



Enhancing Customer Relationship Management: A Strategy to Improve Revenue Management at the Nelson Mandela Bay Municipality

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Abstract

In South Africa, local government as represented by a number of municipalities is at the coal-face of service delivery. Inevitably, municipal budgets are usually not sufficient to meet the unlimited service delivery obligations required by the local communities. The Nelson Mandela Bay Municipality (NMBM) is not immune to these interconnected revenue generation and service delivery priorities. The primary objective of the study is to establish an effective CRM framework that may enhance revenue collection at the NMBM. More specifically, the study investigates the nature of Customer Relationship Management (CRM) at the NMBM, factors that are responsible for ineffective CRM at the NMBM, the impacts of ineffective CRM on revenue collection at the municipality and the ways in which a CRM framework suitable to improve revenue collection at the NMBM can be established. Purposive sampling was used to select a sample of 130 respondents from a population of 420 employees in the Revenue Management and Customer Care Sub-directorate of the municipality. In view of the primary objective of the study, participants were drawn from relevant divisions such as, customer care, debtor management, rates and valuations, billing coordination and receipting. Of 130 questionnaires distributed, only 121 usable questionnaires were returned. This translates to a response rate of 93%. The empirical results reveal that there is a positive relationship between CRM and revenue management. In addition to this, the empirical results show that there is a positive relationship between customer satisfaction, customer engagement, customer value, customer experience, service standards and CRM. Furthermore, the findings of the study show that more needs to be done, as very little has been achieved by the NMBM in the context of implementing measures to enhance CRM. In this regard, the study provides managerial and future research recommendations.

Keywords: Customer relationship management; Nelson Mandela municipality; Service delivery; Local government; Municipal budget; Customer satisfaction; Revenue management.

1. Introduction

The municipality is constantly under pressure from various sectors of the local populace to render services such as human settlements, clean running water, reliable electricity supply, refuse removal and the general provision of relevant amenities. As such, any lack of revenue will undoubtedly exacerbate the discontent shown by the general public in the event that the NMBM is found non-responsive in this regard. It is important for the municipality to introduce strategies to reverse the current declining revenue trends. The aim of this study is to develop a CRM framework that may improve revenue collection at the NMBM.

There are various CRM models available in the market. It is for this reason that the NMBM is expected to exercise the necessary circumspection to identify and select the most suitable CRM solution for the municipality. Shannahan and Shannahan (2010), argue that CRM projects are complicated and often involve different functional areas, and thus a firm must be dedicated to the project if the desired end results are to be realised. In the case of the NMBM, this starts with rendering quality and reliable services such as water, electricity and refuse removal. This requires a CRM system that provides benefits to both the municipality and the general public. This implies quicker turnaround times, especially when queries and disputes are lodged with the municipality. Solving queries quickly has benefits for both the NMBM and the customers in relation to the expectation regarding payment for services rendered.

Unfortunately, at this juncture the NMBM does not have a CRM solution in place, hence some community members are oblivious of how, where, and when feedback is supposed to be received from the municipality. The lack of CRM at the NMBM further perpetuates occurrences where queries are misdirected to unrelated departments, thus prolonging the time it takes to resolve a dispute. To implement a successful CRM solution, first there has to be a conscious paradigm shift on the part of the organisation and its workforce. This change is recognised as a precursor towards restructuring the existing business processes and thereby pursuing the newly found vision of the institution to deliver according to community expectations (Duque *et al.*, 2013).

According to the South African National Treasury (2016), aggregate municipal consumer debts amounted to R108.6 billion (compared to R117.9 billion reported in the second quarter) as at 31 March 2016. Furthermore, a total amount of R1.1 billion has been written off as bad debt. The NMBM is not immune to this situation. It is observable that at the NMBM, income collection has dropped to 90%, down yet again from its 94% target for the financial year ending 30 June 2016. According to the NMBM (2016) the target collection ratio is 94% as per the 2015/16 Integrated Development Plan (IDP) and budget projections. However, a collection rate of 100% or more is required

to decrease the provision for doubtful debts so that more funds are released for service delivery requirements. According to a [South African National Treasury \(2016\)](#), the NMBM is beset by a number of challenges in the area of revenue collection, such as:

- The electricity tariff dispute with the majority of the largest electricity consumers in NMBM has had an adverse effect on the financial sustainability of the municipality;
- The contract with the panel of attorneys appointed for debt collection has not been renewed for an extended period;
- Lack of integrated revenue strategy and the establishment of the multi-disciplinary revenue enhancement structures;
- The challenges with implementation of the full credit control processes, such as issuing of final demands and section 129 and 130 summonses;
- A lack of dedicated effort to deal with customer enquiries expeditiously as a result of poorly skilled employees.

