

Monitoring and Evaluating Service Delivery as a Wicked Problem in South Africa

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ABSTRACT The South African government is challenged by an increasing number of service delivery protests throughout the country, despite it improving the provision of basic services to the majority of citizens. The purpose of this conceptual paper is to evaluate service delivery as a wicked problem and to propose various approaches to deal with enhancing service delivery, via the documentary analysis approach. The paper established that both service delivery and wicked problems exhibit common characteristics of complexity, uncertainty, conflict and power inequalities amongst stakeholders. Traditional methods of solving service delivery problems, are inadequate in a socially and technologically complex developmental context and the application of networks, innovations and integrated leadership could result in improved service delivery outcomes and impacts. The paper is of value to public sector entities and state departments engaged in service delivery and the oversight of the provision of water, sanitation, electricity and housing.

INTRODUCTION

South Africa has inherited huge backlogs in service delivery due to the neglect of the apartheid government in providing basic services to previously disadvantaged communities. Despite the devolution of power to the provincial and local sphere of government, the country is plagued by high levels of poverty, unemployment and income inequalities. Local government in South Africa, as a distinct sphere of government, is mandated to provide basic services in a complex and rapidly changing environment where communities' demands for immediate, affordable and quality services are affected by resource constraints and inadequate administrative and political leadership. Frequent service delivery protests around the country indicate that local government has not been able to successfully meet service delivery outputs, outcomes and impacts. The paper proposes that service delivery could be better managed through the use of dialogue mapping, networking and taming the wicked problem by using a monitoring and evaluation system.

Objectives of the Study

Despite the South African government improving the quality of life for the majority of citizens by providing more basic services, civil protests related to poor service delivery contin-

ue around the country. The study aims to answer the following question: Why do civil protests due to poor service delivery continue despite the significant increase in services provided by the government? The first objective of the study was to scan the various literature on wicked problems and consolidate the key characteristics of wicked problems, and then compare them with "tame" problems. Thereafter service delivery is referenced with the theoretical perspectives of wicked problems emanating from different scholars. To ensure better management of service delivery as a wicked problem, tools for the monitoring and evaluation of wicked problems are discussed.

MATERIAL AND METHODOLOGY

This conceptual paper reviews the specific characteristics of wicked and tame problems and offers some tools which stakeholders could use to better manage wicked problems and enhance service delivery. A literature review was undertaken to clarify and consolidate the characteristics of wicked problems by key authors and propose innovative alternatives to manage wicked problems as presented in literature. This paper used a systematic review of literature from journals, books and government publications. The prevailing methodology of undertaking a documentary analysis offers a broader analysis of key concepts and overarching processes in order to develop a service delivery strategy.

Public Policy Development and Implementation

Traditionally, public policy development has been hierarchical and focused on a homogenous group of policy developers attempting to resolve a single problem to satisfy a group of homogeneous beneficiaries using rational and scientific methods (Australian Public Service 2007; Head and Alford 2010; Rittel and Webber 1973). Due to the advent of globalisation; technology; and diversity, as well as social, political and economic complexities, the traditional policy development process has become inadequate to deliver the desired policy outcomes. Levin et al. (2012) concur that current policy development is inadequate due to time constraints, weak central authority, those who are seeking a solution have caused the problem and the responses do not fully address the future. Global governance and market related problems are increasingly being compounded by demographic and environmental changes (Hamann et al. 2011). For example, an organisations' current operations, products and services need to be environmentally friendly to gain extensive market acceptance around the globe.

Managing the global requirements to do business has become more complex since they cut across organisational and national boundaries (Head and Alford 2015), affecting many stakeholders who have different perspectives with regard to problem definition and the best solutions. Thus, public policy issues currently arise within a complex environment and are increasingly being developed and analysed within the context of networked stakeholders who have replaced individual institutions as the custodians of public policy development and implementation.

Service delivery policy development and implementation in the local sphere of government need to include all stakeholders, including traditional leaders, ward councillors, ward committee members, community leaders and non-governmental organisations. Despite the implementation of Integrated Development Plans to ensure public participation, dissatisfaction with poor service delivery to the communities continues. According to Phi et al. (2009), complexity, uncertainty and conflict have been endemic in issues affecting government, business and civil society due to the devolution of power to different spheres of government; globalisation;

technological advancements; and the information exchange networks that have increased the number of people actively engaged in solving wicked problems.

In this regard, Camillus (2008) posits that while public institutions have improved strategy development by, *inter alia*, utilising large amounts of data and quantitative modelling, their strategies have not been successful in an increasingly complex environment. In response to their inability to resolve problems, policy developers have acknowledged that public policy development and implementation demands an integrated approach-inclusive of communities and other stakeholders-to develop an integrated package of solutions (Curran 2009). As a result, policy analysts, environmentalists, urban planners and business strategists are advocating greater concern in engaging with problems that cannot easily be defined and that resist being solved by means of the "right" solutions.

