Evaluation of an implemented Quality Management System (QMS) at one of the South African government departments: Employee perceptions of the effect of the QMS intervention.

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ABSTRACT

This study is about the employee perceptions of the effect of the Quality Management System intervention that was implemented at one of South Africa's government departments. This organisation's Quality Management System being one of the first in the government or public sector in South Africa to be implemented, creates the possibility for this Quality Management System model to be used to develop Quality Management Systems in other departments or organisations belonging to the government or the public sector in South Africa and the Southern African region.

According to Madu & Kuei (1995), Quality Management System describes a situation where all business functions are involved in a process of continuous quality improvement. This implies that the development and implementation of Quality Management Systems in government departments and the public sector will improve the quality of services delivery.

The findings of this study indicated that a Quality Management System can be used to improve the level of service delivery in the public sector. The Quality Management System should be planned developed and implemented over a period of time in five phases (i) Phase 1 - Determination of the scope of Quality Management System implementation (ii) Phase 2 – Training (iii) Phase 3 – Development of Procedures (iv) Phase 4 – Pilot implementation of procedures (v) Phase 5 – Evaluation of Quality Management System and rollout. It usually takes three or more years to establish an organisation-wide Quality Management System, although technical improvement to the workflow can be as quickly as six to eight months.

And finally, for the Quality Management System to be developed, implemented and maintained successfully, Maximisation of Performance objectives, Good Leadership, Motivation of staff, Implementation of Change Management, Employee Involvement, Long-term Top Management Commitment, Provision of Training, Introduction of Quality Improvement Projects, Measuring Quality Management System Progress and Reward Accomplishment, are the fundamental concepts or principles that should be considered.

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DEDICATIONS

Work like this requires a lot of dedication from all stakeholders, meaning myself and my significant other. If it was not for the dedication of my family, I could never have made it. I therefore would like to dedicate this work to them, for their immense contribution to the success of this work.

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LIST OF ACRONYMS

QMS	Quality Management System
TQM	Total Quality Management System
ZIZO	Zoom-In-Zoom-Out

CHAPTER 1

1.1 CONTEXT

At the beginning of the industrial era, quality was equivalent to inspections. From that point forward, with every advance made in the technological realm, product quality has equally experienced an evolutionary growth. Inspection of product dimensions or composition and observed variance from design parameters have been used to define product quality. Sampling and use of statistical methods were the next and obvious course of evolution. Progressing through decades, quality has reached a summit called Total Quality Management (QMS), a coined term for the contemporary quality movement set across the industrial world.

"QMS is a theory, practice and philosophy, and many theorists and practitioners are contributing toward its growth. However, QMS is still considered be in its early stage of development" (Dale, B., Wu, P., Zairi, M., Williams, A. and van der Wiele, T. 2001).

The origin of Total Quality Management goes back to the 1940's and 50's, when the term was first used formally in 1957 by Feigenbaum. The idea was further developed by many authorities, including; Deming (1980), Juran (1988), Ishikawa (1960), Taguchi (1950) and Crosby (1979). QMS philosophy has not only been confined to industrial settings but has gradually spread to health care organizations, educational institutions, and not for profit organizations as well as public bureaucratic organizations in many parts of the world.

> "QMS is also viewed as a programme that consists of a set of powerful interventions aimed at improving the capacity of an organization to compete successfully on the basis of cost, dependability, flexibility and it is further viewed as a key element of competitiveness" (Surani, 2001).

Madu & Kuei (1995), define Quality Management System (QMS) or Total Quality Management (TQM) as, terms used to describe a situation where all business functions are involved in a process of continuous quality improvement. This view is based on the premise that quality should be viewed by reference to the overall performance of the organisation and not solely to the product.

"QMS can be implemented using a quality management system as a framework, the most common quality management systems are ISO9001, Six Sigma, the Deming Prize, Malcolm Baldrige National Quality Award and Excellence Model" (Mahoney & Thor, 1994:11).

