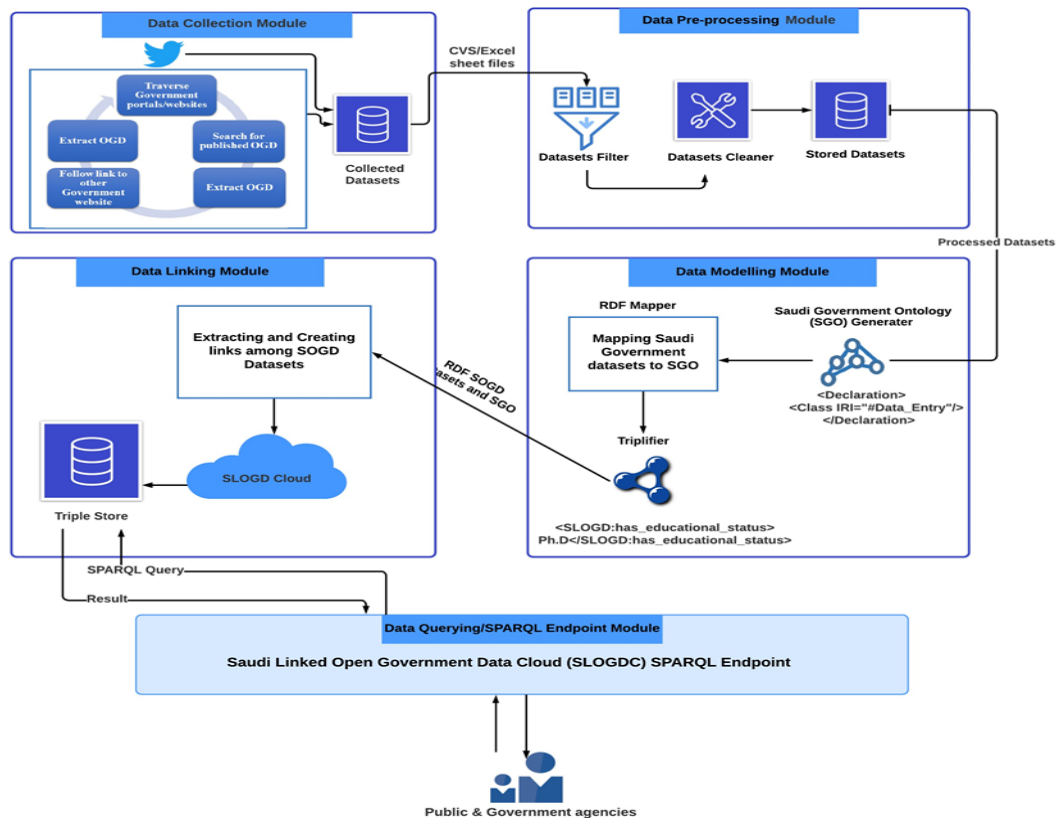


Figure 6: The architecture of Saudi Linked Open Government Data Cloud Framework (Alsukhayri et al., 2020)

The Saudi Linked Open Government Data Cloud Framework (SLOGDCF), shown in Figure 6, automates the creation of Linked Open Government Data from various data sources that are accessible in various formats and across many domains. The framework can be used to gather, extract, process, and create RDF datasets, which can then be mapped to the Saudi Linked Open Government Data Ontology (SLOGDO) to create Saudi Linked Open Government Data.

Transparency cannot be separated from open data, as the principle of open data is a major requirement for building transparency, however, a transparent government allows free access to open data, guarantees issuer reliability, data integrity, accuracy, and quality, and provides data in a reusable format (Milić, Veljković, & Stoimenov, 2022). It is argued that government communication entities can play a role in promoting transparency and that communication must be two-way to show that the government is willing to listen to the opinions of its citizens (Ismail, 2020). The City of Cape Town leverages activist organizations by sharing data on web portals and information centers to enable communities to learn more about the city's projects (MorenoCarmona et al., 2020). The South African community is a politically disputed area, and if there are citizens who are not members of these activist organizations, they may not receive this information.

Transparency is a new form of accountability that has been emphasized as an important element of good governance. The three-tiered structure of the South African government supports collaboration among ministries on shared issues, maintains transparency, and promotes citizen involvement in policy and decision-making (South Africa, 1996). ICT tools should be used to effectively serve citizens and facilitate access to government information (Yomzantsiafrika & Town, 2014). The South African government has adopted an operations management framework to help government agencies plan, build, execute and continuously improve operations for effective service delivery (Pretorius, 2008).

According to the current research, four operating models support the Open Government Initiative, citizens can get data from the government by downloading data from the portal, and there is no feedback from the citizens, the government is supported. You can become a data activist by encouraging the creative use of your data by app development. Alternatively, the government receives data from citizens by reporting issues such as pits, or the government engages in participatory two-way data exchange with citizens and citizens' input is integrated into decision making (Sieber & Johnson, 2015).

In the last two decades ago, the e-governance Stage Model was introduced to fulfil the functioning of e-governance and it was characterised by the availability of

government data on the web, two way communication, the possibility to transact and cross government integration of services (Estermann, 2018). The e-governance staged model helped to guide organisational change management processes and to evaluate progress on implementing internet based practices, however, it lacked orientation on how to implement open government initiatives and as result, the Open Governance Maturity model was introduced with a specific focus on data transparency, citizen participation through social media platforms and collaboration of government departments (Estermann, 2018). A new stage-of-growth model was developed as a stopgap measure between the two earlier developed models to allow for varying development paths and innovation that takes place in organisations (Estermann, 2018). Institutions or departments have their specific needs for open government, and the new stageofgrowth model allows institutions or departments an opportunity to implement their open government initiatives. The stage of growth model's limitations encourage organizational silos, and this approach doesn't explain how it aims to uphold open government values or indicators like open data, openness, participation, and cooperation.

According to (Ruijter, Grimmelikhuijsen & Meijer, 2017), The Democratic Activity Model of Open Data Use (DAMODU) paradigm promotes individuals' active engagement in democratic institutions using open data, and each democratic process necessitates a unique strategy. The intended audience will do so. This model clearly shows how citizens can get involved through an open data platform. However, it is not clear how to archive open government initiatives that require government-government and government-business collaboration.

The Digital Government Evolution Model allows government agencies looking to implement digital solutions to transform their business solutions (Janowski, 2015). This model highlights four steps that governments must go through before government internal and external relationships can be fully digitized via web applications. Both internal and external actors must be on the same page of technology usage before joining. Both sides can enjoy collaboration and transparency. The same is expected of open government, and citizens and governments need to have the same level of knowledge about how to use technology.

The loss of public confidence in the government has prompted the opening of the Ghanaian government according to the model of the Ghana Open Data Initiative (GODI) (Ohemeng & OfosuAdarkwa, 2015). GODI allows the government to provide data to citizens, but Open Government declares that citizens create and do not receive content.

Enterprise operating systems, along with reference models, are used by governments to effectively manage and perform their duties in the implementation of open government resources such as people, applications, and technologies (Chavarria Barrientos et al., 2017). Santander used an Internet of Things paradigm to manage key services like waste management, water system, traffic control, road maintenance, tourism industry, disturbance management, gardens and parks, and community involvement (Dias Dias, Munoz & Perez Gonzalez, 2017). Government process reengineering and business process reengineering models are accelerating the self-transformation of government agencies and the adoption of government services using information and communications technology (Li and Yang, 2016). The Platform Evaluation Framework (PAF) was developed to ensure a consistent mindset across the UK Government's Platform Initiative (Brown et al., 2017).

2.6 COLLABORATION

This section of the study focuses on collaboration that makes it possible for open government projects to be strategically aligned effectively. In order to make your data useful, you frequently need to process it (not by humans), so there are two types of business-related costs that enable collaboration between organizations. The second type of cost is related to data sharing to ensure dependable and secure communication and additional mechanisms to exclude data that actually needs to be shared (Runeson, Olsson, & Linåker, 2021). During Covid-19 pandemic, the Hong Kong government collaborated with other organisations such as governments departments, industry actors and public by sharing knowledge (Chun, Nabsiah, & Tan, 2021). Figure 7 depicts how Hong Kong government collaborated with other actors in the fight against Covid-19.

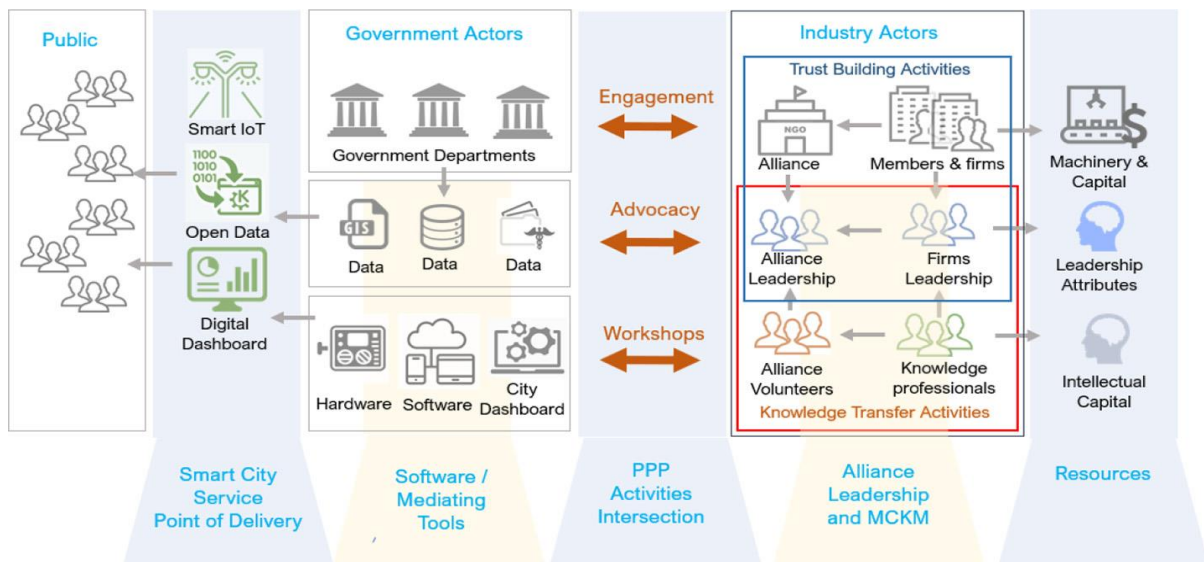


Figure 7: Smart City Leadership Model of Actors (Chun et al.,2021)

The Hong Kong Government became inclined to collaborate with diverse actors together with the technical understanding of the volunteers and the willingness to share knowledge with diverse actors, and having a common intention to combat the pandemic are elements that lessen the resistance to collaboration (Chun et al., 2021). Figure 7 illustrate how collaboration can be achieved if all stakeholders have a common goal and are willing to share knowledge among themselves. Collaboration at academic institutions, conducted by researchers working on the same topic, was defined as a social process that pools experience, knowledge, and social skills with the goal of creating new knowledge for people (Chen, 2020).

(Emaldi, Zabaleta, Guillen, & Lopez-De-Ipina, 2020) acknowledges that Open Government Data (OGP) innovation has the unquestionable potential to be a crucial instrument for enhancing transparency, accountability, or value generation. Citizens can therefore alter the content of current data resources or add new datasets and resources to the open data portal in order to address the present sustainability challenges related to such portals. It is suggested to enhance collaboration. In order to achieve this, AUDABLOK offers a citizen collaboration module that enables users to submit datasets and edit already-existing dataset resources. According to the normal procedure established by CKAN equipped to create new record transactions in the blockchain, publishing new records was carried out.

The development, processing, and reuse of commons to enhance the quality of life in cities is the goal of civic collaboration, an experimental partnership between the government and citizens. Understanding whether and how civil society cooperation will alter citizens' participation in local public politics is the goal of this study. Overall, this study demonstrates how collaborative governance creates room for self-organized civic activities, emphasizing whether to strengthen the type of creativity-based involvement rather than contentious forms of participation like forums (Bartoletti & Faccioli, 2020).

The information age has given us access to a wealth of knowledge, and this knowledge is sufficient to improve management practices for more cooperative community efforts like the transfer of technology to others, which is already happening in the public sector. This knowledge includes information on business practices, technical product specifications, and community impact. Democracy stands out from most business practices, such as the use of open source approaches like transparency, information sharing, product improvement, and other collaboration concepts can serve as the foundation for the next organizational level, despite the effects of business on the community (Bosek, 2021).

Stakeholder collaboration at the board level can deviate from driving corporate goals and reduce wasteful spending and management trends to protect the interests and rights of stakeholders (Mohd Saad, Haniff, Ali, 2019). The introduction of formal committees as a mechanism to control and manage infrastructure technologies and IT assets such as people will have a positive impact on business-IT integration (Bianchi and Sousa, 2016). Mechanisms for controlling the conduct, cooperation, and relationships of numerous stakeholders might be official or informal (Lu et al., 2019). Governance mechanisms ensure that the operation of an organization is consistent with social norms (Karbhari et al., 2018). Governance involves directing and coordinating different stakeholders at different levels of the organization to take responsibility for their actions (Almquist et al., 2013). Mechanisms are defined as structures that have parts that exist within an organization to perform specific functions (Bechtel and Abrahamsen, 2005). Governance mechanisms consist of contract management and trust in project management between organizations (Lu et al., 2019).

