**Gordon Institute
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Drivers, barriers, and strategies to implementing a sustainability balanced scorecard within a municipal-owned entity

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ABSTRACT

Municipal-owned entities play an important role in global climate protection and sustainability. Local governments and municipal-owned entities in many countries have the greater political will to address sustainability and sustainable development concerns than higher levels of government. As a result, it is critical to improve how local governments and municipal-owned entities manage and carry out their sustainability and climate-related projects and initiatives. The sustainability balanced scorecard is considered a tool that may help organisations to identify, analyse, and visualise the causal relationships between environmental and social indicators and financial success. The research aims to determine the main drivers, barriers and strategies to implementing a sustainability balanced scorecard in municipal-owned entities using the Orchestrating Change for Corporate Sustainability framework.

Qualitative and exploratory research methods were used as they aided the researcher in developing new insights based on the themes generated. Nine semi-structured, in-depth interviews with senior decision-makers who work in municipal-owned entities in the City of Johannesburg were used to gather data.

The research has determined that sustainability plays a pivotal role in municipal-owned entities as they are tasked with providing essential services to residents and businesses, and they also play a significant role in the socio-economic dynamics of the local government. Municipal-owned entities have yet to fully comprehend what sustainability means for them and how to fully merge the concepts into their organisational culture. The research has also determined that four main drivers influence the adoption and implementation of sustainability in municipal-owned entities. These are legislation, innovation, the business risk associated with not considering sustainability, and leadership. The research has determined that four main barriers to change influence the adoption of sustainability in municipal-owned entities: red tape, political change, lack of resources and an inflexible organisational culture. The research also determined that change management, resource allocation and innovation are the major strategies for reducing or overcoming the stated barriers.

Finally, the research determined that incorporating sustainability aspects into the four perspectives of the balanced scorecard is the ideal approach when creating a sustainability balanced scorecard for municipal-owned entities. Current municipal-owned entity policies and reports do touch on sustainability as a construct; however, there are no measures in place to assess whether sustainability impacts or influences the organisational strategy and goals.

LIST OF ABBREVIATIONS AND ACRONYMS

BSC	Balanced Scorecard
CoJ	City of Johannesburg
CSR	Corporate Social Responsibility
EMAS	Eco-Management and Audit Scheme
GDS	Growth and Development Strategy
JPC	The City of Johannesburg Property Company SOC Limited
JOSHCO	Johannesburg Social Housing Company SOC Limited
MNE	Multinational Enterprises
MoE	Municipal-owned Entity
MSOS	More Sustainable State
OCCS	Orchestrating Changes for Corporate Sustainability
SBSC	Sustainability Balanced Scorecard
SDG	Sustainable Development Goals
SoE	State-owned Entity
SQ	Status Quo
SQN	New Status Quo

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Signature: _____

Name: **Neo Elias Matheba**

Date: **01 November 2022**

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1.1   The problem and the need for the research

Corporate social responsibility, corporate sustainability, and sustainable development are no longer buzzwords, but they are now a reality that organisations need to contend with despite the absence of explicit regulations on how to deal with these constructs, particularly in the South African setting (Ngoepe-Ntsoane, 2018). Fulop, Hernadi, Jalali, Meidute-Kavaliauskiene and Ferrerira (2014, p.341) note that, "sustainability is becoming a prerequisite for long-term competitive advantage and business excellence". This is primarily due to global competition, government policy, and customer demand for sustainability initiatives that set a new challenge for organisations (Narimissa, Kangarani-Farahani & Molla-Alizadeh-Zavardehi, 2019).

According to Krause and Hawkins (2021), cities are no different as they play a key role in global climate protection and sustainability. In many countries across the world, the cities show more political resolve than the higher levels of government to tackle sustainability and sustainable development challenges. Unfortunately, the cities are ill-equipped to tackle the global concerns for reasons that include but are not limited to, limited resources and capacities that hinder their capacity to meet the sustainability goals. It is, therefore, crucial to improve how the cities, specifically the local government and the Municipal-owned Entities (MoE), oversee and carry out their sustainability and climate activities (Krause & Hawkins, 2021).

The above can be aided by introducing sustainability features into a typically Balanced Scorecard (BSC) which assists the organisations in discovering, analysing, and visualising the causal linkages between the environmental and social indicators as well as financial success. A performance measurement system that integrates openness and sustainability is especially advantageous for the public service organisations that must demonstrate economic success and efficiency (Ates & Buttgen, 2011). A Sustainability Balanced Scorecard (SBSC) is a performance measurement and strategic management tool that supplements the general BSC by including environmental, social, or ethical perspectives (Fulop et al., 2014; Hansen & Schaltegger, 2016). By introducing a sustainability perspective, Tuori, Rois, Martowidjojo and Pasang (2021, p.4) state that, "this approach emphasises sustainability as a basic corporate value or critical strategy that enhances the organisation's sustainability status".

However, a change management process must occur for an SBSC to be successfully implemented at local government and at MoE levels. According to Klein, Ramos and Deutz,

(2022, p.2), "new research that explores how organisations manage and implement change towards sustainability by identifying the factors that influence implementing sustainability activities at the organisational level has emerged". This model that is, Orchestrating Change for Corporate Sustainability (OCCS) is meant to assist in explaining the dynamics of organisational change for sustainability. In a continually iterative process, the model proposes that coordinated and planned change can disturb the status quo and aid in the transition to a more sustainable state since change is seldom a once-for-all phenomenon (Lozano, Nummert & Ceulemans, 2016).

Some local government organisations and some MoEs make use of performance measurement and strategic management tools such as the BSC. There is, however, limited research on the sustainability concepts that are being integrated into the business objectives and strategies. Lozano and von Haartman (2017) point out that the majority of the research on the sustainability drivers and barriers has been conducted in the private sector. There is, therefore, limited research on such drivers and barriers in implementing the SBSC, especially at the local government and at the MoE levels. This study aimed to determine the drivers, the barriers, and the strategies of implementing a sustainability balanced scorecard in local government using the OCCS.

1.2   Relevance of the research problem

With developing countries experiencing record rates of urbanisation, corporate social responsibility, corporate sustainability, and sustainable development agendas have produced substantial new problems for the national and the local government policymakers (Boyle & Michell, 2017). Cities such as the City of Johannesburg (CoJ) are projected to have more than 6. 9 million people by 2030, while the City of Cape Town is projected to have more than 5. 4 million people in the same period. This makes the CoJ the most populous city in South Africa and it is ranked 78th in the world while the City of Cape Town is ranked 108th in the World (United Nations, 2019). According to Boyle, Michell and Viruly (2018), such cities are the hub of human activity. The bulk of environmental degradation and consumption occurs inside these metropolitan regions. One of the essential considerations for developing-world cities is to regulate the relationship between rapid and uncontrolled urbanisation as well as long-term development (Boyle & Michell, 2017).

As a response to some of the challenges that are associated with the above, the eThekwini Municipality established a governance-focused climate change implementation framework. This governance framework comprises of the eThekwini Municipality Climate Change Committee, which operates on a political level, and the Durban Climate Change Strategy

Technical Task Team, which operates on a technical level (eThekwini Municipality, 2019). The Mayor, who serves as the political leader of the eThekwini Municipality, is the chairman of the 12-member, nonpartisan eThekwini Municipality Climate Change Committee. The committee oversees the City's climate change initiatives to ensure they are in line with the City's strategic goals (eThekwini Municipality, 2019).

In 2011, the CoJ developed the Growth and Development Strategy (GDS) that is aligned with its Integrated Development Plan (CoJ, 2011). The Johannesburg 2040 GDS, as it is commonly known, has, a well-defined vision, purpose, principles, objectives, outputs, and indicators. There are four primary objectives that define the Johannesburg 2040 GDS. Each result is associated with a set of outputs and one or more success indicators (CoJ, 2011). Therefore, the research problem is relevant as a sustainability balanced scorecard is a performance measurement and strategic management tool that can aid the MoEs in reaching the set-out targets by the respective local government strategies and the broader national government programmes that deal with sustainability.

1.3   Business need for the study

Chinowsky, Schweikert and Hayles (2014) highlight the research that quantifies the cost of climate change and the extent to which maintaining and adapting to unsustainable buildings diverts resources from sustainable development in government buildings. The research determined that there are inherent risks and costs that are associated with not switching and practising sustainability principles. The findings in the study demonstrate that some governments, and the private sector that are engaged in the planning, design, construction, and in the management of buildings must consider and address a variety of potential climate change implications (Chinowsky, Schweikert & Hayles, 2014).

Affolderbach and Schulz (2017, p.677) argue that due to the relatively high levels of greenhouse gas emissions and the comparatively high authority of local governments over land use, carbon control measures, and the transitions to a green economy, the cities are typically seen as the ideal strategic scale for climate change action. Affolderbach and Schulz (2017, p.677) further argue that there is emerging evidence that the cities, rather than the national or provincial governments, have embraced significantly harder goals and targets through highly ambitious green action plans and strategies. Ates and Buttgen (2011) state that if the local government and the cities were to adopt sustainability principles, they have the potential to contribute immensely to the economic and social changes.

The City of Joburg Property Company SOC Limited (JPC) and the Johannesburg Social Housing Company SOC Limited (JOSHCO), have a development pipeline of more than 500 billion Rands in projects throughout the CoJ (JOSHCO, 2020; JPC, 2020). These entities have considerable budgets to change the infrastructure landscape, mainly the CoJ's residential and commercial markets. These MoEs are mandated to develop and maintain the residential and property-related infrastructure.

As of 2022, there are a total of 53 active MoEs across South Africa (National Treasury, 2022). These MoEs must conform to all the regulatory frameworks and the reporting requirements that are applicable to registered businesses. Additionally, due to the nature of their formation, the MoEs must comply with the Municipal Finance Management Act, 2003 (Act No. 56 of 2003) and the Public Finance Management Act, 1999 (Act No. 1 of 1999) (JPC, 2020; JOSHCO; 2020). According to Gumede (2019), the municipal-owned entities are constituted to perform various roles within municipalities that include but are not limited to:

- Service utilities such as Pikitup, Johannesburg Metrobus Company and Johanessburg Social Housing Company;
- Corporatise or reorganise entities that operate like private firms, such as the Johannesburg City Power, JPC and the Johannesburg Development Agency;
- Section 21 businesses like the Johannesburg Tourism Company and the Johannesburg Roads Agency.

1.4   Theoretical need for the study

Although there is extensive research regarding the sustainability balanced scorecard, there is little evidence of a similar study in the local government, specifically at the MoE level (Hansen & Schaltegger, 2016). Veselovská (2017, p.475) states that although corporate social responsibility, corporate sustainability and sustainable development are topics that are well known, the sustainable policies remain exceedingly difficult to execute in practice. Ates and Buttgen (2011) state that for public entities, more specifically for the MoEs to constantly meet their sustainability goals, they require a management tool that is able to demonstrate the causal relationships and the interdependencies between the sustainability-related measures and the performance indicators to ensure that the sustainability activities follow a holistic approach, which aligns with the objectives and strategy of the entity, as well as corresponds to the particular business conditions. Ates and Buttgen (2011) propose the use of a sustainability balanced scorecard, which is a modification of Kaplan and Norton's (1996) well-established performance monitoring instrument. The study will expand the scope of the SBSC at the MoE level. It will also assist in identifying the drivers and the barriers to implementing a SBSC through the lens of Orchestrating Change for Corporate Sustainability model. This is

important as it may give the policymakers some insights on how best to address the issue, considering that the South African government has committed to fighting global warming.

1.5   Purpose statement

The arguments mentioned above provide insights into the costs of current and future projects that are being done by the MoEs across South Africa. The risks of not considering the sustainability principles in government projects are also highlighted. There is a clear requirement for the local governments and the MoEs that are engaged in real estate and infrastructure as well as related projects to adapt to sustainability principles in their overall business strategies. The SBSC is a tool that may aid organisations to adopt sustainability principles into their overall business strategy.

The purpose of this research was to identify the key drivers, the barriers, and the strategies in implementing a sustainability balanced scorecard using the Orchestrating Change for Corporate Sustainability model in the municipal-owned entities. This research will determine; the degree of adoption and implementation of sustainability within the MoEs, the main drivers towards implementing sustainability, the main barriers to change towards implementing sustainability, and the strategies that are available for the implementation of a SBSC framework in an attempt to improve sustainability within the MoEs.

CHAPTER 2:   THEORY AND LITERATURE REVIEW

2.1   Introduction

The integration of Corporate Social Responsibility (CSR), corporate sustainability, and sustainable development concepts has become imperative for the private and public sectors in their business strategies. Hansen and Schaltegger (2016, p.193) state that the inadequate comprehensive methods to evaluate and manage corporate performance have resulted in a rise in economic risks and has created negative issues for, the businesses, the economy, and the society at large. As climate change dominates public policy debates, the businesses throughout the world are under growing pressure to incorporate sustainability and related practises as well as to keep their key stakeholders informed about their performance (Elijido-Ten & Tjan, 2014). Various researchers have highlighted events such as the ethical scandals and financial crisis of the 2000s. They have also discussed the growing concerns about global warming that have also highlighted the delicate relationship between business and society and the need for businesses to consider the impact of their operations on the natural environment and on human development in a more comprehensive manner (Tol, 2009; Leavesley, 1994; Haines & Patz, 2004; Sekercioglu, Primack, & Wormworth, 2012; Doh & Tashman, 2012). There is, therefore, growing interest around the world on the integrated measurement of sustainability in the organisations' performance measurement systems by scholars and practitioners (Hansen & Schaltegger, 2016).

According to Elijido-Ten and Tjan (2014), incorporating environmental and social strategies, objectives, and targets into organisational processes and performance monitoring systems has paved the way for adopting what is colloquially known as the Sustainability Balanced Scorecard (SBSC). The SBSC is a multi-perspective performance evaluation method that is based on the classic balanced scorecard that incorporates three elements of sustainability: financial, environmental, and social (Elijido-Ten, Tjan, 2014). Unfortunately, implementing any new system or process in the MoEs might necessitate extensive alterations to the organisational structure, including to the culture, to the leadership styles, to the management skills and learning, as well as to human resources (Klein, Ramos & Deutz, 2022). Therefore, a change management process is necessary for any meaningful and sustained implementation of the SBSC.

2.2   The emergence of sustainability constructs

According to Ates and Buttgen (2011), the concept of sustainability was created primarily for and by Multinational Enterprises (MNE). When the MNEs take advantage of the new commercial opportunities that are generated by market liberalisation and globalised sourcing, their labour and environmental policies are scrutinised with greater severity throughout their worldwide supply chains. These societal and market forces necessitate fresh ideas on sustainability and, as a result, they have pushed governments worldwide to advance sustainability and strengthen corporate monitoring in the form of legislation that compels organisations, that are both in the private and the public sector to report on the economic, the environmental and the social risks as well as the associated mitigation plans (Kansal, Joshi, Babu & Sharma, 2018; Jain, Kansal, & Joshi, 2021; Ates & Buttgen, 2011).

Despite the efforts of the government and organisations, and the resources at their disposal, only a small number of organisations have institutionalised sustainability into their systems and cultures. According to Lozano, Ceulemans and Seatter (2015), the organisations that have engaged in sustainability have done so mainly through upper management levels' initiatives, where the organisations have been treated as checkboxes, seldom accounting for the intra-organisational differences, and addressing their organisational systems tangentially. This view is supported by Elijido-Ten and Tjan (2014) who note that while the expansion of sustainability disclosures is well documented, various researchers have noted that declaring organisations seldom integrates sustainability into the core management processes and into the performance monitoring systems, thereby implying that the commitment to sustainability is just cosmetic.

2.2.1   Sustainability definitions

There is a large body of literature on CSR and a growing body of research on corporate sustainability as well as sustainable development. As a result, there are various definitions for each of these constructs (Dahlsrud, 2008). CSR is defined as the organisational acts that advance some social benefit beyond the organisation and its shareholders' immediate interests and beyond what is required by the law (Dahlsrud, 2008). On the other hand, Masoud and Anu (2021) state that CSR refers to the ethics, which distinguish between right and wrong, as well as doing the right thing. Sustainable development is defined as, "Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987). Corporate sustainability acknowledges the importance of organisational growth and profitability, it also necessitates the pursuit of societal goals, notably those related to environmental preservation, social justice and equity, and economic development (Wilson,

2003). On the other hand, sustainability is frequently characterised as the measures that are aimed at enhancing human life quality while remaining within the carrying capacity of supporting ecosystems (Dahlsrud, 2008).

Sheehy and Farneti (2021) argue that CSR, corporate sustainability and sustainable development have different meaning, and, over time, they have come to be used interchangeably, confusing regulators, activists, and the general public. However, Sheehy and Farneti (2021) state that sustainability is the most inclusive term, covering national, regional and organisational levels. This view is supported by Hansen and Schaltegger (2016), who state that CSR, corporate sustainability and sustainable development are closely related and are all anchored in the three elements of economic development, social development, and environmental protection. These three elements are sometimes referred to as the "triple bottom line" and are widely acknowledged in the context of business and business education to represent the concept of sustainability (Doh & Tashman, 2012). Any future reference in this study to the three CSR constructs, sustainability and sustainable development will be referred to as "sustainability".

2.2.2   *Importance of sustainability*

Although the rising importance of sustainability has been seen as a significant breakthrough in the MNEs' business agendas, the relevance of sustainability for the suppliers of services of broad interest, such as the local government and the MoEs, as well as the relationship between the principles of public service obligation and sustainability are not yet well recognised (Ates & Buttgen, 2011). The fundamental aim of the MoEs is to achieve their social goals rather than to generate financial gains, albeit they must ensure their own sustainability (Masoud & Anu, 2021). The concept of providing value is more broadly defined in the local government and in the MoE sphere; however, determining what this value constitutes might be challenging at times. According to Baker (2007), determining what is considered as value depends on the relative importance of the various stakeholders that the local government and the MoEs are serving.

The organisations that provide services of broad interest such as water supply management, wastewater treatment, energy supply, waste management, building, social housing, and public transportation, have an enormous economic impact (Ates & Buttgen, 2011). The developing countries have recently given infrastructure, transportation, and housing projects a sizable portion of their capital expenditures. According to Banihashemi, Hosseini, Golizadeh and Sankaran (2017), construction projects in developing countries have significant effects on, the local populations, the environment, and the social aspects with significant economic weight.

In the City of Johannesburg, the JPC and the JOSHCO have a development pipeline of more than 500 billion Rands in projects. These range from inner-city renewal and refurbishments, hostel developments, mix-use precincts, shopping centres to upmarket residential developments (JOSHCO, 2020; JPC, 2020). In the European Union, the organisations of general interest that are owned by the states and the local governments represented approximately 16% of the total economy in terms of salaries and final products in 2006. More than 15,000 organisations employed over a million persons and earned a turnover of €140 billion (Ates & Buttgen, 2011). However, the construction industry in developing countries has a variety of difficulties, including but not limited to an unpredictable economy, a lack of data and openness, and corruption. In addition to these, societal obstacles, economic and political limitations, as well as a lack of formal education on sustainability all hinder the adoption of sustainability (Banihashemi, Hosseini, Golizadeh & Sankaran, 2017).

Ates and Buttgen (2011) argue that if these local governments and the MoEs embraced the sustainability principles, their combined impact on sustainability's capacity to contribute to growth and employment might be substantial. As policymakers and as the holders of some of the largest capital infrastructure budgets, the local governments and the MoEs have a massive role in setting the tone for sustainability. However, research on sustainability remains scant, particularly in the organisational field and in terms of the barriers that the public service and, especially the local government and the MoEs face. These questions relate to the local government and the MoE's contributions towards their community's welfare, their execution of sovereign tasks, their cost-covering rather than their profit-driven operations, their ability or freedom to act in regulated industries, and their contribution to environmental sustainability (Ates & Buttgen, 2011). Affolderbach and Schulz (2017. P.678) add that sustainability agendas are seen as serving multiple goals at the same time as:

- They respond to and comply with growing adaptation pressures, whether these are in response to environmental needs, or political and legal sustainability imperatives, or public pressures, and
- They help to strengthen the city's competitiveness.

2.2.3 Adoption of sustainability

A growing trend in organisations, particularly in the private sector, is the adoption of sustainability policies and practises within the business operations. Although at a slower pace, the public sector, in particular, the MoEs and the State-owned Entities (SOE), are adopting this trend (Figueira, Domingues, Caeiro, Painho, Antunes, Santos, Videira, Walker, Huisingh & Ramos, 2018). Li, Ye, Dai, Zhao, and Sheu (2019) emphasise that the organisations must devote resources and expertise to addressing how they will transition and incorporate

sustainability into their business operations. This will, in turn, ensure that the organisation is able to turn potential dangers into competitive advantages.