1.2 OBJECTIVES OF THE STUDY

This research seeks to evaluate an implemented Quality Management System (QMS) at one of the South African government departments, focusing on employee perceptions of the effect of the QMS intervention. The argument is in South Africa, Quality Management Systems implementation is common in the private sector, and it is very unusual for a Quality Management System to be implemented in a government department or the public sector. However, this particular government department is one of the few organisations in the public sector to have implemented a Quality Management System.

This research is therefore interested in evaluating how this particular Quality Management System in a public sector department was developed, implemented and maintained. The fact that this organisation's Quality Management System being one of the first in the government or public sector in South Africa to be implemented, creates the possibility for this Quality Management Systems model to be used to develop Quality Management Systems in other departments or organisations belonging to the government or public sector in South Africa and the Southern African region. As indicated by Madu & Kuei (1995), that Quality Management System describes a situation where all business functions or services are involved in a process of continuous quality improvement, meaning development and implementation of Quality Management Systems in the government departments and public sector will improve the quality of services delivery.

1.3 MOTIVATION OF THE STUDY

This study was motivated by the fact that the quality of service delivery in some government departments and public sector in South Africa is of a low standard, Jasson da Costa, W (2007). This organisation used for the case study has been one of the best performing organisations in the public sector for the past ten years (Annual Report, 2007). The fact that it was one of the first government organisations to implement a quality management system, may have been a factor in its general success, though there is no

empirical evidence to support that argument. However, there is empirical evidence to prove that implementation of a quality management system improves the quality of business processes or services as indicated by Madu & Kuei (1995).

According to Jasson da Costa, W (2007) President Thabo Mbeki, second black South African president after democratic elections in 1994, has again urged people to be patient, and blamed the previous apartheid government for poor service delivery in the public sector.

The argument here is, after ten years of new democracy in South Africa, surely, there should be some improvement in the service delivery by the government and public sector. Instead of blaming the previous apartheid regime for poor services delivery in the public sector, perhaps government should be looking at various ways of improving the quality services delivery. One of those ways of improving the service delivery is through the implementation of a Quality Management Systems within the public sector.

1.4 OUTLINE OF THE THESIS

Chapter two presents an overview of the literature reviewed to gain an understanding the fundamental requirements for the development, implementation and maintenance of a quality management system. Understanding the above will serve as guideline when evaluating the quality management system of this organisation used as a case study.

Chapter three gives an account of the research methodology used. Which focuses on the aim of the research, main objectives of the research, description and justification of the design and research procedure followed in this case study

Chapter four presents the results of the study, which answers the research question.

Chapter five makes sense of the data through discussion. These involves stating what the theory says and outline the author's findings, followed by integration of the results of the case study with literature.

Chapter six restates the author's contributions, recommendations, areas of future research, in terms of management practice and also considers the limitations of this study

CHAPTER 2 - LITERATURE REVIEW

2.1 INTRODUCTION

This chapter outlines the theoretical framework that informs the study, and presents a broad literature review of the different approaches to understanding the fundamental requirements for developing, implementing and maintaining a quality management system.

The rationale for implementation of a quality management system should be to maximise the performance objectives of the organisation, which will in turn enhance operational efficiency and effectiveness, Pycraft et al (2000). Charlton, (1993 and 2000), argues that leadership is an inherent critical ingredient behind success of any quality management system; he maintains that it is through leadership that the direction or the vision of such a programme will be set, and these will ensure that are people aligned and motivated. People are motivated through provision of timely rewards and feedback on current performance and long-range opportunities, Hellriegel, D., Jackson, S. E. & Slocum, J. W. (2002).

For a quality management system to be successful, its development and implementation should be accompanied by change management programmes. Even if the right reason for implementing quality management system are evident, implementation may still fail due to inwardly focused cultures, paralyzing bureaucracy, parochial politics, lack of trust, lack of team spirit, negative attitudes, lack of leadership and fear of the unknown, Kotter (1996).

For a quality management system to can be successful, long-term senior management commitment is required, together with provision of training programmes in quality methods, commencement of quality improvement projects, measuring progress of the implemented quality management system, and rewarding employees when accomplishment is achieved, Cummings (2001).