Conceptualising Wicked Problems

Wicked problems have been present in the planning environment for a long time and have been identified by Churchman (1967) and Rittel and Webber (1973) in the light of the concerns of specialists in areas including planning and policy development. Rittel and Webber (1973) introduced the term "wicked problems" as a designation for those distinct societal problems that form the basis of governmental planning, in contrast to those commonly dealt with by scientists. Some examples of wicked problems in the service delivery domain include socio-economic development, poverty alleviation, HIV/AIDS management and public policy development.

To obtain a better understanding of wicked problems, problems were classified into Type 1; Type 2; and Type 3 problems (Roberts 2000). Type 1 problems have a clear definition, and solutions to the problem are found with the consent of all legitimate problem solvers. Type 2 problems entail problem solvers agreeing on what the problem is, without agreement on how to solve the problem. Finally, Type 3 problems show high levels of disagreement as to what the problem is and how best to solve it - these are regarded as wicked problems.

In contrast, "tame" problems (Types 1 and 2) can be clearly defined and resolved by using existing standards and approaches to solving

similar problems within a definite time span and with the consultation of experts (Curran 2009). Spratt (2011), citing Conklin (2005), confirms that tame problems have a single or many clear solutions that can be assessed as true or false. They can be solved in the same way as other similar problems and the solutions can be easily tried and abandoned with little harm done. For example, an engineering problem could be solved by means of existing quantitative principles and with the consultation of experts in the field. Therefore, the solution could easily be abandoned with little harm to the environment or communities. Similarly, a chess problem or a mathematical problem, though complex, are still regarded as tame problems.

Wicked problems could be caused by a number of factors; they are difficult to describe; and they are not completely solved by the proposed solutions, that is, there is no right answer to completely solving them. Wicked problems are not a reflection of the difficulty involved in solving them but, rather suggest that traditional problem solving approaches are inadequate. In an effort to define a wicked problem, Rittel and Webber (1973) identified the following key characteristics:

- They have no definite formulation or stopping rule resulting in solutions to **wicked problems**. **Solutions** are not true or false but classified as good or bad.
- Due to the lack of definitional clarity of the problem, there is no immediate or ultimate test for a solution to a **wicked problem**. Every solution to a **wicked problem** is a “one-shot operation” because there is no opportunity to learn by trial and error: every attempt counts significantly.
- Every **wicked problem** is essentially unique and can be considered to be a symptom of another problem. There is no enumerable set of potential solutions, nor is there a well described set of permissible operations that may be incorporated into the plan.
- The existence of a discrepancy representing a **wicked problem** can be explained in numerous ways. The choice of explanation determines the nature of the problem’s resolution.

These characteristics of wicked problems highlight the need for an effective monitoring and evaluation system that would assist in iden-

tifying problems and symptoms; perspectives used to describe problems that would lead to specific solutions being recommended, and outputs of these specific interventions. For example, a violent civil protest could be attributed to poor service delivery and a possible solution could be to increase the rate, quality and quantity of services delivered to the community. Another perspective could be that the struggle for dominance by two political factions in the same community has led to the violent protest. If the two political factions are from the same political party, mediation by senior party officials may be necessary. Here we have one problem that could be approached from many different perspectives, leading to different interventions and solutions.

Roberts (2000) describes the characteristic of a wicked problem as lacking a definitive statement of the problem. This results in open-ended solutions, and in the problem-solving process being complicated by resource constraints and constant changes in political influences due to changing stakeholder perspectives and conditionalities. Head and Alford (2008) add that wicked problems are linked to social pluralism, institutional complexity and scientific uncertainty, which create uncertainty and make the problems difficult to manage.

Finally, Camillus (2008) proposes that wicked problems exist when the following characteristics exist, namely, the problem involves many stakeholders with different values and priorities; the issues’ roots are complex and tangled; the problem is difficult to come to grips with and changes with every attempt to manage it; the challenge has no precedent; and there is no indication of what the right answer to the problem could be.

In the South African context, service delivery has its roots in the apartheid era which implies that the historical inequalities suffered by marginalised communities are difficult to overcome and that there is no precedent to follow to overcome this problem. Currently, service delivery is affected by the values and powers of the many stakeholders; a bureaucratic work ethic; the lack of performance monitoring and evaluation, and growing political interference (Nengwekhulu 2009).

Another perspective equates wicked problems with “social messes” and notes that they are intractable problems composed of inter-related dilemmas, issues and problems at multiple

levels, namely, society, economy and governance (Horn and Weber 2007). Each stakeholder has a different perspective of the problem emanating from different ideologies, which result in many possible points of intervention. In this complex environment, there are political and economic constraints, resulting in a multivalued proposition to resolve problems and consequent resistance to change.