According to Figueira et al. (2018), the views on sustainability transitions emphasise the need for the public sector to rebuild itself and change its policies to accommodate technological innovation institutionally. As a result, the public sector has begun to recognise the need to change its operating procedures to include sustainability in organisational operations. In addition to delivering services, the public sector plays a vital role in resource consumption and employment, which are critical for achieving the sustainable development goals and objectives. This sector should not just ensure the appropriate management of public assets and infrastructure, but it must also guarantee that the stakeholder expectations are fulfilled, and the public is engaged in what is being done. The stakeholders must also be included, while public commitment must be strengthened, and public management should be more transparent (Figueira et al., 2018).

Figueira et al. (2018) stress that there is still more work to be done to reach the management levels that support not just the high-quality public services that are concerned with the stakeholders' expectations but also the enhanced population quality of life and the creation of sustainable societies. Most initiatives are standalone acts that are not a part of a comprehensive strategy.

2.3   Change management

According to Klein, Ramos and Deutz (2022, p.511), the organisations, especially the MoEs, are complex social systems because they involve individuals with behavioural patterns, organisational structures with values and norms, information, processes, and resources, all of which interact with one another and with their environment. Understanding how the elements of an organisation interact with one another and with external forces improves the chances of change implementation by planning and creating new conditions within the organisation (Klein, Ramos & Deutz, 2022, p.511).

Baker (2007) describes change as a process of becoming different through a controlled or uncontrolled process. Change management can be defined as the continuous updating of an organisation's direction, structure, and capabilities to suit the ever-changing external and internal consumer expectations (Todnem, 2005). Therefore, the individuals, the communities, and the organisations of all shapes and sizes change from one state to another. Change is an ongoing process that may be punctuated by a succession of occurrences or actions that may be regarded as discrete, or as time-limited transitions from one stable state to another. Change

is continuous (Baker, 2007). According to Todnem (2005), the organisations' operational and strategic objectives are perpetually subject to change. Therefore, the relevance of an organisation's ability to see where it needs to go in the future and how to make the required modifications to get there should be beyond question. Therefore, neither the organisational change nor the organisational strategy can be separated from one another.

2.3.1 Different change management models

Errida and Bouchra (2021, p.3) state that there is much research on the organisational change models but there are a few comparative studies. A review of Lewin's, Kotter's, Prosci, ADKAR, and McKinsey 7-S models, and the General Electric's change models found that they have different benefits, flaws, and perspectives, while the research found commonalities amongst five models (Lewin, Beckhard, Thurley, Bridges & Kotter). Some models highlight certain aspects, such as how ADKAR emphasises the team members and the employee's change adaption, and Carnall's model emphasises the managerial skills and talents for change. The formula in the Beckhard and Harris model may help to overcome change resistance, while Lewin's model places a strong focus on minimising the opposing force. (Errida & Bouchra, 2021).

Other change management models do not differentiate between initiating, managing, and sustaining change(Errida & Bouchra, 2021). Some models include stages that others do not, and some descriptive models emphasise characteristics that other models do not as consider critical success criteria. There is also debate regarding the optimal approach for guiding organisational change. One or two change models cannot cover all the change situations. The nature of change and its context varies widely from firm to company; therefore, a single change model would not work in all the cases (Errida & Bouchra, 2021). As a result, Errida and Lotfi (2021) advise that merging current models may lead to a more integrated knowledge of how to assure effective organisational change and aid in developing a holistic strategy to change management.

2.3.2 Organisational change management for sustainability

Lozano and Garcia (2020) state that the organisations are affected by internal and external stakeholders while pursuing sustainable transformation. The internal changes are more under the control of organisations than the external changes, which are often more proactive. The changes can be implemented internally by managerial monitoring and control or by focusing on internal change and innovation. There are two methods to internal organisational transformation for sustainability: 1) The top-down method which emphasises management, measurement, and control, and 2) The inside-out method which emphasises the necessity of

internal change and creativity. While most initiatives in the literature follow the top-down control model, only a handful address internal change and creativity (Lozano, Nummert & Ceulemans, 2016).

According to Lozano, Ceulemans and Seatter (2015), long-term sustainability change necessitates the transformation of organisational structure, operations, management, the formulation of future sustainability visions, ideas for how to achieve them, and the mental model modifications. Unfortunately, a few organisations have effectively integrated sustainability into their operations and culture. Many sustainability initiatives have relied on technocentric solutions and management tactics that ignore culture, and the supply chain, as well as the interconnections between the system elements and the four dimensions of sustainability (Lozano & Garcia, 2020).

Lozano and Garcia (2020) state that the changes that challenge the status quo, such as shifting from unsustainable to more sustainable practises, are sure to meet resistance at many organisational levels. The ability of individuals to adapt to change is a fundamental restriction in such processes. The resistance can be subtle or overt, with open conflicts for resources, statements of scepticism, and a refusal to commit to the change efforts (Lozano, Ceulemans, & Seatter, 2015). Lozano and Garcia (2020) propose an Orchestrating Change for Corporate Sustainability model to help explain the process of organisational changes for corporate sustainability.

2.3.3   Orchestrating change for corporate sustainability model

According to Lozano (2007), internally planned or better labelled, staged transformation, based on proactivity and cooperation, is a superior alternative for organisations that are seeking to engage with sustainability. In a continual iterative process, orchestrated change can disturb the Status Quo (SQ) and aid in the transition to a More Sustainable State (MSOS) since change is seldom a once-for-all phenomenon. The entire system and its components as well as their various attitudes must be addressed in this orchestration (Lozano, 2007).

Developing change drivers and implementing proper change management practices are critical in this process. The institutional structure can aid in maintaining stability throughout the transitions, by facilitating sustainability institutionalisation. The system would go through a transitional period before reaching the MSOS during these modifications (Lozano, Nummert, & Ceulemans, 2016). The MSOS starts to become the New Status Quo after the new structure and objectives are established (SQN). The process must be redone after stabilising since sustainability is dynamic. Planning organisational changes while interacting with various

organisational levels and their attitudes may assist organisations in overcoming change resistance and integrating their sustainability efforts more thoroughly. This includes enhancing organisational, managerial, and technological changes, thereby promoting sustainability from a more comprehensive standpoint (Lozano, Nummert, & Ceulemans, 2016).
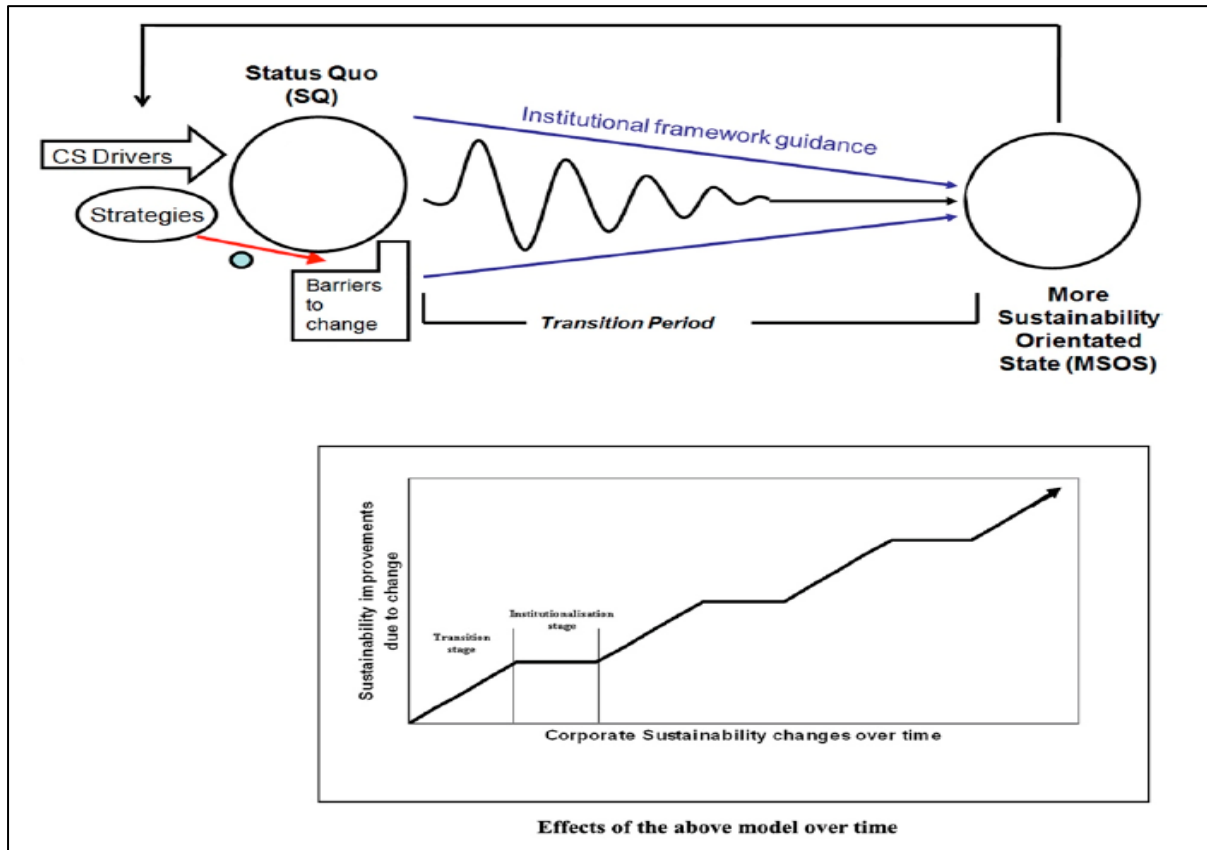
Figure 2.1: Framework for explaining the dynamics of orchestrating changes for corporate sustainability

Lozano (2007) stresses that leadership and the institutional framework, as other forms of change, are critical in guiding and operationalising alternative methods and transformation towards sustainability. With sustainability as its leitmotiv, the institutional framework might help to preserve stability during the transitions, thereby allowing sustainability institutionalisation.

2.4   Drivers and barriers to sustainability implementation

Nearly 90% of innovations and approximately 70% of planned organisational reform attempts fail (Errida & Lotfi, 2021; Hueske & Guenther, 2021). Identifying internal and external drivers as well as barriers is the first step in implementing sustainability. The organisations must understand what motivates them to execute sustainability initiatives and they must be able to note the hurdles they will face during the implementation process. As a result, identifying the drivers and the barriers is a critical stage in implementing sustainability (Narimissa, Kangarani-Farahani, & Molla-Alizadeh-Zavardehi, 2020).

According to Hueske and Guenther (2021), the barriers are things that prevent, slow down, or even completely prevent the adoption of sustainability within organisations. In the study's context, this relates to the detrimental effects of the barriers to integrating sustainability in the MoEs. For the initiative to succeed, the barriers must be addressed. In addition to the study on the barriers, consideration must also be given to driver-related studies. The drivers may aid sustainability implementation and affect how a process is led and accepted since they complement the strategies for challenge mitigation (Hueske & Guenther, 2021; Narimissa et al., 2020). The term drivers refers to the variables "that facilitate the implementation of change by providing an understanding of the need for change, through describing the change vision and initiatives, fostering or training employees on new work routines, processes, models, and/or values, or embedding changes in the culture" (Whelan-Berry et al., 2003, adopted from Narimissa et al., 2020, p.249).

More than merely being opposites of one another, the barriers and the drivers really complement one another. Additionally, the drivers are more than just ways to get around the barriers; and while they might help, they are not absolutely required. Contrarily, the barriers are more than just a shortage of drivers; they may succeed but can also be gotten through. Understanding the causes of the success or failure of the present methods may be improved by identifying the barriers and the drivers. Instead of offering fresh strategic solutions, the barriers and drivers provide insights into why the transformation succeeds or fails and how to boost its chances of success (Hueske & Guenther, 2021).

2.4.1   Sustainability Drivers

Pillora, Blackburn and Artist (2009) identify the following main drivers of sustainability in local government that will be unpacked below.

- General manager and senior management support

Motivation, competency, and leadership offered by senior management in local government and the MoEs is one of the main themes regarding enabling factors. Senior managers are able to encourage managers to eliminate outdated practices and recognise employees' successes in sustainability related initiatives and projects. Senior managers are also able to include sustainability-related job responsibilities in managers job descriptions which encourages the recruitments of managers with a focus of sustainability (Pillora, Blackburn & Artist, 2009).

- Mayor and councillor leadership

Strong and effective leadership from the elected council of local governments is an enabling factor that drives sustainability. Even when councillors were more pragmatic, they would support environmental sustainability priorities (Pillora, Blackburn & Artist, 2009).

- Media coverage of global and local issues

Media coverage of environmental issues, particularly climate change coverage, has had an influence on the adoption of sustainability. By extension, this component was also associated to a higher degree of understanding of climate change and other environmental concerns (Pillora, Blackburn & Artist, 2009).

- Active and engaged community

Engaged communities on topic of sustainability are an important driver when it comes to driving sustainability. In certain regions, it is common to find a large number of activists and conservation organisations, which have a significant impact on the elected council's policies and priorities (Pillora, Blackburn & Artist, 2009).

- Dedicated sustainability staff

Many councils lack sustainability professionals, much alone departments, but those councils that did, have such professionals are viewed as enablers. Many of these professionals are in environmental or natural resource management divisions, but many were also in corporate departments. Sustainability professionals coordinated council activities, managed interdepartmental teams, established partnerships with other MoEs and SoEs, introduced new

techniques and ways of thinking, and maintained change momentum. When sustainability professionals had appropriate seniority, delegation, and subject mastery, they were viewed as successful drivers. Such sustainability professionals assisted in providing employees with take-home packages, intranet education, internal staff surveys, and accomplishment and prize promotion as part of teaching and embedding sustainability in MoEs and council (Pillora, Blackburn & Artist, 2009).

- Sympathetic organisational culture

The organisational culture, in particular how adaptable and receptive the employees were to sustainability goals, was seen as a relevant enabler. In some instances, this sympathetic culture is developed over time as a result of a track record of solid leadership and a hiring processes that prioritised candidates with these sustainability values and competencies (Pillora, Blackburn & Artist, 2009).

- Effective management systems

Despite the fact that organisational and administrative systems were mentioned more frequently cited as barriers, when used correctly, they can create an enabling environment for attaining sustainability results. These results could be achieve through (Pillora, Blackburn & Artist, 2009):

- o Organizational models that dismantled silos, such as those that organised groups around themes.
- o Making managers participate in cross-departmental tasks.
- o Excellent internal education and induction initiatives to raise understanding of sustainability as a shared responsibility.
- o Cross-council teams have been established to handle issues that were previously handled by a single division, such as integrated water management and integrated planning.
- o Making effective use of databases to give staff members easy access to information on all of the council's sustainability-related operations and to stay current on changes.

- Legislation

Government regulation/legislation plays an important role in environmental and social sustainability by establishing environmental and social standards and regulatory frameworks to protect productive inputs and quality of life in a competitive economy. Such approach may be viewed as cost-cutting and damaging to industrial competitiveness. Additional charges will undoubtedly pose issues for business in the near term, especially, if necessary, preparation

work is not undertaken, but in the long run, correctly established environmental requirements can spark innovations that reduce the total cost of a product or increase its value. Such innovations enable businesses to employ a variety of inputs ranging from raw materials to energy, compensating the expenses of reducing environmental consequences and breaking the deadlock. Ultimately, increased resource productivity makes businesses more competitive (Renukappa, Egbu, Akintoye & Suresh, 2013).

- Partnerships and external agency support

Provincial and national department relationships with local governments were generally thought to be highly effective enablers of sustainability. Issues regarding the need of pooling resources, getting together for training, and exchanging accurate information is seen as some of the factors driving sustainability. Councils cited the Cities for Climate Protection (CCP) initiative as a valuable facilitator, particularly in earlier years when they were just getting started in this line of activity. In one instance, the CCP modular approach helped the council redesign their management plan such that it was organised conceptually rather than by department (Pillora, Blackburn & Artist, 2009).

2.4.2 Sustainability Barriers

Larry, Giunipero, Hooker and Denslow (2012) state that while there are pressures urging businesses towards sustainability, there are also barriers to adopting sustainable practices.

- Lack of organisational support

The inability to motivate others in an organisation due to a lack of leadership is one of the barriers identified. Despite sustainability being associated with positive agendas, the agenda is frequently dependent on individuals and exists only in pockets throughout local governments and MoEs. Pillora, Blackburn and Artist (2009) suggest the following initiatives to overcome the above barrier. One of the identified methods is to make use of examples of the success and failures on sustainability implementation from other local municipalities and MoEs. Case studies can also be used to create a business case for long-term sustainability initiatives. Organisations can also employ and use external experts or facilitators to help improve internal awareness of sustainability. Finally, the submission of sustainability initiatives to external organisations that have interest in the implementation of sustainability activities is encouraged (Pillora, Blackburn & Artist, 2009).

- Gap between theory and practice

There is a vast difference between what is advocated and what is actually done in terms of sustainability; especially when it comes to policy implementation and what was initially

intended in so far as the policies. The above barrier can be addressed by including sustainability in the management plans, job descriptions, and orientation programmes of local government and MoEs. Gain momentum by executing the small sustainability initiatives first. Finally, it is preferable to succeed well in a few key sustainability areas rather than achieve poor results across the board (Pillora, Blackburn & Artist, 2009).

- Lack of employee capacity and high employee turnover

The employees tasked with engaging their respective organisation or community in sustainability initiatives are generally overwelled by the extensive requirements of the tasks and the requisite skill sets to successfully execute the tasks. There is a need to increase the abilities of employees in general for sustainability to be successful. Finally, high employee turnover and loss of institutional knowledge is also creating challenges in instilling sustainability in organisations. Methods to overcome the above barrier include improving employee capacity to work on sustainability initiatives and projects by establishing an internal sustainability committee comprised of employees from several departments. Another method s to support sustainable professional development opportunities, and finally, the organisation must consider developing a mentorship programme to provide additional assistance for employees (Pillora, Blackburn & Artist, 2009).

- Competing priorities

The lower priorities placed on environmental or social equality concerns by local governments, community or lobby groups in favour of certain outcomes results in sustainability not being advanced. Ways to overcome this barrier is by organising sustainability workshops to improve community knowledge and support (Pillora, Blackburn & Artist, 2009).

- Inadequate systems for managing information

Many local governments and MoEs have significant issues when it comes to data management and IT systems. Complex and incompatible systems, as well as a lack of automation, might increase the time required for planning, coordinating, and reporting on sustainability related initiatives. Methods identified to manage the above barrier include track sustainable procurement using available internal financial management systems. As well as utalising third-party organizations to monitor your water and electricity consumption (Pillora, Blackburn & Artist, 2009).

- Lack of internal and external funding

A shortage of funds and resources might make it difficult to plan and execute sustainability initiatives. This could be attributed to current finances pressures on local governments and MoEs which is resulting of poor economic conditions. Some of the methods identified to manage the above barrier include establish a revolving energy fund specifically for sustainability initiatives and projects. Savings generated from reduced energy usage are reinvested in sustainability initiative and projects. Another method is to develop regional grant proposals in collaboration with other local governments and MoEs on sustainability initiative and projects that will impact multiple local governments and MoEs. Finally, apply for sustainability levy where possible (Pillora, Blackburn & Artist, 2009).

- Difficulty dealing with government agencies

While interactions between employees from different government departments, SoE and MoEs are typically very good on a personal level, a lack of coordination between these levels of government is generally complicated, and often results in projects at a local government level not starting or progressing at a slow pace. Measures to overcome the above barriers connecting and partnering with provincial and national government departments in grant proposals for sustainability related initiatives and projects. Another method is to setup roundtable discussions with to advance challenging issues (Pillora, Blackburn & Artist, 2009).

- Inadequate Legislation

Legislation is acknowledged as a driver on the one hand; however, it is also viewed as a barrier if legislation is not being amended and adopted to reflect current practices and concerns faced by today's government. Governments throughout the world are launching initiatives to cut red tape, enhance public services, and create a more favourable environment for business. The Donor Committee for Enterprise Development (2010) describe red tape as rules and regulations, administrative and managerial processes and systems that are ineffective in attaining their intended goals, resulting in suboptimal and undesirable societal outcomes. In many circumstances, a completely reasonable bureaucratic system might become complex due to inadequate inter-person interactions or insufficient information about how the process works. Streamlining operations and enhancing administrative personnel's service orientation can therefore play a major role in decreasing inefficiency and ultimately expenses (Department of Trade and Industry, 2013). Methods to overcome this barrier include participating actively in the consultation phases of important legislation, as well as trying to exceed the minimum criteria for new legislation involving sustainability (Pillora, Blackburn & Artist, 2009).

- Research and development challenges

Considering that this is still a new topic for most MoEs, environment and sustainability positions will typically involve enquiring new knowledge and methods on how to manage sustainability as a concept. It is also difficult for these professionals to find the time to reflect, study, and keep up with current trends in relation to sustainability. Another factor is the costs associated with acquiring reliable data and inexpensive external assistance. Methods identified to overcome this barrier include partnering with universities to obtain access to research and expertise in the field of sustainability as well as join sustainable networks that facilitate the flow of information and strategies (Pillora, Blackburn & Artist, 2009).

