The Evaluation of Municipal Electronic Government Capacity and Service Delivery at Ngaka Modiri Molema District Municipality

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Abstract

This study investigated the efficiency of municipal service delivery experienced by the community and the e-Government effectiveness in Ngaka Modiri Molema District Municipality. It highlights problems relating to municipal incompetency, and service delivery backlogs. Segments of the community remain economically inactive and municipal capacity is the catalyst of the whole scenario. The sample consisted of Ngaka Modiri Molema District Municipality employees and the data was collected using questionnaires. The findings of this study provide a point of departure for the evaluation of municipal e-Government service delivery at the municipality and indicate that there is a lack of competence by staff members and ineffectiveness in the e-Government service. The District Municipality management should explore opportunities that ensure that training and development are provided to municipal staff to improve capacity and competency and also explore the opportunity to increase e-Government efficiency and effectiveness.

Keywords: effectiveness, electronic government capacity, lack of competency, service delivery, municipal incompetency

Introduction

Section 151 of the Republic of South Africa Constitution Act 1996 (Act 108 of 1996), provides for the establishment of municipalities, with the executive and legislative authority vested in its council. A municipality governs the affairs of the community. The ability of a municipality to perform its functions may not be compromised or impeded by the national or provincial governments as part of affirmative action (Smith 2005: 16 - 17, — unreviewed).

According to Kaisara and Pather (2011: 1), the Internet has become an integral part of the information society with an ever-increasing role in areas of education, professional sectors, recreation, social networking and in myriad other areas of life. As a result, the capacity of modern organisation is influenced by the way in which it is able to harness the benefits of the Internet.

Problem Statement

The study aims to determine by what means e-government capacity will assist in the improvement of municipal service delivery. Blom-Hansen *et al.* (2016) show that recurring episodes of local protests are testimony to the shortcomings of municipal services. Local government constraints are as a result of a scarcity of technical skills, recruitment and retaining of staff, e-Government inefficiency and inappropriate handling of resources.

Research conducted by Alcayna *et al.* (2016) indicate that in general most national and provincial departments with supervisory and regulatory responsibilities over municipalities are not playing their role of ensuring that standards and processes for monitoring and supervision are implemented.

Research Questions

The research questions to be investigated are:

- i. What determines efficiency and deficiency in municipal service delivery?
- ii. To what extent is the municipality capable and competent?
- iii. What determines good quality municipal service delivery?
- iv. What determines the efficiency and effectiveness of electronic Government (e-Government) system?

Literature Review

Local Government and Capacity Building

Simmons *et al.* (2011: 4) highlight that to define capacity building invites statements, definitions, theory and practice ranging from technical skills development to institutional development. Renfors (2019) defines competency as a combination of training, knowledge, skills and effectiveness.

E-Government

Panayiotou and Stavrou (2019) define e-Government as government's use of technology, particularly web-based Internet applications, to enhance the access and delivery of government information and service to citizens, business partners, employees, and government entities.

Capacity and Competency

Jitsing *et al.* (2019: 21) highlight that the positive progress and success of the local government system in South Africa is being overwhelmed by a range of factors. Van der Waldt *et al.* (2018: 173) state that the capacity in local government is demonstrated by a lack of financial resources to meet service delivery and staff vacancies, and municipalities have to be competent.

Van der Waldt *et al.* (2018) mentions that the National Capacity Building Framework identified capacity constraints within local government as a lack of competency. This can lead to the inability to do tasks, poorly defined job descriptions, recruitment and selection of staff not in line with job descriptions and an inadequate knowledge and information base within municipalities and behaviour.

Johnstone and Blenkinsopp (2017) state that existing government training institutions are overburdened with the rising demand in terms of capacity and capability. A study conducted by Mohr *et al.* (2012: 895) revealed that rural governments were run by volunteers and a small staff of employees. Mohr *et al.* (2010: 894–895) further highlight that units of governments have difficulty negotiating, monitoring, and enforcing contracts. This capacity in turn, is linked to organisational performance.

Skills in Local Government

Damasceno Cunho et al. (2018) forecasted that the nation was poised for a

workforce crisis and that the government was likely to feel the crisis because of the high proportion of older employees leaving the workplace and demand for knowledge by workers. According to Jindal *et al.* (2016), various organisations build skills in diverse areas, including leadership, financial management, local economic development, participatory planning, budgeting and conflict management to impact performance and effectiveness.

Van der Waldt *et al.* (2018: 5–43) highlight that there is a large increase in the demand for skills due to the transformation and restructuring agenda of the local government sector, increased focus on the sector as an implementation agent for national policies, necessity to eradicate service delivery backlogs and high staff turnover, the transformation of human resource management practices, and employment equity considerations. Furthermore, Van der Waldt *et al.* (2018) note that despite problems with the attraction and retention of high-level skills, very little evidence is found on strategies to address problems across the local government sector.

Learning and Training

According to Kachali *et al.* (2018), acknowledging that the learning process is important when building capacity to handle crises. Kachali *et al.* (2018) went on to state that a response to a crisis is benefited by individuals having adequate skills and knowledge of resources, actors and relations needed to solve the specific crisis situation.

