"Management of government properties in Mpumalanga province, South Africa: a service quality perspective"

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# Management of government properties in Mpumalanga province, South Africa: a service quality perspective

## Abstract

This study examines customers' perception with regards to service quality delivery system associated with government properties located within the Mpumalanga Province, Ehlanzeni District in South Africa. The study is based on a survey conducted on a sample of the Department of Public Works (DPW) officials and customers (tenants) occupying government properties residing within the Ehlanzeni District area comprising about 51 per cent males and 49 per cent females. Of the sample, 70.7% were tenants of the government residential houses and 29.3% were government officials. Data were collected using a structured questionnaire, and SERVQUAL instrument was adopted to measure the extent of service quality delivered by DPW to its tenants. Findings show that there were discrepancies between employees' perceptions and management perceptions, and they reveal the need for the management to focus on building effective communication channels. The gaps identified formed the key framework for the evaluation of service quality on the maintenance of government properties.

**Keywords:** customer perception, service quality, gap analysis, government property, preventive maintenance, maintenance backlog.
**JEL Classification:** Q56, R12, R21, R31, R53.

## Introduction

The Mpumalanga Department of Public Works (MDPW) in South Africa is the custodian of all the government immovable assets in the province and its role is to provide, manage and maintain all these assets. These assets include both office complexes and residential properties. This study focuses on the current state of government residential properties within the Ehlanzeni District, which is of great concern regarding its state of repair and preventive maintenance. The province has about 1200 residential properties out of which 500 are situated within the Ehlanzeni district. The MDPW is mandated with the task of ensuring that these infrastructures are well-maintained and operational.

The National Infrastructure Maintenance Strategy (NIMS, 2006) as approved by the Cabinet in August 2006, describes the framework for a coordinated program of actions for delivering infrastructure services to beneficiaries by all spheres of government. The Parliament equally passed the Government Immovable Asset Management Act in 2007 (GIA-MA, 2007), which, in support of its service delivery objectives, is aimed at ensuring uniform framework for the management of immovable assets by the national and provincial departments.

The study, therefore, focuses on customer's perception on the maintenance of residential houses with regard to the quality of its service delivery system. Specifically, it assesses implementation of the preventive maintenance, emergence maintenance and the effort to address the backlog of dilapidated buildings in the province. Furthermore, it looks into the quality of service rendered in the current maintenance program whether it is meeting the customers' expectations or not. Using the service quality concept, the evaluation provides the necessary understanding of the program, the challenges in the program and its framework outlining the positions of all stakeholders in the program.

The findings of the study will definitely be of advantage to the national and provincial governments in general, and the MDPW, in particular. The benefits include better understanding of the level of services rendered and the customers' perceptions about maintenance of government properties. Furthermore, the department may, with this insight information, strategically review the current program and institute further improvements to the maintenance program framework and implementation plan to enable it realize its mandate to maintain public infrastructure in the province.

The national sphere of government may also harmonize the maintenance policy framework towards quality assured service. The study reinforces the understanding that the public sector, although considered bureaucratic, has potential to employ strategic approaches to service delivery at the same level with the private sector.

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It also confirms that service quality approach can be applied as a useful tool for the evaluation of public sector programs because they possess social benefits that are difficult to measure either in terms of return on investment or in terms of time value for money.

*Problem statement*

The state of public buildings and the backlog of buildings due to repair and renovations in the Mpumalanga province shows that maintenance program is not effective (NIMS, 2006). Indeed, this province falls within those Category B institutions whose maintenance budgets and staff skills have failed to increase in step with their increased responsibilities for infrastructure (Wall, 2009). In 2006, an evaluation of the MDPW uncovered the existence of weak management operations, feeble human resource management and poor financial management to achieve the implementation of the maintenance program along other programs (NIMS, 2006). Notably, the customers' perspective was not included in the evaluation. Besides, poor operations management, poor financial management and poor human resource management were looked from the effectiveness of the organization environment and the relationship with the customer. Can we conclude that these are the only factors affecting the achievement of effective maintenance of government property, to the current level of dissatisfaction of the customers? Hence, the need to evaluate the quality of service is being provided to the DPW's customers (i.e., its tenants) in Mpumalanga province.