- The language of sustainability

While professionals in this field recognise that the phrase "sustainability" is an useful abbreviation for a set of well-understood concepts, the phrase frequently proves troublesome when used to a larger audience that might not know the full spectrum of sustainability. This frequently leads to the uncertainty around the term and how it deconstruct and apply it. Methods to overcome the above barrier include encouraging local governments, MoEs and communities to clarify their understanding of sustainability and develop a unified vision and knowledge of sustainability. Other methods include the dissemination of sustainability newsletters, introductions to sustainability, and sustainability surveys to raise awareness of fundamental principles concerning sustainability (Pillora, Blackburn & Artist, 2009).

2.5   The balanced scorecard and its components

According to Yahanpath and Islam (2016), the profit and loss accounts as well as the other traditional accounting metrics have been viewed as having severe flaws in establishing an effective performance measurement system. Asiaei and Bontis (2019) highlight that some businesses have failed to achieve the desired results because of the lack of proper management of strategic initiatives and competencies. The information provided by the performance measurement systems, such as the balanced scorecard, is crucial to the organisation's core activities. Several industries, businesses, small and medium enterprises, banks, universities, and even local governments worldwide have adopted and utilised the BSC as a strategic and performance measurement system (Mbala, 2016).

The BSC can therefore be summarised as a feedback system that gives information about the organisation's internal processes and external outcomes. It was created to link the strategic objectives in four dimensions, with financial sustainability being the ultimate measure. It does this by making the linkages between the objectives and the performance indicators in the respective perspectives, thereby allowing the strategy to be managed. Every indicator that

was chosen for a BSC must be part of a cause-and-effect chain that communicates the organisation's strategy's meaning (Neiva, Prasath, Amorim, Lima, Barbosa, Ribeiro, Ceci, Schneider, Deggau & Guerra, 2021). If the BSC does not sufficiently represent the cause-and-effect links, it will not translate and convey the organisation's vision and strategy (Gqiba, 2013). However, even the most visionary strategy cannot be implemented in the absence of solid operational and governance systems. Conversely, without strategic vision and direction, operational excellence is insufficient to achieve, and much less to sustain (Gqiba, 2013).

According to Kaplan and Norton (1996), the innovative organisation are using the BSC as a strategic management system and the measurement focus of the scorecard to accomplish critical management processes such as:

- Clarifying and translating vision and strategy;
- Creating a strategic management team;
- Communicating and linking strategic objectives and measures;
- Aligning department goals to the strategy;
- Planning, setting targets, and aligning strategic initiatives; and
- Enhancing strategic feedback and learning.

2.5.1 Financial perspective

The BSC model maintains the financial perspective because the financial indicators are valuable in summarising the activities' readily measurable economic consequences (Önder & Aydin, 2018). In most situations, the selected financial indicators are trailing when reporting on previous performance. The financial performance measures indicate if an organisation's strategy, including its formation and implementation, result in higher earnings (Khomba, 2011). While details such as pricing or tariffs are sector-specific, one fundamental approach that applies to the services of broad interest across the board is the cost recovery principle (Ates & Buttgen, 2011). That is, rather than profits, the economic goal of the local government and the MoEs is the recovery of full or incremental expenses. They are also required to implement budget management that is sustainable, economical, and efficient (Ates & Buttgen, 2011). The relevant financial statistics and indicators, such as the return on investment, net profit, current ratio, and debt to equity, are used to assess if the organisation's strategy is adding to the bottom line (Kaplan & Norton, 1996; Önder & Aydin, 2018). The financial indicators have the drawback of not indicating the amount of consumer happiness, quality, timeliness, or staff motivation. According to Önder and Aydin (2018), in the BSC's financial perspective, there are three financial goals that have strategic importance for every organisation. These are:

- Revenue growth and components;

- Lowering costs and increasing productivity;
- Evaluation of assets and investment strategies.

2.5.2   Customer/Citizen perspective

The organisations now commonly have a mission that focuses on serving or caring for the consumers/citizens. According to Amaratunga, Baldry and Sarshar (2000), the organisational leadership now places a high premium on how an organisation is perceived by its clients. This viewpoint illustrates the organisation's capacity to deliver high-quality goods and services while also maximising on client satisfaction. The main outcome measures include but are not limited to citizen satisfaction, retention, profitability, as well as the market and account share regarding the goods and services rendered (Önder & Aydin, 2018). However, the citizens' perspective should also include specific measures of the value propositions the organisation will deliver to citizens regarding the rendered goods and the services. The local government and the MoEs should also supply security, universal provision, and equitable access for all the citizens, which demonstrates social citizenship and contributes to competitive advantages, as expressed by the financial performance indicators in contrast to the private sector rivals. In terms of the local government and the MoE's competitiveness, particularly in liberalised markets, there are indicators that show that the quality and sustainability of the organisation's customer experience are likely to be tied to the firm's long-term financial performance (Ates & Buttgen, 2011). Such indicators represent the consumers' loyalty to the public service provider and, as a result, they express the psychological switching costs that secure long-term income. This view is supported by Williams and Naumann's (2011) study, which indicates that there is a direct correlation between the sales, the profits per share, client retention, and the stock prices. This means that the organisations should never consider financial statistics in a vacuum, especially in a local government sphere where citizen satisfaction is a crucial performance measure. In 1997, the South African government introduced the Batho Pele initiative as it realised that public service lacked the skills and attitudes necessary to address the developmental challenges facing the country. In the effort to restructure the public service, the old culture must be replaced in order to guarantee that the public is adequately served, that all employees work to their full potential, and that state resources are treated with respect (Department of Social Development, 2022).

2.5.3   Internal business process perspective

The internal business process perspective focuses on the internal organisational procedures that will influence value creation, provide customer satisfaction, and meet an organisation's financial goals (Kaplan & Norton, 1996; Önder & Aydin, 2018). Kaplan and Norton (1996) have divided the internal business processes into three main areas: cost, time, and quality-related

indicators, which have direct links to the financial targets. Ates and Buttgen (2011) note that in addition to production expenses (such as energy, water, and waste generation), the relevant lagging indicators might include an organisation's attainment of quality or environmental certifications such as ISO 9001:2000, the Eco-Management, and the Audit Scheme (EMAS), as well as the Social Accountability 8000. The process characteristics, whether defined by certificate authorities or in the form of scientific or managerial competence in process management, are the fundamental performance drivers (Ates & Buttgen, 2011). Önder and Aydin (2018) further state that service development and commitment, partnering with the community, and reporting are examples of the items that may also be represented in this perspective. The organisations might also need to identify entirely new internal processes rather than focusing their efforts on the incremental improvement of existing activities to truly add value, as well as to provide customer satisfaction and meet an organisation's financial goals.

2.5.4 Learning and growth perspective

The learning and growth perspective outlines the infrastructure, particularly the human resources, that are essential for performance and for creating value for customers and municipalities that must be built by the organisation to achieve long-term growth and improvement (Kaplan & Norton, 1996; Ates & Buttgen, 2011; Önder & Aydin, 2018). The learning and growth approach is based on the idea that the organisations may improve their operations through time, notably in terms of personnel talents, information technology systems, and the influence of organisational alignment on achieving organisational goals (Amaratunga, Baldry & Sarsgar, 2000). From this perspective, the knowledge about sustainable technology, processes, and products, as well as job satisfaction, motivation, retention, and productivity, are suitable lagging indicators (Ates & Buttgen, 2011). Önder and Aydin (2018) argue that the organisations are unlikely to be able to meet their long-term targets for customers/citizens and internal processes using only the current technologies and capabilities. Increasing demand and expectations creates intense global competition and requires that the organisations should serve in a better way continuously. The BSC typically will reveal large gaps between the existing capabilities of the people's systems and procedures and what will be required to achieve breakthrough performance. To close these gaps, the organisations will have to invest in developing employees, enhancing new information technology and systems, and aligning organisational procedures and routines for new developments and demands (Kaplan & Norton, 1996; Önder & Aydin, 2018).

2.5.5 Implementation of the BSC

There are various ways to implement a BSC within an organisation, as evidenced by the numerous processes that have been suggested by some researchers (Lueg & Vu, 2015). Regardless of the used process, Lueg and Vu (2015) highlight the fact that they all follow and have been found to be consistent with Kaplan and Norton's six-stage process; refer to table 2.1. The process incorporates the principles of the strategy-focused organisation by offering a thorough system that integrates all the processes and tools that are required to develop and operationalise strategy as well as to monitor and enhance the effectiveness of both strategy and operations (Kaplan & Norton, 2008; Lueg & Vu, 2015):

Table 2.1: Six-stage management system from Kaplan and Norton (2008); Lueg and Vu (2015)

Stage	Description
Stage 1: Develop the strategy	Develop the strategy utilising a variety of tools, including the mission, values, and vision statements, external competitive, economic, and environmental analyses, the resource-based perspective of strategy, blue ocean strategies, and techniques including scenario planning, dynamic simulations, and war-gaming.
Stage 2: Plan the strategy	Plan the strategy using tools such as the BSC strategy maps as well as goals and strategic activities.
Stage 3: Align the organisation	By cascading strategy maps and BSCs to all organisational units, aligning employees through a formal communications process, and connecting the employees' individual goals and incentives to the organisation's strategic goals, you may align the organisation with the strategy.
Stage 4: Plan operations	Utilise tools and techniques such as rolling forecasts, activity-based costing, resource capacity planning, process dashboards, quality and process management, reengineering, and dynamic budgeting to planning operations.
Stage 5: Monitor and learning	Monitor and learn about issues, obstacles, and difficulties. This method incorporates information on the operations and strategy into a meticulously prepared structure for management review meetings.
Stage 6: Test and adapt the strategy	Test and adapt the strategy by using internal operational data and new external data about the environment and competitors. This will start a new cycle of planning and executing both strategy and operations in an integrative manner.

One of the major critics of the BSC lies in the fact that only four perspectives of an organisation are captured: financial, customer, internal business process, as well as learning and growth. Thirty years ago, when the business environment was less complex, these four perspectives might have sufficed, but the firms in the twentieth century had to deal with issues that were a lot more complex, such as global warming and sustainable development (Yahanpath & Islam, 2016). Fortunately, the BSC founders understood that the world is changing, and it is becoming complex so they stated that other relevant perspectives might be added to the current model to improve the relationship. To achieve sustainability, the BSC can assist to consider all the important issues concurrently and in a balanced way. The SBSC is a promising framework for measuring, managing, and reporting the results of the organisation's sustainable strategies (Kalender & Vayvay, 2016). The clear advantage of the BSC models is that other new aspects can be provided to strengthen it and it can also be tailored to the organisation's present nature (Gowindasamy & Jantan, 2018).

2.6   The sustainability balanced scorecard

The essence of the SBSC, like that of the BSC, is to transfer strategy into action. The goal of an SBSC is to find and display strategy-specific influence patterns utilising the cause-and-effect chains that incorporate the key sustainability elements. As a result, the process of developing an SBSC should result in the value-based management of environmental and social factors and measures (Ates & Buttgen, 2011). The initial stage in this procedure starts with defining strategic inputs such as the vision and the goal, as well as identifying the relevant sustainability elements, that is specifically the organisation's environmental and social exposure (Fulop, Hernadi, Jalali, Meidute-Kavaliauskiene, & Ferrerira, 2014). A developed list of sustainability features with possible strategic importance should cover all the components that may impact the success and the value of the organisation. Examples include emissions, energy and material efficiency, responsibility for and development of employees and involvement in local development projects (Ates & Buttgen, 2011).

The second stage is to determine the strategic significance of all the identified sustainability elements in relation to the various perspectives. The most strategically important elements must then be causally connected to long-term success, as evidenced by the financial performance metrics. This stage is crucial because the hierarchical and causal linking of the strategically relevant features is assured by passing through the perspectives in a cascade-like process, beginning with the financial perspective (Ates & Buttgen, 2011). The approach finds appropriate lagging and leading indicators for each perspective, such that the indicators of the hierarchically lesser views causally explain how the aims and the indicators of the superordinate perspectives might be met. The lagging indicators should reflect the key

indicators (results) that are impacted by environmental or social measures and actions. The leading indicators are the sustainability performance drivers that indicate how the outcomes for each perspective may be created (Ates & Buttgen, 2011).

After establishing the strategically significant sustainability elements and connecting them in the cause-and-effect chains to the economic targets, as well as to the performance indicators, and the underlying measurements, the next phase involves the strategy's execution and monitoring. This stage, which employs a plan-do-check-act cycle, serves as a controlling instrument for the local government and the MoEs by providing feedback on the efficacy and the efficiency of their sustainability implementation (Ates & Buttgen, 2011). Elijido-Ten and Tjan (2004) state that the SBSC may also be used to communicate the relevance of an organisation's sustainability strategy, thereby assisting the senior management in repositioning, and improving their sustainability performance and corporate image.

Creating an SBSC, on the other hand, presents a number of obstacles. According to Bieker, as cited in Elijido-Ten and Tjan (2004), creating and executing an SBSC is a pretty difficult, extremely micro-political process that needs a great deal of patience, power, and tenacity. As a result, many organisations fall behind in updating their strategies and their associated indicators. Furthermore, a SBSC may be rejected by certain managers, because as the openness grows, so does the pressure to fulfil the organisational goals. As a result, the senior management's commitment is necessary for the SBSC's acceptability (Elijido-Ten & Tjan, 2004).

2.6.1   Integration challenges

There are different and conflicting views on the architecture and use of the SBSC, with Hahn and Figge (2016, p.919) arguing that "architecture of SBSC does not matter since—irrespective of their architecture—SBSCs are ill-suited to achieve substantive corporate contributions to sustainability". Hansen and Schaltegger (2018) note that the other researchers caution that developing the BSC further than its current architecture might change the reasons it was initially constructed; that is to maximise profit and shareholder value. On the other hand, Neiva et al. (2021) propose an adaption of the BSC tool, with its structure adjusted to fit the needs of the strategic management of sustainable cities. Regardless of the conflicting views, there is little evidence to prove or disprove these assumptions in the local government and in the MoEs, hence the research to probe this debate further.

Elijido-Ten and Tjan (2014) mention that incorporating the sustainability factors into a standard BSC helps the organisation to discover, analyse, and visualise the causal relationships

between the environmental and the social indicators as well as the organisation's financial success. A performance measuring system incorporating transparency and sustainability is especially beneficial for the local governments and the MoEs that must demonstrate their economic success and efficiency. The SBSC can establish the specific sustainability measures and the activities that increase company value, as well as those considered unnecessary efforts from an economic standpoint, putting them at risk of being criticised as public monies are being wasted (Elijido-Ten & Tjan, 2014).

2.6.2 The integration of sustainability in the BSC

According to Kalender and Vayvay (2016), there are three scenarios where sustainability can be integrated into the BSC model by the organisations depending on a organisation's existing position:

- Integrating the measures throughout the four perspectives
  The environmental and social factors can be incorporated into the four current perspectives, thereby linking the corporate strategies and the sustainability efforts throughout the organisation's functions. These sustainability factors are immediately included in the organisation's cause-and-effect relationships and are structured hierarchically from a financial standpoint. There are several justifications for incorporating the environmental challenges into the existing systems, as the integration may permit cost savings. Before implementing the new additional measures, the businesses should carefully assess the level of integration, even though this model works well for businesses with a BSC (Tuori et al., 2021; Dias-Sardinha, Reijnders, & Antunes, 2007).

- Adding a fifth perspective to the BSC
  An additional perspective can be created to consider the social and the environmental aspects. This method is suitable for the high-risk industries that are exposed to high-profile sustainability issues. Tuori et al. (2021) state that by adding a fifth perspective, the BSC stresses sustainability as a core value or strategic approach that strengthens the organisation's sustainability status, including the social, the economic, and the environmental responsibility data. Incorporating the sustainability principles across the financial, the customer, the internal business processes, and the internal measures brings about more sustainable activities for the organisation as a whole. Kalender and Vayvay (2016) mention, however, that because this BSC has its own separate perspective that supports proper planning, it can be hard to integrate it into operations and to convert it into strategic action (Tuori et al., 2021; Dias-Sardinha, Reijnders, & Antunes, 2007).

- Developing a separate SBSC

  A specific environmental or social scorecard can be formulated. The organisations without a BSC that want to monitor or integrate sustainability and the organisations with a functional BSC who do not wish to modify it can employ a separate SBSC (Dias-Sardinha, Reijnders & Antunes, 2007). According to Kalender and Vayvay (2016), a SBSC can include four aspects: sustainability, stakeholders, processes, and learning. However, there might be obstacles to directly integrating sustainability into business strategy.

2.7   Conclusion

Due to the ever-changing global landscape, the chapter has provided compelling reasons for the local governments and the MoEs to integrate sustainability into their business strategies. This chapter has provided the evidence on the importance of the adoption of sustainability in the organisations. The chapter has also provided evidence on the role that change management plays in ensuring the adoption of sustainability.

This study will employ the OCCS framework to investigate the drivers and the barriers impacting the process of implementing a SBSC in the local government organisations and the supporting solutions. The SBSC is considered as an ideal strategic management tool that the local governments and the MoEs can use to drive these sustainability objectives and measures. Because there has been little empirical evidence on OCCS in the context of the local governments and the MoEs, the action research approach is used to link OCCS and the SBSC's implementation by capturing the most relevant and the accurate insights into the factors and the strategies for organisational change towards sustainability.

CHAPTER 3:   RESEARCH QUESTIONS

This chapter presents the research questions that serve as the basis for this research. The literature review conducted in Chapter 2 informed these questions. These questions helped to identify the drivers, the barriers, and the strategies in implementing a sustainability balanced scorecard in the municipal-owned entities.

3.1   Research question one

What is the degree of adoption and implementation of sustainability within the MoEs?

A few organisations have effectively institutionalised and integrated sustainability into their systems and cultures, despite the efforts by the governments and the organisations as well as the availability of technologies (Lozano, Ceulemans & Seatter, 2015). The organisations that have engaged in sustainability have done so primarily through the initiatives at the upper management level, where the organisations have been treated as "black boxes," rarely accounting for the intra-organisational differences and addressing their organisational systems peripherally. Li, Ye, Dai, Zhao and Sheu (2019) stress that the organisations must invest some resources and skills to address how they will transition and integrate sustainability into their business operations.

The first research question aimed to uncover the adoption of sustainability within the MoE structures and to address how it can be accelerated.

3.2   Research question two

What are the main drivers towards implementing sustainability within the MoEs?

Narimissa, Kangarani-Farahani and Molla-Alizadeh-Zavardehi (2020) state that the drivers may help with sustainability implementation, and they may influence how a process is led and accepted since they complement the barrier mitigation measures.

The second research question focuses on the main drivers of implementing sustainability within the MoEs.

3.3   Research question three

What are the main barriers to change towards implementing sustainability within the MoEs?

Hueske and Guenther (2021) state that organisations must understand why they want to undertake sustainability initiatives. They must also be knowledgeable about the barriers they

will face during the implementation process. Identifying such barriers is viewed as a critical stage in sustainability implementation (Narimissa, Kangarani-Farahani, & Molla-Alizadeh-Zavardehi, 2020).

The third research question focuses on the main barriers to implementing sustainability within the MoEs and how these can be overcome.

3.4   Research question four

What are the strategies for implementing a SBSC framework to improve sustainability within the MoEs?

According to Lozano, Ceulemans, and Seatter (2015), long-term sustainability change demands the transformation of the organisational structure, of the operations, and the management. It also demands the formation of future sustainability visions, the strategies for achieving them, and mental model alterations. According to Elijido-Ten and Tjan (2014), the practise of integrating the environmental and the social goals, the objectives, and the targets into the organisational processes and the performance monitoring systems has opened the path for the widespread adoption of the sustainability balanced scorecard. The process of establishing a SBSC should lead to the value-based management of the environmental and the social issues as well as the metrics (Ates & Buttgen, 2011, p.353). According to Kalender and Vayvay (2016), there are three scenarios where sustainability can be integrated into the BSC model by the organisations.

The fourth research question focused on determining whether the MoEs have included sustainability concepts into their policies and into their reporting systems. It aimed to determine how the organisations would incorporate the sustainability elements into the BSC.

3.5   Conclusion

The research questions that served as a guide for this qualitative research are provided in this chapter. The responses to these questions were analysed to gain a better understanding of what the main drivers are, the barriers and the strategies for implementing a sustainability balanced scorecard in the municipal-owned entities. The following chapter will detail the research approach that was used.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

A clear qualitative approach was applied to this research to better understand the main drivers, the barriers, and the strategies for implementing a sustainability balanced scorecard in the municipal-owned entities. Chapter 4 examines the research design's methodological selection and the other facets such as the selection of the population, the sampling technique and size, the measuring tool, the data collection procedure, and the analysis approach that have all been made to support the reliability of the research. Each of the above aspects is discussed, in addition to the quality control procedure as well as the research's limits.

