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Article

A Sustainability Model for a Municipal Entity

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Abstract: The main purpose is to create a model for managing sustainability in the metro and its entities in Gauteng. Within this context, the study will focus on the issue of measures, outcomes, and impacts in the City of Johannesburg (CoJ). The study will clarify a public sector application in municipal entities of the CoJ because sustainability is not well understood or used in the public sector. This article investigates the sustainability phenomena in a metropolitan setting, including the CoJ and its municipal entities. The purpose is rather two-fold. A focus group discussion was held with CoJ senior executive managers to provide feedback on the sustainability model. The information and insights were used to refine the sustainability model to manage sustainability in CoJ and its entities. The data was analysed using thematic analysis to refine the sustainability model. The results indicated that sustainability is a function of having a shared understanding of sustainability, the ability to mainstream and integrate sustainability thinking into all programmes and activities, leadership commitment, requisite competencies, and monitoring and evaluation of sustainability. The implication for leadership is to ensure the alignment of sustainability to the strategic objectives of CoJ and to foreground any planning in CoJ with a sustainability lens. Achieving this focus requires a shared understanding, development of competencies, committed leadership to implement measurement and impact framework, and adjusting plans based on monitoring and evaluation outcomes.

Keywords: sustainability; model; municipal entities; City of Johannesburg; entity

1. Introduction

The sustainability model is the part of a larger study in which multiple methodologies were used to build towards the development of a model to manage sustainability within the City of Joburg. The first phase was a literature review on sustainability policies followed by semi-structured interviews with administrators. Thereafter, a questionnaire was administered followed by developing a draft model that was verified by conducting focus group interviews with sustainability consultants. The draft model and final model are present in this article.

Municipal sustainability is the ability of a municipality to sustain its current spending and revenue policies while delivering on its mandate and meeting its financial obligations, without threatening solvency or default. The study's main purpose is to develop a model for sustainability in the metro and its entities in Gauteng for the management of sustainability. The word sustainability is not clearly understood and practiced in the public sector and hence this study will elucidate a public sector application in the context of municipal entities of the City of Johannesburg (CoJ). This article examines the phenomenon of sustainability in a metropolitan, CoJ and its municipal entity context. It should define the purpose of the work and its significance.

Given its cross-cutting character in connection to several management disciplines, the significant emphasis sustainability entails on the impact of management actions, its multidimensionality, and the requirement to take future generations' needs into account, the idea of sustainability is complicated. As a result, defining sustainability is difficult and frequently calls for a multi-disciplinary approach.

Over the past 25 years, a variety of scholarly contributions have presented various definitions of sustainable development [1]. Though attempts to do so may be a stretch, it is impossible to come up with a full definition of sustainability [2].

Despite the difficulties in clearly defining the term sustainability, the Brundtland Report of the World Commission on Environmental and Development (WCED) of 1987 has a definition of the

phrase sustainable development. According to this publication, sustainable development is defined as “development that satisfies current demands while preserving the ability of future generations to satisfy their own needs [3].

In South Africa, sustainability is aligned with the objectives of the sustainable development goals, the Millennium Development Goals (MDGs), and the National Development Plan (NDP) [4]. The eight goals of MDGs agreed upon in 200 covered, eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria, and other diseases, ensure environmental sustainability, and develop global partnerships for development. The MDG Report [5] alluded that the success of the MDG was limited and was not operationalised through designing programmes, interventions, and activities with sustainability measures, outputs, and impacts. The next era that was ushered in with affiliated United Nations (UN) member countries adopted and agreed to align to seventeen (17) global Sustainable Development Goals (SDGs) [6].

According to a review of the existing literature, there is a need for more research on how to integrate sustainability into the planning, implementation, and assessment of service delivery initiatives at the level of municipal entities. Additionally, the term sustainable and sustainability are frequently used synonymously, so the study aims to shed some light on this. From a sustainability standpoint, the quality of social and environmental disclosure reports has not improved, and the effects of social and environmental factors are not considered when making decisions [7].