The study and examination of the above authors, reveals ten fundamental concepts or requirements for developing, implementing and maintaining a quality management system, namely:

- Performance objectives
- Leadership
- Motivation
- Change Management

- Employee Involvement
- Long-term Top Management Commitment
- Training
- Quality Improvement Projects
- Measuring QMS progress
- Reward Accomplishment

2.2 ROLE OF PERFORMANCE OBJECTIVES

According to Pycraft et al (2000), performance objectives are the main goals that the organisation's operations seek to achieve. Operations aim at satisfying customers through developing five performance objectives, namely; **quality, speed, dependability, flexibility and costs**. It is said that if customers value low-priced products or services, the operation will put emphasis on its cost performance. Secondly, if customers insist on error-free products or services, the operation will concentrate on its quality performance. If a customer emphasis is on fast delivery, this will make speed important, whereas a customer emphasis on reliable delivery will make dependability important. Should a customer expect very innovative products and services, the operation must provide a high degree of flexibility in order to get its innovations to its customers before its rivals. If a wide range of products and services are demanded by customers, the operation will need to be flexible enough to provide the necessary variety without excessive cost. This means that factors which define the customer's requirements give the organisation a competitive advantage. It is also stated that how well an organisation meets its customer's requirements, is determined by how well its operations function excels at its level of performance objectives which influences the competitive factors.

The argument is if performance objectives ensure that organisations meet their customer requirements, quality being one of the five performance objectives, it goes without saying that by implementing a quality management system organisations should seek to improve their performance objectives. Therefore, maximisation of performance objectives becomes fundamental to development and implementation of a QMS programme.

2.3 ROLE OF LEADERSHIP

Leadership is an inherent requirement for an implementation of a successful quality management system**.** Leadership involves setting a direction, aligning people and motivating those people. Setting a direction is developing a vision of the future along with strategies for producing the changes needed to achieve that vision. When that new direction is communicated effectively, people get aligned the set vision and get committed to its achievement. By keeping people moving in the right direction, despite major obstacles to change, by appealing to basic but often untapped human needs, values and emotions, will get people motivation (Charlton, 2000).

Definition

"Leadership is the ability to influence others to willingly contribute to attaining predetermined organizational goals which can be exercised by people throughout the organization". The leadership process is based on interpersonal relationships, not administrative activities and directives (Charlton, 2000).

Why Leadership?

"It is the competence of managers and, in particular, leaders of people that determines, in large part, the returns that organizations realize from their human capital, or human resources. A productivity problem tells us as much about the leader as it does about the worker" (Charlton, 1993:9).

"The critical ingredient behind successful human endeavor – the difference between average and sustained excellence can be summed up in one word – leadership. Yet, judging from pervasive underperformance, leadership is our scarcest resource" (Charlton, 2000:30).

The argument is good leadership will ensure that a vision of the future along with strategies for producing the change needed to develop and implement a successful QMS is set. Leadership will ensure setting example and direction by the management team for the rest of the organisation to follow. It is said that good leadership will align the people who are at the centre of development of a QMS, in the right direction, which will lead to a motivated

workforce, and ultimately all these will lead to a successful development, implementation and maintenance of a successful quality management system.

2.4 ROLE OF MOTIVATION

Implementation of a QMS' main objective is to develop a systems approach in the all areas of operation. For a system approach to be realised, people are required to ensure that processes and procedures are developed and implemented. It will take a well motivated staff to ensure that a well implemented and successful QMS is realised.

Definition

"Motivation is a psychological state that is said to exist whenever internal and/or external forces trigger, direct, or maintain goal-directed behaviours" (Hellriegel, D., Jackson, S. E. & Slocum, J. W. , 2002 p.376)

People may be motivated in various ways, motivation requires establishing collaboratively moderately difficult and specific objectives that are understood and accepted by all concerned. Removing personal and organizational obstacles to performance (achieving the objectives), and using rewards and discipline appropriately to extinguish unacceptable behaviour and encourage exceptional behaviour. Providing rewards and external incentives that are appealing to the individual, distributing rewards equitably and checking perceptions of equity will ensure that employees are highly motivated and prepared to go an extra mile. Providing timely rewards and feedback on current performance and long-range opportunities, asking the following questions:

- Do my subordinates understand and accept the performance expectations?
- Do my subordinates feel it is possible to achieve the objectives?
- Do my subordinates feel that high performance is more rewarding than average or low performance?
- Do my subordinates feel the rewards used to encourage high performance are worth the effort?
- Do my subordinates feel that work-related benefits are distributed fairly?