*Research objectives*

The research objectives are to evaluate the customers' perceptions about the:

♦ physical condition of the properties being rented and occupied.
♦ DPW's ability to perform its expected services dependably and reliably.
♦ DPW's willingness to render needed assistance to tenants and provide quick service.
♦ DPW's knowledge and civility.
♦ caring and individualized attention that DPW provides to its customers.

## 1. Literature review

Research on how to maintain buildings is very active and ongoing. We can now determine in advance the time when we require repainting our buildings. For instance, Chai et al. (2015) used statistical methodology to determine the service life prediction of external painted surfaces. In their study, a multiple linear regression model was used to determine deterioration over time. In other words, deterioration was expressed as a function of various degradation factors. This mathematical model allows property managers to tell which buildings require repainting and at what time.

In a study, Omotehinshe et al. (2015) analyzed the design configurations of selected buildings located in a university environment in Nigeria. This was done with a view to providing information that could enhance the maintenance of future buildings in the study area. The study identified the maintenance problem as traceable to design, and also, it recognizes the impact of design-related problems in the maintenance of the buildings. That is, such variables like provision of as-built drawings, working space and safe access to defective portions, choice of correct construction materials and methods by certified personnel were not taken care of during the design stage. The study recommended that all building items, elements or components be designed and constructed for ease-of-maintenance to ensure better future performance.

A study on implementing and validating a decision making framework for building maintenance projects was done by Chua et al. (2014) in Malaysia. A total of 19 procurement selection criteria were identified and 4 types of procurement methods were studied. It concluded that the best or most appropriate procurement methods are usually not used because of corruption and this causes problems for most of the public departments.

In South Africa context, according to NIMS (2006), all spheres of government face the challenge of operations management and maintaining old and new infrastructure. The Government Immovable Asset Management Act (GIAMA, 2007) requires government properties to be well maintained and be looked after in order to serve the need of the government. The content of the maintenance work required for these properties includes repairs, preventative measures, upgrading, refurbishment and planned maintenance and these must be done at scheduled intervals.

The Strategic Performance Plan for DPW, 2004/2009 aims at aligning the operational plans of both head office and four regions pertaining to property maintenance. The plan requires that the policies formulated with regard to property maintenance are effectively and efficiently implemented in all regions.

Due to lack of maintenance request system, works orders are created manually and not in order of its priority by the inspectors in the regions. As a result, a maintenance backlog has been created. In addition, these government properties are often left unattended which sometimes gives room to occurrence of vandalism. Furthermore, due to lack of accurate asset register, it became a problem to ascertain

which properties belonged to the DPW and also, which properties require maintenance. This inability to identify property assets has resulted in the department being unable to identify and categorize properties according to maintenance.

Although a high volume of complaints from customers have been received and acknowledged by DPW with regard to poor maintenance of certain government properties, the tenants are still compelled to pay on a monthly basis. These complaints indicate that the service quality received is not impressive enough to satisfy their basic needs. Complaints have been communicated to the DPW through mails, faxes, telephones and verbally, and records have been kept for those complaints.

DPW is unable to handle all the maintenance backlog challenges due to insufficient budget. They are unable to satisfy the customer's needs as per their request. Some of those customers perceive that to possess the government property is a privilege and unaware of the maintenance cost implications and yet dependent on the government housing subsidy.

Property lease agreements are also problematic in that they are signed between the landlord and the tenant irrespective of the condition of the property they allocate. Certain clauses of the lease agreement compel the tenants to maintain minor work in the property; major maintenance is the responsibility of the DPW. The tenants are not allowed to convert those properties for commercial purpose. Subletting is also misconduct and prohibited. Even though there are certain government properties that are uninhabitable and that undermine the tenant's rights in terms of basic need requirement, still, the tenant is compelled to pay full rent for the property usage.