Following this introduction, the paper will present a review of the literature, followed by the theoretical framework upon which the research question hinges, this will be followed by the research methods that were used to collect and analyse the data, then a presentation of the results, trailed by a discussion of the results and how they link to the literature, lessons and finally we shall present a conclusion drawn from the results.

2. Materials and Methods

An in-depth focus group interview was conducted to gain a thick nuanced understanding of sustainability. The population for the study was administrators and practitioners who provided sustainability practices and frameworks within CoJ and its entities. The sample was purposively selected based on willingness, accessibility, and most importantly level of knowledge about the phenomenon of sustainability practices within the twelve entities of CoJ. The data collection instrument was an adapted semi-structured focus group interview guide [8] with open-ended questions to fully explore the model of sustainability and practices in the CoJ.

The qualitative data set was analysed using NVivo 12 to identify themes and sub-themes in the data set. Research paradigm and philosophy are the point of departure for the research and influence the selection of the research methodology [9]. Another dimension of research philosophy is linked to the socio-cultural attitude of the researcher and is operationalised through epistemology, axiology, and ontology [10]. The study aligned with both paradigms of phenomenology.

3. Results and Discussion

The proposed model and discussion below was informed by all phase of the study to propose a draft model. Emerging themes from the 15 semi-structured interviews and findings from the survey administered to 457 administrators of CoJ were used to draft the proposed model. The discussion will outline the different ideas and perceptions of the focus group interview. Figure 1 below depicts the proposed model before the focus group discussion.

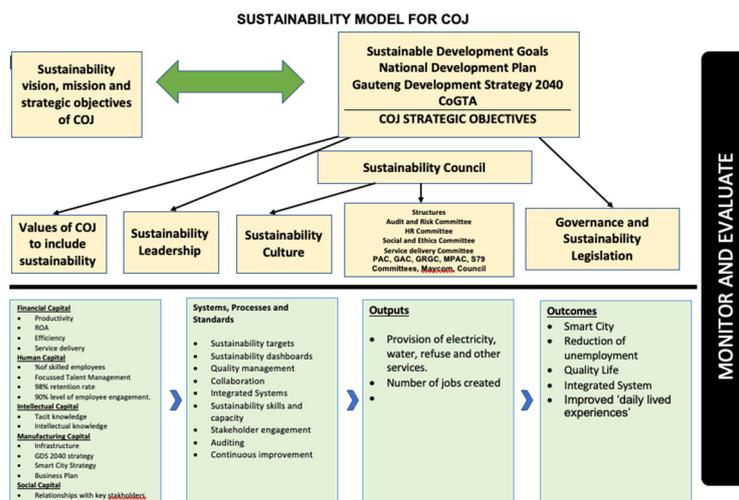


Figure 1. Proposed Sustainability Model for CoJ.

3.1. Strategic Planning and Integration

3.1.1. Model Contribution to Sustainability

The principles of the circular economy of feasible, share, lease, reuse, repair, refurbish, and recycle current resources and products is used in CoJ but not optimally. Through the cross-cutting feasibility programme, the city can make use of more efficient ways of working with waste management which contributes to sustainability for future generations yet to come – converting invaluable to valuable.

The model will supposedly infuse the sustainability thinking of leadership and culture from a planning perspective to design an integrated sustainability programme.

According to the literature, organisational leadership plays a vital role towards achieving sustainability [11,30]. A study done by [11] examined the role of organisational leadership in the delivery of sustainable projects in the UK. The study showed that the most important role of organisational leadership in promoting sustainable practices is to formulate policies, implement procedures and disseminate best sustainable practices throughout the organisation.

3.1.2. Sustainability Vision, Mission, and Objectives Alignment

The value of sustainability needs to include the following blocks, leadership, culture, structure, and governance. As suggested by participants, smart cities should elevate to the blocks in order to reimagine the city as a whole.