Contract governance and relational governance in software development projects drive project success (Haq et al., 2019). Standard SOA governance mechanisms, establishing clear service management processes, and increasing employee eligibility all contribute positively to SOA's achievement of IT flexibility (Joachim, Beimborn & Weitzel, 2013).

Integrated Government Data Sharing (IGDS) is essential for coordinating government agencies and improving public services, but overcome barriers by introducing dynamic mechanisms such as the Cabinet Office Committee and the Data Sharing Coordinating Committee with incentives (Wang, 2018A novel method for fostering open government and enhancing citizen engagement is large and open linked data (BOLD). However, because data protection and openness fight for attention, it is challenging to uphold both ideals at once, thus it is necessary to make a clear distinction between the two (Janssen & van den Hoven, 2015).

To bridge the gap between government and stakeholder aims of enhancing service delivery, the Malaysian government has implemented corporate governance procedures, such as the company's board of directors. (Bin & Yi, 2015). The corporate board of directors plays a central role in managing government operations and oversees and encourages management to perform their duties (Bin & Yi, 2015). Five determinants and mechanisms have driven the adoption of cloud computing in open government initiatives. These factors include cloud trust, technology, cloud provider support, organizational readiness, and environmental incentives (Liang et al., 2017). Other mechanisms that drive the adoption of open government initiatives are information system budgeting, stakeholder collaboration, and knowledge that are critical to successful adoption of open governance projects, with the attention of all stakeholders. Requires (PuronCid, 2014).

Governance strategies for open collaboration such as resource allocation approach and methodological approach (selfgovernance) play a significant role in the success of open governance initiatives as developers need to focus on a small number of projects at a time (Lee, Baek & Jahng, 2017). The alignment of IT with open government strategies has increased the innovation volume and organisation performance (Cui et al., 2015). The Enterprise Architecture model has been viewed

as the mechanism that aligns IT and Business, however, ArchiMate and Business Motivation Model (BMM) presents a better mechanism whereby strategic alignment between business, and IT can be archived (Bhattacharya, 2017). The Brazilian organizations in different sectors have adopted a crowdsourcing mechanism allowing collaboration with external stakeholders to enable the operation of an open innovation process (de Mattos, Kissimoto & Laurindo, 2018). The smart government uses crowdsourcing and social media mechanisms to gather inputs from a citizen (Witanto, Lim & Atiquzzaman, 2018)

2.7 SUMMARY OF THE CHAPTER

The implementation of open government has evolved in various nations around the world and is being investigated in various governmental areas. In this chapter, the idea of open government as a concept was examined, and various transparency models in support of open government were reviewed. The conceptual framework for open government alignment for effective e-participation was used to synthesis the study. This chapter provided a clear discussion of e-participation paradigms and collaborative techniques. The conceptual framework of this study are covered in the following chapter.

CHAPTER THREE: UNDERPINNING THEORY

3.1 INTRODUCTION

The theory that underpins this study is institutional theory which is covered in this chapter. The chapter also represents the conceptual framework of open government alignment for effective e-participation.

3.2 INSTITUTIONAL THEORY

The elements of institutional theory are thoroughly explained in this chapter. Organizations are societal and cultural systems that are intertwined in an institutional setting of social expectations and precepts about what constitutes appropriate behavior, institutional theory argues. (Hinings, Gegenhuber, & Greenwood, 2018). Institutional theory examines the steps taken by structures, rules, schemas, and routines to establish their authority as norms and to maintain social behavior inside a given organization. Institutional theory also addresses organizational changes that may result from many factors that challenge the status quo (van Wijk, Zietsma, Dorado, de Bakker, & Martí, 2019). It also aims to comprehend the processes by which local structures adapt to larger models and the relationships between actors (van Wijk et al., 2019).

The process of creating an organization includes growing involvement of actors within an organisational, emergence of cross systems of domination and styles of partnership, increasing the amount of information with which these organizations must deal with, as well as development of mutual awareness. According to Voronov & Weber (2020) an actor is an entity that is part of a network of other units that make up an institutional order. It is established by the institution and is given actorhood (standing as a recognized unit) by its place within the institution and in connection to the domain that the organization governs. In addition actors can also be individuals playing specialized roles (such as managers). Actors encounter experiences that help them feel connected to both the institution and their own sense of self (Patriotta, 2020).

3.2.1 Institutional Assumptions

According to Jönsson (2017) Social behavior is shaped and regulated by institutions, and this is supported by four main premises that institutional change can be done as described in table 3.1:

Table 3.1 Institutional Assumptions

Institution	Change
	Before organizations recognize (or assume they recognize) change, they must define stability.
	Think of three different steady environments. The first covers still-to-be-implemented modifications, the second lists organizations that have not yet undergone change, and the third lists the rules by which the change process is to be carried out.
	As a change is implemented, it is altered, translated, and made to fit into the specific culture of the organization. The change needs to be un-embedded and then rein-embedded in order to become embedded.
	A change could seem special to the organization or its members when it is happening. However, at a distance, whether now or in the future, or from the perspective of the knowledgeable researcher, the shift is merely another iteration of one of the stock adjustments.

Table 3.1 outlines four major assumptions for institutional change, one of which is that organizations must first define stability before recognizing change. Consider three distinct stable ecosystems. The first section contains still-to-be-implemented changes, the second identifies organizations that haven't yet undergone change, and the third section outlines the procedures for carrying out the change process. Changes are adapted, translated, and made to fit into the unique culture of the organization as they are implemented. To become embedded, the modification must first be un-embedded and then rein-embedded. When a change is occurring, it could seem unique to the organization or its people. The move, however, appears to be just another stock

adjustment from a distance, whether that distance is present or in the future, or from the viewpoint of the informed researcher.

3.2.2 Institutional Isomorphism

The coercive, mimetic, and normative isomorphic processes that govern the development of bureaucracy are shaped by the organizational field structures. These processes make up the institutional isomorphism theory, which seeks to explain the similarity within organizations in the same industry that is frequently linked to a lack of innovation and power-related discontent (Lai, Wong, & Cheng, 2006).

According to (DiMaggio & Powell, 1983) Official and unofficial external limitations placed on an organization, whether they come from dependent organizations or the society in which they function, lead to the development of coercive isomorphism. The shared legal framework, which could be politically constructed and tends to produce homogeneous organizations within a certain field, facilitates these pressures. Mimetic isomorphism is characterized by imitation and arises from coercive power, especially in contexts where there are several uncertainties that emanates from ambiguous goals and not understanding the technological infrastructure, Normative isomorphism govern the activity of production and build a cognitive foundation and legal framework for their occupational autonomy, people in an occupation work together to define the terms and procedures of their profession. This process is known as professionalization.

Competitive and institutional isomorphism are the two types of isomorphism (Fennell, 1980; Meyer, 1979). The term institutional isomorphism refers to the uniformity of institutions brought about by the legitimation processes that urge organizations to adopt trendy practices in order to demonstrate their social fitness. Comparatively, competitive isomorphism refers to the economic homogeneity of firms that are driven to use performance-based hiring procedures (Tan, Shao, & Li, 2013). Institutional and competitive logics are loosely related, can both result in isomorphic organizations at the same time, and are not always in opposition to one another. Legitimate and generally recognized organizational structures and practices in an organizational

sector may result through institutional constraints from regulatory agencies, professional groups, and other rivals (Tan et al., 2013).

3.2.3 Pillars of institutional theory

Despite their diversity, institutional theories go beyond the concepts of efficiency and rationality to consider the influence of social constructions such as rules, conventions, and beliefs on the behavior of organizations (Alexander, 2010). Institutional theory is comprised of three different schools of thought regulative theory, normative theory, and cultural-cognitive theory. Table 3.2 represent pillars of institutional theory.

Table 3.2 Pillars of Institutional Theory (Scott,2001)

	Regulative Pillar	Normative Pillar	Cultural- Cognitive Pillar
Basis of compliance	Expedience	Social Responsibility	shared vision
Indicators	Guidelines, laws, and penalties	Accreditation, Certification	Common perceptions
Basis of Legitimacy	legally authorized	ethically governed	Recognizable culturally acceptable

The regulative, normative, and cultural-cognitive foundations of institutional theory are discussed in Table 3.2. The regulatory pillar concentrated on practicality, rules, legislation, sanctions, and legal power. The normative emphasized social responsibility, certification, accreditation, and ethical rules. The culturally cognizant value shared vision, shared perceptions, and apparent cultural acceptance.

(Jacobson, 2009) postulates that the regulatory pillar bases compliance on expedience. Rules, laws, and fines are indicators of legitimacy that has been sanctioned by the law.

The ethically controlled validity is suggested by the presence of accreditation and certification across needs of industries and the normative pillar's advocacy for compliance with a moral imperative.

Cultural cognitive talk about a noticeable and customarily reinforced foundation of validity is founded on shared understanding, shared ideas, and shared logic.

The focus of institutional theory is on how organizations are shaped by the larger social and cultural contexts in which they function (Jacobson, 2009). Rigid conceptions of reasonable choice, cynicism, and wealth maximization are replaced with a more dynamic understanding of organizations situated in an institutional framework, formed by experience, and partaking in a process where institutions both assist responding and controlled action.

3.2.4 Deinstitutionalization

Existing norms deteriorate and eventually fall apart as a result of demand from logical actors and this can cause deinstitutionalization (Scott et al., 2005). The people's comprehension of the institutional underpinnings of human activity and realization that may transcend and exert influence over these institutions, which are conventionally ingrained in culture and history, have led to pressure.

Perceived issues with performance or the usefulness of institutionalized methods lead to functional pressure and competition for resources may lead to this pressure . Functional pressures are concerned with shifting perspectives on the utilitarianism of institutionalized processes that may be impacted by shifting economic utility perceptions, growing technical specialization, and growing resource competitiveness (Seal, 2003).

The developing performance crises, competing internal interests, rising innovation challenges, and shifting external dependencies are some of the political factors for deinstitutionalization (Nicholson & Sahay, 2009). The pressures are political in that they result from reactions to shifting power dynamics. Organizational restructuring, the hiring of new organizational members, and the appointment of a new chief executive officer may all have an impact on social pressures (Seal, 2003). Increased normative fragmentation inside an organization as a result of other developments, such as

broadening the diversity of the workforce or addressing the issue of excessive turnover, is a social strain (Nicholson & Sahay, 2009). The historical continuity of an organization can be disrupted by amalgamation or modifications to government laws that restrict or prohibit the continuation of an institutional practice and its associated deinstitutionalization. Deinstitutionalization theory provides us with much more theoretical lens how various intuitions interact, why some institutions endure while others disappear, and the social, political, and functional constraints that influence these developments

3.2.5 Weaknesses of institutional theory

There is conflict in social science between ideas that emphasize choice and innovation and those that emphasize stability and order. The first school of thought is supported by institutional theory. The normative and cultural-cognitive theorists within institutional theory, however, hold different views on this matter. The rationalists contend that in order for governing systems to exist and function, human agency and actors are required. The normative and cultural-cognitive theorists within institutional theory, however, hold different views on this matter. They contend that actors are a part of enduring systems that mold their interests and limit their options. (Cai & Mehari, 2015) summaries weaknesses of institutional theory in the following table.

Table 3.3 Weaknesses of Institutional Theory (Cai & Mehari, 2015)

Institutional theory's shortcomings	Various further theories	Research examples
The influence of human agency on institutional changes has received less attention.	Making sense (in a complicated circumstance, humans construct meaning.)	Pietilä (2014)
	Organizations are viewed as tools to execute well-defined goals that fulfil the requirement in the technical environment in the rational system theory.	Bernasconi (2006)
	primary-agent theory (As per their priority areas, rational individuals work to maximize their desires)	(Enders, de Boer, & Weyer, 2013)

	actor's point of view (highlighting the significance of decision-makers as individuals)	(Lepori, Usher, & Montauti, 2013)
	Negotiated order theory (Organizational environments are where personal identities are created)	Bell and Taylor (2005)

The flaws of institutional theory are discussed in Table 3.3 as a theory that makes sense in complex situations, where organizations are seen as tools to carry out clearly defined goals that satisfy the requirements in the technical environment and primary-agent theory according to their priority areas, where rational people strive to maximize their desires.

(Suddaby, 2010) suggests that when we start to examine the empirical world of organizations via a shared theoretical lens, institutional theory will become so popular that it will lose the complexity and variety of the actual world of organizations. (Peters, 2000) states that the institutional theory has been attacked for implying that people acting within of organizations do so out of a drive to maximize personal value rather than due to normative standards. Additionally, these moral norms are learned through participation in one or more institutions, which serve as the main social reservoirs of values. The preferences of the occupants of these structures, however, are unaffected by membership in the institution according to normative institutionalism. Instead, regardless of any institutional engagement they may have, the individuals who deal with the organizations have distinct ordered patterns of interests that largely remain the same.