In order to increase the stability of the local government budgets, as a measure to deliver on service delivery requirements, there is a need for municipalities to reinforce their various independent sources of revenue ([Pūle, 2013](#)). Therefore, this study seeks to improve revenue collection at the NMBM through the establishment of a CRM framework.

2. Research Questions

The research questions included:

- What is the nature of CRM at NMBM?
- What factors are responsible for ineffective CRM at NMBM?
- How does ineffective CRM affect revenue collection in the municipality?
- How can CRM be improved to enhance revenue collection at NMBM?

2.1. Research Objectives

2.1.1. The Primary Objective

The primary objective of the study is to establish an effective CRM framework that may enhance revenue collection at NMBM.

2.1.2. Secondary Objectives

The following specific objectives will enable realisation of the purpose of the study.

- To examine the nature of CRM at NMBM.
- To explore the factors that are responsible for ineffective CRM at NMBM?
- To examine the impacts of ineffective CRM on revenue collection at the municipality?
- To establish a CRM framework suitable to enhance revenue collection at NMBM.

3. Conceptual Background

In the context of the NMBM it is recognised that a multiplicity of factors have contributed to the situation in which the current revenue collected is not on par with the initially projected performance. Doug, cited in [Koçoğlu and Kirmaci \(2012\)](#) reveals that CRM is a business strategy that allows an enterprise to follow its customers, revenues and expenses, also enabling it to focus on target market opportunities. CRM implementation enhances a firm's ability to earn profits, albeit the prerequisite of additional resources. Despite this, businesses that opt to implement CRM usually generate revenue that exceeds the additional costs of implementing the solution [Krasnikov et al. \(2009\)](#).

3.1. Customer Satisfaction

The reality of the situation is that the NMBM has a multitude of customers other than the existing pool of ratepayers. Accordingly, it is conceivable that there is a consistent demand directed at the municipality to ensure that the needs of these customers are realised. Anton, in [Koçoğlu and Kirmaci \(2012\)](#) argues that customer satisfaction means that customer needs, wishes and expectations are met or overcome during the product/service period. [Tripathi \(2014\)](#), define customer satisfaction as the ability of the company to meet or surpass customer expectations when products and services are supplied.

[Najib et al. \(2015\)](#), suggest that for a company to be successful in a long-term, they must focus on feedback gained from customers seeing that there is a link between customer satisfaction and the willingness to pay. It is common cause that some customers are not encouraged to pay their accounts, especially due to the sluggish response displayed by the municipality when customer queries occur. It follows therefore that once queries and disputes are resolved to the satisfaction of the customer, any justification on the part of the customer to delay payment is subsequently nullified.

3.2. Customer Engagement

[Van Doorn et al. \(2010\)](#), suggest that customer engagement has a lot to do with the behavioural aspect of the consumer in deciding whether it is worth remaining with the brand after a particular purchase transaction. [Cambra-](#)

Fierro *et al.* (2013), suggest that customer engagement is defined as the ability to affect mid- and long-term performance through interaction between stakeholders or lack thereof.

Informed, empowered and networked customers are valuable assets. They facilitate business sustainability and profitable growth as evidenced by payment trends (Tripathi, 2014). Noting that the NMBM is a public service institution, engagement with customers is a catalyst for sustained payments.

3.3. Customer Value

According to Helkkula and Kelleher (2010) customer value can be understood as value in use for the customer. In this regard, Gong *et al.* (2016) argue that customer value is not entrenched in products, but is rather generated through customer's own use process. For this reason, an enterprise should develop and produce products with the ability to satisfy the value-for-money requirement of the consumer.

According to Shiau (2014), customer value is the consumer's perception of the cost gap between benefits gained and what he/she has to give in order to maintain relationships with service suppliers. It stands to reason therefore that NMBM customers who are able to identify value in services such as refuse removal are better inspired to pay for these municipal services.

3.4. Customer Experience

Popa and Barna (2013), advance the argument that customer experience is usually subjective and associated with an element of dynamism that can change easily from one customer to the next. Customer experience is a perceived judgment pertaining to the superiority or excellence of the service Lemke *et al.* (2011). Naturally, various customers of the NMBM encounter a diversity of experiences when doing business with the municipality. The obligation rests with the NMBM to abide by certain customer service values and norms that are acceptable to the ordinary customer. Essentially, each customer interaction determines customer perceptions about the municipality in relation to future transactions. Accordingly, good customer experience has a direct bearing on the decision to pay for municipal services.