4.2 Research design

Saunders, Lewis, and Thornhill (2016) state that an exploratory research design is ideal for ascertaining what is happening and it highlights the reasons for such a scenario. An exploratory research design was employed as it is best utilised when there is little knowledge about a topic or when little to no information is accessible on how similar problems or research challenges have been addressed in the past (Kumar, 2011). In essence, exploratory research was conducted to gain a deeper understanding of the main drivers, the barriers, and the strategies in implementing an SBSC in the MoEs.

The interpretivism research philosophy was used as it allowed the researcher to discover and deeply understand the respondents' views on the main drivers, the barriers, and the strategies in implementing an SBSC in an MoE environment in which the respondents are considered as the main social actors from a strategy implementation and an execution perspective (Saunders & Lewis, 2012).

In the context of a qualitative study, inductive reasoning tends to be more exploratory, and it is applicable when a researcher employs a bottom-up strategy and wishes to construct a theory from empirical evidence (Myers, 2013). During the literature review, the researcher used the inductive research approach. The inductive research approach assisted the researcher in answering the research questions relating to the drivers, the barriers, and the strategies in implementing a sustainability balanced scorecard in the MoEs.

This researcher considered using the mono or multiple methodologies; however, since the researcher used a single data collection technique, which is semi-structured interviews, and qualitative data analysis procedures, the methodological choice was a mono method (Saunders & Lewis, 2012). The mono method allowed the researcher to solicit the

respondents' views and opinions on the main drivers, the barriers, and the strategies in implementing a SBSC, thereafter focusing on the themes that emerged from the interviews to answer the research questions.

Action research is often conducted by the researchers who wish to launch organisational transformation initiatives. The action research methodology is ideally suited for implementing planned change. The researcher begins with a previously determined problem and collects pertinent data to provide a tentative remedy. This solution is then executed with the understanding that its execution may have unexpected consequences. The impacts are then analysed, characterised, and diagnosed, and the study continues until the issue is completely remedied (Saunders & Lewis, 2012; Sekaran & Bougie, 2009). By soliciting the views and the opinions of the respondents on the drivers, the barriers, and the strategies in implementing a SBSC, the research intended to develop a theoretical understanding of the research problem and to derive possible solutions.

A research study can be conducted where data is collected simply once, over a period of days, weeks, or months, to answer a research question (cross-sectional), or the researcher may choose to investigate the persons or the phenomena at several points in time to answer a research question (longitudinal) (Sekaran & Bougie, 2009). The time horizon used for this research was cross-sectional, as it allowed the researcher to understand the drivers, the barriers, and the strategies in implementing a SBSC at a particular point in time. Due to the time constraints, the researcher chose not to utilise the longitudinal approach (Saunders & Lewis, 2012).

4.3   Population

The initial research population was to cover the MoEs that are located in the City of Johannesburg Metropolitan, the City of Tshwane Metropolitan Municipality, the eThekwini Metropolitan Municipality and the Mbombela Development Agency. The MoEs within the above-stated municipalities are allocated considerable resources to provide services to the businesses and to the community. The senior managers in these MoEs are responsible for the entity's overall performance as set out by the shareholder and the board of directors. Some of the senior managers, namely the executive officers, report directly to their respective boards of directors on the entity's performance. Unfortunately, due to time constraints and the inability to secure interviews with the senior managers working in some of the MoEs, the researcher limited the population and concentrated on the MoEs within the City of Johannesburg Metropolitan Municipality (CoJ).

4.4   Unit of analysis

The individuals engaging in strategy implementation and in the execution within the respective MoEs served as the unit of analysis for this research. The individuals were restricted to the senior managers of the respective MoEs, namely the managing director, the chief financial officer, the executive manager, the general manager, as well as the senior manager or the divisional manager. It was considered that the senior managers had a better awareness of their organisation's overall activities, which allowed for questioning on the drivers, the barriers, and the strategies to implementing a sustainability balanced scorecard in the MoEs. Data was obtained from a total of nine Respondents, at which point no new insights emerged from the individuals. Data saturation was achieved, and the researcher did not continue with any more interviews (Saunders & Lewis, 2012; Myres, 2021).

4.5   Sampling method

Since the total population of the senior managers across all the MoEs is unknown, non-probability sampling was used for the research (Saunders & Lewis, 2018). Purposive sampling was initially used at the start of the data collection process. The researcher's discretion was utilised to pick the most eligible Respondents for the interviews to meet the research's objectives (Saunders & Lewis, 2018). The researcher compiled a list of senior managers in the targeted MoEs based on the organograms that were obtained from the annual financial reports and other readily available MoE reports. This searching method was used to ensure that all the Respondents either formed part of the executive management team or reported directly to an executive of the MoE. Purposive sampling, as observed and noted by Kumar (2011), guarantees that the respondents in the research have insight into and have comprehension of the topic under investigation. During the initial interviews, some of the respondents nominated some potential individuals to help to answer the research questions; therefore, snowball sampling was employed to conduct the additional interviews. The researcher targeted the senior managers who work for the MoEs and are responsible for directing and implementing strategic decisions. These individuals included the general managers, the senior managers, the operation managers, the chief financial officers, and the other executive managers within these organisations.

4.6   Sampling size

Because this was a qualitative study, the sample size was restricted; nonetheless, determining the sample size required to reach the saturation point was difficult to estimate initially, as the researcher had set a minimum target of eight interviews. McCracken (1988) argues that eight respondents are more than enough for many research initiatives. Although the sample size might be considered small, it is important to remember that this group was not selected to

represent some aspect of the greater world. Instead, it provides a chance to see the complex nature of the organisations and the logic of culture. McCracken (1988) argues that qualitative interviews do not aim to determine how many and what types of people share a particular attribute. It is to acquire access to the cultural categories and the assumptions that one culture uses to construct the world. The compelling problem is not how many, and what sort of people embrace these categories and assumptions. The categories and the assumptions are important, not the people who believe them. Only the quantitative approaches can determine extensively what has been found in the rest of the world (McCracken, 1988). After interview nine, saturation was attained, meaning no new themes were detected concerning the research questions. Table 4.1 below provides a list of all the Rrespondents who were interviewed, including their years of experience in the local government and in the MoEs.

Table 4.1: List of Respondents

Respondent Number	Position	Years of Experience
1	General manager: Office of the CEO	40 years
2	Senior manager: Office of the CEO	16 years
3	General manager: Special projects	14 years
4.	Senior Manager: Informal Trading	20 years
5	Operations manager: Facilities management	20 years
6	General manager: Strategic accounts and self-generation	4 years
7	Executive manager: Human Resources (HR) and corporate services	20 years
8	Manager: Strategy, monitoring and evaluation	10 years
9	Manager: Contracts	14 years

4.7   Measurement instrument

The research aim was to gather data on the main barriers and the strategies in implementing a SBSC in the MoEs. Saunders and Lewis (2018, p.158) define a semi-structured interview as "a method of data collection in which the interviewer asks about a set of themes using some predetermined questions but varies the order in which the theses are covered, and questions asked". The researcher used semi-structured interviews as this was deemed the best measurement instrument that would yield the desired outcomes.

Owing to limited timeframes and conflicting priorities, the researcher conducted semi-structured interviews over Microsoft Teams. All the nine interviews were performed on the same platform on the dates and at the times that were agreed with the respondents. Due to load-shedding by the utility provider, Eskom, all the interviews were conducted with the video function off to allow for better connectivity and sound as loadshedding affects connectivity and bandwidth speeds. The shortest interview that was conducted was 22 minutes due to the Respondent only offering 25 minutes of their time for the interview. The interviews ranged in

length from 22 to 97 minutes. The literature review chapter guided the interview questions, which included the themes and the topics to discuss and the questions to ask. Appendix 1 contains the interview guide. Thus, preparation was critical in guaranteeing the interview's content validity (Saunders & Lewis, 2018).

4.8   Data gathering process

Since the research is qualitative in nature, primary data was collected from the respondents using semi-structured interviews. The first step in the interview was to properly introduce each party, followed by thanking the participant for taking the time to be interviewed. The researcher went through the research and the interview objectives, including the informed consent form. The respondents were informed that their participation was entirely voluntary and that they may exit the interview at any time without penalty. Before commencing with the research questions, the researcher obtained the participant's permission to record the interview.

Saunders and Lewis (2012) advise that a pilot test may be undertaken prior to the interviews to assess whether the questions are likely to be understood, and to check that they are not leading, and will produce the required information. A pilot interview was conducted with a senior manager who works for a local government department and who is familiar with the MoE structures, and the strategic objectives as set out by the respective municipalities. During the pilot interview, the Microsoft Teams platform, and the different system parameters, such as recording, saving of recordings, and transcribing, were adjusted.

The interview was directed by the interview guide, which included themes and questions. To ensure the research's integrity, the pre-qualification questions covering the respondent's titles, and years of experience in the MoE were included in the interview guide. The interview was concluded with a thank you to the respondent. Data was collected in the form of voice recordings, which were then transcribed by using Otter.ai before being analysed to create a written description of the questions and the replies that that were received during the interviews (Saunders, Lewis & Thornhill, 2009).

The researcher experienced a technical issue while conduction interview number 6. The Microsoft Teams platform started recording the interview later than it should have, resulting in the pre-qualification questions not being recorded. The researcher alerted the respondent in writing and requested a response to the questions for record-keeping and to verify the information as provided in Table 4.1. The researcher did not experience any other technical issues with the other interviews.

4.9　Analysis approach

According to Saunders and Lewis (2012), a computer-aided qualitative data analysis software may be used to analyse the qualitative data such as that collected by this study. The analysis software that was selected for this research is ATLAS.ti. The interview responses were transcribed and prepared in a format the software was able to read, thus ensuring consistency and reliability (Saunders & Lewis, 2018). Using ATLAS.ti, all of the interview transcripts were examined to identify emerging themes. The data was coded to organise the sections of text according to their central themes. The data was then analysed based on the resultant themes. As shown in Table 4.2, the codes were created and classified to highlight the key data types that match the research questions and the research purpose (Braun & Clarke, 2006).

Table 4.2: Steps of thematic analysis adopted from Braun and Clarke (2006)

Steps	Description of phases in relation to the study
Step 1: Become familiar with the data	Transcribing data; reading and re-reading; s well as noting down initial codes.
Step 2: Generate initial codes	Coding of interesting features of the data in a systematic fashion across the data-set, and collating data that is relevant to each code.
Step 3: Search for themes	Collating codes into potential themes and gathering all the data that is relevant to each potential theme.
Step 4: Review themes	Checking if the themes work in relation to the coded extracts and the entire data-set; and generating a thematic map.
Step 5: Define themes	Ongoing analysis to refine the specifics of each theme; and the generation of clear names for each theme.
Step 6: Write-up	The final opportunity for analysis is selecting the appropriate extracts, discussing the analysis; as well as relating back to the research question or the literature; before producing the report.

The codes were then sorted into a logical list, and they were then combined to produce numerous themes, which were recorded and ranked according to relevance. The respondents with a large number of comparable themes were given greater weight in completing the research owing to their higher level of validity and dependability throughout the population. Based on the gathered data, the themes were then analysed and used to provide a summary of the findings (Zikmund, Babin, Carr & Griffin, 2013). It was necessary to analyse the data from the research questions independently to eliminate any unwanted biases from all the interviewed respondents. The analytical approach was used to draw the conclusions on the

degree of sustainability adoption in the MoEs, including the key drivers, the barriers, and the strategies for establishing a SBSC in the MoEs.

4.10   Quality controls

Noble and Smith (2015, p.1) highlight the difficulties of establishing the validity and the reliability of qualitative research since they do not rely on statistical methods as quantitative research does. Noble and Smith (2015, p.1) further mentioned that qualitative research is criticised for its lack of scientific rigour and for its insufficient justification of the adopted methods. It lacks transparency in the analytical procedures. The findings are merely a collection of personal opinions that are subject to researcher bias.

4.10.1 Validity

Saunders and Lewis (2018, p.134) state that, "validity refers to the extent to which data collection method or methods accurately measure what they intended to measure. The research findings are really what they profess to be about". A high level of validity is possible when the semi-structured and the in-depth interviews are conducted in a manner that provides an opportunity for clarity-seeking questions, and that examines the meanings, as well as investigates the responses and the themes from different angles (Saunders, Lewis & Thornhill, 2012). In addition to the above, Saunders and Lewis (2018) note the key variables that might undermine validity, such as the choice of subjects, testing history, morality, and the uncertainty about causal direction. Throughout the research, these variables were continuously considered and managed (Saunders & Lewis, 2018). The following activities were also done to ensure a high level of validity:

- Nature of the opening comments when the interview commences

Before the commencement of each interview, the respondents were taken through the informed consent form and the intention for the research. This was to alley the respondent's uncertainty and fears which might have compromised the quality of the response. The anonymity of the respondents in the research was highlighted, as no personal indicators are used.

- Approach to questions

To reduce interview bias, the researcher asked clear and straightforward questions that the respondent understood. The researcher started with an open enquiry followed by detailed questions to understand the situation at hand fully.

- Summarise and test understanding

During the course of each interview, the researcher summarised the respondents' explanations to assess the understanding of the given response. This allowed the respondent to confirm whether the summary was correct, and at times, it assisted the respondent to provide suggestions to deepen or correct the researcher's comprehension. This prevented biased or incomplete interpretations and it was also used to investigate the respondent's answers.

- Recoding data

All the interviews were recorded through Microsoft Teams. All the recordings and the associated data have been stored safely by the university and the researcher.

4.10.2   Reliability

Reliability, on the other hand, refers to "the extent to which data collection methods and analysis procedures will produce consistent findings" (Saunders & Lewis, 2018, p.135). When conducting research using in-depth or semi-structured interviews, Saunders, Lewis, and Thornhill (2012) note that the research results represent reality at the time they were gathered in a scenario that may be subject to change. They are, therefore, not necessarily meant to be repeated, which is one argument for the dependability issue. This research style is predicated on the notion that the situations under study are dynamic and complicated. According to Saunders and Lewis (2018), The key variables that might jeopardise the research's reliability are subject error, subject bias, observer error, and observer bias. The researcher was able to manage these factors by focusing on the interview and coding processes. Respondents were made comfortable with the interview technique to reduce subject error and bias and encouraged to think about the questions. The coding process was well-organized and verifiable. To support the calibre of the research, the researcher made sure that there was an audit record of the entire procedure. By carefully considering each component of the research, special emphasis was also made to uniformity and accuracy.

4.11   Research limitations

A limited number of senior managers working for the MoEs in the Johannesburg Region were interviewed. The researcher attempted to reach out to the senior managers in the other MoEs, specifically in the City of Tshwane Metropolitan Municipality, the eThekwini Metropolitan Municipality and the Mbombela Development Agency, with little success. Owing to the small sample size, there was no attempt made to broaden the scope of the research to include the MoEs in the other municipalities; therefore, generalisability to all the MoEs will not be attainable.

The researcher is also cognisant of interviewer bias which might have influenced data quality if the manner and tone of the posed questions reflect the researcher's personal thoughts and beliefs on the topic.

Data quality may be influenced by participation bias, given the short amount of time. The respondents could have omitted certain information during the interviews.

The research was limited to approximately six months because the research was done as an MBA thesis, which is another constraint. The time allocation made it difficult to delve further, as evidenced by the fact that the other research papers require much more time to finish. The researcher also could not secure interviews with senior managers working in other municipalities outside the CoJ; therefore, the study was constrained by a lack of in-depth experience in academic research and there were scarce resources.

CHAPTER 5:   RESULTS

5.1   Introduction

This chapter covers the research results of the nine semi-structured interviews that were conducted with the senior managers working in the MoEs of the City of Johannesburg. The interview consistency matrix was drafted before the interviews were conducted, and it shows how the objectives drawn from the literature, as well as the research questions, and the interview questions, are related (Appendix 5).

The interview consistency matrix provided in Appendix 5 gave the following mapping of the interview questions to the research questions:

- Research Question 1: Interview questions 4-9 aimed to determine the degree of adoption of sustainability within the MoE structures and culture.
- Research Question 2: Interview question 10 aimed to determine the main drivers towards implementing sustainability within the MoEs?
- Research Question 3: Interview questions 11-12 aimed to determine the main barriers to implementing sustainability within the MoEs?
- Research Question 4: Interview questions 12-19 aimed to determine the strategies for implementing an SBSC framework to improve sustainability within the MoEs?

5.2   Findings from the interviews

The interview questions yielded qualitative data that was analysed using thematic analysis, a method in which the common themes and the concepts in the data are found and categorised. The concepts serve as a taxonomy, which was utilised to analyse the emergent themes in the data. The respondents' views were included to give context and enhance the discussions in the following sections of this chapter. Using an Excel spreadsheet, a summary of all interview data was compiled for the thematic analysis.

All the data from the interviews was recorded side-by-side, and similar themes were recognised from the data. These common themes were obtained from the literature, but in some instances, they were straight from the data, as no direct relationship to particular literature could be established for certain newly observed constructs.

Table 5.1 contains a list of interview participants, along with the years of experience relative to local government and MoE, and interview date and duration.

Table 5.1: Interview date and duration

Respondent Number	Analysis Number	Position	Years of Experience	Interview Date	Interview Duration (Min)
1.	6	General manager: Office of the CEO	40 years	15/08/2022	42 minutes
2.	5	Senior manager: Office of the CEO	16 years	15/08/2022	40 minutes
3.	7	General manager: Special projects	14 years	18/08/2022	97 minutes
4.	4	Senior manager: Informal trading	20 years	29/08/2022	36 minutes
5.	1	Operations manager: Facilities management	20 years	23/08/2022	37 minutes
6.	2	General manager: Strategic accounts and self-generation	4 years	27/09/2022	22 minutes
7.	3	Executive manager: HR and corporate services	20 years	03/10/2022	33 minutes
8.	8	Manager: Strategy, monitoring and evaluation	10 years	10/10/2022	22 minutes
9.	9	Manager: Contracts	14 years	11/10/2022	28 minutes
		The average duration of the interviews			*40 minutes*

5.3   Results for Research Question 1

To what degree is sustainability adopted within the MoEs culture?

Research question 1 aimed to uncover the general level of the adoption of sustainability within the MoE structures and culture as well as how it can be accelerated. Understanding the current state of the adoption of sustainability and its related constructs allowed the research to determine how much effort and commitment are required to embed sustainability into the MoE cultures. To get insights from the main research question, the sub-questions were compiled to lead to a more conclusive response.

5.3.1   Sustainability is critical for the MoEs

In an attempt to answer Research Question 1, respondents were asked to give their opinion on what role sustainability plays in MoEs. The respondents' views are captured below. All nine respondents are of the view that sustainability and its respective constructs are important to the MoEs.

Respondent 1 stressed the importance sustainability plays in the local government and by extension, the MoEs by expressing that;

"…*I think it plays a very, very important role...*" (D6 3:59).

Respondent 1 went further and emphasised the need for the MoEs to be around for generations to come because of the basic services they provide in the local governments:

"…*local government needs to be around for millennia to come, because local government and municipal-owned entities basically have to ensure that whatever they put in place is there for future generations to come*" (D6 3:59).

Respondent 7 echoed Respondent 1 views and stated;

"….*continued service delivery, and the sustainability of the entity is quite critical, because if it doesn't remain sustainable, then it would then not be able to, deliver all the services that (are) required by the communities*" (D3 4:28).

Respondent 4 provided some context in terms of the origins of sustainability by making reference to the Sustainability Development Goals (SDG) which were adopted by countries across the globe in an attempt to counter global warming:

"…*sustainability is informed, obviously, by your Sustainable Development Goals (SDG), which your United Nations adopt*" (D4 3:57).

Respondent 4 went further and provided details on how sustainability was cascaded down from being a global agenda to what is now also a local government challenge;

> "*It's a global issue of which then gets cascaded down to the municipalities through its systems, through legislation…*" (D4 3:57).

Respondent 5, similar to the other respondents, agreed that sustainability is important to MoEs but points out that integrating the three aspects of sustainability, namely the social, economic and environment, is a challenge that will require careful consideration and skill to integrate in MoEs;

> "*I think we are currently faced with juggling three balls and making sure that we are able to integrate them …*" (D1 4:48).

Respondent 6 believed that MoEs such as Joburg Water, City Power and Pikitup provide essential services and have an important role concerning local socio-economic factors in their local governments. Responded 6 voiced that;

> "*…Johannesburg has got different MoEs that gives essential services. Some of them (are) Joburg Water, City Power, Pikitup…and I think the sustainability, it plays a huge role in terms of socio economic output*" (D2 1:34).

The above view is supported by Respondent 9, who highlighted the importance of the MoEs in relation to sustainability, and the impact of service delivery protects as a result of poor services from the MoEs or departments that provide similar basic services;

> "*I think the role that sustainability play is very critical given the fact of the kind of service we provide to the community, so if it's not sustainable, we know that it can bring so much uproar in the community, or protest and it can affect even the economy.*

Respondent 9 also emphasised that the MoEs have an impact on the well-being of communities since they provide basic services;

> "*It can even affect the well-being of human beings. So, yes, sustainability plays a very critical role in all the municipal entities*" (D9 03:09).