3.3. Interpretivism with Institutional Theory

According to Ungsueh (2016) the institutional theory concurs with interpretivism that the governance landscape is characterized by a shift from government to governance. The interpretivist approach to addressing these social explanations naturally entails recovering and placing beliefs within the larger meaning-making networks that they are a part of. According to interpretivists, investigating governance should start with the practices that keep institutions in place rather than the institutions themselves. According to this theory, individual behaviors are not governed by institutional standards but rather by the ideas that people hold in defiance of customs and in the face of moral quandaries. In light of this, a decentered account of governance represents a typological movement from institutions to meaning in action.

Methodologies such as interpretivism emphasize the importance of a person's personality and participation in both social and cultural life. (Chowdhury, 2014). It specifically refers to research methodologies that disregard natural science procedures and maintain that actual humans in society create people's perceptions of reality. Interpretivists look at the motivations and significances underlying people's behaviors, including their social interactions and behavioral patterns.

3.4. Open government institutionalisation

Initiatives involving open government data (OGD) have been put into place as an appropriate instrument for enhancing service delivery and promoting democracy (Mungai, Belle, & Joseph, 2015). All state enterprises and government organizations must contribute to this program, hence the implementation process needs to be well planned and this necessitates the creation of laws and policies that promote it or the modification of those that limit free access to information without jeopardizing security.

If government organizations and departments believe that supporting OGD initiatives would have favorable political, social, economic, administrative, and practical benefits on society and the community at large, they are more likely to do so (Altayar, 2018).

3.4.1 Social

The capacity to boost accountability and openness on how public organizations operate, the things they are doing, and how they produce the policies, processes, and actions that influence their people' engagement is one of the benefits of implementing OGD. Additionally, it encourages public engagement and citizen empowerment, which raises confidence and improves citizen happiness.

3.4.2 Economic

Illustrations of the economic value include the addition of value to the current services and products, user-based innovation, the development of new items and services, and the availability of data to businesses, shareholders, and other parties.

3.4.3 Innovation

Accessing a variety of people and utilizing outside expertise and resources, whether in the public or commercial sector, could be made possible by allowing outside stakeholders to access, examine, handle, and find government data. This might result in the creation of practical services, goods, and programs that would help both society and public entities.

3.4.4 Operational

In addition to enhancing the technical and operational capabilities of governmental organizations and agencies, OGD assists the public administration function. Stakeholders don't need to collect data again because they can integrate, repurpose, reuse, and repackage various datasets for new uses. Reducing administrative labor through automating administrative operations, streamlining administrative processes, and enhancing government services are further operational and technical advantages.

3.5 Open Government based on Institutional Theory

The institutionalization theories that were discovered to be relevant to open government are presented in this section. This serves as the direction that makes the assumptions and research questions connected to each of the identified concepts clear.

The concepts listed below were found to include the following: Collaboration focused on shared meaning and mutual awareness among actors; e-participation focused on primary action of citizens in structures of government departments; open government focused on external factors, policies, and initiatives; transparency focused on problem-solving techniques; Mimetic isomorphism is the study of how organizations imitate others as they learn or in situations when they are unsure how to adopt specific structures, whereas coercive isomorphism refers to the formal and informal pressures an organization feels from society and other organizations (DiMaggio & Powell, 1983). People who operate in a given occupation collaborate to determine the rules and practices of their line of work. Production is governed by normative isomorphism, which also provides the cognitive underpinnings and legal basis for their professional independence (DiMaggio & Powell, 1983). The relationship between the processes that allow for proper institutionalization of the open government effort is illustrated by the open government diagram.

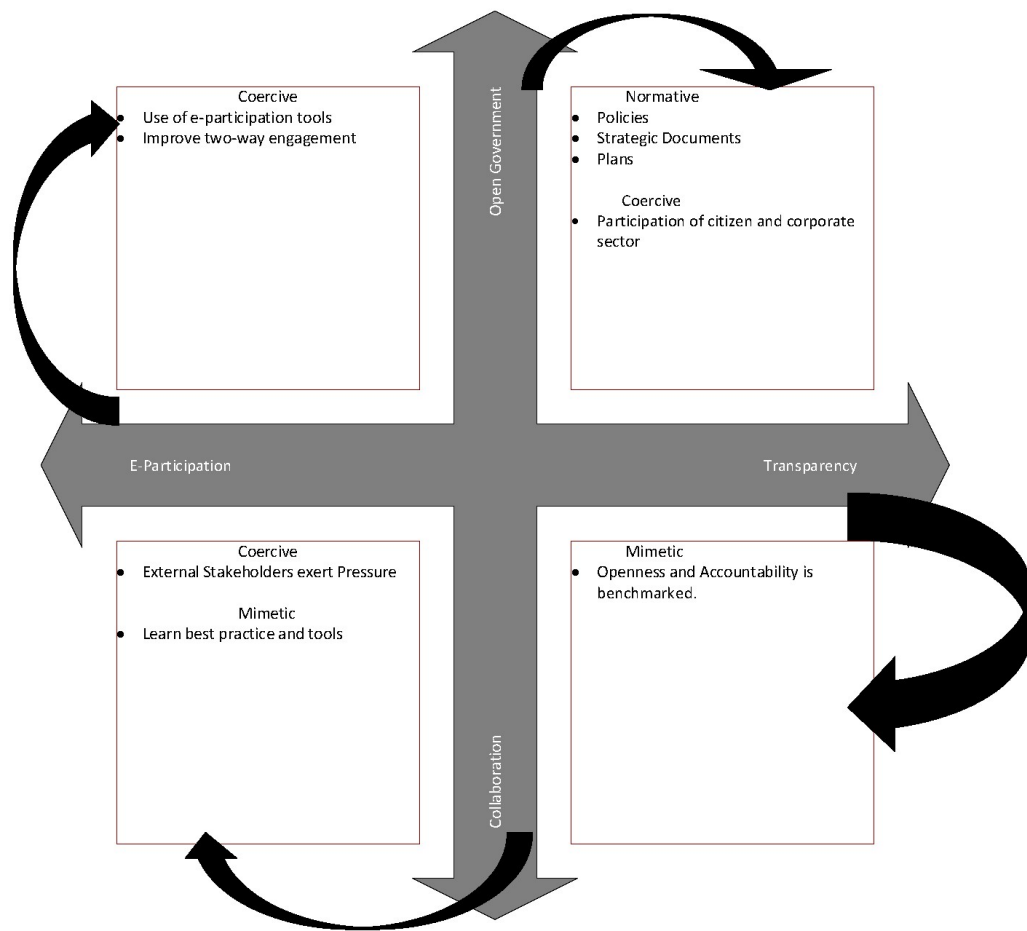


Figure 8: Conceptual Framework Open government alignment for effective e-participation

The figure above presents conceptual framework for open government alignment for effective e-participation. Since policies, strategy documents, plans, and the engagement of the public and private sectors drive change, open government at BCMM exhibits normative and coercive isomorphism attributes. Other highly developed institutions are used as a standard for openness and accountability techniques, demonstrating mimetic attributes that result in a transparent organization.

Because external stakeholders put pressure on BCMM and encourage them to adopt best practices and tools from other organizations, collaboration makes BCMM coercive and mimetic. Through the employment of e-participation tools that allow for two-way communication, citizens can coercively influence the municipality.

3.5.1 Coercive

Political influence is the source of coercive institutional isomorphism, and the coercive pressures are applied to a dependent organization by other organizations and by cultural norms in the society in which the dependent organizations operate (Lai et al., 2006).

3.5.2 Normative

Organizations become more alike as a result of the expansion, influence, and professionalization of several professions, which also opposes change (Katopol, 2016).

3.5.3 Mimetic

If organizational systems are poorly understood, objectives are unclear, or the setting creates symbolic ambiguity, organizations may copy other institutions. Mimetic behavior has many benefits for the economy of human action; for example, when a company faces an issue with unclear causes or hazy remedies, problemistic search may turn up a workable remedy with little outlay (DiMaggio & Powell, 1983).

3.5.4 Open Government

This process has connections to normative isomorphism and coercive isomorphism, two institutionalization theories. When it comes to normative isomorphism, the actors in charge uphold the policies, strategic documents, and plans that will lead to governed actions, a cognitive foundation, and a legal framework. Coercive isomorphism causes citizens and the corporate sector to actively participate in the municipality's everyday activities. The public is getting more and more interested in having access to official government data and information. Due to the quick growth of information and

communications technology (ICT), the extensive use of portable devices, and the variety of user needs, there is a greater need for accessibility to government data. As a result, a lot of government organizations now publish their data online. OGD is helpful for the government since it may guide policy decisions, aid in development plans, and reveal what the public wants (Altayar, 2018).

3.5.5 Transparency

Mimetic isomorphism is one of three institutionalization notions connected to this mechanism. The majority of the open government concept has been governed by nations that are Open Government Partnership (OGP) members, and BCMM when it comes to openness and accountability it must comply with the norm specified by OGP, demonstrating mimetic isomorphism. The creation of open government efforts to promote transparency is benchmarked against those of other organizations that have done so.

Globally, national and local governments establish open data projects with stated objectives like improved productivity, better transparency, or increased economic growth. Although few of these effects have been demonstrated, an increasing number of government agencies are making their datasets available to the public (Heimstädt, 2014).

3.5.6 Collaboration

Coercive and mimetic isomorphism are the two institutionalization notions that result from collaboration. External stakeholders can exert pressure on one another to advance an agenda for change or the execution of open government projects by using coercive isomorphism in partnership. Other government organizations will put functional pressure on the open government stakeholders, particularly when necessary resources and infrastructure are lacking. Mimetic isomorphism will emerge in situations where newly introduced government departments to open government

struggle to comprehend best practice manuals and tools for adopting open government and end up copying those who have accomplished.

(Meijer, Lips, & Chen, 2019) postulates that smart city governance involves both reorganizing collaboration between various players and technology. The manner that collaborative activity is organized is quickly evolving as a result of the release of new open collaboration tools in the public domain. These innovations enable new forms of cooperation that we might refer to as open governance: innovative community participation geared toward resolving complex stakeholder interests, improving people's awareness, or replacing traditional public service delivery techniques. These new open and cooperative formats in cities seem to point toward a substantially different and more clandestine function for the government in such partnerships, in addition to a vast number of digitally enabled individuals.

3.5.7 E-Participation

This mechanism was related to the institutionalization of coercive isomorphism. Once the citizens comprehend the necessity and potential of e-participation, as well as how to utilize the e-participation engagement channels, coercive isomorphism will be experienced through the engagement channel.

The utilization of technological tools for e-participation aims to improve two-way engagement between citizens and their institutions, however, citizens are adopting eParticipation at a comparatively modest rate (Shihab & Hidayanto, 2021).

3.6. Summary of the Chapter

A number of institutional factors, procedures, and conditions are likely to have an effect on organizations and institutions. Institutions are long-lasting, complex social organizations composed of symbolic components, interpersonal connections, and recourses, according to institutional theory. The chapter presented the underpinning theory and conceptual research framework of open government alignment for effective e-participation.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter discusses research methodology; the other sections cover the research philosophy, research approach, research strategy, unit of analysis, population, sample, sampling strategy, time horizon, data collection techniques, and data analysis.

Table 4.1 below summarises the research methodology for the study. The rest of the research topic will be in detail after.

Table 4.1 Research Methodology

Research Design	Methodology
Research philosophy	Interpretive
Research approach	Qualitative (inductive)
Research strategy	Interviews
Unit of Analysis	Departments in BCMM
Population	BCMM Employees and Management
Sample	<u>Operational Employees</u> Admin Staff <u>Management</u> Unit Managers
Sampling Strategy	Purposive sampling
Time Horizon	Cross Sectional
Data Collection Techniques	Semi-structured interviews Document reviews

Data analysis	Thematic analysis and content analysis
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Each element of the research methodology is described in the following section.

4.1.1 Research Philosophy

Open government research may take the form of positivist, interpretive, or critical theory, similar to how social research is conducted. The study followed an interpretive philosophy. Below is a discussion of the three philosophical approaches. In the field of information systems research, positivism, interpretivism, and critical theory are three prominent philosophical research orientations.