3.5. Service Standards

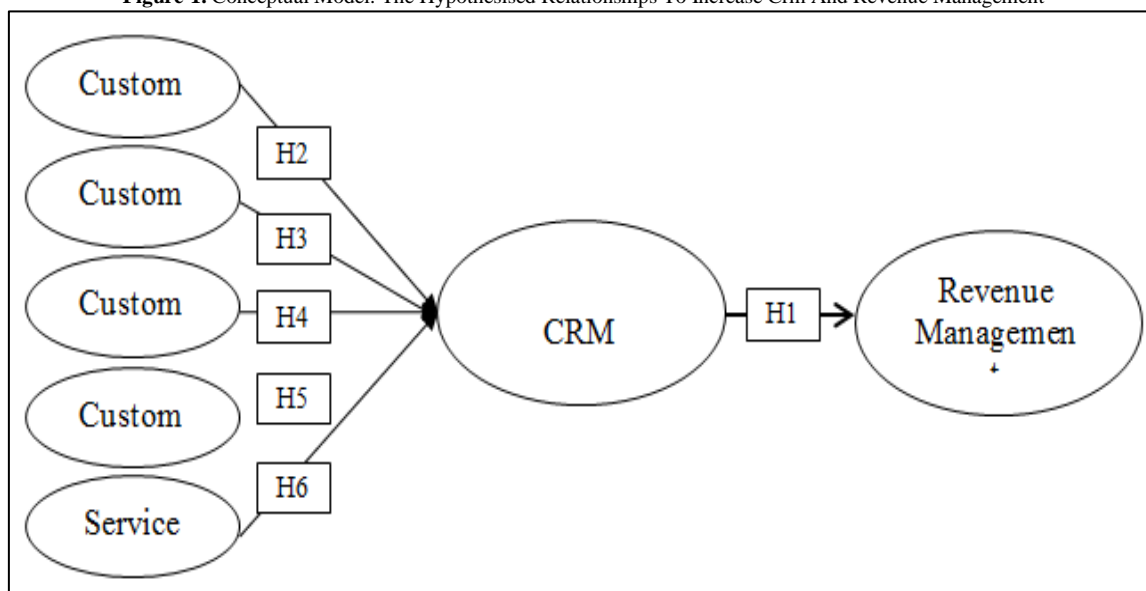
Zitrický *et al.* (2015), define service standards as effective provision of quality services by introducing control processes for any activity, which affects the fulfilment of customer requirements. The phenomenon of community protests is indicative of some underlying displeasure with regard to the provision of basic services. The NMBM should demonstrate a business model that seeks to prioritise service standards with every single customer interaction. It is noted that there is a link between service standards and the degree of satisfaction derived by customers consuming municipal services. As such, it is envisioned that satisfied customers are predisposed to pay for municipal services.

3.5.1. The Hypotheses

The following hypotheses are formulated to investigate the proposed relationship between the variables in the conceptual framework:

- H1: There is a positive relationship between CRM and revenue management.
- H2: There is a positive relationship between customer satisfaction and CRM.
- H3: There is a positive relationship between customer engagement and CRM.
- H4: There is a positive relationship between customer value and CRM.
- H5: There is a positive relationship between customer experience and CRM.
- H6: There is a positive relationship between service standards and CRM.

Figure-1. Conceptual Model: The Hypothesised Relationships To Increase Crm And Revenue Management



4. Research Methodology

4.1. Research Design

According to [Cooper and Schindler \(2011\)](#) a descriptive study attempts to describe or define a subject often by creating a profile of a group of problems, people or events through the collection of data and the tabulation of the frequencies on research variables or their interaction. [Wegner \(2013\)](#), points out that when large quantities of data have been gathered, there is a need to organise, summarise and extract the essential information contained within this data for communication to management. This is achieved through descriptive statistics.

4.2. Research Approach

A quantitative research approach was used in the study. [Cooper and Schindler \(2011\)](#), explain that quantitative research deals with the detailed enumeration of the recorded opinions, attitudes and behavioural aspects.

4.2.1. Setting

The subjects of this study are NMBM employees in the Budget and Treasury Directorate. The study took place in the Nelson Mandela Bay jurisdiction of the Eastern Cape province of South Africa, which incorporates Port Elizabeth, Uitenhage and Despatch.