Van der Waldt *et al.* (2018) indicated that there is a weakness in the overall management of training, as demonstrated by the little consideration given to workplace training and the development of policies and procedures. In addition, although trainings do take place in the local government sector, much of this training is piecemeal, ad hoc and does not lead to full qualifications.

Efficiency and Performance

There is a need to ensure that municipalities are responsive, efficient, and effective and provide value for money with the allocated public resources (CoGTA 2009:6). According to Van der Waldt *et al.* (2018) performance areas are governance and democracy, municipal transformation and institutional development, municipal financial viability and management, etc. The public

choice approach is often characterized by a 'leviathan' view of government, which argues that government monopoly over the people leads to overproduction and inefficiency (Mohr *et al.* 2010: 894).

Service Quality and Delivery

In terms of Act 32, Section 73, (RSA 2000), Local Government: Municipal Systems, the municipality must give effect to the provision of the Constitution and give priority to the basic needs. Therefore, municipalities must be accessible, provided with economic, efficient and effective resources, financially sustainable, environmentally sustainable, and regularly reviewed with a view to upgrading, extension and improvement.

Service delivery is hampered not only by staff vacancies, but also by the lack of standards guiding the appointment of staff, the allocation of numbers and types of posts against service delivery standards and targets (Van der Waldt *et al.* 2018). The South African Constitution stipulates that the local government is the agent that must promote social and economic development in their community.

Local government needs to understand the perceptions of performance on service quality dimensions and its influence on satisfaction levels (Nishant *et al.* 2019). Customer orientation is one of the important ways in which governments attempt to improve the quality of services (Lal *et al.* 2018: 95).

The Auditing Standards specify that the evidence of service quality should be covered by measuring stakeholder or customer perception (eye of the customer) and technical quality (measures that reflect the eye of the expert) (Brusca & Montesinos 2016). Lee *et al.* (2011: 2) further explain that e-Government service depends on the perceived quality of services provided through on-line channels, because the business user's prior interactions with government through off-line service channels.

Cost and Financial Resources

Damasceno *et al.* (2018) indicate that turnover without planning can lead to increased costs, lack of continuity, and immediate negative effects on organisations. Kaisara and Pather (2011: 2) assert that long term cost-saving and improved service quality are the benefits that could be accrued by implementing e-Government.

Meyer and Meyer (2016) highlight that the financial aspects of municipal services primarily concern the revenues and expenditures of service providers. Expenditures include costs incurred in the process of producing services and delivering them to customers, while revenues entail the different sources of income tariffs and other user charges, loans, bonds, equity investment, municipal subsidies, and intergovernmental transfers that are used to cover costs (Meyer & Meyer 2016).

Furthermore, poor financial management, lack of control and accountability systems impact negatively on service delivery for communities (Jitsing *et al.* 2019: 54–55). Local government has considerable financial powers, including the right to raise income through property taxes and user charges for services (Van der Waldt *et al.* 2018: 6). One of the objectives of e-Government is to make the government and its policies more efficient, providing citizens with quicker and better access to public information and the ability to use services in a more personal and cost-effective manner (Ibrahim *et al.* 2016).

E-Government

E-Government initiatives can refocus attention to a number of issues such as to collaborate more effectively across agencies and tiers of public administration, and to enhance customer focus. Lal *et al.* (2018: 90) state that the e-Government has the opportunity to develop comprehensive and more effective policies and implementing strategies.

Government can use Information Technology (IT) to improve efficiency and streamline its operations, and that it is with urgency that government should adopt and use IT to modernize services, improve administration and efficiency (Kaisara & Pather 2011: 3). e-Government provides services to business, government employees and citizens (Saleh *et al.* 2019). Lal *et al.* (2018) assert that e-Government is a catalyst or tool for government administrative reform. Proponents often promise the outcome of better government, including improved quality of services, reduced costs, wider political participation or more effective policies and programs.

New possibilities offered by IT give government an opportunity to think of ways to work and provide services to citizens and businesses (Ibrahim *et al.* 2016). Lee *et al.* (2011: 1) argue that e-Government primarily using Web technology is rapidly being adopted by governments at all levels, but the adoption by citizens and businesses has been relatively slow.

Lee *et al.* (2011: 3–7) argue that e-Government provides better benefits than off-line services. Local governments need to confront the demanding challenges related to their ability to provide next generation e-Government services. The shortage of IT workers is ranked as the number one barrier to e-Government (Lee *et al.* 2011: 3–7). Kaisara and Pather (2011: 7–9) assert that failure to understand citizens' concerns risks alienating citizens who might not be satisfied with -Government services. Furthermore, e-Government requires a concomitant set of on-line service delivery principles.

Lal *et al.* (2018:95) highlight that e-Government is not just about designing smart IT policies or functional systems; it is also about coordination between projects active at all levels. Furthermore, Lal *et al.* (2018) state that e-Government is a broad concept encompassing service delivery and transforming government and democratic opportunities. Kaisara and Pather (2011: 7) found that e-Government websites have invalid e-mail addresses, notably do not respond to queries as received, nor are automated responses used.

Research Methodology

Ngaka Modiri Molema District Municipality is the municipality in the North West province in South Africa of which Mafikeng is the capital of the province

https://en.wikipedia.org/wiki/Ngaka_Modiri_Molema_District_Municipality.