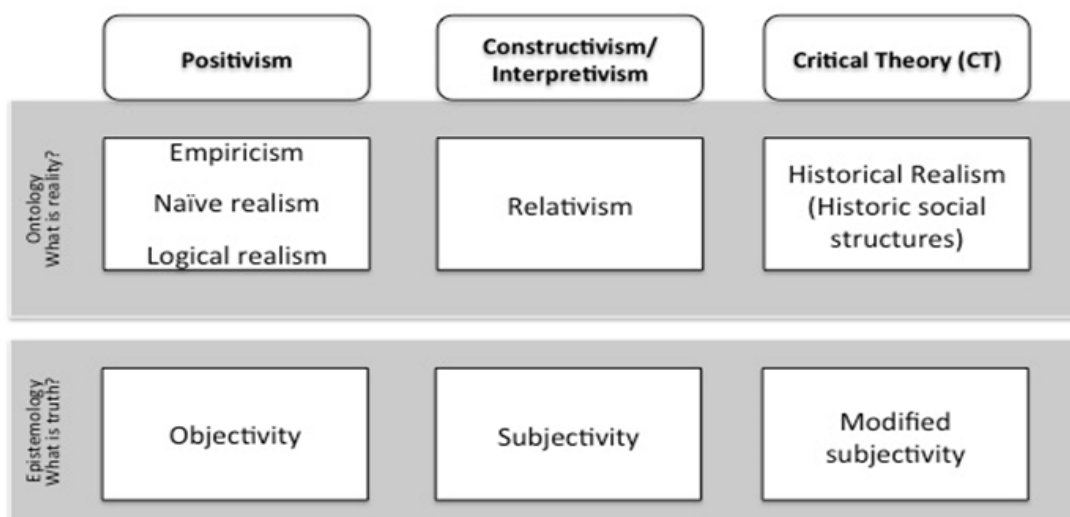


Figure 9: Components of Philosophy (Ryan,2018)

4.1.1.1 Interpretive Research

IS researchers can benefit from the study's interpretive paradigm of human behavior and thought in both social and organizational environments. Additionally, interpretive

research may offer a comprehensive understanding of a number of information systems phenomena, such as the creation and administration of information systems (Klein & Myers, 1999). Both the conduct of anthropological study and our comprehension of the underlying phenomenology and hermeneutics philosophy serve as the foundation for these concepts. (Klein & Myers, 1999) draw attention to the specific set of rules that are principally presented for the conduct and evaluation of interpretive research with a hermeneutic bent.

4.1.1.2 Critical Realism

According to critical realism, knowledge is formed through the social activity of science and the objects of knowledge are the structures and mechanisms that create phenomena. These things are genuine structures that survive and function irrespective of our knowledge, experience, and the circumstances that give us access to them rather than phenomena (empiricism) or human constructs placed on phenomena (idealism) (Dobson, 1999). Philosophical realism is the belief that the outside world can be known and that it exists independently of our senses, experiences, ideas, and will. While the second conjunct is an epistemological one, the first conjunct is an ontological one .

4.1.1.3 Positivism

Empiricism is thought to have evolved into positivism, which is typically associated with experiments and quantitative research. According to positivism, there exist truths that can be verified and reality can be viewed and measured and it is also believed that reality is the same for everyone (Ryan, 2018). According to positivist research, reality is objective and can be characterized by quantitative features that are autonomous of the researcher and the measurement equipment.(Klein & Myers, 1999).

4.2 RESEARCH APPROACH

The two most frequently used research methodologies in IS research are the qualitative and quantitative research approaches. The subsections describes qualitative, quantitative, inductives, deductive research approaches.

4.2.1 Qualitative Research Approach

The study employs a qualitative methodology, and the major objective of qualitative research is to understand human experiences from a humanistic, interpretive standpoint. Good qualitative research follows to principles of reliability like member-checking, gradual replication, and audit logs to make sure that interpretations are not arbitrary repeats of the researcher's personal beliefs. Each of these criteria looks at the content of the participants' statements to verify their accuracy. Participant, in particular, helps to validate qualitative research results by presenting themes and descriptions to participants to ascertain their agreement or disagreement with them (Jackson, Drummond, & Camara, 2007).

4.4.1.1 Inductive Process

The primary goal of the inductive technique is to free research results from the constraints placed by planned events and to enable those findings to arise out from general, significant, or noteworthy themes found in raw data (Thomas, 2006). Inductive analysis relates to methods where ideas, themes, or frameworks are created by the researcher after a thorough review of the raw data.

4.4.2 Quantitative Research Approach

The phrase "quantitative research" is used broadly to refer to research methods and designs that produce numerical data (Quick & Hall, 2015). In order to ensure that interpretations are not subjective reiterations of the researcher's personal beliefs, good research conforms to reliability standards like member-checking, stepwise replication, and audit trails (Jackson et al., 2007).

4.4.2.1 Deductive Process

Deduction is the method of moving from the broad to the specific in order to determine an unknown detail based on how it resembles a collection of well-known facts. It is used in quantitative research, and a variety of quantitative analytic techniques are used, from straightforward variable descriptions to complex statistical modelling techniques to show statistical correlations among the variables (Khalid, Hilman, & Kumar, 2012).

4.5 RESEARCH STRATEGY

A set of methodologies, strategies, and procedures for collecting and interpreting research data as well as the way a researcher conceptually plans a research project based on how they see the world are all referred to as research strategies (Verschuren, 2003). The information systems (IS) field has recommended using idiographic research strategies rather than nomothetic ones because the investigator closely investigates a single entity or a specific event in an effort to understand a phenomenon in its context, on the other hand, nomothetic methods look for general laws and only use techniques found in the exact sciences (Benbasat, Goldstein, & Mead, 1987).

The most adaptable research approach used in this research is a case study because it enables the researcher to keep the key characteristics of real-life occurrences while analyzing factual occurrences. Case studies often concentrate on deliberately chosen examples of a social unit in its natural surroundings as well as provide detailed descriptions of one or more cases, but they may also be employed in a thorough intellectual approach to accomplish experimental alienation of one or more chosen social features in a real-life setting (Oliva, 2019).

Interpretive case study research differs from positivist case study research and the information systems (IS) knowledge base because it places a strong emphasis on close collaboration between the researcher and participants all through the case study process, observing the case participants as active partners in the creation of the case

narrative (Bygstad & Munkvold, 2011). This research follows an interpretive case study.

4.5.1 Interpretive Case Study

It makes sense to employ an interpretive case study methodology to gain a thorough knowledge of the complex interactions between humans and computers in social settings (Andrade, 2009). The BCMM case study is utilized to comprehend how open government alignment for effective e-participation works.

4.6 Unit of analysis

The management of various departments at BCMM make the unit of analysis of the study. The departments were examined during the early stages of implementation. With the help of open government users who carry out open government activities to engage with citizens, the use of open government is examined at the departmental level. The following section discusses the study population.

4.7 Study Participants

According to Mbokane (2001), the totality of all the objects, subjects, or people who satisfy a particular set of criteria is referred to as the population. BCMM managers make up the study's population since their duties entail communicating with many different parties, primarily citizens, in order to offer services to the general public.

4.8 Participants in the study

Participants in the study include BCMM department/unit management and employees. The study participants are presented in the table 4.3 below.

Table 4.3 Sample of the study

Position	Department	Job experience	No of years in position	Level of Education
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Information Management Practitioner	Knowledge Management Unit	8 Years	5 Years	Degree
ICT Manager	ICT	20 Years	7 Years	Diploma
Office Manager	Local Economic Development	19 Years	16 Years	Degree
Office Manager	Finance	13 Years	11 Years	Masters
Executive Assistant	Human Settlements	15 Years	8 Years	Diploma
Office Manager	Corporate Services	10 Years	6 Years	Degree
Office Manager	Public Health and Safety	33 Years	14 Years	Diploma
Office Manager	Executive Support Services	13 Years	9 Years	Degree
Financial Manager	Special Programs	33 Years	13 Years	Degree
BCMM Youth Chairperson	BCMM Youth Council	3	2	Diploma

The sample for the study is shown in Table 4.3, which includes participants from the various BCMM departments. The sample group was chosen using the purposive sampling strategy. The selection of information-rich people for in-depth research is essential to the rationale and effectiveness of purposeful sampling (Shaheen, Pradhan, & Ranajee, 2018). The interviewed participants were chosen based on their familiarity with open government and senior roles in their respective departments, keeping in mind that this strategy is based on non-probability sampling.

4.9 DATA COLLECTION METHOD

The information was gathered through semi-structured one-on-one face-to-face interviews, official municipal records, and the Buffalo City Metropolitan Municipality website.

4.9.1 BUFFALO CITY METROPOLITAN MUNICIPALITY

893 157 people, or 1.5% of the total population of South Africa, reside in BCMM, one of the country's eight metropolitan areas (Department of Cooperative Governance and

Traditional Affairs & Buffalo City Metropolitan, 2020). The City stands out for having a composite land use pattern that mixes rural, peri-urban, and urban elements. Buffalo City is the principal urban center in the province's eastern region.

The corridor of populated regions that make up this region is comprised of a coastal city of East London mostly in east, Mdantsane in the middle, and Dimbaza in the west. Buffalo City's shoreline is 68 kilometers long, while its land area is roughly 2,750 square kilometers (Department of Cooperative Governance and Traditional Affairs & Buffalo City Metropolitan, 2020). The Municipality offers the following services to its citizens: power, roads and transportation, waste management, water and sanitation, and human settlements (Department of Cooperative Governance and Traditional Affairs & Buffalo City Metropolitan, 2020). Open government is a tactic the South African government has used to involve all stakeholders in service delivery initiatives. One of the government entities that was investigated about the adoption of open government alignment for efficient e-participation was Buffalo City Metropolitan Municipality

The subsequent subsections cover each approach in detail.

4.9.2 Semi-Structured Interviews

To gather information about the degree of open government alignment for successful e-participation in South Africa, the study interviews are divided into groups based on the many municipal departments, and each group is then discussed in detail, beginning with the management of each functional area.

4.9.2.1 Knowledge Management Unit

The Knowledge Management Unit builds and maintains an organizational-wide research function for the several Directorates while managing the municipality's information. The unit assists the many Directorates' policy owners with the creation,

alignment, and upkeep of all policies. One participant was chosen to respond to interview questions.

4.9.2.2 Information and Communication Technology Unit

Information and Communication Technology takes part in the strategic and operational governance processes. Evaluates the IT organization and offers suggestions for enhancement or reengineering, approves, prioritizes, and manages the execution of ICT projects. One participant was chosen to respond to interview questions.

4.9.2.3 Local Economic Development Unit

The department's programmatic activities and the provincial priorities are aligned with the department's objectives for local economic development in BCMM. The department has given additional focus to the programming efforts related to trade and investment, SMME development, tourism development, and rural development. Interview questions were posed to one participant only.

4.9.2.4 Finance Unit

The financial guiding concept of the Buffalo City Metropolitan Municipality is to provide a strong financial foundation and the resources necessary to sustain an adequate level of municipal services for its inhabitants. One participant was picked to answer questions during an interview. One participant was chosen to respond to interview questions.

4.9.2.5 BCMM Department documents

The BCMM and government documents, including open government policies and manuals, as additional sources of information

4.10 TIME HORIZON

This study uses cross-sectional data, which is a sort of information obtained by observing many of people at once or over a brief period of time. Cross-sectional data is also referred to as a cross section of the research population.

4.11 SUMMARY OF CHAPTER

The study's research methodology was covered in this chapter. Ontology and epistemology were discussed at the beginning of the chapter, followed by a discussion of the three major IS research philosophies, the research approach, the researcher's role, the research strategy, the study location, the unit of analysis, the population and sampling strategy, data collection methods, and the time horizon. The chapter that follows talks about data analysis and how conclusions are made.

CHAPTER FIVE: DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1 INTRODUCTION

This chapter analyzes the empirical data and provides the results based on the methodology used in the research. The chapter starts off by providing a discussion of the interview data and the way it was analyzed and presented before moving on to an analysis of specific documents from municipality and the government related to open government.

5.2 THE OPEN DATA BAROMETER- SOUTH AFRICA

The Open Data Barometer (ODB) targets to find the actual occurrence and effect of open data tasks across the world. It analyses international developments and affords comparative data on governments and areas the usage of an in-intensity method that mixes contextual data, technical assessments, and secondary indicators (World Wide Web Foundation, 2018). Figure 10 shows how the South African government publishes and utilises open data for accountability, innovation, and social impact.

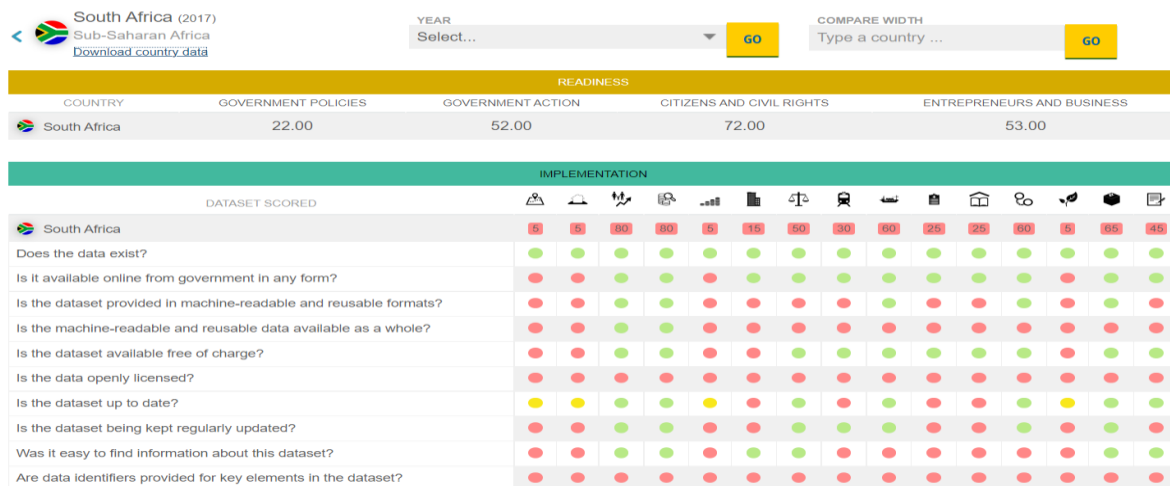


Figure 10: Open Data Barometer for South Africa

According to (World Wide Web Foundation, 2018), the South African government is 22% on government policy, 52% on government action, 72% on citizens and civil rights, and 53% on entrepreneurs and businesses.