4.2.2. Sample Population/Size

The sample consists of 130 respondents who are employees of the organisation under study. The sample was drawn from Customer Care, Debtor Management, Rates and Valuations, Metered Services, Billing Coordination and Receipting divisions.

4.2.3. Sampling Technique

A purposive sample is used in the current study. According to [Collis and Hussey \(2014\)](#) in a purposive sampling also regarded as selective sampling, the researcher usually trusts own judgement in determining members of the population to participate in the study.

4.2.4. Data Collection

In an effort to solicit the necessary permission to conduct the study, the researcher arranged a briefing session with the Chief Financial Officer who is the head of the Budget and Treasury department of the NMBM. Subsequent to an interactive discussion, permission was granted for the research project to ensue in the Revenue Management and Customer Care sub-directorate. Thereafter, the researcher arranged individual meetings with the managers, supervisors and sub-ordinates associated with the relevant divisions to explain the purpose of this study. During these meetings questionnaires were distributed and specific supervisory staff were identified for the purpose of facilitating the distribution of questionnaires to the participants.

The questionnaires contained a covering letter with instructions on how to complete the questionnaire. Participants were advised that confidentiality and anonymity would be strictly prioritised. Because of the geographic spread of all the offices involved in the study, central and secured locations were identified where completed questionnaires were dropped off and subsequently collected. The researcher collected the questionnaires in secured boxes originally organised by the supervisory staff. A total of 130 questionnaires were distributed. In this study 121 usable questionnaires were returned.

5. Findings

This study seeks to establish a framework to enhance CRM at the NMBM. The study argues that poor CRM has negative impacts on the well-being of the municipality. In this section, the researcher presents and discusses the findings of the study. The section is structured as follows: first the author discusses the contributions of the demographic characteristics of the respondents to the purpose of the study. Then, the researcher presents and discusses findings on the nature of CRM at NMBM. Then, the researcher presents and discusses findings on factors that influence ineffective CRM at NMBM. Then, the researcher analyses the impacts of ineffective CRM on the municipality's revenue then the findings and analyses on measures to enhance CRM at NMBM are presented, and finally the researcher tests the hypotheses of the study.

5.1. Demographic Characteristics of the Respondents

In this section the researcher presents the demographic characteristics of the respondents and how the characteristics contributed to the realisation of the purpose of the study. Two demographic characteristics have been discussed- gender and occupational level.

5.1.1. Gender

'The study attracted about 36% (n=33) of male respondents as compared to about 64%(n=78) of the female respondents'. This is a fair representation of the gender balance of the total population, as male representation is normally low in customer care (frontline) and call centre staff in most South African public service organisations. To a certain degree this reveals that there is still a need to try to recruit more male staffers in this area within the municipality.

5.1.2. Occupational Level

The majority (72%;n=84) of respondents were in the Operational occupation level, mainly representing the front line staff within the selected organisation. This is followed by 13% (n=16) in the Middle Level Supervisor occupational level. There were 8% (n=9) respondents in the Senior Level Supervisor occupational level. The remaining 7% (n=8) are at the Middle Management Level occupational level.

The above demographics demonstrate the core occupational levels of respondents in the study. The majority of people working in the Revenue Management and Customer Care sub-directorate are operational staff. This is in unison with the core mandate of this section in relation to the provisioning of customer care services. Undoubtedly, it is important to also obtain the perspective of supervisors and managers in order to gather a full picture of the entire section.

5.2. Nature of CRM at Nmbm

In this section the researcher presents and discusses the findings on the nature of CRM at the NMBM.

5.2.1. Integrated Billing System to Manage Customer Relations

According to 62% (n=75) of the respondents, the NMBM has an integrated billing system to manage customer relations. However, 24% (n=29) were not certain whether the NMBM has such a system or not, while 14% (n=17) of the respondents disagreed that the NMBM has an

5.2.2. Customer Interaction and Information Processes

In the view of the majority (53%; n=64) of the respondents, the NMBM simplifies customer interaction through related information processes; 29% (n=35) of the participants had no opinion, while 18% (n=22) of the respondents disagreed that NMBM has an integrated billing system to manage customer relations.

5.2.3. Procedures to Meet the Needs of Different Customer Types

In this category, the majority (59%; n=71) of the respondents agreed that the NMBM has procedures to meet the needs of different customer types. A notable segment (27%; n=33) of the respondents were unsure while only 14% (n=17) disagreed that the NMBM has procedures to meet the needs of different customer types.