In view of the above, the features of a wicked problem include ambiguity in its definition, complexity, interventions being determined by the specific description of the problem, as well as the lack of a solution. In an attempt to establish whether service delivery is indeed a wicked problem in South Africa, the characteristics proposed by Horn and Weber (2007) and by Camillus (2008) are used, since they closely resemble the current situation regarding service delivery in South Africa. As Rittel and Webber's characterisations of wicked problems were initially compiled for the planning environment rather than for service delivery they have been excluded from the analysis.

Moral Dilemmas of Wicked Problems

Wexler (2009) citing Churchman (1967), notes that the literature reporting on wicked problems usually refers to their complexity and to the fact that they could be tamed. This results in the following normative problems, namely, responsibility nexus where problem solvers benefit from their assertions that enhancements are made on the knowledge frontier; risk of false assurance is created for problem stakeholders by reporting that wicked problems could be solved through new methods and tools, while limiting reporting on the risks; politics of urgency or criticality that capture attention for its continued support; and problem solvers do not accept that wicked problems are unsolvable and argue that improvements in methods and tools could solve wicked problems.

However, Poocharoen and Straussman (2015) argue that not all complex policy issues should be classified as wicked problems. They claim that labelling a situation as a wicked problem based solely on policy complexity is problematic and also wicked problems are silent on the number of persons being affected. In relation to Head's (2010) proposition to discuss wickedness in relation to complexity, uncertainty and divergence,

Poocharoen and Straussman (2015) assert that these constructs do not clearly indicate when a policy issue is wicked and when wickedness occurs. The authors therefore contend that the refugee problem in Thailand, Myanmar, despite existing for three decades is a complex problem, rather than a wicked problem.

In order to minimise the impact of these moral dilemmas, key stakeholders need to evaluate their roles and problem-solving propositions by ensuring that majority stakeholder perspectives are considered. It is also critical for clients to capacitate themselves in understanding the nature and contexts of wicked problems; to be innovative and flexible; and to develop effective networks. In the interests of protecting the client, monitoring and evaluation interventions to manage wicked problems should include a third-party evaluator.

In providing services, politicians make promises that create high expectations in communities and which are subsequently not fulfilled. During the Integrated Development Plan processes, communities are invited to submit their developmental needs via their councillors and ward committees. However, these are not fully implemented due to the financial and human resource constraints in the municipalities. In some municipalities with opposing political parties, the dominant political party receives the bulk of service delivery budget and public servants tend to provide better services to their political constituents rather than providing equitable services to all community members. These issues also create moral dilemmas for the local municipality as the agent providing services, as well as the communities as their clients.

RESULTS

Service Delivery in Local Government as a Wicked Problem

Service delivery is made up of multiple networks and organisations that provide services and products to the masses (Poocharoen and Straussman 2015). According to section 152 of the Constitution (1996), the objectives of municipalities include providing basic services in a sustainable manner and promoting social and economic development through effective community engagement. Municipalities are the main agents of service delivery to their communities

since they engage communities in integrated development planning processes to prioritise the development needs of the communities (Koma 2010). The quality and quantity of services provided also depend on the service characteristics of the nature of the good and service; government failures; task-related and community service demand issues (Batley and Harris 2013). This also creates a complex relationship of interaction and interdependencies between service delivery and the social, economic, political and institutional environments in local municipalities.

According to the Auditor-General's Report (2016), only 30 municipalities out of a total of 284 municipalities achieved clean audits. This could be attributed to the challenges local municipalities are experiencing to implement service delivery programmes due to human capacity constraints, poor municipal leadership and the inability to align service delivery outcomes with performance agreements. Service delivery is also characterised by high levels of conflict, uncertainty, power distribution and both social and political complexities (Department of Cooperative Governance and Traditional Affairs 2009). Factors that complicate service delivery include, *inter alia*, a lack of resources and institutional capacity; political interference; co-operative governance; legislation; urbanisation; the underdevelopment of rural areas; corruption; a lack of accountability mechanisms, income inequalities; historic service backlogs; poor oversight; financial constraints of service beneficiaries; and the level of service offered. Kroukamp and Lues (2008) add that complexity in local government is also due to the demarcation of municipalities, which creates a gap in service delivery due to a lack of sufficient human capital with the required competencies to use new technology.

Although the national government has increased its expenditure on delivering services and more citizens are being provided with basic services, the country continues to experience service delivery protests (Govender and Pencehiah 2011; Luyt 2008). Some of the issues underlying this situation are political in-fighting, interference by politicians in the administrative functions of municipalities, senior political municipal appointments lacking the requisite skills and experience, the demarcation of wall-to-wall municipalities, poor intergovernmental relations

and poor revenue collection (The Independent on Saturday, April 2010). The Department of Cooperative Governance and Traditional Affairs (2009) has identified specific root causes and issues including systemic, legislative, political, accountability, capacity and skills that affect the proper functioning of municipalities.

According to Govender (2011), municipalities are complex systems that adapt to the continually changing demands of their stakeholders and environments, which consist of many variables with non-linear interrelationships that cannot all be described, explained and predicted with accuracy. However, in attempting to solve service delivery problems, the issues are partitioned and the claim is made that problems have been resolved, even though this could be beyond current institutional and technical capabilities. Camillus (2008) asserts that wicked problems emerge when institutions have to face constant change or unprecedented challenges, which is the case in local municipalities.