This municipality was selected as this district has ongoing problems with service delivery and the researcher was grated the opportunity to assist in determining opportunities for improvement.

Saunders *et al.* (2007) argue that quantitative research is predominately used as a synonym for any data collection technique (such as a questionnaire) or data analysis procedure (such as graphs or statistics) that generates or uses numerical data. The study will use a quantitative research method to obtain the respondent's perspective (Frey & Dishi 1995: 4). SPSS and descriptive statistics will be applied to analyse the data.

The researchers used questionnaires to collect data from 165 respondents selected from Ngaka Modiri Molema District Municipal office, using simple random sampling. The data will be gathered by using face-to-face interviews after obtaining the required permissions and ethical clearance from all parties concerned.

Discussion of the Results

The purpose of this study was to seek ways to improve the quality and efficiency of the municipal services, contribute to e-Government service and enhance capacity of service delivery implementation.

A sample of 165 representing the senior and middle management and aspects of the work force of the municipality, was approached (population of 2 000), and only 160 responded (response rate 80%), 52% were males, this is not representative and results should be checked if this research were to be used in future. The sample breakdown is considered as representative of Ngaka Modiri Molema District Municipality.

Of the 160 respondents, 42 (26%) were aged 21–30 years, 40 (25%) were aged 31–40 years, 35 (22%) were aged 41–50 years, while 30 (19%) were aged 51–60 years, 10 (6%) were above 60 years of age. The differences in ages assumes a balance of skills, knowledge and work experience, which in this case, can be regarded as an appropriate mixture. Out of the total sample of 160 approached, 83 (52%) were males and 48% were females. Preference was not given according to gender. The almost equal balance of genders may be due to the application of employment equity legislation as shown in the theory.

The research data showed that most of the respondents were occupying supervisory or managerial positions. Out of 160 respondents, the majority of respondents were qualified (in accordance with government regulations). However, education cannot be used as a differentiating factor; working for the municipality should require a higher level of education (figure 4). The data illustrates that 91% of the respondents were satisfied with the municipal service delivery. Bush and Glover (2016) assert that effectiveness means acquiring necessary knowledge, skills and attitudes that can be applied to the job situation.

The majority of the respondents (91%), indicate that the municipality has the ability to provide service to the community. This suggests that the respondents are satisfied with the municipal ability to render service to the local community. According to the relevant Sector Skills Plan (2010: 18–19), the capacity constraints within local government are due to a lack of competency which may lead to an inability to perform municipal functions.

Out of the total sample of 160 approached, 85 (53%) of the respondents indicated being satisfied with the adequacy of training and development provided by the municipality. The research suggests there may be a short-coming

in municipality training that requires attention. van der Waldt *et al.* (2018) highlighted that the problem with acquiring skills in municipalities is the lack of experience within local government. A study conducted by Blom-Hansen *et al.* (2016) indicates that the lack of competence is one of local constraints.

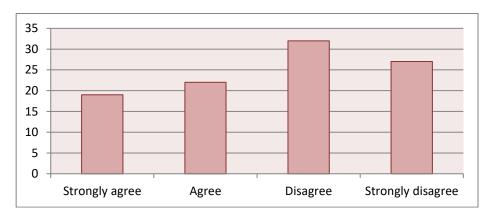


Figure 1: Recruitment and selection process application in the local government under investigation (question on questionnaire)

Figure 1 (y axis- number of respondents and x-axis their reaction to recruitment) shows that 95 (59%) were dissatisfied with the way recruitment and selection are applied and conducted. The research suggests that recruitment and selection is limited within the Ngaka Modiri Molema Municipality thus external, more appropriately suited candidates are not sourced. Van der Waldt *et al.* (2010: 17) highlight that service delivery is hampered by staff vacancies and the lack of norms and standards guiding the appointment of staff within municipalities. Jitsing *et al.* (2019: 66) assert that political influence in the appointment of employees, at the expense of technical competence is not conducive to attracting and retaining talented professionals.

The data indicates that a number of respondents were completely dissatisfied with the municipal staff's knowledge and skills in providing the required service. The research explicates that there is a shortage of skills to provide services to the community. Kachali *et al.* (2018) state that a well-functioning response to a crisis is benefited by individuals having adequate skills and knowledge of resources.

Figure 2 (y axis- number of respondents and x-axis their reaction to of upholding the principle of service delivery) shows that the respondents were satisfied with the municipal culture of upholding the principle of service delivery. The study interprets that municipal culture has limitations in upholding the principle of service delivery. The Sector Skills Plan (2010: 18–19) identifies certain constraints in local government such as a lack of service orientated attitude and behaviour and an organisational culture that does not uphold the principles of service delivery. Ibrahim *et al.* (2016) assert that service delivery must provide greater satisfaction with higher efficiency. The data indicates that the 69% of respondents were happy about the output of service delivery to the community. The authors therefore suggest that the quality of service delivered by the municipality is lacking. This is in line with Ibrahim *et al.* 's (2016) finding that user dissatisfaction with the low quality of service provision has become a political issue.