According to [12], through technologically driven solutions, smart city strategies have been adopted across the globe to address urban challenges. According to the smart city vision, high-speed rail, shiny new buildings, and fast technology are the answers to South African challenges.

3.1.3. Systems and Processes for Sustainability

The city has a sustainable services cluster which deals with an important pillar thus being cross-cutting and part of the model. The sustainability council has to link to this cluster.

Sustainable public service delivery is the ability of an organisation to continuously learn, develop, and reconstruct in accordance with environmental, economic, and social conditions. As a result, resilience means being able to cope with emerging challenges, threats, and problems, learn from them, and develop based on that knowledge. It is possible to address the challenges and complexity of collaborative public service delivery by looking into both of these concepts. Despite the growing interest in sustainability and resilience, these topics are still in their infancy [13–15].

3.1.4. Factors facilitating integration

There is a need for a sustainability council. Considering constant change within CoJ, creating sustainability is a key element of the various different structures that are currently in place which may minimise change management.

According to [16], the role of government in sustainable development thus far has received limited attention in scholarly discourse. He argues that, to a degree, governmental issues are captured mainly in the social dimension of sustainability. Governments roles is also mainly described in qualitative and normative terms through concepts such as community participation, empowerment, equity, and transparency. Government and its governance functions, however, transcend these social-normative dimensions. The outcomes of governance also impact the two other dimensions of sustainability namely ecological and economic factors.

3.1.5. Factors hindering integration

On the other hand, a sustainability council may be tricky as the CoJ is diverse. The leadership and culture are diverse, thus there will be a need to deal with various approaches to dealing with leadership and culture that is currently embedded.

According to [17], sustainable leadership integrates leadership and management practices and values such as competitive and motivated staff and team orientation, trust, strategic planning, vision, ethical behaviour, financial independence, environmental and social responsibility, ethical behaviour, culture, knowledge management aspects as knowledge sharing, innovation, quality. Although the leadership and culture within CoJ are quite diverse, it may be tricky as per the comment however it also can promote sustainability.

With the five capitals and systems, processes, and technology enablers not being achieved it will not contribute to achieving the desired objectives. There are non-standard ways of working within the CoJ, thus making it difficult to see if objectives are being met.

Complexity and adaptability is the biggest hindrance within the CoJ. The five capitals model provides a basis for understanding sustainability in terms of the economic concept of wealth creation or capital. CoJ can maintain and where possible enhance these stocks of capital assets, rather than deplete or degrade them. Achieving the use of the five capitals model can be used to allow the organisation to develop a vision of what sustainability looks like for its own operations, products, and services.

3.2. Pillars of Sustainability

3.2.1. Effect on the model

The lack of public awareness in communities was highlighted as an effect on the efficacy of the model. Shared understanding will improve the efficacy of the model to a certain extent because the efficacy of the model is dependent on various internal and external factors. The [18] is entrusted with a crucial legislative mandate to ensure all citizens within the Republic of South Africa live in a clean and healthy environment and use its resources in a sustainable manner for the benefit of current and future generations. Over the years, they crafted and amended pieces of legislation in an endeavour to meet the legislative requirements and have posted remarkable achievements each year. They have implemented environmental programmes for public awareness called good green deeds.

3.2.2. Shared understanding

There is a link to sustainability in each entity as discussed by participants within the focus group. Each entity has a linkage to a pillar of sustainability. GSPCR is based on a broader planning-related component of sustainability, the intergovernmental and internal relations also have a strong sustainability focus. There is a high level of shared sustainability or the understanding of shared sustainability. Shared understanding should not only be referred to the shared understanding but there must also be a shared understanding in the political sphere, society, and community.

The strategic and portfolio management office links to sustainability by being a backbone for the way the city is meant to run in order to deliver quality services that contributes to various different objectives, quality of life, and long-term economic growth.