5.2.1 Open Data Implementation in South Africa

The overall performance of the South African government in implementing open data is currently 36% (World Wide Web Foundation, 2018).

5.2.2 Map Data

Map data is not published and the recording quality is rated at 5% out of 100, and this type of data is not available online. Map data is not available in a machine-readable and reusable format. Charges are incurred, licensed and out of date. The data identifier is not found in the key elements of the dataset and information about the dataset is not immediately available.

5.2.3 Land Ownership Data

Land ownership data has a rating of 5% data quality, but is not available online and the current data format is not machine readable and reusable. Land ownership data is licensed, not free and up to date. This type of data is not updated regularly in South Africa, it is not easy to find information about the land, and the data identifiers of the key elements of this dataset are undefined

5.2.4 Detailed Census Data

Census data are evaluated in 80% data quality, machine-readable and reusable format and are available online. Census data is free, but licensed and up-to-date. The record is updated regularly and is easy to find, but it does not provide the data identifiers for the key items in the record.

5.2.5 Detailed Government Budget Data

Government budget data is 80% rated in data quality, machine-readable and reusable format and is available online. Budget data is free, but licensed and up to date. The record is updated regularly and is easy to find, but it does not provide the data identifiers for the key items in the record.

5.2.6 Detailed Data on Government Spending

The quality of government spending data is rated at 5%, the data is not available online and is not in machine-readable or reusable format. South Africa's expense data is licensed, non-free and not updated regularly. Finding information about a record is not easy and does not provide data identifiers for important items in the record.

5.2.7 Company Register Data

The data from the business registry is 15% rated and accessible online, but it isn't in a machine-readable or reusable form. The information is licensed, not free, and not frequently updated. Finding information about this record is not easy and does not provide the data IDs for important items in the record.

5.2.8 Legislation data

Legislative data reaches 50% and data is available online, but these data types are not in machine-readable or reusable format. This dataset is free, but licensed and up-to-date. It is updated regularly, the information is easy to find, and it does not provide the data identifiers for the key items in the dataset.

5.2.9 Public Transport data

Public transport data is rated at 30%. The data is available online, but it is not in a machine-readable or reusable format. This dataset is free and licensed, but not up to date. The dataset is updated regularly, is not easy to find, and does not provide data identifiers for the key items in the dataset.

5.2.10 International Trade data

International trade data is rated at 60% and is available online in machine-readable or reusable format, but not machine-readable or reusable. This dataset is free, licensed, up-to-date, and updated regularly. Finding information about this record is not easy and does not provide the data IDs for important items in the record.

5.2.11 Health Performance data

South Africa's Health sector is rated at 25% and data is available online but not in machine-reusable and readable format. This dataset is free, but licensed and not up to date and updated regularly. Finding the information in this record is not easy and the data identifiers for the important items in this record are not provided.

5.2.12 Primary and Secondary Education Performance data

The education sector has a rating of 25% and the data is available online, but it is not in machine-readable or reusable format. This dataset is free, but it is licensed and not up to date and will be updated regularly. Finding information about this record is not easy and does not provide the data IDs for important items in the record.

5.2.13 Data about Crime

15% rated and online, the business registry data is not provided in a machine-readable or reusable form. The information is licensed, fee-based, and irregularly updated. This dataset is free, licensed, up-to-date, and updated regularly. Information about this data set and the data IDs of the key elements in the data set are not provided.

5.2.14 National Environment Data

National environmental statistics are rated at 5%, not available online, but in a machine-readable and reusable format. The dataset is free to use, licensed, up-to-date and not updated regularly. Finding information about this record is not easy and does not provide the data IDs for important items in the record.

5.2.15 National Elections Data

The availability of machine-readable and reusable national election data online is assessed at 65%. This data set isn't really accessible without charge. However, it is licensed and is not up to date and will be updated regularly. Finding information about this record is not easy and does not provide the data IDs for important items in the record.

5.2.16 Public Contracts Data

Public Contracts data is rated at 45% and is available online, but not in machine-readable or reusable format. This dataset is free to use, licensed, up-to-date and will not be updated on a regular basis. No data identifiers for the main items in the dataset are provided, but information about this dataset is easy to find.

The South African government still needs to do more when it comes to opening data and implementing open government initiatives to boost accountability, transparency, citizen engagement and public trust. All government departments should join their respective global open data organizations to keep up with the current trends on what is happening in the world in terms of open data strategies. Currently, the National Treasury department is a member of GIFT but the Department of Rural Development and Agrarian Reform is not affiliated with GODAN which shows that other departments in South Africa have not moved.

5.3 OPEN GOVERNMENT : EMERGING GAPS IN KNOWLEDGE

According to Bonina & Eaton (2020) Although there is little knowledge of how these platforms for service innovation are managed using open data, the Open Government Data (OGD) initiative is a new area of platform research. The study explains how OGD platform owners can control the supply and demand aspects of the platform to facilitate the development of the platform ecosystem. Second, it adds to the practice by offering guidance on how emerging market governments may create and maintain a thriving ecosystem of OGD platforms.

The ideas and methods of transparent governance regularly vary from country to country around the world because of the characteristics and effects of several social, political, cultural, technical, and economic factors. The successful and efficient delivery of public goods and services to residents required governments around the world to reevaluate and redefine their current tasks, responsibilities, and activities (Nel & Masilela, 2020). The public sector, which uses data to enhance public service delivery, transparency, and organizational responsibility, has profited from the significance of open data. The concept of open data also encourages the government to provide its entire data freely and publicly accessible (Haini, Rahim, & Zainuddin, 2019).

The innovation (IID) for inclusive development and open government are now closely related, and practice and research in these two fields are focusing on similar methods to achieve integrated development goals. Information and communication technology (ICT) plays a significant part in policy making and innovation activities, and public services are provided in a transparent, market-oriented manner that prioritizes serving the demands of citizens (Plantinga & Adams, 2021).

Government open data initiatives have been motivated by the desire to disseminate information and data access, to promote and improve transparency, and to boost the social and economic development of the city. The city's data openness philosophy, which is restricted to the public disclosure of selected government datasets, is highlighted by the limited participation or awareness of civil society efforts. To describe new prospects regarding data openness, the term "two-way open data" was created (Ricker, Cinnamon, & Dierwechter, 2020)

Open government is an evolving concept, at one level aimed at transforming the flow of information between government and citizens, thereby allowing citizens to interact, influence and reuse that information. The result is a more proactive governance process, and increased support for good governance and the correlation of collaboration with all stakeholders, including the general public, further supports the growth of the Open Government Initiative. Cooperation strengthen democracy by building new relationships and networks between governments and citizens that meet

the needs of the community. Open government improves the quality of governance and policymaking through increased transparency, collaboration and accountability (Kopec & Sheldrick, 2020). The strengthening of municipality participation is a key tenet of the Open Government Data (OGD) initiatives (Begany, Martin, & Yuan, 2021). Open data initiatives have long ago spread internationally as nations concentrate more on innovation using open government data through exchanging ideas, promoting co-creation, and making use of other incentives. Focusing on attaining goals like innovation, engagement, openness, and accountability should be the main goal of open data initiatives.

The degree of government accountability, transparency, and public involvement in sociocultural, political, economic, and governmental processes is known as open government (Harrison & Sayogo, 2014). Indicators of open government are transparency, cooperation and participation (Veljković, Bogdanović-Dinić, & Stoimenov, 2014). An ecosystem is described as the process of supplying goods or services that includes various actors, characteristics, guiding concepts, and ideologies in the field of technology and innovation management (Tsujimoto, Kajikawa, Tomita, & Matsumoto, 2017). Ecosystem approaches can be applied to facilitate government planning, identify existing conditions, and enable citizens to participate in government policymaking and strategic initiatives and stimulate desirable interests (Dawes, Vidiasova, & Parkhimovich, 2016). The policy of promoting open data and open data portals for local governments and actively engaging citizens has added value to both governments and their partners (Chatfield & Reddick, 2017). Government agencies can increase transparency to citizens by adopting open government data initiatives (Zhao & Fan, 2018). Public value creation in public sector institutions can be effectively achieved when all parties at all levels participate in value creation through ICT. (Millard, 2015) examines the effectiveness of using resources and funds available at all levels by using ICT to solve social problems such as inequality, poverty, corruption and climate change. The Australian Government has succeeded in moving from a

secret government to an open government by making more government services available online and eliminating registration fees.

The open government portals no longer constantly meet all key necessities of a responsible government due to structural and organizational complexities; residents can't finish and say the records furnished via way of means of the government-on-government portals is complete (Lourenço, 2015). My School has a records that offers college overall performance information in Australia (Marjanovic & Cecez-Kecmanovic, 2017). The Open Governance Data internet portals in Africa aren't aligned with customers` necessities and expectations (Afful-Dadzie & Afful-Dadzie, 2017b). Government departments round the world have created open governance portals which aren't completely used and followed by the general public customers due to technical skills and education (Gascó-Hernández, Martin, Reggi, Pyo, & Luna-Reyes, 2018). The training is a vital step in Software Development Life Cycle, and if the training is provided in the precise context and covers the person`s expectations, then customers are in all likelihood use the open government portal. The Philippines government followed the Open Government Data portal as a device that lets in information seek and sharing through social media (Saxena, 2018). These information units violate the open information standards which call for that information need to be complete, well timed and re-usable.

5.4 Analysis of Interview Data

Data were gathered through semi-structured, in-person interviews. Data was analysed using thematic analysis, when selecting themes to report on, the researcher is acknowledged as being engaged through thematic analysis. Thematic analysis is a technique for identifying, analyzing, and summarizing patterns or themes in data (Braun & Clarke, 2006). In order to synthesize the data and observe patterns and meanings, Otter.ai software was used in transcribing the audio data. Initial codes were made to represent the data's patterns and meanings. Data that shared a common

meaning or had relationship were coded and collated. Themes were created from the codes, and each theme was explained. When a theme emerges, the researcher analysis the data using a table adopted from the underpinning theory showing characteristic features of institutions (Rachunkowo. 2017). Websites and documents from the municipality were interpreted using qualitative content analysis. The data was organized into categories with similar codes, and themes that described a number of categories that provide the subject matter under investigation significance and its different forms were identified. According to (Mayring, 2019) the approach used in qualitative content analysis is category-based, which sets it apart from quantitative content analysis. Aspects of the text are referred to by categories, which condense their significance. Thus, the chosen category system is the only one that may be used for text evaluation.

Table 5.1 Characteristic Features of Institutions (Rachunkowo, 2017)

Roles	From ordinary accounts to professional auditor
Utilitarian	8 elements of accounting method
Cultural symbols	Accountint’s day, specific certifications and certificates
Written codes	Laws, standards, regulations, guidelines
Verbal codes	Informal rules of conduct for professional accountants
Patterns and samples of behaviour	Codes of ethics for professional accountants and auditors

The following section examines the interview data; it introduces the theme, then a subtheme, which is supported by a quote and a table defining some of its ontological aspects; lastly, it offers an interpretation.

5.4 Theme One: Provide basic human needs

“ In order to establish a transparent, secure, and friendly environment, BCMM is a municipality that must be structured to give its administration, budgetary, and planning procedures precedence to the fundamental requirements of its citizens and encourage their growth economically and socially.”

Roles	Provide basic needs
Utilitarian features	Administration, budgeting and planning
Cultural Symbols	Local government
Written codes	Laws, regulations, guidelines,
Verbal Codes	By-Laws
Patterns and Sample of Behavior	Municipal Ethics Documents

The theme of providing basic human needs by municipalities is characterised by administration, budgeting and planning as way to priorities basic human needs.

5.4.1 Sub theme: Policies on Governance

“BCMM does not have a specific policy for open government, however, the municipality have other policies such as budget policies and by-laws”

Roles	Govern municipal services and operations
Utilitarian features	In accordance with applicable provincial and municipal laws, BCMM is authorized to manage the local governmental affairs of its local population through its own initiative.
Cultural Symbols	Municipal Systems Act of 2000, No. 32
Written codes	Policies
Verbal Codes	By-Laws
Patterns and Sample of Behavior	Municipal Ethics Documents

This sub theme shows that the BCMM municipality has no policies that promote and govern open government initiatives but the municipality has other policies related to governance.