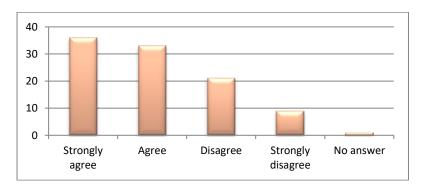


Figure 2: Municipal organisational culture of upholding the principle of service delivery (question on questionnaire)

Figure 3 (y axis- number of respondents and x-axis their reaction to better service in terms of quality [strongly agree and agree added together] indicates that 61% of the respondents are satisfied with e-Government system in terms of the quality of service delivery. The research explicates that e-Government is effective in ensuring service delivery to the community. Ibrahim *et al.* (2016) indicate that enhanced quality of service provision is a major component of public administration, and the use of IT to generate improvements is a primary driver for e-Government activity.

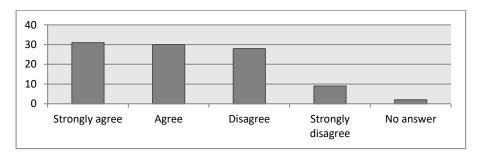


Figure 3: e-Government ensuring better quality when they deliver a service (a research question)

Also, out of the sample of 160 respondents, 82% presume that e-Government service enhances access and service delivery during the analysis of the questionnaires. This indicates that e-Government has some freedom towards improving access and service delivery. Kaisara and Pather (2011: 7–9) assert that failure to understand citizens' concerns risks alienating citizens who might not be satisfied with e-Government services, and that e-Government requires a concomitant set of online service delivery principles.

The data show that 68% of the respondents presume e-Government service to be efficient. The Department of Communications (2010) highlight that the role of IT is to improve efficiency and streamline operations and that government should adopt and use IT in order to modernise services, improve administration and efficiency.

Associative Statistics

The Spearman correlation between age and number of years at the municipality was 0.961. This can be interpreted that age and length of service does not impact on municipal service delivery. The correlation between age and gender is 0.928. The interpretation could be done that gender has no impact on municipal service delivery as the study is dealing with this aspect. The correlation between age and qualifications is 0.947. This implies that the respondents perceive no barrier in relation to age and qualifications to deliver services.

The correlation between age and provision of high-level expertise by staff in delivering services is 0.941. This could be interpreted that the respondents perceive municipal staff as being good at service delivery. The corre-

lation between age and organisational culture upholding principle of service delivery is 0.935. This implies that upholding culture has no impact on service delivery.

The correlation between age and community understanding the role of service is 0.927. The authors looked at assoiciation, cause and effect while interpreting the data. This impact of this implies that the respondents are satisfied with the community awareness of service delivery. The correlation between number of years at municipality and qualification is 0.961. This implies that the respondents are satisfied with the level of education of the municipal staff as it does not impact service delivery. The correlation between number of years at the municipality and sufficiency and competency of municipal leaders to fulfil their roles is 0.945. This implies that the respondents consider the municipality capable of delivering good service.

The correlation between number of years at the municipality and municipal organisational culture is 0.936. This could be interpreted as the respondents' perception that municipal organisational culture does not impact service delivery. The correlation between number of years at the municipality and e-Government service is 0.93. This could be interpreted that respondents perceive e-Government to be efficient and it does not have an impact on municipal service delivery.

The correlation between sufficiency and competence of municipality leaders to fulfil their roles and age is 0.929. This could be interpreted that the respondents view municipal leaders to have the relevant skills and capability to fulfil their roles. The correlation between sufficiency and competence of municipality leaders to fulfil their roles and the number of years at the municipality is 0.945. This implies that the competence of municipality leaders to fulfil their roles has no impact on municipal service delivery. The correlation between the recruitment and selection process is appropriately applied and the number of years at the municipality is 0.936. This suggests that the respondents perceived the recruitment process as being adequately applied and that it impacts service delivery.

The correlation between the recruitment and selection process is appropriately applied and municipal staff providing high level of expertise in delivering the required services to the community is 0.922. This could be interpreted that the recruitment and selection is properly followed and staff have the skills to provide service to the community. The correlation between the recruitment and selection process is applied and community satisfaction is

0.928. This implies that the respondents were satisfied with the recruitment and selection process and the degree of service provided.

The correlation between the recruitment and selection process is applied and municipality have sufficiently trained IT personnel is 0.941. This implies that the recruitment and selection process is applied and that the IT personnel are trained to execute their duties. The correlation between the age of respondents and municipal staff providing expertise in delivering the required services to the community is 0.941. This suggests that that the municipal staff providing expertise in delivering the required services to the community and age has an impact on service delivery.

The correlation between the municipal staff providing a high level of expertise in delivering the required services to the community and municipal organisational culture upholds the principle of service delivery is 0.984. This can be interpreted that the municipal staff are competent and knowledgeable in providing the municipal service delivery and that the organisational culture is upheld at the same time.

The correlation between 'the staff has the required knowledge and skills to provide the required services to the community' and 'the municipality has sufficiently trained IT personnel' is 0.924. This could be interpreted that the respondents perceive the municipal staff as sufficiently trained to provide the required services. The correlation between municipal organisational cultures upholding the principle of service delivery and age is 0.935. This suggests that the municipal culture is upheld by the municipality and age has no impact on municipal service delivery.

The correlation between 'the municipal organisational culture upholds the principle of service delivery' and 'municipal staff providing high level of expertise in delivering the required services to the community is 0.984'. This implies that the respondents are satisfied by the municipal organisational culture to provide service delivery to the community.