- Do my subordinates know where they stand in terms of current performance and long-term opportunities?
- Are rewards administered on a timely basis to my subordinates as part of the feedback process?

2.5 ROLE OF CHANGE MANAGEMENT

QMS implementation develops a new way of doing things; it is therefore advisable for a change management programme to be implemented concurrently with the development and implementation of a QMS programme.

According to Kotter (1996) the rate of change is not going to slow down anytime soon. If anything, competition in most industries will probably speed up even more in the next few decades He says that re-engineering, re-strategising, mergers, and downsizing, quality efforts, and cultural renewal are here to stay even though most people wish they would soon disappear.

He further proposed eight stages used in successful transformation which are all based on a fundamental insight that major change will only come about for a variety of reasons. Each of the eight stages is associated with one of the fundamental errors that undermine transformation efforts. He says that most of the time, successful change of any magnitude goes through all eight stages (*which are explained in Table 1)* in sequence.

> "Even if the right reason for change to happen, which may be in a form of high costs of production, bad quality of products or customer needs not met, are evident, needed change can still fail because of inwardly focused cultures, paralyzing bureaucracy, parochial politics, lack of trust, lack of team spirit, negative attitudes, lack of leadership and fear of the unknown" (Kotter, 1996:p20).

Table 1: Eight stages of creating major change. Source Kotter

1	**Establishing a great enough sense of urgency** ▪ Examining the market and competitive realities ▪ Identifying and discussing crises, potential crises, or major opportunities
2	**Creating the guiding coalition** ▪ Putting together a group with enough power to lead change ▪ Getting the group to work together like a team
3	**Developing a vision and strategy** ▪ Creating a vision to help direct the change effort ▪ Developing strategies to achieve that vision
4	**Communicating the change vision** ▪ Using every vehicle possible to constantly communicate the new vision and strategies. ▪ Having the guiding coalition role model the behaviour expected of employees
5	**Empowering Employees for broad-based action** ▪ Getting rid of obstacles ▪ Changing systems or structures that undermine the change vision ▪ Encouraging risk taking and non-traditional ideas, activities, and actions
6	**Generating short-term wins** ▪ Planning for visible improvements in performance, or wins

	▪ Creating those wins ▪ Visibly recognising and rewarding people who made the wins possible
7	**Consolidating gains and producing more change** ▪ Using increased credibility to change all systems, structures, and policies that do not fit together and do not fit the transforming vision ▪ Hiring, promoting, and developing people who can implement the change vision ▪ Reinvigorating the process with new projects, themes, and change agents
8	**Anchoring new approaches in the culture** ▪ Creating better performance through customer- and productivity orientated behaviour, more and better leadership and more effective management. ▪ Articulating the connection between new behaviour and organisational success ▪ Developing means to ensure leadership development and succession

2.6 ROLE OF EMPLOYEE INVOLVEMENT

Involvement of employees in any kind of programme will encourage compliance and ownership. QMS is a process that will require a collective effort from everyone within the organisation. It is therefore crucial for employees to be involved in the early stages of the programme.

Organisations are faced with competitive demands for lower costs, higher performance and greater flexibility. As a result they are increasingly turning to employee involvement to enhance the participation, commitment and productivity of their members. It is believed that this increased employee involvement can lead to quicker, more responsive decisions,

continuous performance improvement, and greater employee flexibility, commitment and satisfaction.