5.4.2 Sub theme: Availability of strategic documents

“ BCMM has various strategic documents such as Standard Operating Procedures, ICT Strategy, Public Participation Strategy, Communication Strategy, IDP and SDBIP”

Roles	Strategic documents govern various services provided by BCMM Departments to its clients
Utilitarian features	Each BCMM department has responsibility to draft its strategic plans in response to Integrated Development Plan
Cultural Symbols	IDP
Written codes	BCMM Operational Plans
Verbal Codes	By-Laws
Patterns and Sample of Behavior	Service Delivery and Budget Implementation Plan

The BCMM's Standard Operating Procedures, ICT Strategy, Public Participation Strategy, Communication Strategy, IDP, and SDBIP are among the strategic instruments that support open government.

5.4.3 Sub theme: Use of ICT platforms

“BCMM use a website, newspapers, emails, sharepoint, letters, and call centers to share information such as tenders and financial annual reports with the public”

Roles	An effective modern city must have connectivity to ICT that are of a high standard and reasonably affordable
Utilitarian features	Digitization and growth of knowledge-based ICT services on the strength of more stable and faster internet and broader availability of services through free Wi-Fi.
Cultural Symbols	A creative and successful city
Written codes	The National Integrated ICT Policy White Paper provides a comprehensive policy framework for making South Africa into an open, progressive society that embraces technology
Verbal Codes	White Paper on National Integrated ICT Policy
Patterns and Sample of Behavior	Modern ICT infrastructure

Citizens can access some of the municipalities services through the website, call centers and social media platforms.

5.5 Theme Two: Well Governed and Responsive municipality

“The BCMM will require a responsive and well-run municipality that can foster relationships with community members and stakeholders, make it possible for the general public to participate in decision-making, and maintain consensus on the socioeconomic development.”

Roles	Responsive Municipality
Utilitarian features	Build trust with stakeholders
Cultural Symbols	Public participation initiatives

Written codes	Public participarion strategies
Verbal Codes	Mid-Year Budget and Perfomence Report
Patterns and Sample of Behavior	Plan for Service Provision and Budget Implementation

The theme emphasizes the necessity for a responsive and well-run municipality that can foster relationships with its constituents and foster popular engagement in decision-making and efficient service delivery.

5.5.1 Sub theme: Other forms of communicating with Citizens

“The Imbizo is the most utilised offline channel in South Africa including at BCMM”

Roles	Development and review of IDP
Ulitarian features	Impactiful on socio-economic
Cultural Symbols	Community Involvement
Written codes	No. 32 of 2000 Municipal Systems Act
Verbal Codes	Council for BCMM
Patterns and Sample of Behavior	Public Participation Framework

The BCMM municipality still relies on imbizo’s to communicate with its citizens.

5.5.2 Sub theme: Use of unstructured communication medium

“The BCMM uses social media for unstructured communication such as outages and they can measure their reach”.

Roles	Implement Smart City
Utilitarian features	Increase connectivity in BCMM
Cultural Symbols	World Class ICT Systems and Infrastructure
Written codes	ICT and Communication Strategy
Verbal Codes	MSCOA compliant
Patterns and Sample of Behavior	City Development Strategy receives input from the ICT Strategy

The municipality use the unstructured media such as social media to communicate with its citizens.

5.5.3 Sub theme: Increased Public Trust

“BCMM employees believe trust among citizens increased as a result of making information available on the website”

Roles	Build trust with stakeholders
Utilitarian features	Democratic institutions that are capable
Cultural Symbols	Capable, ethical, and developmental state
Written codes	The 1996 South African Constitution urges governmental institutions to work together in a spirit of confidence and goodwill by providing support, communicating, and coordinating activities while abiding by set procedures..
Verbal Codes	Good corporate governance creates the trust needed to enable the production of sustainable value.
Patterns and Sample of Behavior	In order to bring compliance concerns including internal audit, fraud, and risk management as well

	as information technology to more people's attention, BCMM introduced the King III Report on Corporate Governance.
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Public trust has increased due to availability of information through sources such as website and social media.

5.6 Theme Three: Participatory Governance through Open Government Initiatives

“The BCMM and other stakeholders' collaboration has produced several noteworthy results”

Roles	The most effective way to implement initiatives is frequently through collaboration and partnership.
Utilitarian features	BCMM continued to collaborate on many initiatives with public businesses, parastatals, and other government agencies.
Cultural Symbols	Intergovernmental Relations Forums
Written codes	Framework for Intergovernmental Relations
Verbal Codes	By making significant investments in infrastructure, BCMM will accelerate the execution of our catalytic projects and programs, working with the Buffalo City Development Agency and other social partners.
Patterns and Sample of Behavior	Pledges, compromises, tradeoffs, collaborations, and partnerships with other partners, as well as those amongst important role players, will all be used to facilitate collaboration.

The theme facilitates collaboration amongst many stakeholders in order to accomplish shared objectives.

5.6.1 Sub theme: Mode of collaboration between stakeholders

“Citizens are involved through party representation in Parliament and municipalities”

Roles	Ward councillors work to boost involvement in the council's democratic system
Utilitarian features	Ward committees are participatory community organizations that support the coordination of consultations, the communication of information, and the promotion of citizen engagement
Cultural Symbols	Ward Councillors, Community Development Workers, and Traditional Leaders serve as the primary channels of communication between the municipal government and the citizenry
Written codes	According to the Local Government: Municipal Structures Act of 1998's Sections 73 and 74
Verbal Codes	The ward councillor serves as the ward committee's chair and is therefore an integral member of the group. The council designates the proportional representation (PR) councillor to support the ward councillor in a ward.
Patterns and Sample of Behavior	All clusters (Inland, Midland, and Coastal Urban and Rural Regions) must be visited by the Office of the Mayoral Committee, which is led by the Executive Mayor, the Speaker, and the Chief

	Whip, on a quarterly basis to provide progress reports on those wards' top priorities and to give council members a chance to interact with management
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Collaboration between stakeholders still happens through political party representative and civil society organisations, ordinary citizens are not directly involved in decision making.

5.6.2 Sub theme: No Open Government Initiatives Committees

“In the BCMM and other government entities in South Africa, there are no open government committees that are focused on observing the execution of open government initiatives including openness, cooperation, and online involvement”

Roles	The Committee on Open Government monitors and provides guidance to the government, the general public, and the news media on laws pertaining to access to information, public sessions, and individual privacy protection.
Utilitarian features	Two weeks following the conclusion of each meeting, OGP makes the complete minutes of the Steering Committee and all Subcommittee meetings online.
Cultural Symbols	The Steering Committee of the Open Government Partnership is made up of representatives from both government and civil society, reflecting the joint nature of the initiative.

Written codes	Members of the Steering Committee are elected at each annual meeting and serve a rotating term.
Verbal Codes	The OGP Steering Committee in South Africa approved a Declaration titled The 2030 Agenda for Sustainable Development will be implemented with the help of the Open Government for its execution
Patterns and Sample of Behavior	The Republic of South Africa's 1996 Constitution, Chapter 10, Section 195 sub-section (1), outlines the guidelines for how the government should interact with its people, deliver high-quality services, and uphold ethical standards.

The municipality does not have an open government committee that looks into open government initiatives.

5.7 Theme four: Provide mechanisms and processes for public participation

“BCMM must provide suitable mechanisms and processes for public participation”

Roles	Councillors are in charge of organizing public engagement and consultation.
Utilitarian features	The BCMM Speaker is in charge of managing the overall oversight of the public participation process.
Cultural Symbols	Promote effective financial and administrative management by ensuring community participation
Written codes	National Policy Framework for Public Participation
Verbal Codes	In its efforts to promote real oversight and increase public involvement, BCMM has demonstrated a

	substantial commitment to citizen participatory approaches in the operation of the municipality
Patterns and Sample of Behavior	The Local Government Act, 33 of 2000, also referred to as the Systems Act, reemphasized the need of encouraging citizen involvement in municipal operations for municipalities

The municipality needs to provide mechanisms and processes that involves citizens in decision making and policy development

5.7.1 Sub theme : Mobile Applications

“BCMM mobile application is supposed to allow citizens to have access to accounts, make purchases & pay rates, report incidents, provide IDP input, and broadcast BCMM news, however, this mobile app is not working”

Roles	BCMM released a mobile application to interact with citizens about various issues.
Utilitarian features	The BCMM Mobile App was meant to allow citizens to access account services, make purchases & payments, report incidents, allow citizens to give inputs on IDP and access news.
Cultural Symbols	The Buffalo City Municipality Citizen Engagement Application offers mobile web services to all digital devices and every form of smart phone, allowing the Municipality to effectively interact, engage, and serve citizens throughout all socioeconomic groups..
Written codes	BCMM Communication Policy

Verbal Codes	Four benefits come from using direct channels of communication, especially through mobile devices: management can be enhanced; it encourages a greater comprehension of citizens; it lowers the costs involved with public involvement; and, lastly, it will enhance service delivery
Patterns and Sample of Behavior	Ratepayers can submit a meter reading, receive a copy of their account statement, check their account balance, report an incident to the municipality, register for IVR services, reset their PIN, and seek the most recent meter reading using the BCMM Mobile Municipal Application.

The BCMM mobile application isn't functioning; it's supposed to give users access to their accounts, allow them to shop and pay rates, report incidents, give IDP input, and disseminate BCMM news.

5.8 SUMMARY OF CHAPTER

The chapter analysed the interviewed data by identifying themes and sub themes providing a quote for the theme then describing them in a table with the underpinning theory elements and an explanation below. The next chapter is interpretation of findings and recommendations.

CHAPTER SIX: INTERPRETATION OF FINDINGS AND RECOMMENDATIONS

This chapter evaluates the research findings in light of published, pertinent literature and using the interpretations, the suggestions would then be formed.

This study seeks to explore and discuss the open government alignment for effective e-participation in South Africa. According to the findings, the following challenges must be resolved first if open government is to enable efficient citizen involvement.

6.1 Government should enable e-participation through technology

Government should collaborate with its citizens by utilizing efficient e-participation tools to organize, manage, and fulfill the basic human needs of the people. Using e-participation tools that promote collaboration among governments and citizens to enhance laws while also meeting citizens' basic human needs, citizens may take part in public decision-making by directing, planning, and budgeting to meet their requirements (Androniceanu & Georgescu, 2022). These researchers have found the similar pattern in their research.

6.1.1 Lack of policies related to open governance

There are no open government initiative policies in the BCMM municipality, although there are other governance-related policies. (Attard, Orlandi, Scerri, & Auer, 2015) have demonstrated that many open government data efforts are nonetheless protected by laws governing information freedom, the use of public sector data, and the sharing of data between public entities despite the absence of open government data rules. This is the case in South Africa especially in the municipality under study.

6.1.2 Lack of guidance on the use of online media

The municipality lacks basic guidelines on how to use online media such as blogs, social media and other related websites. In 2008, Canada set policies regarding how government workers should utilize social media, including corporate blogs, social networks, and a Wikipedia-like effort (Picazo-Vela, Gutiérrez-Martínez & Luna-Reyes

Departamento, 2012). Guidelines on social media usage as tool to interact with citizens can be developed by municipalities in South Africa.

6.1.3 No full utilisation of ICT platforms

Some municipal services are available to the public via the city's website, contact centers, and social media channels. ICT is used to boost citizen involvement, social inclusion, political accountability, as well as transparency in government, openness, and ability to respond. Information from the public sector is a valuable asset that has high potential in several different stakeholders, such as government departments, corporate entities, universities, and civic organizations (Wirtz, Daiser, & Mermann, 2018). The majority of South Africans still access government services by physically going to the municipality and stand in long queues instead of utilising technology to access services.

6.2 Lack of governance relationship management

There is a lack of a responsive and effective municipality that can build connections with its stakeholders and citizens, promote public participation in decision-making, and deliver high-quality services. Government entities and procedures are commonly viewed as being inefficient due to a lack of motivation to satisfy citizens' aspirations and a lack of competitive providers for government services (Evans & Yen, 2006).

6.2.1 Continuous use of traditional means of communication

The municipality continues to use imbizos to interact with its citizenry despite the numerous availability of ICT solutions that can assist include individuals who aren't physically attending the event. The South African government's imbizo is a tool designed to strengthen administrative relations with the electorate in an effort to galvanize them to tackle problems with delivering services. The government believes the imbizo is a suitable venue for interacting with the general public when they express concerns about the provision of services, and the government responds with the specific intent of resolving all such concerns (Kosanke, 2019).

6.2.2 No Open Government Initiatives Committees

A committee that reviews open government projects does not exist in the municipality. The US government established the Committee on Open Government, which would deal with matters relating to open government rules, in an attempt to encourage the idea that the government has a duty to be accessible to those it represents (Fujimura, 2004). Similar to what they have done, the municipality could established an open government committee.

6.2.3 A Functional mobile application

The BCMM mobile application isn't working; it should allow users to access their accounts, purchase and pay rates, record issues, provide feedback from IDPs, and distribute BCMM news. A smartphone app endorses a different kind of engaging interaction between citizens and the municipal government that goes further than what websites give in terms of data sharing, flexibility, location-based data, quickness, direct collaboration among citizens and a municipal government, special populations, and municipal tools as a status symbol (Rosenberg & Lev-On, 2021), a functional mobile app could enable citizens to access municipal services

The section that follows is a conceptualised framework for open government alignment for effective e-participation.