### Financial management

Historically, there has been an inadequate budget allocation for maintenance. This has resulted in a major maintenance backlog. According to NIMS (2006), the cost for maintaining infrastructure is no longer affordable in South Africa. The maintenance strategy further put emphasis on the retention of ten percent of the cost price for maintenance purpose. The DPW is funded by both the Treasury and its own rental collection. The DPW is experiencing ineffective revenue collection from the client departments as there is still the perception of unwillingness to pay for the property rentals. Currently, the responsibility of revenue collection is still within the client departments. Ineffective revenue collection from client department's tenants had an impact towards addressing the maintenance backlog of the residential properties at large.

GIAMA (2007) requires that all the users of government properties budget for the maintenance of the properties they are occupying. Ineffective budget planning by the departments on a yearly basis had posed delays in budget allocation by Treasury. Furthermore, poor budget planning had also contributed to the increase of the maintenance backlog. The nonexistence of the infrastructure plan had contributed to the ill-informed budget planning decisions. Thus, the funding available for asset maintenance is compromised by poor budgeting and poor rent collection.

### Human resource management

NIMS (2006) identified the shortage of skills that are detrimental to quality service delivery. Currently, the department is faced with the shortage of professionals in addressing the maintenance backlog because many of the technical staff had retired and some will retire in the next ten years, thus, taking away with them much of the institution's skills and experience.

The passing of skills to the newly appointed personnel may be difficult, given the fact that there is shortage of adequately trained younger staff. There is no skills retention strategy in place to address the scarce skills. Besides, most artisans have retired from the sector and without any replacement. There are only few artisans who can execute the maintenance work in the province and the department is outsourcing the work to the external service providers to enhance service delivery.

### National policy frameworks on maintenance works

The national government, realizing the maintenance challenge before it, came up with the National Infrastructure Maintenance Strategy (NIMS, 2006) that was approved by the Cabinet in August 2006, and NIMS outlines the framework for a co-coordinated program of actions. Within NIMS, one sees the vital part of the government's vision of delivering well-maintained infrastructure to all spheres of the government.

Furthermore, the parliament passed the Government Immovable Asset Management Act of 2007 (GIAMA, 2007), that aims at ensuring the uniform framework for the management of immovable assets used by national and provincial departments in support of its service delivery objectives. It is argued in this study that the framework is adequate, but there is a need to have strategies in place that will ensure the realization of the vision envisaged within the framework.

### Best practices in service quality

Pitt and Jeantrout (1994) define service quality as emphasis on satisfying the needs and requirements of customers, and further explains how well the service delivery mechanism matches the expectations from customers. In modern times, greater emphasis is placed on the need to understand the role of expectations. People nowadays are more sensitive to, and critical of, the quality of service that they experience (Dotchin and Oakland, 1994; Ali, Rohai-

zat and Setareh, 2012). According to Buzzell and Gale (1987), service quality perceptions and expectations of customers are gradually employed to forecast company's profitability and prospects for improved market share, as it has been empirically proven that customers' perception of service improvement enhances profitability.

Modern-day managers are constantly under pressure to establish customer-focused services and ensure continuous and improved delivery system. Managers are equally tasked to understand the customer's expectations and to identify gaps with regard to service quality, since such information will help managers to identify cost-effective ways of addressing service quality gaps in order to make decisions based on those scarce resources (Shahin, 2008). Service quality signifies a difference between expectations from customers and perceived service quality. If performance is less than expectations, then perceived quality is less than satisfactory and, hence, customers become dissatisfied (Parasuraman, Zeithaml and Berry, 1985; Lewis and Mitchell, 1990).

DPW's poor rent collection record impacts negatively on the amount of funds that are available to engage in property maintenance activities. In addition, DPW has its own internal problems of weak management of its operations, inadequate human resource management and poor financial management. It, thus, becomes important to evaluate the quality of service that is being provided to its customers (i.e., its tenants), given that it is experiencing these management problems.