5.2.4. Suitable Customer Care Procedures and Policies

According to most (70%, n=85) of the respondents the NMBM has suitable customer care policies and procedures to address customer queries. However, 23% (n=28) of the respondents were undecided while only 7% (n=8) disagreed that the NMBM has suitable customer care policies and procedures to address customer queries.

It is notable that a considerable 61% (n=74) of the respondents indicated that they agree with the nature of CRM existing at the NMBM, while 26% (n=31) were undecided. The remaining 13% (n=16) did not agree with the nature of CRM existing at the municipality. The average mean score of 3.61 is indicative of the fact that most of the participants supported the nature of CRM implemented by the NMBM. This notion is validated by the low average standard deviation score of 0.99 demonstrating minimal differences in the views of the respondents.

5.3. Factors Responsible For Ineffective CRM at Nmbm

In this section the researcher presents and discusses the findings on the factors that influence CRM at the NMBM.

5.3.1. Effective CRM

In the opinion of 55% (n=67) of the participants, the NMBM is committed to rendering effective CRM; 30% (n=36) of the respondents were neutral in this category while 15% (n=18) consider that the NMBM is not committed to rendering effective CRM.

5.3.2. Long-term CRM Strategy

According to 38% (n=46) of the participants, the municipality has a long-term CRM strategy. However, 36% (n=44) of the respondents did not know whether there is a long-term CRM strategy in existence, while 36% (n=31) did not agree that the NMBM has a long-term CRM strategy.

5.3.3. Technology and Employee Capabilities

In the view of 44% (n=53) of respondents, the NMBM provides a combination of technology and employee capabilities to render sound CRM. However, 29% (n=35) were neutral in this regard, while 27% (n=33) disagreed that the NMBM provides a combination of technology and employee capabilities to render sound CRM.

5.3.4. Knowledge of Products and Services

In the opinion of 31% (n=38) of respondents, NMBM employees have extensive knowledge of products and services offered by the municipality. However, 29% (n=35) held no opinion in this category, while 40% (n=48) of the participants disagreed that NMBM employees have extensive knowledge of products and services offered by the municipality.

In this category just below half of the respondents (42%; n=50) agreed that the NMBM has effective CRM. However, 31% (n=37) were neutral in this regard while 27% (n=33) of the participants disagreed that the NMBM has effective CRM. The descriptive data provided an average mean score of 3.22, which is perfectly acceptable notwithstanding the fact that it is slightly lower than the average mean score of the category dealing with the nature of CRM. The average mean score of 3.22 is indicating that a considerable proportion of participants agreed that the NMBM has effective CRM. The overall deviation score of 1.06 confirms the opinion of the participants. This suggests that there was minimal difference in opinions provided by the respondents.

5.4. Impacts of Ineffective CRM on the Municipality's Revenue

In this section the researcher presents and discusses the findings on the impacts of ineffective CRM on the municipality's revenue.

5.4.1. Adequate Payment Channels

According to 73% (n=88) of the respondents, the NMBM provides adequate payment channels to all customers; 11% (n=14) were undecided in this regard while 16% (n=19) of the participants disagreed that the NMBM provides adequate payment channels to all customers.

5.4.2. Debt Management Platforms

In the view of 47% (n=57) of the respondents the municipality provides adequate payment channels to all customers. However, 26% (n=31) of the participants were neutral in this regard while 27% (n=33) disagreed that the NMBM provides adequate payment channels to all customers.

5.4.3. Accurate Customer Bills

In the opinion of 55% (n=67) of the respondents, the NMBM strives to render accurate customer bills in order to improve revenue collection, while 24% (n=29) of the participants remained neutral in this regard. In addition to this, 21% (n=25) of the participants disagreed that the NMBM strives to render accurate customer bills in order to improve revenue collection.

5.4.4. Customer Information

According to 33% (n=40) of the respondents, the municipality updates customer information constantly in order to improve debt collection. However, 30% (n=36) of the participants did not know that the NMBM updates customer information constantly in order to improve debt collection, while 37% (n=45) disagreed that the municipality updates customer information constantly in order to improve debt collection.

Statistical analysis reveals that over half (52%; n=63) of the respondents agreed with the effective impacts of CRM on the municipality's revenue, 23% (n=28) of the participants were undecided while 25% (n=30) of the participants did not agree with the effective impacts of CRM on the municipality's revenue. In the view of these respondents, ineffective CRM has an impact on the municipality's revenue collection. The data produced an overall mean score of 3.36, implying that most of the respondents agreed with the effective impacts of CRM on the municipality's revenue. The overall deviation score of 1.06 confirms the opinion of the participants. This suggests that there was a slight difference in the opinions of the respondents.