Group governance cuts across all three pillars of sustainability and is responsible for governance and reporting within the city.

3.2.3. Conflict between pillars

The CoJ has a service delivery model which causes the complexity of having a shared understanding. This is on the basis of an individual functional area with individual accountability for that service delivery area. All service delivery entities seek the easiest way to deliver to link to performance.

In the context of the pillars, sustainability sometimes goes into conflict with one another by fulfilling an economic pillar and affecting the environmental pillar through this.

The most common conflict is between economic growth and environmental protection, and there is also a conflict between economy and equity, which manifests itself in an unequal distribution of wealth [19].

3.3. Culture and Leadership

3.3.1. Support to Sustainability

According to a participant from the study, the type of leadership support needed for sustainability would need a paradigm shift that will change the leadership thinking from political to national. Adaptive leadership was suggested as it is a combination of different leadership styles.

A leader that is committed to the whole notion of sustainability is needed. A culture of meritocracy and a culture of inclusiveness that can take different workers into account. Decisive leadership is needed to set the tone right at the top in terms of sustainability and provide a vision to control in the correct context.

In the context of the pillars, sustainability sometimes goes into conflict with one another by fulfilling an economic pillar and affecting the environmental pillar through this.

Sustainability leadership must create opportunities for people to engage and problem solve and find solutions to everyday problems. Sustainability leaders need to co-create to find solutions by exploring, learning, and collaboration. [20] proposed that a sustainability leader is someone who inspires and supports action toward a better world.

From another perspective, culture supports sustainability throughout the city, each department has a focus area but may differ. The results showed that different types of cultures can be underpinned by a focus on sustainability.

Sustainability will work if there's a high level of collective responsibility and accountability.

3.3.2. Types of workers needed

The built environment requires organisational leadership that offers the group's overall vision, plan, and course of action in the direction of society's shared objective of a sustainable future. Leaders should integrate sustainability into all aspects of their organisations' operations and incorporate sustainable development into their overarching business plans [21].

Skills and competencies of workers are present within the CoJ, however, the attitude and culture of workers need a change. Change management plays a key role in the issue of attitude and culture.

Being a change manager plays a key role in ensuring that organisational goals and initiatives meet objectives. The change management needs to ensure supporting and adopting a change to business processes, systems, technology, job roles, and structures within their function. Having this will improve the attitude and culture of how employees work [22].

3.3.3. Effects of job security on Sustainability

The CoJ has a service delivery model which causes the complexity of having a shared understanding. This is on the basis of an individual functional area with individual accountability for that service delivery area. All service delivery entities seek the easiest way to deliver to link to performance.

Local power in the form of the municipal council creates an enabling environment consisting of local by-laws that are complimented by national support for capacity development for the strengthening of inclusive systems for local public expenditure management and coherent accountability mechanisms. Meaningful dialogue between the local sphere and provincial and national spheres is fostered appropriately by the [24], other legislation, and institutional arrangements for the local government without perverse incentives.

3.3.4. Legislation

The legislation doesn't need a change, however, the way the city operates within the legislation can provide the required results wanted in the context of sustainability. Recruitment should be done in different ways that may contribute to getting the right skills and leadership personnel to drive sustainability forward.

CoJ needs to adopt different strategies of recruitment and selection from a talented pool for change. According to [24], maintaining a close connection between training policies and employment policies creates an effective bridge between the worlds of learning and of work. Policies to improve skills combined with policies to sustain growth and investment, facilitate job search, and support entry and re-entry into the labour market can lead to more and better jobs.

3.4. *Monitoring and Evaluation*

3.4.1. Sustainability Council

The sustainability council is not necessarily shut down by participants. It was suggested that it can be a standalone or in the sustainable services cluster as an agenda item.

As the proposed fourth enabling dimension of sustainability, governments should integrate policies through a council by adopting and implementing a sustainability agenda. Appreciating the instrumental as well as normative contributions of government to sustainable development requires a clearer understanding of how these interventions are linked to ecological, economic, and social goals [16].