> "Organisations use employee involvement as a broad term that covers empowerment, participative management, work design, industrial democracy and quality of work life, which covers the diverse approaches to gaining greater participation in relevant workplace decisions. Some organisations, like GTE and Ford, have increased participation by forming employee involvement teams that develop suggestions for improving productivity; and other organisations like General Mills, AT&T and Intel have enhanced worker involvement through an enriched form of work and quality. Whereas others such as Southwest Airlines, Shell oil, and Nucor Steel, have sought greater participation through union - management cooperation and performance and quality-of-work-life issues. Texas Instruments, Solar Turbines, 3M, The IRS, and Motorola, have improved employee involvement by emphasising participation in quality improvement approaches" (Cummings 2001:p172).

A definition of employee involvement, according to Cummings (2001), is:

"Employee involvement is described in terms of four key elements that promote worker involvement, namely power, information, knowledge and skill and rewards".

Power

It includes providing people with enough authority to make work related decisions covering various issues such as work methods, task assignments, performance outcomes, customer service, and employee selection.

These can vary from simply asking for input from managers, joint decision making with employees, to employees making decisions themselves.

Information

Timely access to relevant information can ensure that the necessary information flows freely with decision authority and this can include data about operating results, business

plans, competitive conditions, new technology and work methods, and ideas for organisational improvement.

Knowledge

Employee involvement can be can be facilitated by providing training and development programmes for improving the member's knowledge and skills.

Rewards

Rewards can have a powerful effect on getting people involved in the organisation, because generally people do those things for which they are recognised.

Employee involvement impact on productivity.

According to Cummings (2001), an assumption underlying much of the employee involvement literature is that such interventions lead to higher productivity. Although this premise has been based mainly on anecdotal evidence and a good deal of speculation, there is now a growing body of research findings to support that linkage. It is said that studies have found a consistent relationship between employee involvement practices and such productivity measures as financial performance, customer satisfaction, labour hours and waste rates.

How does employee involvement impact on QMS?

QMS is the most recent, and, along with high involvement organisations, the most comprehensive approach to employee involvement. Quality is achieved when the organisation's goods and services exceed the customer's expectation. According to Cummings (2001), it is possible to achieve or implement QMS without involvement of the employees. However, employee involvement and participation in the change process increases the likelihood that it will become part of the organisation's culture. It is said that when implemented successfully, QMS is also aligned closely with the overall business

strategy and attempts to change the entire organisation towards continuous quality improvement.

According to Cummings (2001), major employee interventions are parallel structures, including cooperative union - management, projects and quality circles, high-involvement designs; and QMS. If each intervention represents an increase in the amount of power, information, knowledge and skill and rewards available to employees, it means that employee involvement is an inherent requirement for a successful and sustainable implementation of a QMS programme.

According to Cummings (2001), QMS can be implemented in five major steps, namely:

- Gaining long-term senior management commitment
- Training members in quality methods
- Starting quality improvement projects
- Measuring progress
- Rewarding accomplishment

2.7 ROLE OF LONGTERM TOP MANAGEMENT COMMITMENT

It said that this stage involves helping senior executives understand the importance of a long-term commitment to QMS. Without a solid understanding of QMS and the key success factors for implementation, managers often believe that workers are solely responsible for quality. Senior management have the authority and larger perspective to address the organisation-wide, cross functional issues that hold the greatest promise for the success of QMS. Commitment of senior management involves giving direction and support throughout the change process. It usually takes three or more years to establish an organisation-wide QMS, although technical improvement to the workflow can happen as quickly as in six to eight months.

According to Cummings (2001), it is said that the longer term and more difficult parts of implementation involve change in the organisation’s support systems, such as customer

service, finance, sales and human resources. Often these systems are encumbered by old policies and a culture that can interfere with the new approach. It is senior management who can confront those practices and create new ones that support QMS and the organisation's strategic orientation.

> "Senior management should be willing to allocate significant resources to QMS implementation, particularly to make large investments in training. A case study of Motorola is a classical example how this commitment can be demonstrated. As part of its Baldrige Award preparation, Motorola developed Motorola University, a training organisation that teaches in twenty-seven languages. Each department at Motorola allocates at least 1.5 percent of their budget to education and every employee must undertake a minimum of forty hours of training per year. When targets are reached the company demonstrates its commitment to continuously improving its quality with new targets of tenfold improvement in key goals of its six-sigma (six sigma is a statistical measure of product quality that implies 99.9997 percent perfection) quality systems" (Cummings: 2001).