6.4 Conceptualised Framework for Open Government alignment for effective e-participation

This section provides the conceptual framework informed by evidence and interpretation of findings.

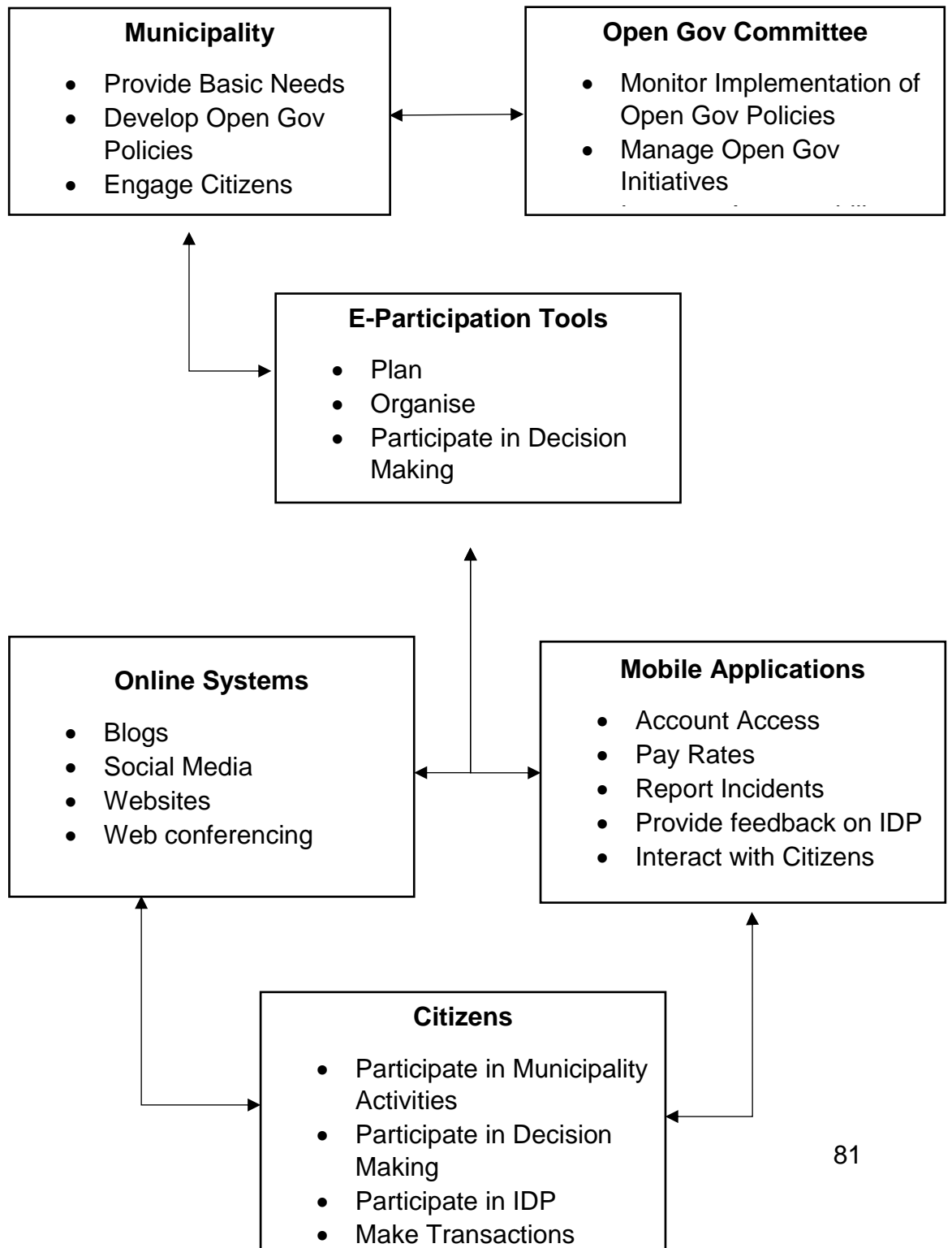


Figure 5: Open Government alignment for effective e-Participation Framework

Figure 11 suggests that citizens should interact with the municipality via online channels and mobile apps as e-participation tools. The execution of open government initiatives must be overseen by a committee. The municipality engages citizens through strategies like Imbizo's, but this framework suggests that Imbizo's must be supplemented by usage of social media and blogs to incorporate individuals who are not physically present at the meeting. Although the mobile app is currently not working, social media, websites, and mobile apps are also used to engage citizens. There is no open government committee to monitor the implementation of open government initiatives, policies, and citizen participation in decision-making using technology. The use of e-participation tools, such as online media and mobile apps, is required to include citizens in a variety of municipal matters. Instead of having a two-way interaction, the municipality currently posts material on its website and social media platforms for informational purposes only.

In order to oversee the implementation of open government initiatives, open government policies, and public e-participation, the open government alignment for effective e-participation suggests the establishment of an open government committee in each municipality in South Africa.

6.5 SUMMARY OF THE CHAPTER

This chapter provided recommendations after interpreting the study's findings and comparing them to existing literature. The conceptual framework of open government alignment for effective e-participation was discussed. The adoption of e-participation tools to include citizens in government affairs were proposed in the conceptual framework.

The evaluation of the research is discussed in the following chapter.

CHAPTER SEVEN: EVALUATION OF THE RESEARCH

An analysis of the findings, recommendations, and development of a theory of open governance in government departments were done in the chapter before this one. This chapter is about evaluation of the research. The chapter has the following structure. The research is summarized first, followed by a discussion of the research issues and an explanation of how the empirical data and analysis resulting from them have been addressed. After that, the research approach is evaluated and discussions of reliability and usefulness are had. Following a discussion of the research's contributions and conclusions, the chapter is completed with a discussion of the results and future studies. This chapter's goal is to determine whether the study addressed the issues it claimed to.

The section that follows provides a summary of the study from chapters one through seven along with an explanation of what each chapter stands for.

7.1 An overview of the study

The organization of the thesis and the subjects covered in each chapter are both reiterated in this section. The chapters are described as follows:

The **Chapter One**, which also introduced the thesis, the research problem, problem statement, research rationale, research objectives, and question broken down into sub-questions were all covered. The research is based on the claim that in order to comprehend and justify its application in organizations, open government must first be understood and explicated. Looking at how open government is used has an impact on the research's focus. The word "open government" describes the level of public involvement in socioeconomic, social, economic, and administrative processes as well

as government accountability and openness. The use of a variety of theories, frameworks, or models of open government adoption as well as their use as analytical lenses of the research.

The **chapter two** reviewed relevant ideas in the study's literature and provided a survey of scholarly work. A few aspects of open government were briefly examined, and the concepts were organized in accordance with the main goal and its subgoals. This dissertation examined the concept on open government and addressed a number of transparency models. The forms of collaboration methods and e-participation models were clearly ventilated upon in this chapter.

The **chapter three** examined the theoretical foundations of open government. Institutional theory examines the steps taken by institutions, rules, schemas, and routines to become accepted as the norms for conduct and to maintain it inside an organization. According to institutional theory, organizations are lasting, complex social organizations made up of symbolic components, interpersonal connections, and material resources. It is a system of values and regulations that guide and regulate social structures and conduct. Institutional pillars, institutional pressures, and rationalized myths are a few examples of institutional theory concepts that have been employed as the theoretical framework for this study.

In **chapter four** a variety of methodological approaches used in the field are discussed. The chapter's supplementary exploration of the research's methodology and philosophical foundations alerts the reader to other methodologies and philosophical stances that can be applied in information systems research. The case study at BCMM was conducted using a research strategy and methodologies that are further described in the chapter. An interpretive field research framework that depends on discussions with open government users in the context of their work, is also introduced in the chapter as a useful method of gathering data. The information was gathered in formal office settings by administrators of organizations with experience in open government or citizen engagement.

The findings from the case study were discussed and interpreted in **chapter five**. The themes and sub-themes that developed from the data collected through interviews and organizational documents are analyzed and evaluated in relation to the study's primary results. Themes from the research question served as a guide for gathering data. The focus of the investigation was on the manager's decisions about the implementation of open government and the administration's use of various techniques to address open government questions. The first theme covered open government analyses, the second theme covered how government agencies impose transparency within their organizations and the arising sub-themes, and the third theme covered participatory governance through open government initiatives. Theme four describe E-Participation

Chapter Six main focus was on interpreting the case study's results. The study's primary conclusions, which are provided in chapter 5, are examined and evaluated in light of those chapter's topics. The chapter's introduction included a discussion of the emerging themes and a synopsis of them using a framework. The theory put forth in light of the results covered in chapter five is examined as the chapter comes to a close.

7.1.1 The primary question in the study

How open government initiatives are aligned for effective E-participation within the government of South Africa?

7.1.1.1 The Research sub-questions

The first sub-question is *what open government Initiatives in South Africa are there for e-participation by citizens?* According to the data collected Open government initiatives and policies is not yet implemented by government departments including municipalities in South Africa.

The second sub-question is *how does effective alignment of open government initiatives in South Africa happen?* Traditional methods of contact, especially in-person visits to municipal offices, characterize the channels of communication

currently in use between citizens and the municipality. Imbizo-based municipal communications offer means for enhancing citizens' inclusive, participatory monitoring and assessment practices. Municipalities have embraced the Twitter and Facebook platforms to enhance communication and accelerate the delivery of services to citizens, but the use of mobile technology through apps also enables municipalities and citizens to strengthen their relationship.

The third sub-question is *how can e-participation that permits effective alignment with open government programs in South Africa happen?* Government agencies in South Africa have embraced social media as a method to include the public in a range of topics and activities. The majority of citizen engagement activities include face-to-face interactions, and it is through these interactions that the public is informed about current events. One strategy for encouraging the public, especially young people, to participate in municipalities is the use of online media.

The research methodology, as well as the importance and contribution of the study, are evaluated in the part that follows.

7.2 Evaluating the methodology

7.2.1 The reasons a case study is pertinent to this study

The study seeks to explore and discuss the open government alignment for effective e-participation in South Africa. The case of BCMM as a municipality in the Eastern Cape which is a metropolitan municipality that caters for both urban and rural people is a unique and interesting case because preliminary investigations found that South Africa has not yet adopted open government, a practice that is adopted by the majority of other nations in the globe. Due to the nature of the case study, the researcher was able to comprehend and explain open government in a typical South African municipality.

Additionally, to emphasize the significance of citizen involvement within the municipality, there is a specific department responsible for overseeing projects for

citizen involvement. The researcher decided to use a case study approach of the municipality. Additionally, the researcher was able to make significant discoveries by interacting with employees in their natural setting, which wouldn't have been feasible if survey data from some kind of large group of people had been used, accompanied by a statistical methods.

7.2.3 What is the research topic, and how does it relate to Open Government?

The topic open government alignment for effective e-participation. Using effective e-participation tools, the government should work with its citizens to coordinate, manage, and meet the people's most fundamental needs. The BCMM municipality does not have any open government initiative policies, although it does have other governance-related rules. Some municipal services are accessible to the public via the city website, call centers, and social media channels, the municipality lacks fundamental instructions on how to use online media like blogs, social media, and other relevant websites. A responsive and effective municipality is needed to build connections with its constituents and stakeholders, promote public participation in decision-making, and deliver high-quality services. Imbizos are still used by the municipality to interact with its citizens

7.2.3.1 The suitability of the data collection methods

Given the nature of the study, data was collected through document analysis of laws and websites as well as semi-structured interviews to uncover depth or insight from the respondents' lived experiences. It was possible to see the open government's complexity as a social system by combining data from three sources. Utilizing three techniques of data collection was justified in order to obtain a variety of perspectives on experiences and participant-subjective interpretations of activities in order to detect discrepancies in the data.

7.2.3.2 Appropriateness of the population and the unit of analysis

Buffalo City Metropolitan Municipality is comprised of King William's Town and East London. With the support of BCMM staff and management who participate in open government activities, the municipality's directorates were inspected, and the usage of open government was evaluated at the departmental level. The theoretical, methodological, and practical contributions made by the study are covered in the section that follows.

7.3 Contributions that are theoretical, methodological, and practical.

The section that follows discusses the three contributions from the study before analyzing universal applicability as it pertains to theoretical contribution relying upon an interpretive case study.

7.4 Theoretical Contribution

Institutional theory holds that institutions permanent policies, conventions, and structures that form the essential context for action have an important function in society and provides a framework for evaluating organizational phenomena, especially in the social realm. This study was backed by institutional theory and research that has shed light on how open government can be put in place in municipal governments while taking into consideration that impact and cultural norms, professionalization, and imitating organizations that are at the forefront of their industries leads to change on how organizations operate and embrace open government.

The study also contributes that open government can not be implemented without appropriate e-participation tools, open government policies, lack of guidelines on how to use online media, lack of full utilisation of ICT platforms, lack of governance relationship management and continuous use of traditional means of communication such as imbizo's.