3.4.2. Sustainability monitoring, evaluation, and measurement

The monitoring and evaluation approach needs to evolve according to participants. Currently, the approach is short term whereas there's a need for a longer-term view. What needs to happen in order to report on sustainability, is being held accountable and responsible for either good performance or poor performance, achievement of targets, or non-achievement of targets.

[25] argue that monitoring is the continuous assessment that provides feedback on a programme or project in relation to the intended objectives. During monitoring successes, constraints are identified to guide timeous decision-making. Furthermore, processes toward progress and impact are measured. Projects are monitored for a number of reasons namely to minimise risks and ensure systematic and professional execution of a project.

The way sustainability is measured will look at efficiency and effectiveness within the system linked to value for money. From another perspective, whatever it is that officials do, they need to drive it through the highest level of integrity and good governance.

A dynamic approach should take place in terms of how systems thinking is looked at, by bringing all the various systems that are at play to an integration point of view. It is seen as an important tool then to unpack those systems in order to implement sustainable outcomes or deliverables or opportunities that emerge from there.

Figure 2 above depicts the revised model after all the suggested comments from the focus group discussion.

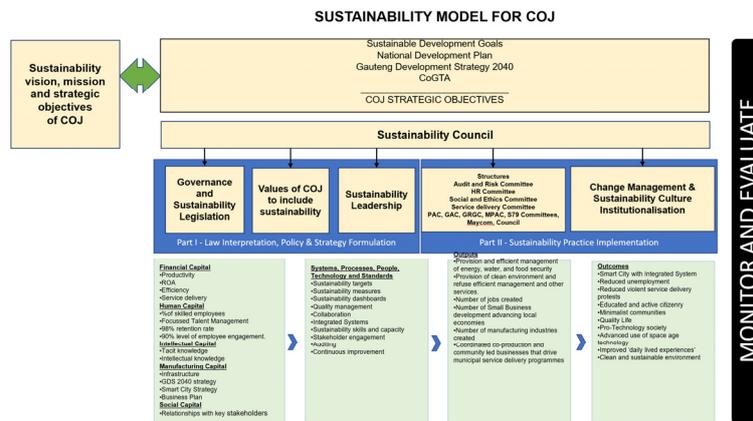


Figure 2. Revised Sustainability Model for CoJ.

Based on the focus discussion with sustainability experts the revised model will facilitate better alignment, collaboration, and coordination of sustainability across CoJ. The Sustainability Council will synergy and hold entities and departments accountable to develop sustainability strategies, identify programmes, and measure, monitor, and evaluate the impact.

Most research on sustainability in municipalities is done on financial sustainability and not wholly on the sustainability ecosystem. Research and audit reports revealed that municipalities in South Africa are plagued by cadre employment, a skills deficit, and a lack of financial sustainability [26].

The Auditor General of South Africa's [27] findings revealed that only 15 of the municipalities received clean audits, citing a lack of consequence, non-compliance, and perpetual fruitless expenditure causing a threat to the financial sustainability of municipalities. Another insight is that even though there is a lack of an integrated understanding of sustainability the pillars of social and governance collapsed under financial sustainability. This is also evident in the reporting by the Auditor General South Africa in that inadequate leadership, low accountability, and a lack of competencies contributed to audit outcomes. Other studies done of the 2022 Municipal Financial Sustainability Index (MFSI) study by Ratings Afrika, 107 local governments in South Africa 104 metro areas, and eight of the largest local municipalities were on the verge of becoming financially dysfunctional [28].

The lesson extracted from this study is that literature and findings from this study use sustainable and sustainability interchangeably yet sustainability is more inclusive and covers economic, environmental, and social whereas sustainability relates to the elements of economic, well-being, and quality of life. Another lesson is that change in the political sphere interrupts and disrupts the nature and configuration of sustainability targets, programmes, and budgets. Furthermore, entities and departments should CoJ unit and synergy efforts in pursuit of sustainability strategies for better outcomes and impacts.