The correlation between community understanding the role of IT service and community satisfaction to the quality of service delivery is 0.924. This suggests that the respondents perceive the community understanding the role of IT. The correlation between community understands the role of IT service and municipality have sufficiently trained IT personnel is 0.950. This implies that the respondents presume the community understanding the role of IT service and that the municipal IT personnel are competent and qualified.

The correlation between 'e-Government services are efficient' and

'municipal staff provide high level of expertise in delivering the required services to the community' is 0.974. This could be interpreted to mean that the respondents presume e-Government to be sufficient and relevant and that the municipal staff are qualified to execute their functions. The correlation between 'e-Government services are efficient' and 'municipal organisational culture upholds the principle of service delivery' is 0.971. This suggests that the respondents perceive the e-Government service as efficient and the municipality as upholding service delivery.

Conclusion and Recommendations Response to Research Questions

The main findings of this research in relation to each research question will now be discussed.

What determines efficiency and deficiency in municipal service delivery?

Local government struggles to provide services to citizens, and the provision of poor services erodes trust (Meyer & Meyer 2016). It was found that the most frequent response on determining factors of efficiency and deficiency in municipal service delivery was that the municipal service delivery was adequate and efficient. The notion is supported by data that the respondents perceived municipal staff as possessing the required expertise to provide community service and perceived e-Government as efficient. This is contrary to findings (above) that highlighted that most of the respondents were unhappy with the output of service from the municipality.

An analysis of the data found that most of the respondents perceive the municipality as being capable of providing the required services to the local community. The analysis reveals that the majority of respondents perceive the municipal staff having the required expertise to provide service. Furthermore, it was found that the majority of the respondents were happy with training and development, while 47% were highly dissatisfied with the training and development within the municipality. However, the analysis of data illustrated that the majority of respondents were dissatisfied with the municipal knowledge and skills, and perceive the IT personnel to be inadequately trained.

According to the Sector Skill Plan (2010: 18–19) the National Capacity Building Framework identified the capacity constraints within local government as having inadequate technical skills and knowledge in functional areas and an inadequate information base within municipalities.

Lastly, it was found that most of the respondents suggested that the municipal leaders were sufficiently and competently skilled to provide service delivery. The correlation between the sufficiency and competence of municipality leaders to fulfil their roles and age was 0.929. This implies that the respondents perceive the municipality as being capable; however, they are not satisfied with training and development provided by the municipality.

The research concludes that respondents are satisfied with the municipal service delivery and consider the municipality as being capable and efficient. Management should explore the opportunity to ensure further training and development of municipal staff to ensure that they are competent to deliver high quality services to the community.

To what extent is the municipality capable and competent?

Research conducted by Jitsing *et al.* (2019: 21) further highlights that the overall positive progress and success of the local government system in South Africa is increasingly overwhelmed by a range of factors and negative practices both internal and external to municipalities. These factors apply to poor governance, service delivery failures and their capacity and performance.

Figures support the notion that respondents perceived the municipal service delivery as being both adequate and efficient. This capacity, in turn, is linked to overall organisational performance.

It was found that the majority of respondents perceived the municipal staff as having the required expertise to provide service to the community, while a small number of respondents did not concur Furthermore, it was found that the majority of respondents were dissatisfied with the municipal staff knowledge and skills to provide the required service to the community, while a few respondents were satisfied with the municipal staff knowledge and skills.

Zhu *et al.* (2017) concur that the problem with skills shortages is that it is actually a systematic industry problem. The correlation between the staff having the necessary knowledge and skills to provide the required services to the community, and the municipality having sufficiently trained IT personnel was 0.924. In a study conducted by Blom-Hansen *et al.* (2016) in Pretoria the

authors highlighted that effective municipality is a function of a combination of technical skills, material resources and civic engagement.

Results from the study showed that the majority of respondents were satisfied with the municipal organisational culture of upholding the principle of service delivery, while a small but significant number of respondents was dissatisfied with the municipal organisational culture. Of the respondents, 83% were satisfied with the municipal service delivery. However, 69% of respondents were dissatisfied with the service delivery quality. The correlation between municipal organisational culture upholding the principle of service delivery and the municipal staff providing high level of expertise in delivering the required services to the community was 0.984.

This implies that the respondents were dissatisfied with the capacity and competency of the Ngaka Modiri Molema District Municipality. The research concludes that respondents were not satisfied with the municipal capability and competency. The management should explore ways of ensuring improvement in capacity and competency, to provide the required service to the community.

What determines good quality municipal service delivery?

Municipalities struggle with strategies of providing affordable services to citizens in a sustainable way (Meyer & Meyer 2016: 1–3). The present study found that 69% of respondents were dissatisfied with the service delivery, while 30% were satisfied with the quality of service provided. Most of the respondents were dissatisfied with the level of awareness provided to the community by the Municipality's IT service. However, the majority of respondents were satisfied with the training and development provided at the municipality and perceived municipal leaders as sufficiently skilled and competent.

Kaisara and Pather (2011:7-9) assert that failure to understand citizens' concerns risks alienating citizens who might not be satisfied with e-Government services. Furthermore, e-Government requires a concomitant set of on-line service delivery principles. It was found that 61% of the respondents are satisfied with e-Government system in terms of quality and ensuring service delivery. The majority of respondents suggested that the e-Government was efficient and enhanced access and service delivery.