The question regarding whether service delivery is indeed a wicked problem, is now discussed based on Horn and Weber's (2007) social messes components and the root causes for poor service delivery.

In terms of there being no single "correct" view of the problem, poor service delivery could be explained by using any one of the perspectives of the different stakeholders. For example, if poor service delivery were to be attributed to systemic factors, the root causes to be chosen would include the two-tier local government structure; limited revenue; and municipal demarcation. If one considered accountability systems as contributing to poor service delivery, the root causes would be lack of performance management systems; poor oversight; and poor community participation mechanisms. In a similar manner, poor service delivery could be explained in terms of the remaining thematic and root causes for municipal performance failures. Therefore, none of the thematic factors would fully explain or resolve the poor service delivery challenges (see Rittel and Webber 1973).

The type and quality of services offered to communities are influenced by rising social movements and the demand for better democratic accountability by citizens, thus affecting the functioning of municipalities (Karuri-Sebina et al. 2009). Therefore, municipalities cannot dictate the type and level of service to be imple-

mented but they need to engage communities in this regard. Similarly, if government should prioritise a pro-poor development agenda rather than local economic development growth strategies, resources would be allocated for social welfare programmes instead of infrastructure development. Poverty alleviation rather than economic growth would then become the priority within the municipal area, and it would be strongly supported by politicians in the municipality.

Political constraints are due to the municipality being controlled by a political party which influences its efforts to ensure that the services delivered meet the needs of communities. According to the Department of Local Government and Traditional Affairs (2009), service delivery is adversely affected by political instability within the ruling party; poor inter-party relationships; interference by senior political party members in administrative functions; and a lack of communication skills. Proposals accepted by the municipal council may not be the most economical, but they are still accepted on the basis of majority support.

Economic constraints also arise from government's inability to fund the immense service backlogs inherited from the apartheid government. In terms of the communities themselves, political changes have not brought about economic benefits, since many citizens still live in abject poverty (Davids 2011). Integrated development planning is, therefore, critical to the prioritisation of service delivery programmes and the allocation of both financial and human resources. Due to the lack of engagement of communities about integrated development plans and budgets, communities perceive delays in service delivery as poor performance by the municipality (Department of Local Government and Traditional Affairs 2009).

Finally, resistance to change affects the service delivery performance of municipalities. This could be a historical factor by the use of officials from the previous government or officials not having the requisite competencies and skills to identify and deal with the real service delivery issues. Karuri-Sebina et al. (2009) comment that service delivery in South Africa has a high political profile that includes politics; technical delivery; public participation; and political interrelationships, where the government is seen as the sole provider of services to passive recipients. This notion lends itself to recipients re-

sisting having to make payments for services provided.

In view of the above discussion on the characteristics of messy problems (Horn and Weber 2007) the complex and changing municipal environment; and the numerous factors that affect service delivery, this study has deduced that service delivery is a wicked problem. To confirm that service delivery is a wicked problem, the characteristics of wicked problems proposed by Camillus (2008) are discussed.

Characteristics of Wicked Problems as Defined by Camillus

The Problem Involves Many Stakeholders with Different Values and Priorities

Communities require services immediately, irrespective of whether they can afford the services and whether the services are sustainable. However, government cannot afford to deliver the basic services to all citizens. Communities may not want to pay for services due to poverty, unemployment or their belief that they are entitled to free services as promised by the government (Fjeldstad 2004 citing Mufamadi 2002).

Generally during elections, political parties engage communities to ensure continued support by using their influence and power both in municipal structures and in the communities themselves (Department of Local Government and Traditional Affairs 2009). Political in-fighting and polarisation has adversely affected the performance of municipalities. For example, the development goals of politicians may differ from those of the municipalities, where the former might focus on their own area while municipalities may have prioritised another region for economic growth and poverty alleviation.

Provincial and national government are important stakeholders through providing support and fulfilling their oversight roles in order to ensure that services are delivered. Good co-operative government is essential for the three spheres of government to provide effective, efficient and economical service delivery. Poor co-operative government and deficient inter-governmental relations would hinder the participation of key stakeholders in service delivery, resulting in dissatisfied communities protesting and agitating for better services. Reddy (2001) and Baatjies et al. (2006) note that political will is critical for good co-operative governance.

The Issue's Roots are Complex and Entangled

The apartheid government left a legacy of poorly structured local municipalities that were unable to sustain themselves financially through a poor revenue generation base, resulting in skewed socio-economic development and service delivery backlogs in previously disadvantaged communities (Municipal Systems Act 2000). The current government needs to deliver services according to its election mandates but does not possess the financial and human resources to do so. It is thus forced to make trade-offs and difficult choices regarding competing service demands (Nengwekhulu 2009). Rampant unemployment, urbanisation and the poor development of rural areas present great socio-economic challenges to the three spheres of government.