*Understanding the concepts of quality and service quality*

The section looks at the concept of quality, service quality and the technique of SERVQUAL, and Total Quality Management. According to Stevenson (2002), quality is referred to as 'fitness for purpose' or 'meeting customer requirements' or conformance to customer specifications and 'consistently exceeding cus-

tomer expectations'. Key in this note is that the purpose has to be clear and customer requirements must be clearly identified and defined for the program to meet such requirements.

Burke (2006) posits that quality management involves the process, management of the project(s) and the product(s) of the projects. To achieve this, according to him, quality management covers adequate planning, quality control and assurance.

The process of planning has an output of quality control plan that is used to control the implementation towards quality achievement. It is in the planning phase that the customers' expectations are investigated and planned for. Also a review of the customer perceptions of the current service can be revised and measured to address such perceptions put in place.

According to Parasuraman et al. (1985) and Parasuraman et al. (1988), the difference between perceptions and expectations of the customers of a service is basically known as service quality. In their own words, service quality is defined as "the difference between customer perceptions of the current service being provided by a given organization and customer expectations of excellent service within that given industry". From this definition, it is clearly notable that service quality can be quantified and measured, and thereby deepening understanding of the shortfall of the program, in addition to poor management as noted earlier in the study.

There is a technique that can be utilized to perform a gap analysis of an organization's service quality performance against customer service quality needs (Parasuraman et al., 1988), which is known as SERVQUAL. In developing this technique, Parasuraman et al. (1985) identified seven major gaps in the service quality and three of those important gaps are also identified by ASI Quality Systems (1992), Curry (1999) and Luk and Layton (2002). This is presented in Figure 1 below:
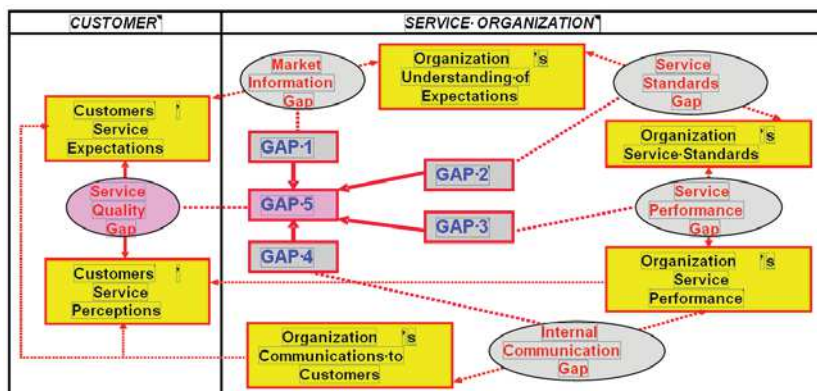


Fig. 1. A "GAPS" model of service quality source: an adaptation from Parasuraman et al. (1995)

As graphically outlined in Figure 1 above, the identified critical discrepancies for this study are seven (7) and are listed below:

Gap 1 – Management perceptions against customer's expectation.

Gap 2 – Service specifications against management perception.

Gap 3 – Service delivery against service specifications.

Gap 4 – Service delivery against external communication.

Gap 5 – Customers' expectations and their service delivery perceptions.

Gap 6 – Employees' perceptions and customer expectations.

Gap 7 – Management perception and employee's perceptions.

The gaps identified above are cardinal to this study and form key framework for the evaluation of maintenance program in Mpumalanga. According to Brown and Bond (1995), Gaps 1 to 7 are gaps within functions of the way in which service is delivered.

## 2. Research methodology

This study basically evaluated the quality of service that is being provided to the DPW's customers (i.e., its tenants) in Mpumalanga province from the customers' perspectives and in the light of the ma-nagement problems that the province is experiencing.

**2.1. Identifying respondents.** Using stratified random sampling technique, 92 respondents were identified and targeted. Out of the 92 respondents, 65 were tenants (Group A) and 27 were DPW officials (Group B). From the 65 tenants, 5 did not provide feedback. The purpose of the grouping and stratifying randomly was to guarantee that each group was represented in the sample (Lind, Marchal and Wathen, 2005).