Of the respondents, 83% were satisfied with the municipal staff's

understanding of the legal framework. The correlation between staff understanding the local government legal framework and sufficiency, and the competency of municipal leaders to fulfil their roles was 0.928, a positive correlation between the two variables. Alcayna *et al.* (2016) indicate that the mandate, motivation, and means to provide the services required and needed by local citizens in a manner that is responsive to changes in requirements and needs over time, must be responsive to the differing requirements and needs of groups of citizens within the community.

This implies that the respondents perceived the municipality as providing good quality service, despite some limitation in the service quality. The research concludes that the respondents were happy with the quality of service that was being rendered to the community, despite certain constraints in the delivery of high quality service. The management should ensure a continued and sustained improvement in the quality of service rendered to the community.

What determines the efficiency and effectiveness of the electronic Government (E-Government) system?

Panayiotou and Stavrou (2019: 209) assert that e-Government is enabling organisations to provide better services to their constituents. It was found that the majority of respondents (69%) perceived e-Government service as enhancing access and service delivery, and a small number of respondents were dissatisfied with e-Government's inability to improve access and service delivery. Thomas (2017) states that e-Government is the use of technology to enhance the access to, and delivery of government services to benefit citizens, business partners and employees.

An analysis found that the majority of respondents were not satisfied with the level of awareness by the community and the role of IT services. This implies that there is a barrier to IT service awareness. Most of the respondents were also unhappy with the output and quality of service delivery. The correlation between e-Government ensuring better services in terms of quality and the municipality having sufficiently trained IT personnel was 0.943.

It was found that the majority of respondents perceived e-Government service as being efficient, while a small number perceived that it as inefficient. It was found that the majority of respondents were happy with training and development provided by the municipality. The correlation between the municipality having sufficiently trained IT personnel and e-Government service

being efficient was 0.950. Ibrahim *et al.* (2016) assert that new possibilities offered by IT give governments opportunities to think of ways to work and provide services to citizens and businesses.

This implies that the respondents were not satisfied with efficiency of the e-Government system. The research concludes that the respondents were dissatisfied with the e-Government efficiency and effectiveness. The management should focus on raising awareness of e-Government and ensure that the IT personnel are adequately trained to improve service delivery.

Recommendations

The recommendations, based on the discussions are as follows.

Millar and Doherty (2016) state that capacity building should be promoted as a way to enhance effectiveness and sustainability. Capacity building has become an important tool in supporting local government. According to Act 209 of 1993, Local Government Transition Act, which is the statutory legislation, local government is the form of government that is closest to the people, and necessary to ensure that the needs of its community are adequately provided for, through the provision of services such as health, water, housing, sanitation and electricity, classed as essential services.

On the discussion of capacity and competency, the municipality should explore opportunities to improve their recruitment and selection process and ensure that it is appropriately applied to ensure fairness.

On the discussion of skills in local government, the municipality should explore opportunity to improve training and development to increase knowledge and skills of the municipal staff. It was found that 47% of the respondents were unhappy with the training and development provided by the municipality. This implies that there are serious constraints associated training and development and this requires attention. Ndevu and Muller (2017) assert that it is imperative for municipalities to constantly change and review the way services are rendered, in order to remain relevant and effective. An institutional culture of learning should be developed to any process change. Employees should be empowered through continuous learning, training and development. Training systems within local government are poorly developed and training committees are often poorly capacitated. The analyses found that the majority of the respondents were dissatisfied with the municipal staff knowledge and

skills in providing the service to the community. This implies that there is a shortage of skills within the municipality.

The municipality should explore opportunities to improve municipal systems and operations to enhance the delivery of quality of service to the community. Smith (2005:3) argues that in order for municipalities to deliver services effectively and efficiently, they have to build partnerships with the private sector, especially where municipalities deliver a wide range of diversified municipal services to their local communities within their area of jurisdiction. Meyer and Meyer (2016: 1–3) provides that quality municipal services support the economic development of municipalities, while poor levels of service, interruptions, low coverage levels, and other problems undermine quality of life in municipalities, retard economic growth, and erode trust between citizens and local governments.

Singhal *et al.* (2017) state that service quality is considered a critical measure of organisational performance. It was found that the majority of the respondents were satisfied with the municipal leader's sufficiency and competency, while the minority of respondents were unhappy with the municipal leader's sufficiency and competence. The majority of respondents were happy with the municipal organisational culture of upholding the principle of service delivery, and the difference in the percentage of the respondents that were discontent was less. It was also found that 69% of the respondents were unhappy with the quality of service being rendered to the community which makes for a dissatisfied community.

. Panayiotou and Stavrou (2019) argue that e-Government does not simply have to be the application of new technologies but has the potential to be a strategy for delivering more effective and efficient services.