Problems are Difficult to Grasp and Manage

Despite government delivering services to more citizens and increasing its service delivery expenditure, there continues to be service delivery protests by communities that are unhappy with the lack of progress towards service delivery and the quality of services provided (Luyt 2008). At all levels of government, poor service delivery, maladministration and corruption persist (Abrahams et al. 2009). While government cannot continue to provide services without the recovery of revenue from communities, the country has an unemployment rate of approximately forty percent and nearly half of the population live in poverty (Luyt 2008). Poor revenue collection results in service providers becoming financially unsustainable and developing greater dependence on the provincial and national government. This in turn, adversely affects the autonomy of the municipalities in operating independently as a sphere of government and delivering on their mandates. Reforms relating to decentralisation, deregulation, commercialisation and privatisation have also increased the demand for an integrated performance management system. Ultimately, the local municipality is blamed by communities for poor service as they perceive the municipalities are unable to understand and manage their service delivery needs (Davids 2011).

The Challenge Has No Precedent

South Africa is a young democracy and the Constitution has introduced fundamental prin-

ciples of equality and human dignity with which all organs of state have to comply. Local government now has to impose its autonomy in order to solve the current complex service delivery issues. However, according to Steytler (2008), municipalities' right to govern the provision of services to its communities conflicts to some extent with the oversight role of the national and provincial governments through regulation and supervision. A balance has to be achieved in terms of Section 151(3) of the Constitution, according to which the national and provincial spheres of government should not compromise or impede a local government's right to exercise its powers and to prevent mismanagement, incompetence and corruption. This has introduced the principle of co-operative government that has to deliver services to the previously disadvantaged communities, which has no precedent in the new dispensation.

There is nothing to indicate That There is a Right Answer

Government initiatives to uplift the quality of life of all its citizens have not yielded the desired results and the problems of poverty, high unemployment, corruption, a lack of funding, the absence of good accountability mechanisms and poor service delivery continue to plague the current administration (Fjeldstad 2004 citing Ajam 2000 and Johnson 1999). Reforms relating to decentralisation; deregulation; commercialisation and e-governance; privatisation; corporatisation; outsourcing; and public-private partnership seem unable to resolve the current service delivery backlogs and civil protests.

Service delivery problems are therefore intractable due, *inter alia*, to their impact on the three spheres of government; the demarcation of municipalities; restrictive legislation; poor oversight roles; and political conflict and polarisation. The problem could be viewed from different perspectives, namely from systemic, political, accountability, capacity and skills, co-operative governance and fiscal perspective. Hence a particular stakeholder may choose to deal with the problems from any one of these perspectives. The issues are also interrelated and affect society, the economy and governance. For example, the demarcation of a municipality could affect the amount of funding received from both national and provincial government, which

may in turn affect the socio-economic status of the communities within the municipalities' jurisdiction. A lack of funds also leads to poor governance due to the shortage of staff and lack of adequate capacity and skills.

The above analysis using Camillus's (2008) characteristics and Horn and Weber's (2007) social messes' components for a wicked problem confirms that service delivery is a wicked problem.

DISCUSSION

Monitoring and Evaluation in South Africa

It is worth noting that the South African Government has made tremendous progress towards developing a culture of performance monitoring and evaluation by the formation of the Ministry of Performance Monitoring and Evaluation and the development of policies and guidelines for the implementation of the national, provincial and local government monitoring and evaluation systems. Despite its intentions, monitoring and evaluation systems have not produced the desired levels of outcomes and impacts at the local government level, in particular. This could be attributed to local government being a complex institution with decentralised power that has to simultaneously deal with a myriad of issues affecting its service delivery performance.

In terms of section 152 of the Constitution, basic services need to be delivered to communities in a sustainable manner and this has been a challenge to local municipalities. Interconnected issues such as political interference; a shortage of institutional capacities; a lack of skills; financial and human constraints; low standards of service; complex geography; urbanisation; poverty; unemployment; and systemic issues have caused service delivery to become a wicked problem. Therefore, municipalities attempting to monitor and evaluate wicked problems should aim to achieve sustained behavioural change by means of collaboration with all stakeholders through the outcomes approach and systems thinking (Australian Public Service Commission 2007).

Municipal performance and local governance are affected by the lack of a clear definition of the problem or an indication of what the resolution of the problem should be. Furthermore, the

dynamics of the wicked problem enables it to change as attempts are made to manage it. In this regard, Sharp and Stock (2005) citing Rittel and Webber (1973) add that the features of wicked problems, as discussed in the previous section of this paper, affect performance and governance evaluation of municipalities due to their uniqueness, lack of complete information on the problem and the inability to clearly define the problem.