Respondent 2 emphasised that financial sustainability is also key to the MoEs as it concerns the survival and the future viability of MoEs by stating;

> "*Sustainability in terms of financial as much as we are a public entity and we focus on basic service delivery. We must also make sure, right, there is money in the bank*" (D5 1:34).

5.3.2 Low adoption rate of sustainability in the MoEs organisational culture

The researcher aimed to determine whether there exists a culture that encourages sustainability and what could be done to accelerate the adoption of sustainability within the MoEs. All the respondents were of the opinion that in the time they have worked in the MoEs, sustainability has not been embraced, and it will take some time for it to be at an acceptable level.

Respondent 5 stressed that the adoption of sustainability within the MoEs was not where it should be, considering that this is not a new topic;

> "….I think it has really taken long enough we shouldn't be where we are in regards to sustainability" (D1 1:39).

Respondent 7 echoed these sentiments and gave sight to the fact that sustainability is a difficult concept to embed in MoEs;

> "It is, I think, one of those, you know, approaches or strategies that, that haven't really, you know, fully taken off" (D7 8:48).

Similar to the above, Respondent 2 stressed that the adoption of sustainability should be at a far more advanced stage since it is not a new concept; however, the difficulty of embedding and implementing is due to sustainability conflicting with some of the primary objectives of certain MoEs;

> "And because it also, in a way conflicts with us making sure that we meet the first primary objective, which is service delivery and it lacks behind" (D5 6:48).

Respondent 2 also alluded to the fact that sustainability is a moving target and is not easy to implement;

> "… I would say by now, it should have been. However, we seem to, it's like transformation, It's a moving goal…" (D5 6:48).

Respondent 2 further elaborated that it might take ten or more years to become embedded to an acceptable standard;

> "So if I were to put a timeline, we'll take another 10 years if we keep doing things the same way we are doing them. Less than 10 years, if we change the basics" (D5 06:48).

Respondent 8 was a bit more optimistic in terms of timelines and believed that it might take two to five years to embed sustainability in the MoE culture. Respondent 8 pointed out that an

organisational culture change, away from the silo thinking, will require a change management process as one of the enablers;

> "*…I think two to five years because people are still having the mentality of wanting to work in silos, right. Yeah. So Just having to change that mentality on its own, it's a process because there's change management that has to go within the process, which will also take its own time, …*" (D8 5:25).

Respondent 7 mentioned that some of the reasons why sustainability has not been embedded into the MoE culture relate to leadership, empowering and training employees on sustainability and what sustainability and what that means for the employees. According to Respondent 7;

> "*Empower people to also just understand it, and not from a theoretical perspective, but really bring it into their day to day, you know, functioning*" (D3 10:57).

5.3.3   Conclusion of results for Research question 1

Research question 1 intended to uncover the common subthemes amongst the respondents regarding the degree of adoption of sustainability in the MoEs. All the respondents believe that sustainability has not been fully embraced during the period they have worked in their respective MoEs and that it will take some time before it reaches an acceptable level. All of the respondents also believe that the MoEs have a pivotal role to play when it comes to sustainability. The MoEs provide basic services and must be sustainable to continue providing such services for generations to come.

5.4   Results for Research question 2

What are the main drivers towards implementing sustainability within the MoEs?

Research Question 2 aimed to determine the main drivers towards implementing sustainability within the MoEs. The main drivers that were identified by the respondents are indicated below.

5.4.1   Legislation

A total of four of the respondents were of the opinion that legislative frameworks and policies are one of the main drivers in enforcing the MoEs and the local governments to transition towards sustainability. Respondent 7 stated that;

> "*…there has been drive in terms of legislation that really directs entities towards thinking about sustainability, towards compliance with regards through some of those pieces of legislation*" (D 3:15),

Respondent 9 indicated that the the main driver is a responsible and caring MoE that complies with regulations;

> "*I think if the main drivers first should be being a responsible entity. Caring about the people, being able to comply with all the regulations*" (D9 11:59).

Respondent 4 highlighted one of the original pieces of the international legislature on sustainability; namely, the SDGs has made its way from the global arena to the local governments;

> "*The sustainability is informed, obviously, by your SDGs, which are adopted by your United Nations…. It's a global issue of which then gets cascaded down to the municipalities through its systems, through legislation …*" (D4 03:57).

Respondent 2 supported the above assertion and commented that;

> "*…Its the SDGs, which the city and the province have set up, so these come from the millennium development goals. And they look at a whole lot of things*" (D5 13:22).

Respondent 2 further unpacked the SDGs and sustainability as policy frameworks;

> "*…remember sustainability is a concept that is also has a lot of frameworks, international frameworks and local frameworks that says, if you want to be a well run City, these are the things that you need to look at in terms of sustainability*" (D5 13:50).

Respondent 5 highlighted the fact that sustainability legislation does affect not only the MoEs but also other stakeholders, such as the developers;

> "*We still need to deal with legislation that governs, specifically the environment within local government, because it doesn't only touch local government…*" (D1 7:39).

5.4.2 Innovation

Participants 1, 5 and 6 were of the view that innovation is one of the main drivers compelling the implementation of sustainability in the MoEs.

Participant 6 stated that complaints coming from the residents require the MoEs to find innovative ways to address them;

> "*….complaints from the residents, or the expectation of the residents will then push us to think out of the box and give them sustainable services.…I think that is what is driving sustainability is us striving to answer or to solve the customer's needs*" (D2 08:32).

Participant 5 proposed analysing the business operations of the MoEs in an attempt to explore possible opportunities for innovation;

> "*It's also critical to look into how you can optimize innovation in all different spaces. And you analyse your value chain, and efficiencies, if you need to rationalize, you know, you carry on and do those processes just to make sure there's elements of increased productivity in line with sustainability…*" (D1 12:14).

Participant 1 unpacked the main reason why the MoEs were created: to fast-track projects and provide services of a high standard. There is an inherent requirement for the MoEs to be innovative in their processes and systems;

> "*…we've been created to fast track service delivery, that's why MoE's were created. Okay, if these functions were carried out in the traditional old dispensation where you had one council with various departments, you found it took ages to get a project of the track…*" (D6 37:46).

5.4.3   Business risk associated with not considering sustainability

Respondents 3, 5 and 7 believe that the risks associated with not considering sustainability in the MoE strategies are what is compelling the MoEs to implement sustainability. Respondent 5 stated that it is crucial for the MoEs to be able to identify and manage their risks;

> "*I think more crucially, how you identify and manage risks, and also ensuring to give assurance in terms of compliance within that space, of innovation as well*" (D1 12:14).

Participant 7's comments supported the above statement and indicated that the MoEs need to consider the risks associated with sustainability and how these risks impact the organisation;

> "*…a realization of some of the risks, that your sustainability strategy aims at at addressing, I think I've made an example with regards to water conservation, where, the driver is that we know, water is really a scarce resource*" (D3 14:48).

Participant 7 provided a bit more context and an example of the risks associated with sustainability;

"…in recent years, it's really has been proven, that (water) it's a resource that really needs to be preserved. So, external factors that are really pushing to say it's no more initiative that you can choose whether to do or not, it's a reality, that you will have to look into" (D3 14:48).

Finally, Respondent 7 further elaborated on the performance failures of SoE and MoE in South Africa and suggested that if these entities had reviewed their risks associated with sustainability, they might be in a far better position to what they currently are;

> "…*we've also just seen the performance failures that some of the entities have experienced over time and one kind of wonders to say this entities indeed had really spend time looking at their operational functioning, questioning the sustainability of some of the decisions that are being made, they probably would have performed better, or would have had mitigents to offset some of the performance challenges that they have faced*" (D3 14:48).

Respondent 5 highlighted a frustration and provided a practical example of the financial risk that the local governments and the MoEs are faced with;

> "…*one of government's frustrations is revenue collection. And not only just revenue collection, in terms of revenue streams, but also how you secure such and it's also embedded in the way that you drive, or you conduct your business*" (D1 12:14).

Participant 3 mentioned that as much as the MoEs were created to fast-track service delivery, they must also generate their own revenue and become financial sustainability. Participant 3 highlighted that this is not always possible as the nature of some of the MoE operations does not allow them to be financially sustainable. One of the reasons cited by Participant 3 is the outdated policies that restrict the MoEs to change their business models for more revenue-enhancing and service delivery orientated approaches;

> "*The main drivers in relation to this originally, was to fast track the delivery of government. …the objective was basically just reduce the burden that the state has and become self sustainable and deliver on the outcomes on a quicker basis. But then they implemented laws that stop all of that. So you just another government department called an MoE or an SOE*" (D7 31:50).

5.4.4 Leadership

Respondent 5 believed that leadership is one of the main driver for the MoEs to implement sustainability.

> "*Well, I think one of the critical issues is elements of leadership, I think the tone should then be set on top, because it touches the way you do business*" (D1 12:14).

Respondent 5 further elaborated by stating that the MoEs need the buy-in of senior managers to drive the implementation of sustainability;

> "*…you need a buy-in and a driving force in regards to that:* (D1 12:14).

These are the same sentiments as shared by Respondent 8, who maintained that buy-in from the MoE leadership is critical to advance sustainability.

> "*For me, it's leadership. Once you get the buy in from leadership, then they are able to run with it*" (D8 10:17).

Respondent 1 provided a different perspective and mentioned that one of the main drivers for the implementation of sustainability is leadership that supports junior employees working on sustainability-related initiatives and projects.

> "…*comes from them being motivated by the seniors, comes from them being given the tools that they need to make this happen …*" (D6 14:03).

5.4.5　Conclusion of results for Research question 2

Research question 2 aimed to determine the main drivers towards implementing sustainability within the MoEs. It can be concluded that the respondents believe that policy and legislature are forcing the MoEs to rethink and incorporate sustainability into the business strategy. The respondents were of the view that innovation is compelling the MoEs to rethink their business processes in an attempt to optimise and provide better services to their customers. The respondents also highlighted the risks associated with not considering sustainability and leadership as drivers for adopting sustainability.

5.5　Results for Research question 3

What are the main barriers to change towards implementing sustainability within the MoEs?

Research question 3 aimed to determine the main barriers to change towards implementing sustainability within the MoEs, followed by an investigation into how these barriers to change can be overcome or reduced. The results for Research question 3 were acquired by adding the appropriate interview responses to the relevant main questions and the sub-questions from the whole sample of respondents.

5.5.1　What are the main barriers to integrating sustainability into the MoEs

The researcher aimed to determine the main barriers to integrating sustainability into the MoEs.

5.5.1.1 Red Tape

A total of six respondents believed that red tape or long administrative processes synonyms with the government are a major barrier. Respondent 5 remarked that;

> **"***I think the government is too stringent because of elements of governance and accountability"* (D1 15:06).

Respondent 4 on the other hand stated that;

> "*…the main barrier, obviously, we are a municipality that is regulated, and we've got entities that must also conform to your Companies Act*" (D4 21:24).

Respondent 4 further highlighted that one of the pieces of legislature requires the MoEs to embark on a consultation process with the affected stakeholders, which can result in delaying sustainability projects;

> "*Consultation, I think is one of the critical areas…because with the string of consultation, how far can it go? And if you're receiving objections from other parties who are having different interests, that might also affect you in terms of a planning and implementing sustainable development*" (D4 21:24).

Respondent 2, on the other hand, expressed the same views as the above and mentioned that;

> "*…we, as an entity, and as a City, our processes are slow paced, or are bureaucracy laden heavy in terms of get approval*" (D5 19:07).

Respondent 2 further alluded to a growing conversation within the government that is questioning the relevance of legislature, such as the Municipal Finance Management Act (MFMA), which was instituted more than 20 years ago.

> "*…there's a debate that's going around to say, if you look at The MFMA, it was meant as a good thing but 20 years, 25 years later, it's becoming an obstacle* (D5 19:07).

Finally, Respondent 2 expressed some frustration on how the PFMA, in the attempt to protect the integrity of the government processes, has become an obstacle simply because it has not been reviewed.

> *"Because for me to implement something, I must go through all those things...so what was initially meant to protect the integrity and everything is becoming an obstacle. Because legislation and processes have not been reviewed* (D5 19:07).

Participant 3 weighed in on the matter concerning the introduction of the MFMA in the MoE sphere and argued that the MoEs could not be efficient if they are required to comply with all government regulations.

> "…*but ever since the MFMA came in, that defeated the purpose because everything that you could do quicker, you can't do now, because you have to advertise for one month, you have to advertise for seven days, we have to follow a tender process, you have to follow this, you have to follow that. There is too much red tape…*" (D7 05:28).

In addition, Respondent 5 believed that innovation is required in the MoE environment but mentioned that the stringent regulations stifle and impede such innovation.

> "*…I think local government being a highly regulated environment, has actually unveiled the need that would have to open doors for innovation, so that we critically work towards fulfillment of all elements in regards to sustainability…*" (D1 07:39).

On the other hand, Respondent 7 acknowledged the need for governance and compliance requirements within the MoEs but expressed discomfort with the fact that the processes, at times, are too long and there are too many boxes to tick;

> "*….I think as much as there's legislation that is really driving governance and compliance, I do believe that the processes sometimes are just long, and one kind of get to that experience of, there's just too many boxes to (tick), before you get to that point of implementing as much as governance is critical*" (D3 18:51).

5.5.1.2 Political changes

The respondents believed that politics in the local government and at the board of directors' level stifled the sustainability initiatives in the MoEs. Respondent 1 highlighted that the political parties will allocate funds towards community-driven initiatives that will greatly impact the voters' perceptions.

> "*…this is no secret, if you have a major election coming, you will find that your budget is reduced. And lots of those budgets are focused towards community driven projects*" (D6 33:59).

Respondent 3 stated that these budget reallocations result in sustainability-related initiatives and projects being cancelled if they do not meet the objectives of the political party or the new board of directors.

"*So, before you can even implement something, you got a new political party, and you got a new board. That means you've got new objectives, new direction, and new issues*" (D7 18:43).

Respondent 3 further highlighted the challenges with the introduction of the new board of directors and how that always seems to further derail sustainability initiatives.

"*And then the first thing that comes in is the board will come in and say we don't like this executive team. … So then you have a disjuncture between the executive team and the board. And that takes you a whole year. So then how do you concentrate on your deliverables?*" (D7 18:43).

Respondent 3 stressed that these political and board changes result in sustainability never being adopted in the MoEs as they do not understand the complexities that are associated with sustainability and strategies implementation.

"*Because they don't understand how it operates. They don't understand the complexities. They politicians, not individuals with an insight of, for example, property, or power, or water, or roads*" (D7 05:28)*.*

Respondent 3 concluded by stating that the politicians and the board of directors are appointed to advance certain political objects meant to please their constituencies, not the MoEs.

"*…they coming with a deliverable objective. So they're not looking at the betterment of the organization, they're looking at the betterment of their constituencies*" (D7 05:28).

However, as much as respondent 5 acknowledged the ever-changing political landscape and the resultant organisational changes, Respondent 5 was of the opinion that not much could be done as it was inherent in every political party to advance their political ideology and agenda. What is required is for the local government and the MoE officials to embrace such changes that come with the new board of directors and political parties.

"*So a change of political environment comes with the change of organization, in most cases, the structure and all of the other things. And, and whether good or bad, but the reason of the change of structure and change of goals is because of political ideology*" (D1 10:14).

Respondent 5 concluded by recommending that the local government and the MoE administrators must learn to embrace change. A change management process might be required to help administrators transition from one political ideology to the next without compromising service delivery.

"And I think that then becomes a problem in terms of change management for people to adjust, especially in the lower levels" (D1 10:14)*.*

5.5.1.3 Lack of resources

Five of the respondents are of the view that one of the main barriers to change is the lack of resources to implement sustainability-related initiatives and projects within the MoEs. Respondent 7 mentioned that the lack of resources could be attributed to the lack of knowledge in terms of the benefits associated with sustainability.

"*… I think one is the lack of resources…. limited understanding in terms of the benefits that the organization can generate from driving sustainability*" (D3 18:51).

Respondent 4 commented on the challenges the local government faced in funding and grant allocation and the resultant conflicting priorities that the MoEs and the local governments faced.

"*look at some of the measures, you need to have adequate resources and those resources, the allocation of them, might be a challenge, only to find that as local government, because sometimes you, you get grants to be able to implement such principles"* (D4 21:24)*.*

Respondent 4 further alluded to the fact that funds are generally directed at projects that are deemed as service delivery imperative.

"So if the grants are very, very minimal, where you need to maybe prioritize other service delivery imperatives, then that will be obviously one of the barriers that we'll have as well" (D4 21:24).

The issue relating to the lack of funding and competing priorities is also emphasised by Respondent 2, who provided an example;

"*So the sustainable goal looks at different elements. Now, the city has to prioritise providing water. And than there is ensuring that there's initiatives that deals with poverty. So because of competing priorities, there's always lack of resources"* (D5 15:58).

Respondent 1 briefly explained how the MoEs are funded or generate revenue.

"*…remember, we in local government, MoE's are funded by public funds. And public funds are generated through revenue, and revenues, is given by people who pay rates and taxes"* (D7 05:28)*.*

Respondent 1 further unpacked the revenue model and provided context regarding how the lack of funds ultimately affects sustainability projects.

> *"Okay, so when the rates and taxes income is low, that year, definitely certain projects do get cut. And that has an effect right down to the line in terms of execution of projects"* (D6 18:15).

Respondent 3 argued that the municipalities are technically bankrupt and can never afford to execute all the sustainability-related initiatives.

> "*Municipalities already bankrupt. Now they want to be social because they say that is the mandate*" (D7 05:28).

5.5.1.4 Inflexible organisational culture

Another barrier identified by the respondents is the current inflexible organisational culture found in the MoEs. Respondent 6 pointed to the fact that changing the attitudes in the MoEs is a challenge.

> "*the main barrier here is change of attitude, I think change management is a huge part"* (D2 10:14).

Respondent 6 went further and stated that the change in attitudes and behaviours is most important in the MoEs in order for them to embrace sustainability. Most MoE employees do not value the customer and believe that the customer is there to serve them as opposed to the MoE serving the customer.

> "*… most employees, they thing that the customers are there because of them, they are doing the customers favor, and forgetting that they won't be paid without the same people that they think that (they) doing favor"* (D2 10:14).

Respondent 6 concluded by stating that change management is required to change the mindsets of the MoE employees.

> *"So change management is a huge thing"* (D2 10:14).

The above was also observed by Respondent 7 who also alluded to an inflexible organisational culture that has created an environment that is content with the status quo.

> "…*I think the other barrier is the inflexibility of the culture within the local government to really adapt and change….in the sense that there's a lot of comfort with, tested and proven*" (D3 18:51).

The respondents highlighted the need for training and awareness when it comes to sustainability-related matters, which could be a factor that is exacerbating the above. Respondent 1 pointed to the fact that sustainability is not understood.

>   **"…***what comes to mind is, the question is, do people actually know what sustainability is all about?* (D6 18:15).

Respondent 1 further alluded to the fact that sustainability is treated merely as a compliance exercise and not as a strategic objective.

>   *"…is sustainability being taken as a, shall we say, if something that is out there for now and because it's out there for now, we have to do something and make record of it*" (D6 18:15).

Respondent 7 stated that the benefits of employing sustainability initiatives and projects are generally unknown hence the low levels of adoption in some of the MoEs.

>   "*I think…is just maybe limited understanding in terms of the benefits that the organization can generate from driving sustainability*" (D3 18:51).

5.5.2   How can these barriers be overcome or reduced?

The researcher aimed to determine the main strategies to overcome or reduce the identified barriers in the attempt to integrate sustainability into the MoEs.

5.5.2.1 Change Management

Change management is a theme that strongly emerged amongst the respondents. The need for the MoEs to adopt new ways of working and changes in the organisation's culture and structure is seen as extremely important. Respondent 7 highlighted the importance of creating a culture that constantly questions the status quo.

>   "*…it will be important to look at really that flexible culture that is able to continuously ask questions and allow for questions to be answered"* (D3 18:51).

Respondent 2 touched on the need for policies and frameworks to also change and embrace technology. Respondent 2 stressed that MoEs cannot expect to change if they are not reviewing their processes and regulatory frameworks.

>   "*I cannot want to be sustainable, whereas I'm not changing my process. I'm not viewing my regulatory framework. I'm not moving with the times in terms of technology*" (D5 33:15).

Respondent 2 provided a practical example of how embracing change can lead to technological innovation and solutions that enhance the customer experience.

"…*the simplest thing, you don't have to come to the JPC to inquire whether this land is owned by city or not. Ideally, somebody should be able to make that enquiry on their phone*" (D5 33:15).

Respondent 2 also touched on the need for the employees, in their capacity, to buy into the concept of sustainability and embrace the resultant change.