This study presents a different viewpoint on the usage of open government and, consequently, how it might be successfully implemented in South African municipality. This study's focus is on open government alignment for effective e-participation, whereas the majority of open government research focuses on aspirations for using open data.

7.5 Methodological Contribution

According to an interpretivist philosophy and a qualitative case study of a municipality, the study evaluated open government alignment for effective e-participation participation which is a new framework. In contrast to a positivist case study, which lacks depth, the researcher was able to learn open government application in the South African municipality.

7.6 Practical Contribution

The thesis offered a new conceptual framework for coordinating open government alignment for effective e-participation in South Africa and offers illuminating recommendations for managers, practitioners, and policymakers on how to implement open government in the country.

The management of the municipality should be aware of the usefulness of this research and open up their departments to all stakeholders so that they can participate in policymaking, service delivery planning, implementation, follow-up, open government initiatives, and e-participation.

7.7 Research's limitations

The scenario offers a different setting for examining the implementation and use of open government, which may limit the relevance of the research to other fields that are not municipalities. The investigation was carried out in a municipal environment.

Only one researcher was able to take part in the inquiry because it was a master's thesis, restricting the gathering of multiple researcher opinions. To get a new viewpoint, suggestions, or thoughts on some aspects of the study process, there was, nevertheless, always constant dialogue with the supervisor.

7.8 Future research suggestions

Future studies might focus on how the open government components of the conceptualized framework could be resolved, or they might examine each of the discrete, summarized determinants mentioned and see how they could be mitigated to achieve the objectives of applying open government in institution. The study could be carried out once more in a government department or in a setting with a different group.

7.9 Conclusions

Open government is proving to help organisations to be more transparent, accountable, and accessible to their citizens. The South African government is a partner with open government partnership organisations and all government organisations are supposed to start open government initiatives. The findings show that BCMM and other South African departments have not implemented open government and they are still using the traditional methods such as imbizo's and party/civic representation to engage stakeholders on various matters. The traditional methods of engaging stakeholders can only accommodate a few people in a physical meeting whereas IT solutions can help departments to be more open, transparent, accountable, collaborative, and accessible.

Social media is also used by BCMM and other government departments to announce events that are taking place and few people comment on those posts. The nature of social media is used as a tool for posting information, then citizen consume it. Comments that are made on those social media platforms are not formal inputs that can be taken into consideration by the department. Organisations must implement proper formal applications/software that can be integrated into formal structures of

government departments and citizens must also feel that they are in a formal meeting. The social media platform and its use does not have qualities of a formal meeting setting hence most of the comments that are made by the citizens derogate from the point of discussion.

Written reports are posted on the websites, and few citizens download the reports. Citizens are not able to ask questions on the posted reports from government websites and they are written in English. Websites are used as a platform for posting information and there is no interaction between citizen and the government.

7.8 Recommendations

Open government promotes that citizen must be part of what is being done by government, however, the current technology does not enable that interaction between citizens and government. Applications that are meant to assist government administration and citizens to interact in real-time through live chats, live discussions and reviewing documents online needs to be developed. These applications must be integrated with formal structures such as Councils, MPAC and others committees to involve citizens to government operations. Citizens should be equipped with e-skills to enable everyone to participate in government operations. Once all citizens have e-skills they will be able to participate in government initiatives using technology.

Collaboration between government departments is not yet explored by the literature and more research needs to be done in that aspect. BCMM and other government departments are still using traditional mechanisms where stakeholders meet face-to-face to address service delivery matters. If government departments still prefer to use physical meetings to engage each other with plenty of resources at their disposal, how much more with citizens who have no digital resources to engage. There is a need for government departments to shift from doing their operations manual and start incorporating technology that will make them to be more open, transparent, accountable, interactive, and responsive.

Traditional websites are not interactive or responsive because citizens are expected to download reports from the websites and if you need to ask clarity, there is no channel one can use to ask questions. The language that is used in those reports is English whereas the majority of BCMM citizens are Xhosa speaking individuals or if we take South Africa, the majority of people speak indigenous languages. These reports are not useful and timely because they narrate a story of what happened in previous financial years. One of the eight principles of open government data demands that data must be timely and what we are getting from the government now is old information that narrates a story. The open government for effective e-participation model is a vehicle that enables citizens to be part of the planning, creation, implementation and delivery of services through the use of e-participation tools that enables live chats, discussion forums, video conferencing, and surveys.

7.10 Summary of the chapter

This chapter examined the research methodology, along with the contributions it made, and the results were compared to the study's objectives, questions, and sub-question. The final discussion focused on the study's limitations, conclusion and recommendations.

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Appendix A: Interview Guide

Open Government

- Do you have an open government policy?
- Do you have a strategic document for open government?
- How does your organisation use Digital Platforms to support business operations and strategic planning?
- How would you rate priority level given to transparency at BCMM/ECDRDAR?
- Why did you introduce digital platforms?
- Do you think your digital platform like SharePoint enable cooperation between public administrators, businesses and citizens?
- Categorise your digital platform?

Transparency

- How do you use technology to address transparency?
- How transparent are you at BCMM/ECDRDAR?
- Which channel is most utilised to promote transparency?
- Impact of introducing digital platforms yields positive results?
- Access to government information increased as results of implementing digital?
- Trust increased as results of implementing digital?
- Citizens are Empowered as a results of implementing digital solutions?
- Do you promote the use of digital platforms to inculcate a culture of transparency?
- Do you use technology to involve citizens in decision making?

Collaboration

- Does your organisation collaborate with internal/external stakeholders?
- How do you collaborate with Stakeholders?
- Who are the drivers of information sharing?
- Is a reward system/ incentive aiming to promote collaboration among stakeholders?
- Mention initiatives that required you to collaborate with stakeholders?
- Which platforms do you use to support collaboration?
- Do have a committee that manages open government initiatives?
- How would you rate the effectiveness of your team that manages open government?

E-Participation

- Does your organisation use technology to share experiences among colleagues?
- Please indicate the level of your clients e-participation?
- Which e-participations tools do you use in your organisation to engage citizens?
- Would you say the introduction of e-participation improved government administrators and citizen's engagement?
- Do you use technology in strategic planning processes?

Appendix B: Ethical Clearance

CONSIDERATION OF ETHICS

Informed consent, the right to privacy, and protection from harm are all addressed in relation to research ethics.

Informed consent

Participants were made aware of the purpose of the study so they may decide whether or not to participate. They were made aware of their ability to refuse to take part at any time and to end the interview.

The right to privacy

The anonymity and confidentiality ensured privacy. Since names or other identifying information need not be disclosed, anonymity and confidentiality are assured. Participants were made aware that the data gathered on them would only be utilized for the study and would not be shared with anybody for any purpose.

Protection from harm

There is no risk, cost, or loss of advantages associated with participation. The College of Science, Engineering, and Technologies Research and Ethics Committee authorized the ethical clearance with reference number 076/SG/2019/CSET SOC, and the permission letter from the BCMM staff to participate has been received.

**UNISA COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY'S
(CSET) RESEARCH AND ETHICS COMMITTEE**

06 March 2020

Ref #: 076/SG/2019/CSET_SOC

Name: Mr Siyabulela Gegana

Student #: 49014234

Staff #:

Dear Mr Siyabulela Gegana

**Decision: Ethics Approval for 3 years
(Humans involved)**

Researchers: Mr Siyabulela Gegana, 49014234@mylife.unisa.ac.za, +27 83 300 4344.
+27 43 703 8511

Project Leader(s): Dr Mampilo Magdeline Phahlane, phahlmm@unisa.ac.za,
+27 11 670 9135. +27 74 031 3667

Prof Nixon Muganda, nixon.muganda@gmail.com. +27 81 493 8478

Working Title of Research:

Open Government Alignment for Effective E-Participation

Qualification: MSc in Computing

Thank you for the application for research ethics clearance by the Unisa College of Science, Engineering and Technology's (CSET) Research and Ethics Committee for the above mentioned research. Ethics approval is granted for a period of three years, from 06 March 2020 to 06 March 2023.

1. The researcher will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Unisa College of Science, Engineering and Technology's (CSET) Research and Ethics Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially



if those changes affect any of the study-related risks for the research participants. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

3. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
4. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
5. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
6. A signed agreement for research 3rd parties form must be signed by each applicable 3rd party and submitted to the SoC ethics committee for approval before that 3rd party can do their work for the study.
7. No field work activities may continue after the expiry date (06 March 2023). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 076/SG/2019/CSET_SOC should be clearly indicated on all forms of communication with the intended research participants, as well as with the Unisa College of Science, Engineering and Technology's (CSET) Research and Ethics Committee.

Yours sincerely



Dr. B Chimbo

Chair: Ethics Sub-Committee SoC, College of Science, Engineering and Technology (CSET)



Prof E. Mnkandla

Director: School of Computing, CSET



Prof B. Mamba

Executive Dean: CSET



Approved - decision template – updated Aug 2016

University of South Africa
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www.unisa.ac.za

Appendix C: Permission Letters

Buffalo City Metropolitan Municipality

East London | Bisho | King Williams Town
Province of the Eastern Cape
South Africa

Website: www.buffalocity.gov.za



Office of the City Manager
10th Floor Trust Centre
Cnr Oxford and North street
East London
5201

Tel: 043 705 1045
Email: Kholekas@buffalocity.gov.za

Date: 24 JUNE 2019

TO WHOM IT MAY CONCERN

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN BCMM:
MR SIYABULELA GEGANA

Dear Sir/Madam

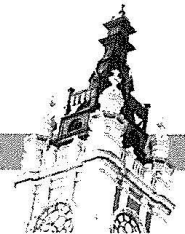
It is hereby acknowledged that **Mr. Gegana**, a student at **University of South Africa**, completing **Master of Science in Computing**, has met the prerequisites for conducting data collection at Buffalo City Metropolitan Municipality (BCMM) for partial fulfillment of his degree. He has provided us with all the necessary documentation as per the BCMM Policy on External Students conducting research at the institution.

With reference to the letter to the City Manager dated 14 June 2019, permission was requested to conduct research at BCMM for his Research Report, entitled "**Open Government Alignment for Effective E-Participation**". This request was scrutinised by the Information and Knowledge Management, Research and Policy Unit for further assistance, and approved in accordance with national and international research ethical and legal norms, standards and guidelines. **Mr. Gegana** was asked to provide the Unit with the necessary documentation, which he subsequently did.



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The relevant Officials to assist in the research were identified and will duly be informed about the research, and the fact that **Mr. Gegana** has met all the prerequisites. Their contact details will also be provided to him and he will be informed to contact them directly for assistance.

We wish **Mr. Gegana** good luck in his studies.

MS. AMANDA QWEDE



.....
ACTING HEAD: IKM, RESEARCH AND POLICY

MR A SIHLAHLA



.....
CITY MANAGER

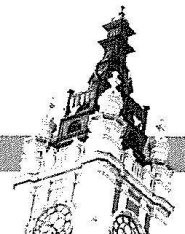
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NOT APPROVED



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THE H.O.D
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19-06-24
RURAL DEVELOPMENT
AN REFORM
IC EASTERN CAPE

UNISA 
university
of south africa

PERMISSION LETTER

Request for permission to conduct research at Rural Development & Agrarian Reform

Open Government Alignment for Effective E-Participation

Date: 14 June 2019

Contact person: Prof Nixon Muganda and Dr Phahlane Mampilo

UNISA, Science campus, Florida, Roodepoort
Block C, floor 4, room 89
School of Computing, Information Systems department
0814938478 or 0740313667
nixon.muganda@gmail.com or Phahlmm@unisa.ac.za

Dear participant,

I, Siyabulela Gegana doing research with Prof Nixon Muganda and Dr Phahlane Mampilo, a supervisor in the Department of Information Systems, School of Computing towards a Master of Science degree in Computing Science at the University of South Africa. We are inviting you to participate in a study entitled Open Government Alignment for Effective E-Participation

The aim of the study is to explore the extent of alignment of open government initiatives within the government ecosystem of South Africa and determine the forms of government operating models that are supportive of open government initiatives, determine forms of government mechanisms that enable effective strategic alignment with open government initiatives and develop a prioritization model for open government initiatives for maximum effect.

Your organization has been selected because all government departments around the world have started adopting open government initiatives by providing data and services to its clients via government portals. Benefits of this study include uncovering new knowledge of how open government initiatives such as e-participation could benefit organizational strategy, management and improve customer satisfaction.



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The study will entail sending out questionnaires to potential participants. Where necessary interviews will be conducted at the participating organization; invitation emails will be sent to potential participants to be in the study. Questionnaires will also be distributed and filled online. Questionnaires will target 100 participants of which 40 participants must be government employees made up of managers and operational staff members whereas 60 participants must be clients of government services such as ordinary citizens, private entities and nonprofit organizations.

There are no potential risks involved in participating in the study

Yours sincerely

Signature


Mr Siyabulela Gegana

Cel:0833004344

Email: siyagegana@gmail.com or 49014234@mylife.unisa.ac.za

Approved,
Ntiti base with Ms Skoubo..




Xoliswa Skoubo
0406025197