These complex issues affect both performance and good governance, resulting in poor service delivery. Here, good governance refers to the democratic government's initiatives to implement appropriate developmental goals for local socio-economic development through the effective and efficient use of resources (Cloete 2005). Furthermore, the interdependencies and interrelationships amongst these issues pose a challenge for objective evaluations to be conducted, as the causality between the service delivery factors cannot be clearly identified.

Tools to Monitor and Evaluate Wicked Problems

According to Wexler (2009), it is necessary to implement a participative and dialogue-based approach when dealing with wicked problems. Cranfield (2007) citing Blackham (2007) argues that agility, flexible innovation, rapid response and the adoption of the correct culture are critical in dealing with wicked problems. In a similar vein, Humphreys et al. (2009) propose that a collaborative synthesis in which complexity, ambiguity and context are acknowledged, would assist in dealing with wicked problems. The difficulty of resolving issues is also attributed to fragmentation forces, namely, social complexity, technical complexity and the wickedness of the problem itself, and is evidenced in stakeholders blaming each other for their inability to solve the problem (Seybold 2013).

Problem-solving Technique

As an alternate approach to deal with wicked problems, Phi et al. (2009) assert that problem structuring should be the core process when dealing with wicked problems. The problem structuring method (PSM) operates within a collaborative context in order to structure the deci-

sion-making process, which entrenches transparency and trust amongst the participants.

Firstly, the PSM framework suggests that all stakeholders need to agree that a wicked problem exists. The problem is then analysed in terms of substantive, strategic and institutional uncertainty. Substantive uncertainty relates to the quality of knowledge that is available and needs to be accepted by all stakeholders. Strategic uncertainty relates to the unexpected strategies implemented by stakeholders which also change the nature of the wicked problem, while institutional uncertainty considers the uncertainty of participants' institutional responses to clarify the problem. Due to these three types of uncertainty, the decision-making process requires intensified collaboration between the various stakeholders (Van Bueren et al. 2003).

Secondly, the pre-intervention process affords government policy-makers the opportunity to take a lead role in the solution of the wicked problem by selecting a core team and providing resources and a facilitator. Thirdly, the facilitator engages all stakeholders, in building a model for problem formulation, exploring policy options, reaching consensus and allocating responsibilities. Finally, in the post-intervention stage, joint resolutions are implemented and the outputs are monitored and evaluated. The PSM was successfully used to plan and manage the 2009 Australian World Rally Championship which involved a large number of both public and private stakeholders (Phi et al. 2009).

Dialogue Mapping

Shared understanding is defined as stakeholders adequately understanding each other's positions, being able to engage in intelligent dialogue about the different interpretations of the problem and collectively resolving the problem. The absence of shared understanding and buy-in about the problem definition, scope and goals, adversely affects the successful completion of an intervention due to the forces of fragmentation. Fragmentation refers to the different perspectives, assumptions and intentions of stakeholders that are not reconciled through shared understanding. Each stakeholder assumes that only his or her perspectives, assumptions and intentions are correct. Conklin (2006) comments that fragmentation can be ascribed to the wickedness of a problem and social complexity, which

is determined by the number and diversity of the stakeholders involved in the intervention. Seybold (2013) comments that the forces of fragmentation are increasing due to globalisation and advancing technologies and that the solution to overcome fragmentation is a shared understanding of a problem and shared commitment to finding a solution.

Dialogue mapping directs a group towards collective learning through mapping the complexity of issues involved to seek shared understanding of a problem and to create commitment towards finding a solution to the problem (Conklin 2006). It records individual submissions and ensures that every member is listened to and that each contribution is recorded. The main components of dialogue mapping, namely shared display, an argumentation scheme and active listening. Shared display involves the display of the dialogue contribution of each participant with the aid of a computer or chart as the meeting progresses. Argumentation scheme entails the use of a specific notation for sketching the line of reasoning highlighting questions, answers, pros and cons. Active listening requires a skilled communicator to map the dialogue as the meeting progresses by ensuring each participant's contributions are accurately recorded.

The desired outcome of this approach should be the effective engagement of participants by acknowledging their contributions and reflexive learning through the use of a facilitator. As a result, the command and control paradigms of management are minimised through shared display of the issues surrounding the wicked problem. This approach is appropriate when group discussions encourage learning and changing new behaviour (Australian Public Services Commission 2007; Seybold 2013) in meetings and complex social networks.

Taming of Wicked Problems

Traditionally, problems were solved by considering each problem and developing a step-by-step process to systematically define the problem, search for potential solutions and test results. The failure to recognise the wicked dynamics of a problem lends itself to the use of inappropriate methods and tools to solve the problem (Conklin 2006). According to Conklin (2006), one of the ways in which to deal with a

wicked problem is to tame the problem in the following manner:

Narrow the problem definition. The problem is described as a related problem or a sub-problem that could be solved.

Assert that the problem has been solved. This could be achieved by taming the wicked problem or asserting that it has been solved. The latter approach requires considerable authority to be successful.

Specify objective parameters by which to measure the success of the solution. The output of the tamed wicked problem is quantified and measured to determine the success of the intervention to solve the sub-problem.