"*So things are changing, you want to bring in the change, you striving to move towards the chance. But as an individual, you're not changing*" (D5 19:07).

Respondent 8, on the other hand, states;

"*I think key is to have a buy in*" (D8 06:46).

However, respondent 8 emphasised that buy-in might not be enough to see the required change. The senior managers in the MoEs must take ownership of the process if it is to be a success.

"*...(buy-n) also on its own, it's still a problem. Because there's two things to buy in. There's an issue of buying into the concept itself. But there's also an element of owning the process, which is still not where it's supposed to be* (D8 06:46)*.

The above change can only be brought in through leadership and a change management process driven by senior management. Respondent 5 pointed to the fact that leadership is critical in getting sustainability embedded in the MoEs.

"*Well, I think one of the critical issues is elements of leadership, I think the tone should then be set on top, because it touches the way you do business*" (D1 12:14).

Respondent 6 proposed a workshop as part of a change management process.

"*I think reducing these barriers, will then want a workshop that will really make a lower-level employees understand that the environment that you are working in..*" (D2 12:36).

Finally, Respondent 3 believed that the barriers to change can never be overcome due to the lack of leadership and the prevalent political interference.

"*…they cannot be overcome, until such time that we have a common goal that we have leadership, understand leadership on all levels, and removal of politicians from key post*" (D7 33:49).

5.5.2.2 Resource allocation

The respondents believed that providing the required resources towards sustainability initiatives and projects will reduce some perceived barriers to adopting sustainability. Respondent 7 argued that the local governments have an opportunity to prioritise and allocate resources towards sustainability initiatives and projects.

> "T*here is, I think, ample opportunity for local government, firstly to really prioritize and allocate resources towards sustainability*" (D3 08:45).

From the above comments, Respondent 1 believed that sustainability can only become embedded if resources are made available.

> **"***… it can only be embedded when basically you are given all the resources to see the project from start to end to meet a term; be it short term, medium term or long term deadline*" (D6 07:57).

5.5.2.3 Innovation

The respondents believed that the introduction of innovation will aid the MoEs in reducing some of the barriers to change. Respondent 7 argued that the MoEs have an opportunity to review and reengineer their processes without infringing on good governance processes.

> **"T***here's an opportunity to really reengineer and streamline some of the processes without, negatively impacting on good governance*" (D3 18:51).

Similar to the above statements, Respondent 5 concurred with the need for the MoEs to review their processes and introduce innovative solutions to current challenges.

> "*…I think local government being a highly regulated environment, has actually unveiled the need that would have to open doors for innovation, so that we critically work towards fulfillment of all elements in regards to sustainability*" (D1 07:39).

Finally, respondent 2 believed that the City of Joburg had fallen behind when compared to other international cities in the areas of infrastructure, electricity and technology, with innovation being one of the equalisers.

> "*There's a lack in terms of a technology initiatives that are there. Whether it's for infrastructure, whether it's for electricity, whether it's for technology*" (D5 30:59).

5.5.3 Conclusion of results for Research Question 3

Research Question 3 aims to determine the main barriers towards implementing sustainability within the MoEs and how these barriers can be overcome or reduced in an attempt to integrate sustainability. It can be concluded that the respondents in this research believe that the red tape that is associated with the MoE procedures is the main barrier to change towards sustainability. The respondents also believe that political and board of directors' interference and a lack of resources are the other barriers impeding sustainability integration. Another interesting observation is that the participants believe that a lack of awareness of sustainability and inflexible organisational cultures are other barriers identified.

Regarding strategies the MoEs can employ to reduce the identified barriers, the respondents believe that change management is pivotal to ensuring the transition towards sustainability. The respondents also believe that allocating adequate resources towards sustainability will greatly aid the MoEs. Finally, innovation, or the introduction thereof, is considered a key strategy for the MoEs to reduce some of the identified barriers.

5.6 Results for Research question 4

What are the strategies for implementing an SBSC framework to improve sustainability within the MoEs?

The purpose of Research question 4 was to determine the strategies that are available for implementing an SBSC framework in the MoEs to improve sustainability adoption and management. To get insights from the main research question, the sub-questions were compiled to lead to a more conclusive response.

5.6.1 Sustainability reflected in the MoE policies, goals and reports

In an attempt to answer Research question 4, the respondents were requested to give their opinion on the level of adoption of sustainability in the MoE policies, goals, targets, and reports.

According to Respondents 2, 5, 6, 7 and 9, sustainability is included and does reflect in the MoE policies, goals, targets and reports. Respondent 6 noted that sustainability is incorporated into their policies, goals and reporting.

> "*Remember sustainability is part of our strategy as a company... And within our strategy, all the department, there is a word sustainability*" (D2 04:50).

This is the same view as Respondents 2 and 9, who stated that sustainability is reflected in the MoE policies through annual reports and business plans.

"*It's in the annual reports, its in the business plan*" (D5 29:23).

Respondent 9 concurred with the above comments and highlighted that not only is sustainability included in policies, but these policies also guide the organisations in terms of the services they offer.

"*In Pikitup's policy, we do have sustainability.... And I think because of the policy that we have, it also helps us to ensure that whenever we conduct our services, we are guided by what the policy requires*" (D9 18:38).

Respondent 5 went further and provided comments in terms of how, from a reporting perspective, sustainability is addressed.

"*…it's embedded within what is expected of the job outcomes. And I think it is more clear when we do reporting, because as we do reporting to our stakeholders, we single out all the elements that speaks to sustainability* (D1 05:55)*.*

Respondent 7, on the other hand, highlighted the vagueness and ambiguity of the MoE policies, goals and related frameworks as they were not being explicit regarding sustainability. Respondent 7 stated that sustainability is somewhat inferred in the MoEsmission and vision statements; however, it still needs to be unpacked.

"*… if one really reads some of those mission statements and the vision, one could infer, inclusion of sustainability….the gap for me, comes as one now start unpacking*" (D3 21:33)*.*

Respondent 7 further detailed that as the vision and mission statements allude to sustainability, no initiatives or projects on the ground highlight the execution of this vision and mission statement.

"*So, what are the initiatives or the processes that have been implemented to realize the sustainability part of this vision, that's where I believe there's a gap*" (D3 21:33).

Respondent 2 echoed the same sentiments as Respondent 7.

"*Yes, it is included in entities, but it's lacking... It's wishing but it's not deep? It's not unpacked!*" (D5 22:51).

5.6.2 SBSC is a valuable framework for the MoEs

Most of the respondents believed that the SBSC is a valuable tool that the MoEs can utilise to implement and monitor sustainability initiatives and projects. Respondent 1 strongly agreed that the SBSC is a valuable tool for tracking and measuring the performance of strategies and projects.

"*Of course, as I said, we all agree a scorecard is a tool whereby you monitor and you report on how you're progressing on a specific project*" (D6 33:59).

Respondent 9 shared the same sentiments and highlighted that since it is a BSC, senior management will be able to measure organisational performance over a period of time.

"*100% I believe that, and I am in support of that if it's incorporated, then remember when it's on balanced scorecard people they know that they'll be measured according so that way they will not have performed*" (D9 24:14).

Respondent 9 provides a practical example of the BSC's importance and impact on performance bonuses and incentives.

"*If you did not perform it means even your salary would be affected you won't get bonuses*" (D9 24:14).

Respondent 4 also agreed on the value the SBSC can bring to the MoEs. Respondent 4 highlighted that the local governments and the MoE are not necessarily similar in terms of operations and will require the SBSC to be flexible to cater to the MoE's needs.

"*Yes, definitely. It is the right framework…with minor changes here and there to suit the circumstances of the country, of the provinces, of the municipality*" (D4 32:42).

Respondent 6, on the other hand, believed that a strategic performance measurement framework is essential but stressed that emphasis should be given to the customer perspective first before the finance and sustainability perspectives.

So for me that we must really integrate sustainability in a customer forecast orientated manner, then the other three will sort themselves out" (D2 14:46).

Respondent 6 continued by stating that satisfied customers will pay their accounts on time, which also aids in ensuring that the MoE is financially sustainable in carrying out services.

"*if the customer is happy, the customer will pay, and they will pay on time.... And they will end up being our brand ambassadors, where then they support us in all our initiative to give them sustainable power*" (D2 14:46).

An interesting observation is respondent 3's comments on whether the SBSC could be a valuable tool for the MoEs. The respondent believed that the SBSC, or any strategic measurement tool, can never succeed in the MoE environment due to the inflexible organisational culture and the employees' mindsets.

> "*It can never, under current conditions, not possible. In the current climate, people are not willing to listen, and people are not willing to change their thinking pattern* (D7 53:41)*.*

Respondent 3 also believed that there are conflicting views between the MoEs and the politicians on how the MoEs should be run and deliver services.

> *And it's hard to explain something to a politician… you only looking at it as what is best. And the politician is looking at it as what's best for him, not what is best for the country*" (D7 53:41).

5.6.3 Incorporating sustainability into the four perspectives of the BSC

The majority of the respondents were of the opinion that incorporating sustainability measures across the four balanced scorecard perspectives is the ideal approach. Respondent 9 stated that;

> "*To me, I think all four are still relevant, I'll incorporate (sustainability into) all four of them*" (D9 22:46).

Respondent 8 provided more reasoning as to why incorporating sustainability measures into the standard balanced scorecard is a better option. The respondent alludes to the fact that the BSC is designed to unpack an organisation's strategy into attainable goals spread across the four perspectives. The four perspectives are interlinked and guide the organisation in executing its mandate.

> "*…these four perspectives are guiding you as and when you are trying to come up with those strategic goals, which will fit into your, your vision, your mission and your values and then support your MoE's mandate*" (D8 18:27).

Respondent 7 cautioned that as much as integrating sustainability into the standard balanced scorecard is the ideal approach, it must be clearly articulated; otherwise, it will create confusion.

> "*…just clearly articulated in a way that that it (sustainability) cannot be missed"* (D3 25:27)*.*

Respondent 7 further stated that it is important to include the sustainability measures in each perspective of the BSC and provided an example using the financial perspective.

> *"…I would rather say as you articulate your, your financial perspective on the balanced scorecard, I would like to see indicators that really talks to financial sustainability"* (D3 25:27).

Respondent 4, on the other hand, provided a different perspective in terms of integrating sustainability into the general BSC by emphasising the need to review and unpack the SDGs.

> "*…. knowing it starts with the unpacking the SDGs. And obviously, policies are in place"* (D4 30:29)*.*

Participant 4 also believed that the focus should be on addressing the triple challenges of the local government, namely, unemployment, protecting the environment, eradicating poverty and creating housing, which are some of the SDGs key deliverables.

> *"…when it talk of issues of triple challenges, the focus is definitely to create employment. The focus is to protect the environment. The focus is to eradicate poverty to create housing. So those those four principles in terms of the balanced scorecard are already incorporated in those policies of the municipality"* (D4 30:29).

5.6.4 Conclusion of results for Research question 4

Research question 4 intended to uncover the respondents' common subthemes regarding the strategies for implementing an SBSC framework to improve sustainability within the MoEs. Most respondents believe that sustainability is reflected in the MoE policies, targets and reports, although it is unclear at times. Most of the respondents also believe that the SBSC could be a valuable tool that the MoEs can utilise in implementing and monitoring sustainability initiatives and projects. An interesting discovery is that the respondents believe that incorporating sustainability measures across the four balanced scorecard perspectives is the ideal approach.

Table 5.2: Summary table of themes and concepts

Table 5.2 represents a summary list of the emergent themes and concepts that were discussed in this chapter. Appendix 4 contains a list of all the themes and concepts generated as part of this research.

Research Question	Themes and Concepts	Grounded
Research Question 1: What is the general adoption and implementation of sustainability within MoEs?	Importance of sustainability	10
	Embedding of sustainability culture	7
Research Question 2: What are the main drivers towards implementing sustainability within the MoEs?	Legislation	6
	Innovation	5
	Risk associated with not considering sustainability	4
	Leadership	3
Research Question 3: What are the main barriers to change towards implementing sustainability within the MoEs?	Barrier - Red tape	14
	Barrier - Political instability	8
	Barrier - Inflexible organisational culture	6
	Barrier - Lack of resources	3
	Strategy - Change management	7
	Strategy - Innovation	4
	Strategy - Allocate resources towards sustainability	3
Research Question 4: What are the strategies for implementing an SBSC framework to improve sustainability within the MoEs?	Sustainability reflects in the MoE policies, goals and reports	11
	Integration into standard BSC	9
	SBSC is a good tool	5

5.7   Conclusion

Through the above discussions, the respondents have provided their opinion that the sustainability adoption levels in MoEs are not satisfactory and can be improved at both the local government and MoE levels. The respondents also indicated that policy and legislature, innovation, leadership and business risks are the driving forces towards implementing sustainability in MoEs. The respondents also believe that red tape, political interference, lack of resources, and an organisational culture not willing to change are some of the barriers to change in MoEs.

Regarding strategies MoEs can employ to reduce the identified barriers, respondents believe that change management is pivotal to ensuring the transition towards sustainability. Respondents also believe that allocating adequate resources towards sustainability will significantly aid the MoEs. Other strategies identified include innovation, coordination with neighbouring municipalities, and consequence management regarding MoE employees who break the rules. Finally, respondents believe that, to some degree, sustainability is reflected in MoE policies, goals and reports; however, they are unpacked and not understood by all employees. Respondents also believe that the SBSC is an ideal tool to assist in measuring and managing strategic targets of MoEs.

CHAPTER 6:   DISCUSSION OF RESULTS

6.1   Introduction

This chapter aims to explore the research findings as reported in Chapter 5. These findings were generated from the ten in-depth interviews that were conducted with the senior managers working in the MoEs. The purpose of Chapter 6 is to connect the insights from Chapter 5 to the literature review that was completed in Chapter 2, with the ultimate goal of answering the research questions that are outlined in Chapter 3.

The research findings, along with the discussion that follows, will contribute to a better understanding of the degree of adoption of sustainability within the MoEs, that is what are the main drivers towards implementing sustainability within the MoEs, as well as what are the main barriers to change towards implementing sustainability within the MoEs. Finally, an understanding of what are the strategies for implementing an SBSC framework to improve sustainability within MoEs will be achieved.

6.2   Discussion of results for Research question 1

RQ1: What is the general adoption of sustainability within the MoEs' culture?

In the following discussions, the researcher attempts to uncover the degree of adoption of sustainability within the MoE structures and their culture as well as how it can be accelerated. This section is arranged based on the emerging themes from Research question 1.

6.2.1   *Sustainability is critical for the MoEs*

The results in Section 5.3.1 indicate that all the respondents believe that the MoEs have an essential role to play in sustainability. The MoEs such as the City Power, Johannesburg Water, Pikitup, Johannesburg Metrobus, JOSHCO and JPC, with a combined capital budget of 500 billion Rands in maintenance and infrastructure projects, are tasked with providing essential services in the local governments they operate in (JOSHCO, 2020; JPC, 2020). They must ensure that they provide a sustainable service not only for the current residents and businesses, but also for future generations to come.

According to Ates and Buttgen (2011), the organisations that provide services of broad interest, such as water supply management (Johannesburg Water), energy supply (City Power), waste management (Pikitup), building (JPC), social housing (JOSHCO), and public transportation (Johannesburg Metrobus Company), have a massive socio-economic influence on the communities they serve. In providing these services, with some being considered as

basic services, Masoud and Anu (2021) point out that the MoEs must ensure their own financial sustainability to ensure that they are able to provide services for future generations. Masoud and Anu (2021) also acknowledge that the primary purpose of certain MoEs is to meet their social objectives rather than to make money.

Based on the above, what can be deduced from the literature and from the respondents is that sustainability plays an extremely important role for the MoEs, and by extension for the residents and the businesses they serve. Sustainability for the MoEs is important not only from being a provider of basic services such as water, electricity, and housing but also from a socio-economic perspective considering the operational and capital budgets these MoEs command. With that said, what also stands out is the fact that the MoEs must be financially sustainable and stable for current and future generations. The MoEs must be able to fund their operations in a manner that is considerate of the environment while maintaining a balance between the social and economic impacts of their operations.

6.2.2   Low adoption rate of sustainability in the MoEs organisational culture

The results in Section 5.3.2 indicate that the respondents in the research believe that sustainability has not really been embraced as a new way of working and should be at a much higher level of adoption than it is now. There are various challenges that are cited by the respondents on the reasons why adoption has not really occurred in the MoEs. Some of the identified challenges include but are not limited to an inflexible organisational culture that is set against changing. There are also elements of the silo mentality among the MoE employees which stifles the sharing of ideas and an openness culture. The issues of leadership also emerge as it is inherent in any senior management role that the requirement to try and drive sustainability in the MoE culture is embedded in the leadership. What is also clear is the disconnect between theory and practice. This highlights the fact that the MoEs are not sure what the meaning of sustainability is for them, and therefore, the MoEs are unable to change the policies and the culture to reflect this meaning.

Globally, the private sector is more responsive to the sustainability agenda, and they have adopted sustainability practices and policies into organisational operations. However, Lozano and Garcia (2020) point out that very few organisations have successfully incorporated sustainability into their practices and cultures. In the public sector, the MoEs and the SoEs are starting to embrace this trend, albeit at a slower pace when compared to the private sector (Figueira et al., 2018). For sustainability to be embedded in the MoEs culture, Lozano, Ceulemans and Seatter (2015) state that long-term sustainable change demands an adjustment to an organisational structure, operations, and management. It will also require the

creation of new and futuristic sustainability visions and strategies. In a lot of organisations, sustainability programmes have focused on technocentric management strategies and solutions that disregard culture, the supply chain, relationships between system components, and the three pillars of sustainability which have resulted in failed attempts at embedding sustainability (Lozano & Garcia, 2020).

Based on the above, what can be deduced from the literature and from the respondents is the disconnect between the ideal culture, considering that sustainability is not a new agenda, and the current inflexible cultures. What also stands out is the disconnect between theory and practice which is a factor impacting the adoption of sustainability. This disconnect is as a result of the lack of leadership and an understanding of what sustainability means both for senior managers and the MoEs. The senior managers must equip themselves with knowledge and then drive the sustainability agenda from the top down by encouraging sustainability as a new way of working. The respondents believe that the adoption of sustainability can be accelerated. It is evident that the adoption will not occur overnight; however, the respondents believe it can be achieved.

6.3   Discussion of results for Research question 2
RQ2: What are the main drivers towards implementing sustainability within the MoEs?

In the following discussions, the researcher attempts to uncover the main drivers towards implementing sustainability within the MoEs. This section is arranged based on the emerging themes emanating from Research question 2, which are discussed in detail.

6.3.1   Legislation
The results in Section 5.4.1 indicate that the legislature and the policy frameworks are considered important drivers of sustainability in the MoEs. The changing environmental and the political landscape are compelling MoEs to consider sustainability in their strategies and operations. The international treaties such as the SDG as well as the various stakeholders' expectations are forcing the national, provincial and the local governments to adopt sustainability into their operations.

According to Renukappa, Egbu, Akintoye and Suresh (2013, p.65), in a competitive economy, the government legislation plays a significant role in environmental and social sustainability by creating environmental and social standards and regulatory frameworks to preserve the environment as well as to improve the quality of life. As Ngoepe-Ntsoane (2018) has highlighted, sustainability is no longer a buzzword, but it is a reality that the organisations need

to grabble with. However, in South Africa, explicit regulations are absent in terms of how to deal with the different constructs of sustainability.

Based on the above, what can be deduced from the literature and the respondents is the importance of legislation as a driving force that is compelling the MoEs to adopt and embrace sustainability. The sustainable development goals have proven to be one of the key pieces of international agreements that is driving countries to review their policies and frameworks; however, there seems to be a considerable disconnection in terms of how to apply sustainability at local government and at the MoE level. The current sustainability frameworks and the legislation are difficult to interpret and implement as they normally impact both the internal and the external stakeholders.

6.3.2 Innovation

The results in Section 5.4.2 also indicate that innovation is an important driver among the respondents. The changing consumer habits, coupled with the current socio-economic challenges require the MoEs to find new and innovative ways to provide goods and services. The MoEs have to review their business process and models in an attempt to increase productivity while reducing costs.

Nidumolu, Prahalad and Rangaswami (2009) indicate that the organisations that pursue sustainability will reshape the competitive landscape, thereby forcing them to reassess their goods, technology, processes, and business models. The views on sustainability transitions emphasise the necessity for the public sector to rebuild itself and adapt policies to institutionally embrace technological innovation (Figueira et al., 2018). In times of economic difficulty, innovation is critical to growth and prosperity.

Based on the above, what can be deduced from the literature and from the respondents is the importance of innovation as a driver for adopting sustainability in the MoEs. The MoEs are challenged to reassess their goods, technology, processes, and business models. This is in an attempt to find new ways to solve the current service delivery challenges and remain financially viable for future generations. With changing consumer habits and an increasing population, the old ways of working are no longer applicable, and innovative solutions are being required now.