**2.2. Construction of research instruments.** Data was collected by means of in-depth, individual phenomenological interviews and observations in the form of field notes. There were two (2) different sets of questionnaires in which one elicits customers' perception on the service they receive (Group A) and the other one (Group B) draws from the DPW officials the extent to which their expected services were delivered to their clients. In addition to these, a common section meant for all respondents was included to elicit other important information like demographic features, organizational functions and responsibilities.

Based on a five-point Likert scale, the tenants' questionnaire gauged the reactions of each tenant as to

whether or not he/she is in agreement. The DPW officials were also interviewed in order to gauge the attitude with regards to the conditions of services they provide to their customers. It, further, investigated promptness in responding to customer's complaints or requests as well as their understanding of the customers' needs pertaining to maintenance on regular basis.

## 3. Discussions

This study is a survey and evaluation of the DPW customer perceptions. The following critical discrepancies (gaps) were observed and identified:

**Gap 1: Management perceptions versus customer's expectations:** The gap exists due to inadequate marketing research orientation, insufficient communication strategy and too many levels of management. Targets are not easily met as reflected in the strategic plan of DPW and this is equally compounded by the fact that DPW lacks the marketing research skills and are not oriented towards research because of budget constraints. The program planners should ensure that market research is conducted before the program is put in place and ensure that a communication plan is implemented.

**Gap 2: Service specifications versus management perception:** The gap exists due to less than sufficient commitment to service quality, inadequate task standardization and an absence of goal setting. Evidently, service quality is not usually taken into consideration, as most customers do not consider the existing maintenance program reliable because management is known to carry out maintenance program without giving due considerations to customer's perceptions. The culture of quality assurance and standardized service aimed at a definite loyal clientele should be adopted and budget secured for promotional activities.

**Gap 3: Service delivery versus service specifications:** This gap exists due to role conflict and ambiguity, erroneous supervisory control system, lack of perceived control and lack of team work. DPW may implement a system-based management approach, standardized to avoid ambiguity, retain skilled personnel that are able to utilize the technology for supervisory control and invest into team-building activities. There is the need for both DPWs management and personnel to enforce the collective commitment, cooperation, and team building spirit towards effective implementation of plans and re-commendations.

**Gap 4: Service delivery versus external communication:** This gap exists due to inadequate communications and propensity to over-promise. Line of communication is still problematic with DPW and,

as a result, it has experienced shortage of staff who can execute the property portfolio with informed decision. DPW may implement a communication plan that ensures that all stakeholders are managed and kept informed as regularly as possible and according to their position in the communication hierarchy. Besides, external communications need to be strengthened. What is being promised to the customers and the capacity of the service delivery system should be well communicated. Inability to clearly and accurately communicate the benefits of the service offered to the customers may be detrimental to the DPW's image. It is prudent for DPW to utilize effectively and to realize the options that it offers. The clients should possess authentic and comprehensive information. It is also vital to utilize many channels of communication to convey, convince and teach the customers. In addition, such services should be user-friendly which will concurrently enhance client use and external communication.

Besides, the service strategy should be communicated timeously to beneficiaries at all levels and be harmonized with the vision of the department and what its achievements would be. Effective communication has to be promoted for harmony and integration purpose in the institution's service activities and quality. This can in no small way contribute to individual improvement and it will equally prompt horizontal and vertical communications, thus, flattening and inverting the hierarchical pyramid.

**Gap 5: Customers' expectations versus their service delivery perceptions:** This results from the influences exerted from the customer side and the shortfalls (gaps) on the part of the service provider. In the present case, customer expectations are influenced by the extent of personal needs, word of mouth recommendation and past service experiences are necessary. DPW simply lacks the capacity to ascertain perceived gaps between customers' expectations and the service offered to them. In Mpumalanga, maintenance program is running and buildings are maintained but not meeting the customers' needs and perception of quality. The second key aspect of quality as construed in SERVQUAL is reliability. The position, based on the analysis, is that the tenants seems satisfied that the current maintenance program and its strategies are reliable. But one quickly notices that reliability is also dependent on the knowledge and skill pool available in the program, a case in point for lower program effectiveness.