6. Measures to Enhance CRM at Nmbm

6.1. Customer Satisfaction

Generally, 35% (n=42) of the respondents agreed that there are customer satisfaction measures to enhance CRM at the municipality. However, 30.5% (n=37) of the respondents were neutral while 34.5% (n=42) of the respondents disagreed that there are customer satisfaction measures to enhance CRM at the NMBM. Data analysis resulted in an average mean score of 2.99, which is acceptable although slightly slower than the mean score of the category on the impacts of CRM on the municipality's revenue. The average mean score of 2.99 reveal that there was nominal consensus in the opinions of the respondents in this regard, suggesting the fact that only to a minimal extent does the municipality exhibit customer satisfaction measures to enhance CRM. The overall deviation score of 1.02 confirms the opinion of the participants. This implies that there was not much difference in the responses of the respondents.

6.2. Customer Engagement

It is noted that less than half (41%, n=50) of the respondents reported that the municipality has customer engagement measures to enhance CRM. However, 31% (n=37) of the participants were undecided while 28% (n=34) maintained that the municipality had customer engagement measures to enhance CRM. The average mean score of 3.19 is indicative of the fact that most of the participants agree to a great extent that the municipality has customer engagement measures to enhance CRM. The perception is validated by the low average standard deviation score of 1.05 representing a slight difference in the opinion of the respondents.

6.3. Customer Value

Statistical analysis reveals that under half (41%, n=50) of the respondents agreed that the municipality has measures to address customer values in order to enhance CRM. However, 32% (n=39) of the respondents remained neutral in this category, while 27% (n=32) of the participants disagreed that the municipality has measures relating to

customer values, designed to enhance CRM. The data produced an overall mean score of 3.19 implying that most of the respondents agreed to a great extent that the municipality has measures to address customer values, in order to enhance CRM. The perception is validated by the low average standard deviation score of 1.01 representing a slight difference in the opinion of the respondents.

6.4. Customer Experience

In this section the researcher presents and discusses the findings on customer experience.

In this category of customer experience, 40.5% (n=49) of the respondents agreed that the municipality has measures to deal with customer experience to enhance CRM. However, 30.5% (n=37) of the participants had no opinion in the category, while 35% (n=29) disagreed that the municipality has measures to deal with customer experience to enhance CRM. The data produced an overall mean score of 3.15 implying that most of the respondents agreed to a great extent that the municipality has measures to address customer experience, in order to enhance CRM. The perception is confirmed by the low average standard deviation score of 1.06 representing a slight difference in the opinion of the respondents.

6.5. Service Standards

In this category of service standards, 40.5% (n=49) of the respondents agreed that the municipality has service standards measures to enhance CRM. However, 30.5% (n=37) of the participants held no opinion in this category, while 29% (n=35) disagreed that the municipality has service standards measures to enhance CRM. The data produced an overall mean score of 3.15 implying that most of the respondents agreed to a great extent that the municipality has service standards measures in order to enhance CRM. The perception is confirmed by the low average standard deviation score of 1.05 signifying a slight difference in the opinion of the respondents.

6.5.1. Hypotheses Testing

For the purpose of this study, statistical tests were applied including the following:

- Simple regression analysis
- Multiple regression analysis

A simple regression model denotes that the outcome in the dependent variable is predicted by a single independent variable. Essentially, the prominent aspect in this relationship is the association and the impact of the independent variable on the dependent variable. With multiple regression analysis, several independent variables are utilised in the same type of regression equation to predict a single dependent variable. This is important for a researcher to comprehend the extent to which the value of the dependent variable differs when change occurs in one of the independent variables.

In the current study, an experiment was done to investigate the relationship between the dependent variable, interim variable and the five identified independent variables. The Statistica Version 13 and R Project for Statistical Computing (StatSoft, 2015; Windows, 2016) were used for statistical purposes to investigate the relationship between variables. This was done to investigate the relationship between revenue management, CRM, customer satisfaction, customer engagement, customer value, customer experience and service standards.

Table-4.15. Summary of simple regression analysis of the relationship between CRM and revenue

	Correlation	Coefficient	Std. error	t value
Intercept		1.053***	0.260	4.058
Relationship	0.610	0.631***	0.074	8.506
R-squared		0.781		
Adjusted R-squared		0.373		
No. of observations		121		

*** p < 0.001

Table 4.15 depicts the summarised results of simple regression analysis. The empirical results show that the interim variable CRM (RELATIONSHIP) explain about 78% ($r^2 = 0.781$) of the variance in revenue management. This validates the argument that CRM is an important determinant of revenue management.