6.3.3 Business risk associated with not considering sustainability

The results in Section 5.4.3 also indicate that business risk management and the risk that is associated with not considering sustainability in organisational strategies is an important driver

amongst the respondents. It is clear that the MoEs need to review and manage the strategic risks that are associated with sustainability. Considering that the MoEs provide basic services such as water, electricity and housing, there are inherent sustainability risks that are linked to these basic services that the MoEs must not ignore. The performance failures of some of the MoEs and the SoEs in South Africa, and globally, should remind the senior managers of the risks that are associated with not considering sustainability related risks.

According to Hansen and Schaltegger (2016), there has been an increase in the economic risks and the concerns for the organizations, the economy, and the society at large due to the inadequate and the comprehensive techniques to evaluate and manage corporate performance. As climate change and financial scandals dominate public policy debates, the organisations worldwide feel more pressure to embrace sustainability as well as the associated practices and inform the important stakeholders about their performance (Elijido-Ten & Tjan, 2014). The literature has provided compelling evidence that there are inherent risks and costs that are associated with not adopting and practising sustainability principles (Chinowsky, Schweikert & Hayles, 2014).

The above responses allude to the fact that the MoEs have taken note of the performance failures that were experienced by both the public and the private organisaitons. The MoEs have also acknowledged the need for operational plans and strategic goals to consider the risks that are associated with sustainability. Risk is inherent in all the organisations and the ability for an organisation to foresee the current and the future risks, especially those that are associated with sustainability, cannot be emphasised enough.

6.3.4 Leadership

The results in Section 5.4 indicate that the leadership is an important driver towards sustainability in the MoEs. The senior managers in the MoEs have a pivotal role to play in advocating for sustainability initiatives and projects. The top-down approach for instituting change in organisations towards sustainability is the preferred method, especially when buy-in from the junior employees is required. Any sustainability initiatives and projects that have the buy-in of senior managers has a better chance of success than if initiated by the junior employees. Once buy-in at lower levels is achieved, it is important to ensure that there are sufficient resources to see sustainability projects through to completion.

Pillora, Blackburn, and Artist (2009) make reference to the senior managers' personal devotion, competence, and leadership in the local government and the MoEs as one of the most important themes in terms of enabling factors. The senior managers are able to

encourage the employees to abandon obsolete processes and methods in favour of sustainability approaches. The senior managers are also able to recognise the employees' accomplishments in sustainability-related projects and initiatives, and therefore they can solicit for more from their teams. Pillora, Blackburn and Artist (2009) also highlight that the elected councillors from the political parties as well as the boards of directors can also provide strong and effective leadership, which encourages sustainability. Lozano, Nummert and Ceulemans (2016) indicate that there are two methods for internal organisational transformation for sustainability with the top-down approach being the most popular. This approach emphasises management, measurement, and control as the means to address internal change.

Based on the above, what can be deduced from the literature and from the respondents is that leadership at a senior management level is critical. However, it must be coupled with personal dedication and competence in sustainability for it to really succeed. Senior management must take personal responsibility and ownership in the attempt to encourage and embed sustainability in the MoEs. Embedding sustainability using the top-down approach seems to be the preferred method as it emphasises a manage, measure and control approach that is ideal for inflexible and compliance laden environments such as the MoEs.

6.4   Discussion of results for Research question 3

RQ3: What are the main barriers to change towards implementing sustainability within the MoEs??

In the following discussions, the researcher explores the main barriers to change and how these can be overcome or reduced. This section is arranged based on the emerging themes emanating from Research question 3, which are discussed in detail below.

6.4.1   Barriers

6.4.1.1   Red tape

The results in Section 5.5.1.1 indicate that the red tape or the long administrative processes that are the synonyms with government are major barriers to the adoption of sustainability. The processes in the MoEs, are similar to those of the local government departments, as they are extremely slow paced and bureaucracy laden in terms of getting approvals. Legislation such as the PFMA and other pieces of legislation were introduced from a governance and accountability perspective; however, some of the legislation has created processes that are difficult to shorten. Other pieces of legislation require the MoEs to embark on community consultation processes which might create challenges for sustainability related projects if they are opposed by lobby groups. There is a clear requirement for some of the legislation and

process to be reviewed with the intention of streamlining approvals and ensuring that sustainability related initiatives and projects commence in earnest.

Pillora, Blackburn and Artist (2009) highlight the fact that on the one hand, legislation is acknowledged as a driver; however, if it is not amended and adopted to reflect the current practises and challenges that are faced by today's governments, it is also seen as a barrier. According to the Department of Trade and Industry (2013), the rules, regulations, administrative and management procedures, and systems that fail to achieve their intended objectives and, as a result, produce less desirable and unfavourable societal outcomes are collectively referred to as red tape. Governments throughout the world are launching initiatives to cut red tape, enhance public services, and create a more favourable environment for business (The Donor Committee for Enterprise Development, 2010).

Based on the above, what can be deduced from the literature and the respondents is that legislation is acknowledged as a driver on the one hand; however, it is also viewed as a barrier if legislation is not being amended and adopted to reflect the current practices and challenges that are faced by today's government. This is evident in the case of the MoEs that are attempting to initiative sustainability initiatives and projects.

6.4.1.2 Political changes

The results in Section 5.5.1.2 indicate that the political and board level changes in local governments and the MoEs are a major barrier to the adoption of sustainability. The political changes, the instability and the political events are known to stifle the sustainability initiatives and the projects in the local governments and the MoEs. This is due to the budgets being re-allocated to politically motivated initiatives that favour the political party's constituency. Another factor to note is that each new political party that takes over the government, will institute objectives and deliverables that advance their political ideology. An understanding of sustainability as a concept and how it affects the MoEs, and the local governments is lacking at both the political and the board levels.

Hueske and Guenther (2021) indicate that the drivers and the barriers complement each other and should not be viewed as opposing sides of a coin. Pillora, Blackburn and Artist (2009), indicate that the political party and the local community's support are some of the recognised drivers for sustainability, but the converse is also true. If there is no strong and effective leadership that aims to advance sustainability both at a political and at a board level, the sustainability agenda will not take off and be a success. This leadership must also be coupled

with a good understanding of sustainability as a concept and the benefits that are associated with sustainability initiatives and projects (Pillora, Blackburn & Artist, 2009).

Based on the above, what can be deduced from the literature and the respondents is that the political changes at both the council and the board levels have a major influence on whether the sustainability agenda will be advanced or delayed. The MoEs must advocate for sustainability initiatives and projects with the political leadership if they are to see the end of light.

6.4.1.3   Lack of resources

The results in Section 5.5.1.3   indicate that the lack of resources is a hinderance in the adoption of sustainability. The lack of resources could be attributed to the limited knowledge in terms of the benefits that are associated with sustainability, which result in the sustainability initiative and projects not being prioritised. Another factor to consider is the budgets constraints coupled with the conflicting priorities that are faced by most MoEs. Certain MoEs also receive grant allocations from the local governments which are hardly guaranteed due to the poor financial position of most local governments.

Planning and implementing sustainability efforts may be challenging due to a lack of funding and resources. This may be attributed to the financial constraints that the current economic conditions are putting on the local governments and the MoEs (Pillora, Blackburn & Artist, 2009). What also emerges is that the local governments, the communities, and the lobby groups put less emphasis on the environment or social equality in favour of the other goals that meet their specific objects which means that the sustainability related initiatives do not move forward (Pillora, Blackburn & Artist, 2009).

Based on the above, what can be deduced from the literature and the respondents is that the MoEs are faced with a serious challenge when it comes to the allocation of resources for sustainability related initiatives and projects. With the current financial challenges, coupled with conflicting priorities, most of the local governments are unable to fund the sustainability projects that do not impact and advance the government of the day.

6.4.1.4   Inflexible organisational culture

The results in Section 5.5.1.4 indicate that an inflexible organisational culture is a hinderance in the adoption of sustainability in the MoEs. The employees working for the MoEs are said to be discourteous towards their customers. There also exists an organisational culture that is inflexible to change and is content with the status quo.

Amaratunga, Baldry, and Sarshar (2000) claim that the current organisational leadership places a significant value on how the clients view an organisation. This perspective demonstrates the company's ability to provide high-quality products and services while maximising customer satisfaction. In terms of the local government and the MoE's competitiveness, Ates and Buttgen (2011) note that the performance indicators that demonstrate the quality and the sustainability of the MoEs' customer experience are likely to be linked to the organisation's long-term financial performance. Such performance indicators reflect customer loyalty to the provider of basic public services, which expresses psychological switching costs that guarantee long-term revenue. Williams and Naumann's (2011) research, which found a connection between the sales, the earnings per share, the customer retention, and the stock prices, lends credence to this view.

Based on the above, what can be deduced from the literature and the respondents, is that the current organisational cultures found that the MoEs were not customer centric and were inflexible to change. Literature has shown that customer experience has a huge impact on an organisation's success. The poor customer service by the MoEs might result in the customers considering alternative solutions albeit at a higher cost.

6.4.2   Identified strategies

6.4.2.1   Change management

The results in Section 5.5.2.1 indicate that the change management processes can be used to reduce the impact of the identified barriers. The requirement for the MoEs to adopt to new ways of working and changes in the organisation's culture and structure are seen as extremely important. The buy-in from the MoE's employees on sustainability and innovative thinking is seen as an important step towards transforming the MoEs culture. A change management processes is encouraged by various respondents as a means of not only getting MoEs to embrace sustainability, but also to review the current strategies and processes as they might not be applicable considering the current socio-economic challenges.

Todnem (2005) asserts that the organisational operational and strategic goals are inherently changeable, and it should be obvious that an organisation's capacity to envision where it needs to go in the future and how to make the necessary changes to get there is relevant. Organizations, particularly MoEs, are said to have complex social systems because they involve individuals who have different behavioural patterns, organisational structures with values and norms, information, processes, and resources, all of which interact with one another and with their immediate surroundings. By understanding how the components of an

organisation interact with one another and with influences, planning and establishing new settings inside the organisation enhances the possibility that change will be achieved (Klein, Ramos & Deutz, 2022). Resistance might come in different forms; it may be direct or indirect, open disputes over resources, scepticism statements, or a refusal to support the change initiatives (Lozano, Ceulemans, & Seatter, 2015).

Based on the above, what can be deduced from the literature and the respondents, is the clear gap and a need to change the overall organisational culture in the MoEs. Change management not only talks to embedding sustainability, but it also requires a change in behavioural patterns, values, norms, processes, and resources.

6.4.2.2 Resource allocation

The results in Section 5.5.2.2 indicate that the MoEs believe that providing the required resources towards sustainability initiatives and projects will reduce some of the perceived barriers to the adoption of sustainability. The MoEs and the local government have an opportunity to prioritise and allocate resources towards sustainability initiatives and projects. Such allocations must be consistent and must be made over a long period of time. This is to ensure that sustainability initiatives and projects are embedded and become part of the daily business operations.

According to Li, Ye, Dai, Zhao, and Sheu (2019), organisations must commit both resources and knowledge in an attempt to determine how to transition to and integrate sustainability into their daily operations. As a result, the organisation will be able to transform the potential risks into competitive advantages. Unfortunately, the cities lack the resources and capabilities that are necessary to address global issues, which makes it difficult for them to achieve sustainability objectives (Kruse & Hawkins, 2021).

Based on the above, what can be deduced from the literature and from the respondents, is the need for the MoEs to consistently allocate resources towards sustainability initiatives and projects over numerous financial periods. However, due to the financial constraints that most local governments and the MoEs face, it is unlikely that there will be consistent findings. This will stifle any attempts to embed and make sustainability part of normal operations.

6.4.2.3 Innovation

The results in Section 5.5.2.3 indicate that most respondents believe that innovative thinking and services can aid in reducing some of the identified barriers to change. It has been argued that the MoE and the local government systems and processes are outdated and are not fit for current needs. There is an opportunity to review and reengineer their processes without

infringing on good governance processes. It is now the opportune time to advance innovation, not only in regard to processes, but also on the delivery of basic goods and services.

The necessity for the public sector, and the MoEs in particular, to reform and alter their policies to institutionally encourage technological innovation cannot be stressed enough (Figueira et al., 2018). It is found that the organisations that are environmentally conscious, have fewer input costs than their competitors. This allows for the saving that was generated to be directed at establishing new businesses (Nidumolu, Prahalad & Rangaswami, 2009). Smart organisations now view sustainability as the next frontier of innovation which will give them a competitive edge over their rivals. Growth and prosperity depend on innovation, particularly when the economy is performing badly.

Based on the above, what can be deduced from the literature and the respondents, is that there is a clear and deep desire for the MoEs to embrace innovative thinking and products. The MoEs are forced to think outside the box and provide products and solutions that will address the current challenges. With a failure rate that is close to 90%, trying to implement innovative thinking in the MoEs might be a difficult task considering the in flexible culture.

6.5   Discussion of results for Research question 4

RQ4: What are the strategies to implementing an SBSC framework to improve sustainability within the MoEs?

In the following discussions, the researcher explores the preferred strategy for implementing sustainability within the MoEs. This section is arranged based on the emerging themes emanating from Research question 4, which are discussed in detail below.

6.5.1   Sustainability is reflected in the MoE policies, goals and reporting

The results in Section 5.6.1 indicate that most of the respondents believe that sustainability is reflected in the MoE policies, goals, targets, and reporting. From a reporting point of view, the MoEs do address the matters of sustainability in their annual reports and business plans. Sustainability is also reflected in the MoEs policy documents; however, such policies and reports are incredibly vague and ambiguous in terms of the meaning and the direction that sustainability is meant to take. There is a requirement for the MoEs to unpack and clarify the meaning of sustainability for their respective organisations and how they plan to reach set targets.

There is a growing requirement globally, compelling the organisations to adopt sustainability into organisational practices and operations and to keep stakeholders updated on their performance as climate change dominates public policy debates (Elijido-Ten & Tjan, 2014). Veselovská (2017) found that the sustainability concepts are well-known, but the sustainability policies are incredibly challenging to implement. Lozano, Ceulemans, and Seatter (2015), found that the organisations that have pursued sustainability have done so primarily through initiatives from the upper management levels. In these initiatives, the organisations are typically treated as checkboxes, with internal organisational differences rarely taken into account and organisational systems only briefly addressed. Elijido-Ten and Tjan (2014) note that although the growth of sustainability disclosures and reporting has been well documented, various researchers have highlighted that declaring organisations rarely integrate sustainability into their core management processes and performance monitoring systems, thereby implying that the commitment to sustainability is merely superficial.

Based on the above, what can be deduced from the literature and the respondents, is that there is a significant difference between what is proposed and what is done in terms of policy intentions and policy execution. The majority of the MoEs have included sustainability in their policies, targets, and reporting; however, it is unclear and needs to be unpacked. It is not clear what sustainability means to each respective MoE, as expressed in the current strategies and reporting, even though it is there. This could signal a situation where the MoEs treat sustainability reporting as just an exercise they need to comply with.

6.5.2 SBSC is a valuable framework for the MoEs

The results in Section 5.6.2 indicate that most respondents believe that the SBSC is a valuable framework that the MoEs can utilise. The SBSC allows the MoEs to monitor and report on the sustainability related measures that are informed by the organisational strategy. The SBSC also allows the senior management to view their individual contribution and assess whether they are adding value to the overall strategic objectives. The SBSC, as a performance measurement system, is versatile and can be amended to consider and suite the MoE requirements. An important factor to consider when embarking on implementing the SBSC is the apolitical buy-in at both the MoE board level and at the local government political office.

Ates and Buttgen (2011) as well as Elijido-Ten and Tjan (2004) stress that for public entities, particularly for the MoEs to meet their sustainability goals, they need a management solution that can show the connections and dependencies between the sustainability-related measures and the performance indicators. This is to ensure that the sustainability activities take a holistic approach, as well as align with the organisation's objectives and strategy, and also correspond

to specific business conditions. Pillora, Blackburn and Artist (2009) point out that strong leadership in both the council of local government and the senior management in the MoEs is important in driving the sustainability agenda. Elijido-Ten and Tjan (2004) allude to the fact that the SBSC or any sustainability initiative may be rejected by the managers because as openness increases, so does the demand to achieve organisational goals. Elijido-Ten and Tjan (2004) stress that the senior management support is required for the SBSCs to be accepted.

Based on the above, what can be deduced from the literature and from the respondents is that the SBSC is a valuable framework for the MoEs to not only measure the overall business objectives, but to also assess the individual contributions of the senior management. This, in itself, can create a challenge as the SBSC may be rejected by the senior management who might not want to be measured against a concept such as sustainability that is relatively not understood.

6.5.3 *Incorporating sustainability into the four perspectives of the BSC*

The results in Section 5.6.3 indicate that the majority of the respondents believe that incorporating sustainability into the four perspectives of the general BSC perspective is the ideal approach. A key consideration when incorporating sustainability into the standard BSC, is to remember that the sustainability goals or the indicators, must be aligned and interlinked to all the four perspectives of the BSC. These strategic goals are informed by the vision, mission, values, and the mandate of the MoE.

According to Elijido-Ten and Tjan (2014), integrating sustainability indicators in a standard BSC aids an organisation in identifying, analysing, and visualising the causal links between the environmental and the social indicators and its financial success. Ates and Buttgen (2011) highlight a critical point in the SBSC, that is similar to the BSC, that it is designed to translate strategy into action. A performance measuring system incorporating sustainability is especially beneficial for the local governments and the MoEs that must demonstrate their economic success and efficiency to all the stakeholders (Elijido-Ten & Tjan, 2014).

Based on the above, what can be deduced from the literature and the respondents is that incorporating environmental and social considerations in the four BSC perspectives is the ideal approach for the MoEs. This approach is said to connect the corporate strategy with the sustainability initiatives and the projects across all the four BSC perspectives. This approach allows for the sustainability elements to be instantly included in the organization's cause-and-effect linkages and are linked to the financial indicators.

6.6 Conclusion

This chapter synthesised the scholarly work that was covered in Chapter 2wo while also presenting the results that were offered in Chapter. A total of four drivers of sustainability and three barriers to change were identified. In addition, this chapter uncovered three approaches to overcome or reduce the impact of the identified barriers, as well as the strategies to implement the SBSC in the MoEs. The next chapter outlines the conclusions based on the research findings.

CHAPTER 7:   CONCLUSION AND RECOMMENDATIONS

7.1   Introduction

Chapter 7 presents and discusses the findings of this research by utilising the OCCS framework as a means to implement the SBSC in the MoEs (See Figure 7.1). The chapter also addresses the implications of the study's results on the managers, the limitations of the research conducted, and future research suggestions.

The decisive conclusions that are reported in this chapter are based on the findings in Chapter 5 and the discussion of the results in Chapter 6. This chapter links the research findings to the overall research questions (Section 3.1 – 3.4).

7.2   Principle conclusion

Based on the evidence established in Chapter 5 and the data analysis in Chapter 6, the OCCS framework was used as a basis to articulate the principal findings. The OCCS framework brings together the interrelated factors that influence the adoption of sustainability in the MoEs and provides proposals on how these factors can either be leveraged or overcome to implement an SBSC and add value to the MoE's attempt to be sustainable organisations. In the following section, the researcher presents a practical guide of actions that should be taken and the factors that should be considered by senior management in the MoEs. Figure 2 is an illustration of the model.
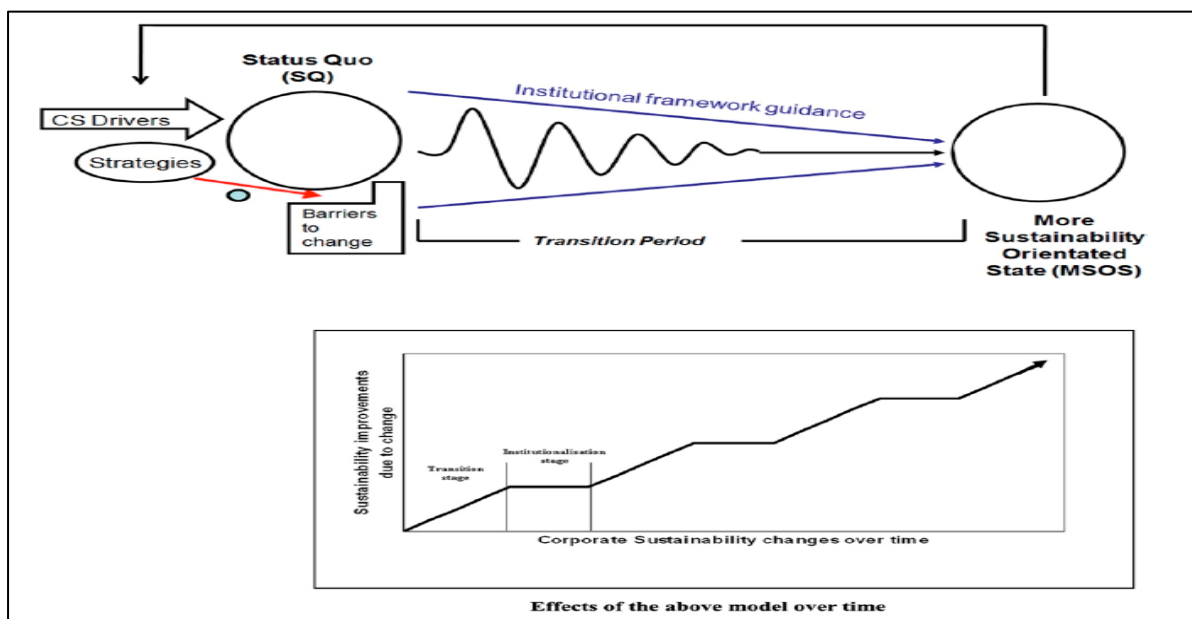
Figure 7.1: Model for implementing the SBSC using the Orchestrating Changes for Corporate Sustainability Framework.