**Gap 6: Employees' perceptions versus customer expectations:** This results from the differences in the understanding of customer expectations by the service providers. Currently, the difference is not wide but there is a need for improvement frontline management. The need to implement the Batho Pele (People First) principles is very necessary.

**Gap 7: Management perceptions versus employee's perceptions:** This is as a result of discrepancies in the understanding of customers' expectations between managers and service providers. This discrepancy is one of the most ignored challenges in public sector. It is always assumed that the executive managers, senior managers, middle managers, technical staff, and artisans and the general workers work together like a team. The reality is far from the truth. There is a need for concerted effort towards building effective communication channels that permeate the layers in the management structure of the public entities.

## Conclusion

This study is an attempt to examine customers' perception with regards to service quality delivery system associated with government properties located within the Mpumalanga Province, Ehlanzeni District in South Africa. In that province, just like in other provinces, there has not been regular maintenance, hence a new terminology, namely, backlog maintenance, has been coined. The maintenance program is being implemented on the levels of emergency and backlog maintenance rather than preventive maintenance or regular improvements. It is also evident that if properties are not maintained, such properties will deteriorate and their rental value may go down. The fall in the rental value or the dilapidation may also dent the perception of the property users.

The backlog is as a result of low budget allocations towards maintenance as well as other challenges like lack of skills, capacity and inability to retain skilled personnel. Currently, the province has ±1200 residential properties that are on backlog, receive 6000 emergency calls per financial year, and is expected to plan for preventive maintenance on 500 residential properties. The challenge remains within the budgeting process and the allocation made available to ensure the implementation of the program is at the lowest, all the years. The small allocation may not be enough to ensure achieving service quality.

Customers' perception about the maintenance program is linked to the physical conditions of the properties being rented or occupied. Equally, these perceptions affect the customers' attitude towards government properties. In its current format of planning and implementation, the maintenance program in Mpumalanga is not aligned to ensure improved customers' perception. The department is not doing enough on this aspect, even on space utilization of

the properties. The customer's perceptions about the DPW's ability to perform its promised services dependably and reliably is on the negative. Customers believe that the department is unable to deliver because of bureaucracy and inefficiency. As observed, the department is unable to meet its obligation because of limited resources which are low budget allocation, lack of skills and capacity and failure to plan for preventive maintenance. Looking at the maintenance program, its processes and sustainability, it becomes clear that customers' perceptions, needs and lifestyles should be considered starting from the time of policy formulation up to the time of implementing the specific projects.

The customer's perceptions about DPW's willingness to help tenants and provide a prompt service is noticed as high, but this aspect has been overshadowed by the lack of plan for preventive maintenance, which would have complimented the effort directed at emergency maintenance or day-to-day repairs done on the properties. Similarly, a promotional approach to market the program would enhance the communication between the management officials and workers in the DPW and the customers which is a theme promoted in the service quality concept.

The customer's perceptions about DPW's knowledge and courtesy courted a (Strongly Agree) response, meaning that the DPW is striving to meet its

customers' expectation despite the numerous challenges. This observation is also confirmed by the correlation between the response to questions on DPW's prompt attention to specific needs and its understanding of specific needs. From some of the responses, we may conclude that the maintenance program lacks the vision to individualize the services as is the case in private-sector-driven programs.

The customer's perceptions about the caring and individualized attention that DPW provides to its customers is low and could be attributed to the weaker promotion activities, failure to engage stakeholders and ensure that all their misgivings are addressed and that the program is jointly managed.

Although this study looked at the maintenance program from service quality, the study further covered some critical aspects such as understanding the concepts of quality and maintenance in a lesser detail. Among other techniques for evaluating a program for quality, the concept of service quality offers opportunity to look at a program from the quality point of view. This opportunity allows the use of SERVQUAL and the Gap theory. Although the service quality has not been applied in the Mpumalanga province, this study shows that it can be applied and it can facilitate the understanding of customers' perception and aligning of program objects to the customer needs.

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