5. Conclusions

The word sustainability is not always well understood and practiced in the public sector. One of CoJs strategic priorities at some point was for us to preserve our resources for future generations, but it is clear that there is no holistic and integrative approach to managing sustainability in service delivery. Most studies that were researched were focused predominantly on sustainable procurement in the UK, Australia, the US, and the Netherlands.

It is seen that the CoJ is a very complex organisation and structure with thirteen entities and a population. A sustainability council is seen to rather sit as an agenda item rather than a standalone within the organisation. Leadership and culture within the organisation are diverse and has its many

challenges, however, change is a need thus recruitment strategies in accordance with legislation need to take place.

Monitoring and evaluation within the city is yet a difficult area to achieve given that all functions within the city are so complex. There is a short-term monitoring tool set in place however a longer term should be looked at. Good governance plays a key role in the monitoring and evaluation phase.

In accordance to change management, leadership's focus should sit mainly on how the issue can be adapted instead of opposing it. Leadership plays a key role in accelerating the attitude and culture of workers.

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Institutional Review Board Statement: The study was conducted in accordance with the principles and protocols, and approved by the Ethics Committee of Management College of South Africa (MANCOSA) (protocol code _____ and October 2019 for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Written informed consent has been obtained from the participants to publish this paper. A written informed consent letter was sent out to all participants involved in the focus group discussion. Refer to Appendix A for a written informed consent letter that was sent out

Data Availability Statement: Not applicable.

Acknowledgments: The City of Joburg provided access to relevant documents needed to do the study. Data Gram must be acknowledged for verifying the codes for thematic analysis and for editing the journal article.

Conflicts of Interest: There are no declared conflicts of interest by the authors of this work.

Appendix A

Dear participant

Thank you for taking the time to participate in this study. I am conducting a research project in the City of Johannesburg as part of the requirements for my Doctorate in Business Administration degree at the MANCOSA. My thesis title is to Develop a model to operationalise and manage sustainability within the City of Johannesburg (CoJ)

The objective of the study is to determine the sustainability approaches and practices of the municipal entities of the City of Joburg. To this end, I wish to collect information from you regarding the approaches and practices to manage sustainability in the entities of the CoJ. I, therefore, invite you to participate in my study by completing a focus group interview that will last about 1.5 hours to note the following:

1. Your participation in this study is voluntary. We will only include you in the study if you give us written consent to do so.
2. You can discontinue the interview at any point without adverse consequences to yourself and without providing reasons
3. You can decline to answer any questions without providing reasons
4. No identifying particulars will be asked
5. Your will be referred to either directly or by your job title in the report, which will render you identifiable, therefore anonymity and confidentiality cannot be assured.
6. Any notes that I make during the interview will be stored securely in a safe location for five years after which they will be destroyed.
7. Electronic datasets (transcription of interviews) will be completely anonymous and stored for an indefinite period on a password-protected computer and/or secure Cloud-based storage.
8. The interview will be audio taped. It will then be transcribed by myself or possibly an independent third party, who will be required to sign a non-disclosure agreement
9. The original audio recordings will be stored securely on a password-protected device for five years and then permanently deleted.
10. Only my supervisor and I will have access to the audio recording of the interview, and if applicable, the transcriber.
11. You will be given an opportunity to review the transcript of your interview and provided feedback if you so wish.
12. The project will be assessed by examiners and I will be allocated a mark for it.
13. A copy of the executive leadership of entities of the City of Joburg to distribute at their own discretion.
14. If you have any concerns or questions related to the project, please contact me. My contact details are at the bottom of this form.

Kind regards,

Name: Floyd Warren Brink

Email address: fbrink@ymail.com

Name of supervisor: Prof Shamila Singh

Email address: shamilasingh70@yahoo.com

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