Saleh *et al.* (2019) assert that technology helps governments to achieve some important goals through websites that provide convenient and accessible information to citizens. Lal *et al.* (2018: 89) highlight that e-Government is a catalyst or tool for government administrative reform. Proponents often promise the outcome of better government, and improved quality of services, cost savings, wider political participation or more effective policies and programs. For Saleh *et al.* (2019), providing quality e-Government services to citizens makes interactions between citizens and government agencies smoother, easier, and more efficient. Lee *et al.* (2011: 1) argue that e-Government primarily using Web technologies has been rapidly adopted by governments at all levels, but the adoption by citizens and businesses has been relatively slow.

Conclusion

Local government face stress of economic downturn or stagnation and are struggling to maintain service levels. Furthermore, they must cope with population growth and additional service demands. In-order to enable municipalities to carry out their responsibilities, local government need to transform the service delivery through a process of restructuring. e-Government is critical for meeting expectations for interaction with administration and enables agencies to align efforts as needed, to significantly improve service.

The findings of this study provide a point of departure for the evaluation of municipal e-Government capacity and service delivery at Ngaka Modiri Molema District Municipality.

The findings support the notion that local government is poised for a workforce crisis. Also, that skills and knowledge is critical to provide quality services. The findings further support the fact that service quality has been proven to be a suitable indicator of IT effectiveness, the assessment of service quality in the public sector has been less studied. The findings allude to the raising awareness about e-Government as being crucial and many citizens do not know which services actually exist. Lack of awareness of services prevents citizens from becoming familiar with the added value that electronic public services could offer in their everyday lives.

A final conclusion can be made that e-Government capacity and municipal service delivery can be identified as municipal incapacity and incompetency, and inefficiency of e-Government system. The results highlight the need for Ngaka Modiri Molema District Municipality management to explore opportunities that ensure that training and development is provided to municipal staff to improve capacity and competency.

References

Alcayna, T., V. Bollettino, P. Dy & P. Vinck 2016. Resilience and Disaster Trends in the Philippines: Opportunities for National and Local Capacity Building. *PLoS Currents* 8.

https://doi.org/10.1371/currents.dis.4a0bc960866e53bd6357ac135d740846 PMid:27790382 PMCid:PMC5061578.

Bakunzibake, P., G.O. Klein & S.M. Islam 2019. E-government Implementa-

- tion and Monitoring: The Case of Rwanda's 'One-stop' E-Government. *The Electronic Journal of Information Systems in Developing Countries* 85,5: p.e12086,. https://doi.org/10.1002/isd2.12086.
- Blom-Hansen, J., K. Houlberg, S. Serritzlew & D. Treisman 2016. Jurisdiction Size and Local Government Policy Expenditure: Assessing the Effect of Municipal Amalgamation. *American Political Science Review* 110,4: 812-831. https://doi.org/10.1017/S0003055416000320.
- Brusca, I. & V. Montesinos 2016. Implementing Performance Reporting in Local Government: A Cross-countries Comparison. *Public Performance & Management Review* 39,3: 506 534. https://doi.org/10.1080/15309576.2015.1137768.
- Bush, T. & D. Glover 2016. School Leadership and Management in South Africa: Findings from a Systematic Literature Review. *International Journal of Educational Management* 30,2: 211 231, https://doi.org/10.1108/IJEM-07-2014-0101.
- CoGTA 2009/ 2010 Annual Report. 2010. Available at: https://cogta.mpg.gov.za/documents/AnnualReport09-10.pdf
- Damasceno Cunha, R., A.L.M. Serrano, V.R. Franco & P. Guarnieri 2018. Staff Sizing as a Mechanism of Efficiency: An Application of a Non-parametric Method. *Cogent Business & Management* 5,1: p.1463835. https://doi.org/10.1080/23311975.2018.1463835.
- Department of Communications 2010. Annual Report of the Department of Communications in Terms of the Public Finance Management Act, 1999, Republic of South Africa.
- Frey, J.H. & S.M. Dishi 1995. *How to Conduct Interviews by Telephone and in Person*. London: Sage.
- Ibrahim, R., S.M. Hilles, S.M. Adam, M.M. Jamous & W.M. Yafooz 2016. Theoretical Framework Formation for E-Government Services Evaluation: Case Study of Federal Republic of Nigeria. *Indian Journal of Science and Technology* 9,37.
 - https://doi.org/10.17485/ijst/2016/v9i37/94575.
- Jindal, N., A. Sehrawat & Y. Medury 2016. An Analysis of India's Need of Capacity Building for E-Governance. *Prabandhan: Indian Journal of Management* 9,6: 47-59.
 - $\underline{https://doi.org/10.17010/pijom/2016/v9i6/95022}.$
- Jitsing, A., Z. Brey, K. Wall, S. Craig, M. Thosago & S. Munro 2019. State of Municipal Finance Management: An Overview of Capacity and