7.2.1 What is the degree of adoption and implementation of sustainability within MoEs?

It has been determined that there are low levels of adoption when it comes to sustainability being institutionalised in the organisational cultures of the MoEs. With sustainability and the related constructs dominating the global agendas and discussions, the MoEs are yet to comprehend what sustainability means for them and how to fully merge the concepts into their organisational culture. The MoEs still have a long way to go in terms of clarifying the sustainability question. Another theme that emerged is the fact that the MoEs play a pivotal role, not only as a provider of basic services to the residents and the businesses but also concerning the socio-economic factors in the communities they serve. Certain MoEs, such as Johannesburg Water, Pikitup and City Power, operate as monopolies in the local governments they serve, and as such, they must not fail as the businesses providing basic services. The collapse of certain MoEs will have a massive impact on the socio-economic aspects of the community they serve. Unfortunately, the MoEs are faced with numerous challenges, chief of them being the inability to adapt to an ever-changing business environment. This necessitates an organisational culture that is able to adapt to these changing environments and ensure that the provision of basic services is sustainabile and available for future generations to come.

7.2.2 What are the main drivers towards implementing sustainability within MoEs?

The research has determined that there are four main drivers that influence the adoption and implementation of sustainability in the MoEs. As a result of global warming and the numerous catastrophic performance failures of organisations, global leaders, countries, organisations and interested groups are accelerating the adoption of sustainability and related concepts, mostly through legislation and policy frameworks. As a consequence, this has created an opportune environment for innovation, and the requirement for the MoEs to review their processes and business models to align with the new world order and solve current service delivery challenges while remaining financially sustainable.

7.2.3 What are the main barriers to change towards implementing sustainability within MoEs?

The research has determined that there are four main barriers to change influencing the adoption of sustainability in the MoEs. As much as there are external drivers advocating for the adoption of sustainability, the MoEs are faced with an internal barrier that is associated with outdated and unresponsive legislation and policy frameworks that do not consider today's dynamic business environment, thus stifling the adoption of sustainability. This is also exacerbated by an inflexible and entitled organisational culture that is not considering the customers' interest in their services. The unstable and forever changing political landscape,

both at council and at the board of directors' levels, is seen as another major barrier. The councils of the local governments have executive and legislative authority over the affairs of the municipalities, and they are responsible for providing basic services, amongst other things. The boards of directors of the MoEs, on the other hand, are responsible for crafting the strategic plans and the oversight activities that are aligned with the council's mandate. The constant change in the council and at the board level destabilises the MoEs and often, there are changes to the strategy goals of the MoEs. This also comes with changes in the allocation of resources, namely funding, which is redirected to the initiatives that meet the political ideology of the council.

The research also established that there are three main approaches that the MoEs can use to overcome some of the identified barriers to change, specifically in relation to the internal barriers. The current organisational culture must change to a more innovative and customer focused approach that has sustainability at its core. The senior management in the MoEs must champion the understanding and the implementation of sustainability from the top down to the lower levels within the organisation. There is lack of leadership in relation to sustainability, even though the senior management believes that their current roles are pivotal in implementing sustainability within the MoEs. The MoEs' senior managers might not have the desired level of expertise and commitment towards sustainability to see through this required organisational culture change. Finally, innovative thinking will aid the MoEs in better analysing the current business environment as well as their customer expectations. The MoEs should then be able to provide goods and services as well as meet such needs. There is also a requirement to ensure that all the sustainability related initiatives and projects are allocated the necessary resources to see them to the end. New funding sources, such as the sustainability grants from both the local and the international markets should be explored.

7.2.4   What are the strategies for implementing an SBSC framework to improve sustainability within MoEs?

The research has determined that incorporating the sustainability aspects into the four perspectives of the balanced scorecard is the ideal approach when creating the sustainability balanced scorecard for the MoEs. The MoEs must create sustainability related indicators in each one of the four perspectives for it to be a success. As it stands, the current MoE policies and reports do touch on sustainability as a construct; however, there are no measures in place to assess whether sustainability has an impact or influence on the organisational strategy and goals.

7.3 Implications for management

This research revealed three managerial and other important stakeholder implications.

- The senior management in the MoEs must understand that they are responsible and must be intentional in driving the desired change in the organisation. Without the correct culture, any strategy that is put in place will not succeed, regardless of their efforts.

- The senior management in the MoEs must prioritise and unpack what sustainability is and what its respective constructs mean to all the levels within the organisation. They must also prioritise the training and upskilling of the employees and encourage them to take on sustainability projects and initiatives.

- The senior management in the MoEs must engage their boards of directors and Council on the implications and the risks that are associated with not advancing the adoption of sustainability. This approach will aid the senior management in ensuring that sufficient resources are allocated towards the fulfilment of sustainability initiatives and projects.

7.4 Limitations of the research

In Section 4.11, the study highlighted the methodology limitation, which is discussed in the next section.

The research was carried out on the CoJ-based MoEs; thus, its findings might not apply to the other MoEs in the other municipalities. Only the senior managers working for the CoJ's MoEs were included in the population that was chosen for this research. The exclusion of the lower-level employees and the other MoEs that are located in the other municipalities that could have a high level of exposure to the research objective may restrict the research's applicability.

Interviewer bias is when a researcher poses direct and probing questions looking for information to support their views and beliefs (Galdas, 2017). The researcher was well aware of this and is also cognisant of the interviewer bias which might have influenced the data quality if the manner and tone of the questions posed reflected the researcher's personal thoughts and beliefs on the topic.

Participation bias may also influence data quality, given the short time that was taken with some of the interviews. Three of the interviews lasted for less than 30 minutes, which is below

the average for all the interviews of 39 minutes. These Respondents could have therefore omitted certain important information during the interviews.

Since the research was undertaken as an MBA thesis, the study's allotted time was approximately six months. Compared to the other research papers that need more time to complete, the time limit may have restricted the opportunity to delve into more details regarding the research problem. A lack of substantial expertise in academic research and a lack of resources may have hampered the research to some extent.

7.5   Suggestions for future research

Future research on the topic has the potential to help to overcome some of the limitations of this study and offer new perspectives on the research topic.

7.5.1   Leadership style to drive sustainability in the MoEs

The research has found that the leadership, which is namely, the council, the board of directors, and the senior management at the MoE levels, is a significant success factor in promoting the implementation of sustainability in the MoEs. Further research should be undertaken to determine if there is a certain leadership style that is able to advance the promotion and adoption of sustainability in the local government and in the MoEs.

7.5.2   How to foster and implement an innovation culture in the MoEs

The research has found that the organisational culture within the MoEs requires drastic change towards innovation and becoming more customer focused. The South African government has introduced the *batho pele* principles which have not yielded the expected results. Further research on how to move the MoE's culture from its current, inflexible state to a more innovative and customer focused approach is necessary.

7.5.3   The impact of red tape on organisational performance

The research has found that the red tape associated with long administrative processes is a major barrier to the implementation of sustainability in the MoEs. Further research should be undertaken to explore what impact does red tape have on organisational performance and effectiveness.

7.6   Conclusion

The literature review conducted in Chapter 2 highlighted the concept and the general adoption of sustainability, the concept of change management and how to implement it, the various drivers and the barriers affecting the implementation of sustainability, the current form and use of the BSC, and the strategies to integrating the SBSC. Although there is research done in

each of the above sections found in Chapter 2, there is limited research, specifically in the public sector, on integrating sustainability concepts into business strategies and objectives. The research aimed to add to the literature by uncovering the interrelated factors (drivers, barriers, and strategies) that influence the adoption of a SBSC in the MoEs from the 10 in-depth interviews using the OCCS framework.

The research provided the key insights into the main drivers and the barriers affecting the implementation of sustainability, and the associated approaches to overcome the identified barriers to change. Furthermore, the research aimed to provide a strategy on how the MoEs can implement the SBSC. It is hoped that the research will provide strategic decision makers with a practical framework to improve the adoption and implementation of the SBSC.

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APPENDIX 1: INTERVIEW GUIDELINE

SECTION A: Describe the role and the MoE:

1. What is your entity's name? ☐

2. What is your position, or the level held in the organisation? ☐

3. How many years of relevant experience? ☐

SECTION B: General questions on the adoption of sustainability within the MoEs:

4. What role does sustainability play in the MoEs, if any? ☐

5. Is there someone in your organisation specifically in charge of sustainability? ☐

6. If so, is that her/his only role? ☐

7. In the way the MoEs approach sustainability, how long has it taken, or how long do you think it will take to become embedded into the MoE's culture? ☐

8. Do you think that the process could be accelerated? ☐

9. Do you feel sustainability is equally adopted across all the MoEs, or there are some MoEs that seem more interested than others? ☐

SECTION C: Drivers towards implementing sustainability within the MoEs?

10. In your opinion, what have been the main drivers of implementing sustainability within the MoEs? ☐

SECTION D: Barriers to change towards implementing sustainability within the MoEs?

11. What have been, or you think could be, the main barriers to change that would affect the integration of sustainability into the MoE's culture? Please mention some examples. ☐

12. If so, how have the barriers to change been overcome or reduced? Please provide some examples. ☐

SECTION E: SBSC as a framework to improve the implementation of sustainability within the MoEs?

13. Is sustainability included in the MoE's policies (vision, mission, objectives, etc.)? ☐

14. Do you think it is necessary to include it? ☐

15. Do you think the current policies adequately represent the MoEs, and the future of the MoEs regarding sustainability? ☐

16. In what ways are the MoEs concerned about the sustainability that is reflected in their systems, that is, finance, reporting, incentives and rewards, information, etc.? ☐

17. Is sustainability reflected in the setting of goals, targets, and objectives? ☐

18. The SBSC has four perspectives: i) Financial, ii) Customer, iii) Learning and growth, and iv) Internal processes. How would you incorporate the sustainability element into the BSC? ☐

19. Do you believe that the SBSC is a valuable framework, which can aid the MoEs in incorporating and measuring sustainability? ☐

20. How do you think your position relates to implementing sustainability within your organisation? ☐

Is there something I neglected to ask you, and you think I should know about, regarding what we have been discussing?

Thank you for your participation

APPENDIX 2: INFORMED CONSENT FORM

Title of the research project: Drivers, challenges, and strategies to implementing a sustainability balanced scorecard within municipal-owned entities

Research study description: I am currently a student at the University of Pretoria's Gordon Institute of Business Science and am completing my research in partial fulfilment of an MBA. I am conducting research on the main drivers, the challenges, and the strategies to implementing a sustainability balanced scorecard in municipal-owned entities.

Our interview is expected to last about an hour, and it will help us to understand how municipal-owned entities can implement a sustainability balanced scorecard as an aid to adopting sustainability principles into their overall business strategies. **Your participation is voluntary, and you can withdraw at any time without penalty**. All the data will be reported without identifiers. If you have any concerns, please contact my supervisor or me. Our details are provided below.

1. I confirm that I understand the research and have the opportunity to ask questions.
2. I understand that my participation is voluntary and that I can withdraw at any time without giving a reason.
3. I agree to take part in the research.
4. I agree with my interview being recorded, and that confidentiality is assured.
5. I agree to anonymised quotations being used in the publication.

Researcher Name: Neo Matheba

E-mail address: 14379920@mygibs.co.za
Phone: 081 240 0389

Research Supervisor: Dr. Ngwako Sefoko
E-mail address: nsefoko@gmail.com
Phone: 072 368 4415

Researcher Signature: _____
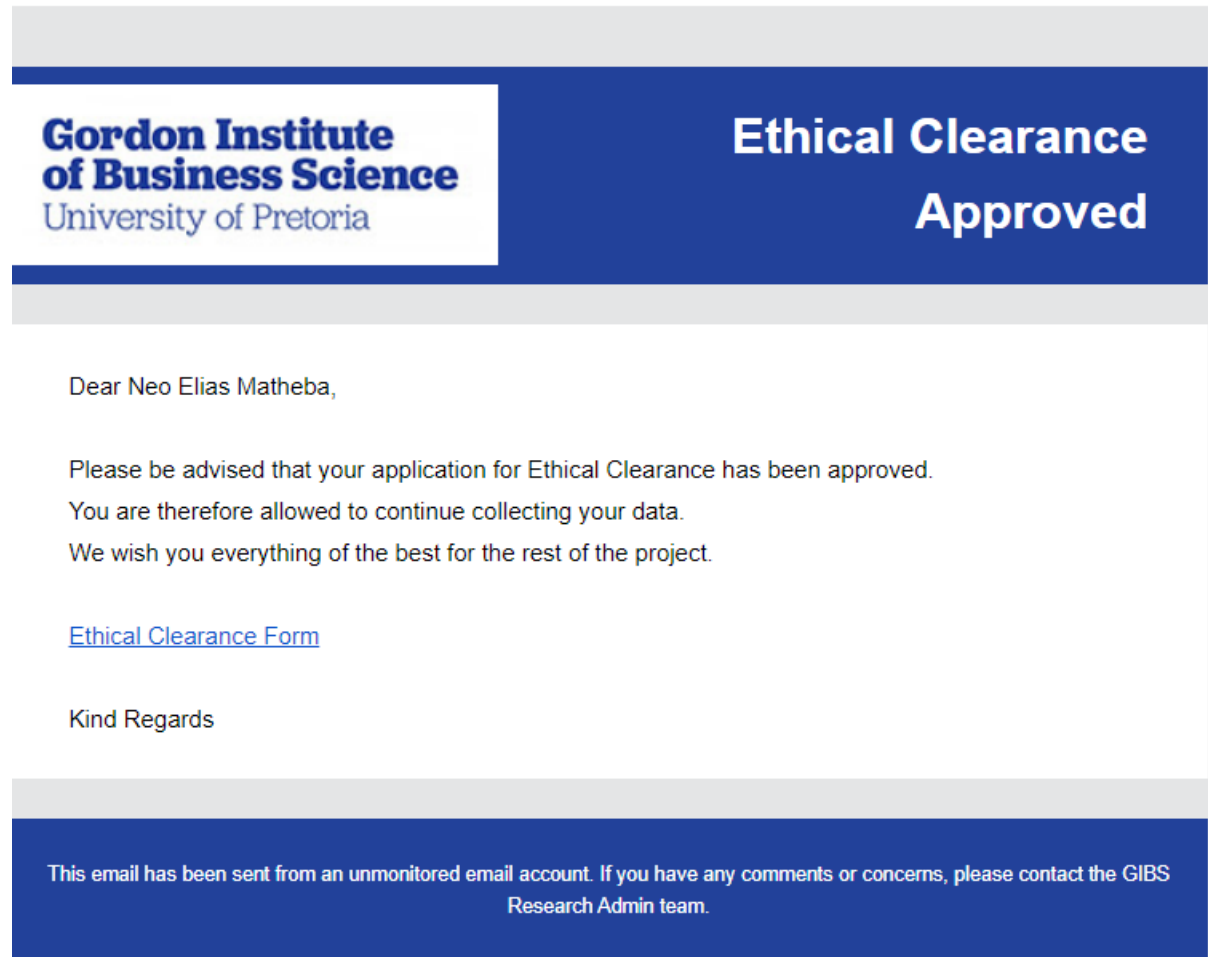
Date: _____

Respondent Signature: _____

Date: _____

APPENDIX 3: ETHICAL CLEARANCE

The below screenshot in Figure 2 demonstrates that the researcher obtained ethical clearance to gather the data utilised in this research.

Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear Neo Elias Matheba,

Please be advised that your application for Ethical Clearance has been approved.
You are therefore allowed to continue collecting your data.
We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

APPENDIX 4: LIST OF ALL CODES USED

Research Question	Themes and Concepts	Grounded
Research Question 1: What is the general adoption and implementation of sustainability within the MoEs?	No single person responsible for sustainability	12
	Importance of sustainability	10
	Embedding of sustainability culture	7
	Interest in adoption	4
	Business risk	3
	Change management	3
	Conflicting priorities	3
	Innovation	3
	Financial sustainability	3
	Integration of sustainability	2
	Legislation	2
	political placement in strategic positions	2
	Some interest to adopt them based basic needs some MoEs provide	2
	Strategy planning	2
	Human Basic needs	1
	Bankrupt	1
	Board meddling	1
	CoJ department responsible for sustainability	1
	Currently just theory and no real understanding how to incorporate it	1
	energy MoEs	1
	Environmental initiatives	1
	Financial sustainability	1
	Socioeconomics	1
	Strategy Office Coordinates	1
	Triple challenges	1
	We don't measure	1
	MoE structuring based on Municipal Systems Act	3
Research Question 2: What are the main drivers towards	Legislation	6
	Innovation	5
	Risk associated with not considering sustainability	4

implementing sustainability within the MoEs?	Leadership	3
	Enabling environment with appropriate tools and support	1
	Service delivery	1
	Social and political theories	1
	Stakeholder management	1
	Sustainable & value adding procurement	1
Research Question 3: What are the main barriers to change towards implementing sustainability within the MoEs?	Barrier - Red tape	14
	Barrier - Political instability	8
	Barrier - Organisational culture	6
	Barrier - Lack of resources	3
	Barrier - Local governments dependent on revenue collection	2
	Barrier - Organised Labour	1
	Barrier - Proper reporting required	1
	Barrier - Stakeholder consultation	1
	Barrier - Awareness of sustainability	1
	Barrier - Coordination between entities/municipalities	1
	Strategy - Change management	7
	Strategy - Innovation	4
	Strategy - Allocate resources towards sustainability	3
	Strategy - Stewardship	1
	Strategy - Empowerment	1
Research Question 4: What are the strategies for implementing an SBSC framework to improve sustainability within the MoEs?	MoE policies, goals, targets & reports	11
	Integrate into standard BSC	9
	SBSC good tool	5
	Change management	3
	Customer first	3
	Include sustainability in policy	3
	Policies	3
	Role relates to implementing sustainability	3
	Financial sustainability first	2
	Governance	2
	Implementation	2

	Leadership	2
	Role directly impacted by sustainability	2
	Social and political theories	2
	Stage of maturity	2
	Learning and growth perspective not existent	1
	Remove sustainability from MoE mandate	1
	Dictatorship	1
	Motivation	1

APPENDIX 5: CONSISTENCY MATRIX

The general research questions have served as the foundation for the consistency matrix. The four research Questions have been mapped to related literature, with the author and year identified depending on the order in which they appeared in the field of study:

Questions	Literature Review	Data Collection Tool	Analysis
Research Question 1: What is the general adoption and implementation of sustainability within the MoEs?	Banihashemi, Hosseini, Golizadeh and Sankaran (2017) Figueira, Domingues, Caeiro, Painho, Antunes, Santos, Videira, Walker, Huisingh and Ramos (2018) Lozano (2007) Lozano and von Haartman (2017) Lozano, Ceulemans and Seatter (2015) Li, Ye, Dai, Zhao and Sheu (2019) Masoud and Anu (2021)	Interview questions 4 – 9	Thematic
Research Question 2: What are the main drivers towards implementing sustainability within the MoEs?	Affolderbach and Schulz (2017) Hueske and Guenther (2021) Klein, Ramos and Deutz (2022) Narimissa, Kangarani-Farahani and Molla-Alizadeh-Zavardehi (2020) Pillora, Blackburn and Artist (2009) Renukappa, Egbu, Akintoye and Suresh (2013)	Interview questions 10	Thematic
Research Question 3: What are the main barriers to change towards implementing sustainability within the MoEs?	Hueske and Guenther (2021) Klein, Ramos and Deutz (2022) Narimissa, Kangarani-Farahani and Molla-Alizadeh-Zavardehi (2020) Pillora, Blackburn and Artist (2009)	Interview questions 11 – 12	Thematic

Research Question 4: What are the strategies for implementing an SBSC framework to improve sustainability within the MoEs?	Ates and Buttgen (2011) Elijido-Ten and Tjan (2014) Errida and Lotfi (2021) Kalender and Vayvay (2016) Lozano, Ceulemans and Seatter (2015) Tuori, Rois, Martowidjojo and Pasang (2021)	Interview questions 13 – 19	Thematic