Table-4.16. Summary of multiple regression analysis of the relationship between CRM and the independent variables

	Correlation	Coefficient	Std. error	t value
Intercept		0.809***	0.189	7.289
Satisfaction	0.72	0.239*	0.096	2.493
Engagement	0.70	0.111	0.096	0.252
Value	0.69	0.151.	0.089	0.0928
Experience	0.74	0.210*	0.098	0.0352
Service	0.69	0.129	0.089	0.147
R-squared		0.645		
Adjusted R-squared		0.630		
No. of observations		121		

*** p < 0.001, * P< 0.05, . p<0.1

Note: P-values in bold indicate a significant relationship

Table-4.16. above shows the summarised results of multiple regression results. The empirical results indicate that the five independent variables, Customer Satisfaction (SATISFACTION), Customer Engagement (ENGAGEMENT), Customer Value (VALUE), Customer Experience (EXPERIENCE), Service Standards (SERVICE) explain about 65% ($r^2 = 0.645$) of the variance in RELATIONSHIP. This confirms that the five independent variables are key determinants of CRM (RELATIONSHIP).

6.5.2. The Relationship Between CRM and Revenue Management

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between CRM and revenue management.

H1: There is no positive relationship between CRM and revenue management.

The empirical results reveal that there is a positive relationship between CRM and revenue management. The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances CRM, there will be improvement in revenue management.

6.5.3. The Relationship Between Customer Satisfaction and CRM

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between customer satisfaction and CRM.

H1: There is no positive relationship between customer satisfaction and CRM.

The empirical results reveal that there is a positive relationship between customer satisfaction and CRM. The empirical results further indicate that there is a significant relationship between the two constructs ($r = 0.24$, $p < 0.05$). The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances customer satisfaction, there will be improvement in CRM.

6.5.4. The Relationship Between Customer Engagement and CRM

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between customer engagement and CRM.

H1: There is no positive relationship between customer engagement and CRM.

The empirical results reveal that there is a positive relationship between customer engagement and CRM. The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances customer engagement, there will be improvement in CRM.

6.5.5. The Relationship Between Customer Value and CRM

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between customer value and CRM.

H1: There is no positive relationship between customer value and CRM.

The empirical results reveal that there is a positive relationship between customer value and CRM. The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances customer value, there will be improvement in CRM.

6.5.6. The Relationship Between Customer Experience and CRM

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between customer experience and CRM.

H1: There is no positive relationship between customer experience and CRM.

The empirical results reveal that there is a positive relationship between customer experience and CRM. The empirical results further indicate that there is a significant relationship between the two constructs ($r = 0.21$, $p < 0.05$). The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances customer experience, there will be improvement in CRM.

6.5.7. The Relationship Between Service Standards and CRM

The null and alternative hypotheses that were formulated are discussed below:

H01: There is a positive relationship between service standards and CRM.

H1: There is no positive relationship between service standards and CRM.

The empirical results reveal that there is a positive relationship between service standards and CRM. The null hypothesis (H01) is therefore supported, whereas the alternative hypothesis (H1) is not supported. This suggests that if the NMBM enhances service standards, there will be improvement in CRM.

7. Reliability Testing

According to Zikmund *et al.* (2013) reliability is an indicator of a measure's internal consistency. Consistency is the key to understanding reliability. A measure is reliable when different attempts at measuring something converge on the same results. Reliability refers to the accuracy and precision of the measurement and the absence of differences if the research were repeated (Collis and Hussey, 2014). In the current study a reliability test was conducted to measure consistency and the reliability of the scale used. Table 4.17 below depicts the reliability coefficients included in this study.