- Challenges. *Civil Engineering* = *Siviele Ingenieurswese* 27,v27i1: 39 45.
- Johnstone, L. & J. Blenkinsopp 2017. Challenges for Civil Society Involvement in Civic Entrepreneurship: A Case Study of Local Enterprise Partnerships. *Public Money & Management* 37,2 89 96, https://doi.org/10.1002/ncr.4100860208
- Kachali, H., I. Storsjö, I. Haavisto & G. Kovács 2018. Inter-sectoral Preparedness and Mitigation for Networked Risks and Cascading Effects. *International Journal of Disaster Risk Reduction* 30: 281 291. https://doi.org/10.1016/j.ijdrr.2018.01.029.
- Kaisara, G. & S. Pather 2011. The E-Government Evaluation Challenges: South African Batho Pele-aligned Service Approach. *Government Information Quarterly* 30: 1 11. http://dx.doi.org/10.1016/j.giq.2010.07.008
- Lal, B., Y.K. Dwivedi, N.P. Rana, D. Frost & S. Chirara 2018, Understanding Development from the Perspective of E-Government, Digital Divide and ICT4D Literature: A Research Agenda. In *Proceedings of the 19th Annual International Conference on Digital Government Research: Governance in the Data Age*. ACM. https://doi.org/10.1145/3209281.3209369.
- Lee, J., H.J. Kim & M.J. Ahn 2011. The Willingness of E-Government Service Adoption by Business Users: The Role of Offline Service Quality and Trust in Technology. *Government Information Quarterly* 30: 1 9.
- Meyer, N. & D.F. Meyer 2016. The Relationship between the Creation of an Enabling Environment and Economic Development: A Comparative Analysis of Management in the Local Government Sphere. *Polish Journal of Management Studies* 14,2: 150 160. https://doi.org/10.17512/pjms.2016.14.2.14.
- Millar, P. & A. Doherty 2016. Capacity Building in Non-profit Sport Organizations: Development of a Process Model. *Sport Management Review* 19,4: 365 377. https://doi.org/10.1016/j.smr.2016.01.002
- Mohr P.J., B.N. Taylor & D.B. Newell 2012. CODATA Recommended Values of the Fundamental Physical Constants: 2010. *Journal of Physical and Chemistry Reference Data* 41,4.
- Ndevu, Z. & K. Muller 2017. A Conceptual Framework for Improving Service Delivery at Local Government in South Africa, *African Journal of Public Affairs* 9,7: 13 24.
- Nishant, R., S.C. Srivastava & T.S. Teo 2019. Using Polynomial Modelling to Understand Service Quality in E–Government Websites. *MIS Quarterly* 43,3: 807 826. https://doi.org/10.25300/MISQ/2019/12349

- Panayiotou, N. & V. Stavrou 2019. A Proposed Maturity Assessment Framework of the Greek Local Government Web Electronic Services. *Transforming Government: People, Process and Policy*. Available at: https://doi.org/10.1108/TG-03-2019-0018.
- Renfors, S.M. 2019. Identification of Ecopreneurs' Business Competencies for Training Program Development. *Journal of Education for Business* 1 9. https://doi.org/10.3390/su9040492.
- Republic of South Africa 2001. *E-Government Policy*, 2001. Pretoria: Government Printer.
- Republic of South Africa 1996. *The Constitution of the Republic of South Africa Act, 1996 (Act 106 of* 1996). Pretoria: Government Printer.
- Republic of South Africa 1998. *Skills Development Act*, 1998 (*Act* 97 *of* 1998). Pretoria: Government Printer.
- Republic of South Africa 2000. *The Local Government Municipal Systems Act,* 2000, (Act 32 of 2000). Pretoria: Government Printer.
- Saleh, S.M., A.H. Zolait, M.M. Ali & E.A. Wali 2019, Investigating the Role of Information System Quality and Managerial Competency on the Organization's Performance. In 2019 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT).
 - https://doi.org/10.1109/3ICT.2019.8910283 PMCid:PMC6323851
- Saunders, L.A., R.V. Lewis, C. Thornhill 2007. *Research Methods for Business Students*. New York: Prentice Hall.
- Sector Skill Plan 2010. Available at: https://lgseta.co.za/publications/sectorSkillsPlan
- Simmons, J.P., L.D. Nelson, & U. Simonsohn 2011. False-positive Psychology: Undisclosed Flexibility in Data Collection and Analysis allows Presenting Anything as Significant. *Psychological Science* 22,11: 1359 1366.
- Singhal, A., A.K. Agariya & J. Tikoria 2017. Service Quality Scales: A Literature Review. *Evidence Based Management* 84. Available at: https://doi.org/10.1016/j.jretconser.2010.06.003.
- Smith, A. 2005. Regstel-aksie Kelder Rade. *Rapport* 18 September 2005. (Not Peer-reviewed.)
- South Africa 1998. Local Government: Municipal Structures Act, 1998 (Act 117 of 1998). Pretoria: Government Printers.

- South Africa 2000. The White Paper on Local Government Service Partner-ships. 2000. Government Gazette, No. 21126. Pretoria: Government Printers.
- Thomas, J.C. 2017. Citizen, Customer, Partner: Engaging the Public in Public Management: Engaging the Public in Public Management. London & New York: Routledge.
- Van der Waldt, G., D. Fourie, J. Jordaan & M. Chitiga-Mabugu 2018. Skills Profile of Technical Staff in the South African Local Government Sector: An Empirical Survey. *Problems and Perspectives in Management* 16,1: 173. https://doi.org/10.21511/ppm.16(1).2018.17.
- Zhu, S., J. Pickles & C. He 2017. Global and Local Governance, and Industrial and Geographical Dynamics: A Tale of Two Clusters. In *Geographical Dynamics and Firm Spatial Strategy in China*. Berlin & Heidelberg: Springer. https://doi.org/10.1177/0263774X15621760

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