Cast the problem as a similar problem that has been solved. Evidence that complicates the problem is ignored and the solutions used historically for similar problems are implemented.

Give up trying to find a good solution to the problem. Undertake the instructions as given and assert that the solution will be reviewed in the future.

Declare that there are a few possible solutions and focus on selecting from these options. The problem is formulated in “either/or terms”.

While taming a wicked problem helps stakeholders to cope with it, it also reflects on moral dilemmas, as discussed in the previous section. Taming a wicked problem could be used in situations that allow for the separation of a specific part of the wicked problem and the use of conventional problem-solving methods (Spratt 2011). For example, when considering the poverty issue, one could focus on the skills people require to become employable. Skills training could assist the unemployed person to find employment. In other words, one does not consider the state of the economy, the industry demand or the willingness of the person to work. In this way, the wicked problem of poverty is tamed even though poverty issues are not completely solved. Brinkerhoff (2014) cautions against the use of this approach since it could lead to over simplification; unclear and conflicting objectives; and fragmentation of effort.

Considering Organisational Service Delivery Strategy as a Wicked Problem

Organisational strategies determine the structure of the organisation and the policies laid down to ensure the achievement of the organisation’s vision, mission and objectives. Cam-

illus (2008) regards strategy as a wicked problem and provides the following guidelines to cope with it:

Define the Corporate Identity

Public sector organisations need to define their values and live by them; identify what service and product they provide better than similar organisations; and how the organisation measures success. Persistent poor performance, corruption, lack of capacity and poor accountability mechanisms make it difficult for an organisation to align itself as an entity that practises good governance.

Involve Stakeholders, Document Opinions and Communicate

Public sector institutions need to manage strategy and policy development processes not by being more systemic, but by utilising social planning processes which include brain storming, focus groups and retreats to identify and engage with the different stakeholder perspectives and engender a shared understanding of the problem and a joint commitment to finding ways of resolving it. Creativity and innovation are critical. The Australian Public Commission (2007) also advocates effective stakeholder engagement, holistic thinking and innovative and flexible approaches to dealing with wicked problems. Spratt (2011) argues that wicked problems are by their very nature context-specific, and involve many different perspectives. Therefore limiting the number of stakeholders engaging in the wicked problem could lead to an inappropriate choice of solution.

Focus on Action

Since the outcome of each strategy cannot accurately be determined beforehand, an organisation need not wait until a comprehensive list of options has been compiled. Rather, it needs to focus on a few outcomes and activate the process of implementing the strategy. These initial initiatives could become the catalyst to tame the defined wicked problem as advocated by Conklin (2006).

Adapt a “Feed-Forward” Orientation

Conventional planning relies on feedback, which analyses the historic performance of or-

ganisations. However, continuous change in the complex environment needs future scenarios to be developed to accommodate the wicked problem.

In the context of dealing with the management of service delivery as a wicked problem, municipalities need to enhance their identity as the main service delivery agent of government by engaging more effectively with the various stakeholders in order to develop a programme of action that includes service delivery scenarios in their integrated development plans.

Networks

Networks are broadly defined as the sustained knowledge-sharing relations between public and private organisations, groups and individuals. Networks and inter-organisational relationships emphasise the interdependencies of various stakeholders in policy formulation (Klijn 2005) and are considered as an alternative to the limitations of hierarchical and fragmented administrative systems in public policy development and delivery (Weber and Khademian 2008). Spratt (2011) also advocates a coherent approach to dealing with wicked problems by developing a shared understanding of the problem and consensus to implement the agreed-upon intervention. Batley and Harris (2013) suggest that departments within the municipality could collaborate to form networks to co-produce services.

Advantages of networks are their greater capacity to solve problems; manage shared resources; create a learning culture; and develop shared goals in a complex environment. Such networks are formed by means of existing knowledge networks which include the use of technology to effectively manage and share information (Weber and Khademian 2008). The outcomes of a network are collaborative capacity; problem-solving capacity; improved performance; and accountability (Weber and Khademian 2008).

For the full organisational transition from hierarchies to networks, Ferlie et al. (2011) assert that cross-organisational information and communication technology databases to share information, strong inter-organisational learning through joint problem solving and a shift from vertical management to lateral leadership are required. For these networks to be effective in dealing with wicked problems, they would require simultaneous changes to their struc-

ture, organisational capability and interactive processes.

Due to exclusivity, key stakeholders could be excluded from the policy formulation and implementation processes, resulting in groupthink due to the closeness of the selected actors in the network (Klijn 2005). To avoid a lack of learning through exclusivity and group-think, a systemic intervention has to be implemented by including as many stakeholders as possible when developing and implementing policies. Therefore, networking is crucial for linking national, provincial and local government monitoring and evaluation systems, e-governance and e-service across the public sector.