Senior management need to clarify and communicate throughout the organisation a totally new orientation to producing and delivering products and services. We are told that at Volvo, for example, the CEO, Soren Gyll, says that the company's three core values, which are: quality, environmental concern and safety must never be compromised. This was implemented by challenging the managers to create a climate where people can use their analytical skills and their creativity to continuously improve the organisation's overall effectiveness and efficiency.

2.8 ROLE OF TRAINING

According to Cummings (2001), extensive training in the principles and tools of quality improvement is required for QMS to be successful. Training can be conducted over a period of a few weeks to more than two years; this should depend on the size and complexity of the organisation. Employees are typically trained in problem-solving skills and simple statistical process control (SPC) techniques, which are referred to as the seven tools of quality. Training should be given as a long term process if continuous improvement is to be realised. Employees should be given the knowledge to understand the variations in

organisational processes, to identify sources of avoidable costs, to select and prioritise quality improvement projects, and to monitor the effects of changes on product and service quality. The knowledge gained by employees in analysing the source of variations systematically, will improve the reliability and dependability of manufacturing goods and services.

An example of HCA's West Pace Ferry Hospital is used, where QMS as a method was used to reduce direct costs attributed to antibiotic waste.

2.9 ROLE OF QUALITY IMPROVEMENT PROJECTS

According to Cummings (2001) this phase of QMS implementation involves individuals and **work groups applying the quality methods to identify the few projects that hold promise for the largest improvement in the organisational processes. These involve identifying output** variations, interventions to minimise deviations from quality standards, monitoring of improvements, and repeating of this quality improvement cycle for an indefinite period. It is said that identifying output variations is a key aspect of QMS because such deviations from quality standards are measured by the percentage of defective products, or in the case of customer satisfaction, by on-time delivery percentages, or customer survey ratings. VF Corporation, a leading retail apparel firm, found that retailers were out of stock in 30 percent of their items 100 percent of the time. To change that VF revamped its systems to fill orders within twenty-four hours 95 percent of the time.

2.10 ROLE OF MEASURING QMS PROGRESS

Quality Management Systems do not stop with development and implementation; they also have to be monitored to determine their relevance, and benefits they provide to the organisation. Measuring QMS progress is a form of evaluation to determine whether the QMS is still benefiting the organisation.

According to Cummings (2001), this stage involves measuring organisational processes against quality standards. It is said that knowing and analysing the competition's performance are essential for any QMS effort because it sets minimum standards of costs,

quality, and service and ensures the organisation's position in the industry over the short term. He further says that for the longer term analytical efforts concentrate on identifying world-class performance, regardless of industry, and creating benchmarks. Alaska Airline and Disney are used as examples in this case. Alaska Airline is considered as a benchmark of customer service in the airline industry, whilst Disney's customer service orientation is considered a world-class benchmark across all industries. The fundamental aim of QMS is to exceed the competitor's benchmark. It is said that the organisation by understanding benchmarks from other industries, promotes "out-of-the-box" thinking.

2.11 ROLE OF REWARDING ACCOMPLISHMENT

Reward accomplishment is one of the tactics that can be used to ensure that employees' interest on the quality management system is maintained.

According to Cummings (2001), methods of monitoring and rewarding systems should not be outcomes orientated only. These systems track the number of goods produced. The reason being such measures are chasing numbers at the expense of quality and do not necessarily reflect product quality and can be difficult to replace because they are ingrained in the organisation's traditional way of doing business. The focus should rather be on rewards that are process-oriented, where improvements such as an improvement in speed, demonstrated by a reduction in cycle time, customer satisfaction with product quality, flexibility and dependability of the goods and services, are in place.

In short Cummings (2001) says that rewards should only be based on improvement of performance objectives, because the linkage between rewards and process-oriented improvements reinforce the belief that continuous improvement will be sustained and this will ultimately develop into an organisational culture.