Table-4.17. Reliability coefficients of constructs

Variable	Cronbach's alpha coefficient
Customer satisfaction	0.74
Customer engagement	0.81
Customer value	0.84
Customer experience	0.85
Service standards	0.85
CRM	0.89
Revenue management	0.63

According to Zikmund *et al.* (2013), Cronbach's alpha measures internal consistency of the measuring instrument responses. The responses to all items used to measure a single construct should be very similar. Zikmund *et al.* (2013), provides the following rules of thumb about Cronbach's alpha coefficient:

Cronbach's alpha coefficient	Level of reliability
0.50	Poor reliability
0.60	Fair reliability
0.70	Good reliability
0.80	Very good reliability

It is noted that some researchers normally consider an alpha of 0.7 as a minimum, although lower coefficients may be acceptable based on the purpose of the research (Hair *et al.*, 2007). The authors highlight that a Cronbach's alpha value of between 0.6 and 0.7 is considered acceptable for basic exploratory research. Nunnally (1978) confirms that a Cronbach's alpha value between 0.50 and 0.69 is acceptable for new and experimental research. In the present study the results show Cronbach's alpha coefficient values of between 0.7 and 0.8 for customer satisfaction, customer engagement, customer value, customer experience, service standards and CRM. It is noted that the revenue management construct provided a lower Cronbach's alpha value of 0.6, which is acceptable for the purpose of this study. In view of the guidelines provided by the authors in the preceding discussion, the integrity of the present study is validated through the recorded Cronbach's alpha results.

8. Discussion

It is not enough for a municipality to simply implement a CRM solution and expect smooth operations without introducing adequate measures to safeguard the financial and human capital investment made in the roll-out of such a project (Retseletsoe and Neo, 2015). The authors state further that the onus rests with the institution to ensure that the CRM strategy adopted is crafted in a manner that promotes the business objectives irrespective of the type of service or product offered.

Generally, in view of measures to enhance CRM at NMBM, 35% agreed that the municipality has customer satisfaction measures to enhance CRM; 41% agreed that the NMBM has customer engagement measures to enhance CRM; 41% agreed that the municipality has customer value measures to enhance CRM; 40.5% agreed that the municipality has customer experience measures to improve CRM; and 40.5% agreed that the NMBM has service standards measures to enhance CRM.

8.1. Based on the Findings of the Study the Following Conclusions Were Drawn

- Very little has been achieved by the NMBM in the context of implementing measures to enhance CRM.
- In most areas, specifically in implementing measures such as customer satisfaction, customer engagement, customer value, customer experience and service standards, the municipality has significant weaknesses.
- As a result, it appears that the extent of measures implemented to enhance CRM at the NMBM are below average.

Recommendations

- The municipality is required to improve the existing customer satisfaction measures in order to enhance CRM. According to Garga and Bambale (2016), service quality plays an important role in customer support and usage of a product or service. As a consequence, rendering outstanding quality services has a direct bearing on customer satisfaction. Ordenes *et al.* (2014), observe that customers provide a service provider with feedback – both consciously, and at times, unintentionally – during the business transaction. Irrespective, the responsibility to digest such feedback lies with the relevant department in the organisation by ensuring that where necessary, lessons are drawn for future improvement. Customer impatience leads to the loss of a stable business relationship. This is normally characterised by rendering services not meeting customer expectations. In this sense, companies are encouraged to attach premium value to customer feedback as a measure to remedy perceived service gaps (Kumar and Sharma, 2012).
- The municipality should improve customer engagement in order to enhance CRM. According to Tih *et al.* (2016), it is conceivable that effective customer participation has a potential to contribute superior information to enable public sector institutions to introduce a better approach in view of service delivery practices. For customer participation to be effective the deployment of front-line staff should be managed in

a manner that ensures employees are placed according to the requisite skills to perform the job at hand. A firm usually benefits from customer participation more especially in instances whereby front-line staff are able to prioritise the principles of courtesy, transparency and service standards (Yoo, 2016).

- The municipality should prioritise customer value in order to enhance CRM. According to Munnukka and Järvi (2011), households are faced with shrinking disposable income, creating a spike in reported cases of customers grappling with constricted financial ability and demanding value for money when buying products and services. According to the African Development Bank (2010), municipalities are now obligated to exercise circumspection when developing annual budgets since double-digit tariff increases result in property rates, water, electricity, and sewerage becoming unaffordable for the ordinary household. Almost on a daily basis, consumers of products and services are becoming aware of their ability to influence the decisions made by service providers. This is vocalised in various forms (Kim *et al.*, 2014).
- The NMBM should improve on customer experience in order to enhance CRM. According to Kim and Choi (2013), public service institutions can no longer afford the luxury of behaving in a monopolistic fashion. Although government institutions render a unique basket of services without the immediate pressure of profit-making or the unending threat from the competition, the need to create a satisfying customer experience has become more urgent.
- The NMBM should improve service standards in order to enhance CRM. According to Celuch *et al.* (2015), as part of the business growth strategy, an organisation cannot afford to solely focus on inward interventions and neglect the importance of establishing procedures for both the employees and customers to make a contribution to improve the standard of services rendered.

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