Public Sector Strategies for Dealing with Wicked Problems

According to Roberts (2000) public officials and managers use three generic coping strategies when dealing with wicked problems, namely:

Authoritative Strategy

Stakeholders with authority are allowed to define the problem and provide a solution with the remaining stakeholders agreeing to abide by the decision. This is also considered to be a taming strategy, since it reduces the complexity by limiting the number of stakeholders involved in the problem-solving process. However, people in authority may be found wanting in their definition of a problem or in their recommendations of solutions.

Competitive Strategy

This evolves from the win-lose mind-set of stakeholders. Power is used to garner support for a particular perspective over competing perspectives. Once he or she wins, the concentration of power enables the stakeholder to deal with the wicked problem in an authoritative manner. Competitive strategy introduces innovation and creativity in attempting to resolve a problem and may force stakeholders to behave in an unethical and immoral manner.

Collaborative Strategy

This strategy is embedded in a win-win scenario, in which stakeholders' perspectives are considered and evaluated in the context of the wicked problem. Collaborative efforts could also

result in better products and services, reduced liability and costs, while the transaction costs of solving the problem increases due to the engagement of more stakeholders.

It may be added that the authoritative strategy is aligned to the taming of a wicked problem, while the collaborative strategy could include the problem-solving technique, dialogue mapping and networks. Head and Alford (2015) assert that the collaborative strategy are generally the best approach to tackling wicked problems. The competitive strategy is indicative of the manner in which the public sector is currently managed, where political interference in administrative functions has led to poor service delivery performance and it should be discouraged (Department of Local Government and Traditional Affairs 2009).

The successful implementation of these strategies requires the public sector officials and leaders to have the necessary resources and skills (Waddock 2013). In this regards, the Australian Public Services Commission (2007) identifies the following critical skills for the use of the collaborative approach to wicked problems, namely, holistic and systems thinking and strategies; innovation, flexibility and adaptation; building a shared learning culture; working across organisational and departmental boundaries; toleration of uncertainty and a long-term focus; engaging a wide range of stakeholders and communities in a meaningful way; re-configuration of accountability frameworks and measures; and expanding the new skills set for employees; including an improved understanding of behaviour change. Head and Alford (2015) suggests that systems thinking; managing information and change; building commitment and engaging stakeholders are important skills for dealing with wicked problems.

The above skills set could also aid in resolving the complex issues causing poor service delivery performance in municipalities. While the provision of skills and resources depends on organisational leaders, poor service delivery in South Africa is also due to a lack of political will, inadequate leadership, management weaknesses and inappropriate institutional design (Engel and Ajam 2010). To overcome these challenges, Alban-Metcalf and Alimo-Metcalf (2010) assert that integrative leadership is crucial for management to deal with wicked problems by grouping different stakeholders in a semi-permanent

way to achieve a common good. The leadership skills required for managing wicked problems include personal skills and knowledge; people skills; transactional and transformational skills; and policy and programme knowledge (Beinecke 2009). This means that leaders need to take cognisance of the contexts within which they operate, as well as the constraints, structure and governance, the nature of problems, outcomes and accountabilities to bring about innovation and collective learning (Alban-Metcalf and Alimo-Metcalf 2010 citing Crosby and Bryson 2010; Real World Group 2010).

CONCLUSION

Public policy development has evolved from a hierarchical to a lateral process in which heterogeneous stakeholder perspectives are considered through a collaborative process due to the existence of wicked problems. The main characteristics of wicked problems are that they cannot be clearly defined; have no single right solution; involve a large number of stakeholders; evolve as solutions are implemented; and entail high levels of conflict, uncertainty and power distribution.

Municipalities are complex adaptive systems whose primary purpose is to enhance the quality of life of their citizens through service delivery. The service delivery performances of municipalities have been adversely affected by a number of complex and interrelated factors including, social, political, technological, economical and extensive information communication networks. All these suggests that political and administrative office bearers need to review the mechanisms used to deal with the management of service delivery as a wicked problem. Mechanisms to monitor and evaluate wicked problems include dialogue mapping, collaborations, problem structuring, taming and the use of networks. The successful implementation of a collaborative approach of developing networks and partnerships to structure the wicked problem requires integrative leadership.

RECOMMENDATIONS

To better understand the contexts in which services are delivered, the monitoring and evaluation process firstly requires clarifying and “living” the organisation’s value statements to en-

sure that stakeholders abide by the service delivery principles. Secondly, problem solvers need to acknowledge that service delivery is a wicked problem in order to agree on the perspectives and tools to be adopted when tackling the wicked problem. Thirdly, networks and partnerships have to be developed to share experience, expertise and new knowledge gained during the intervention. Fourthly, a monitoring and evaluation system should be developed that includes the relevant baseline data, indicators and targets to be achieved. Finally, the outputs, outcomes and impacts have to be evaluated against the agreed objectives after considering systemic and stakeholder conditionality changes. To give effect to improved service delivery, both political and administrative leaders need to collaboratively deal with wicked problems, even if the specific tools used to manage wicked problems may not yield the desired outcomes.

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