CHAPTER 3 - METHODOLOGY

3.1 RESEARCH METHODOLOGY

In this chapter, the research methodology used in the case study is discussed, and will include the following:

a) Aim of the research

b) Objectives of the research

c) Description and justification of the design

d) Research procedure followed in this case study.

3.2 AIM OF THE RESEARCH

Theoretical Underpinnings

According to Terre Blanche & Durreim (1999), the aim of conducting a research project should be to specify and operationalise the focus of the research, and this should be a brief concrete statement of what the research plans to investigate.

> "In developing a research design, the researcher must ask two further questions about the research purpose: who or what do you want to draw conclusions about; and what type of conclusion do you want to draw about your object of analysis. The rationale of the research provides reasons why the research is being conducted, and this can be a theoretical basic research or practical applied research. The research rationale is normally developed alongside a review of some central ideas in the relevant literature. The purpose of such a review is to show that the proposed study is part of a broader context of academic enquiry. It will neither repeat work that has already been done, nor is it completely unrelated to anything that has been done before" (Terre Blanche & Durrheim: 1999).

Research Aims

The aim of this study was to evaluate perceptions of the employees on **an implemented** Quality Management System in the public or government sector. The rationale behind it

was to determine the methodology followed on how this particular quality management system was developed, implement and maintained. The fact that this organisation's Quality Management System being one of the first to be implemented in the government or public sector in South Africa, the possibility exists for this Quality Management Systems model to be used to develop Quality Management Systems in other organisations in the government or public sector in South Africa and the Southern African region. As indicated by Madu & Kuei (1995), that Quality Management System describes a situation where all business functions or services are involved in a process of continuous quality improvement, meaning development and implementation of Quality Management System in the government and public sector will improve the quality of services delivery in South Africa.

According to Pycraft et al (2000), a number of QMS programmes lose their impetus over time of implementation, and this may be attributed to the fact that most of this QMS programmes are not implemented using the right methodologies. Even QMS programmes which were successfully implemented are not necessarily guaranteed to continue to bring long-term improvement, which is variously described as a quality disillusionment and quality droop.

This study was aimed at evaluating the implemented Quality Management System in a public sector organisation in terms of how the quality management system was developed, implemented and maintained. It has been outlined in the literature review that development, implementation and maintenance of a Quality Management System involves the concepts listed below:

- Performance objectives
- Leadership
- Motivation
- Change Management
- Employee Involvement
- Long-term Top Management Commitment
- Training
- Quality Improvement Projects
- Measuring QMS progress

- Reward Accomplishment

The researcher did not aim to investigate whether the implemented QMS did maximise operational efficiency; the focus was on the methodology followed when the quality management system was developed, implemented and maintained. That was done through evaluation of documents, questionnaire surveys and individual interviews of employees involved during the development and implementation of this particular quality management system. This implied that the objective of focus was the employees and document analysis.

In developing a research design, the researcher must consider whether the aims of the research are mainly exploratory, descriptive or explanatory, as this will impact on the type of the study to be conducted (Terre Blanche & Durrheim: 1999). The author‘s aim was to evaluate an implemented QMS through document analysis and individual interviews and questionnaire surveys. The document analysis and individual interviews and questionnaire surveys were used to determine the methodology followed on the development and implementation, and maintenance of this Quality Management System and these informed the design decision used in this study.

3.3 OBJECTIVE OF THE RESEARCH

In defining the objective of a study the researcher specifies who or what they want to draw conclusions about. These objects of investigation are known as the unit of analysis. Babbie: 1989 in Terre Blanche & Durrheim: 1999, distinguishes between four different units of analysis that are common in the social sciences: individuals, groups, organisations and social artefacts. Document analysis, to determine how the quality management system was developed, implemented and maintained was coupled with evaluation of perceptions of employees through individual interviews and questionnaire surveys.

“Although there are no clear boundaries between different units of analysis, the researcher must ask which aspect the research will focus on. The units of analysis have an impact on sample selection, data collection and the types of conclusions that can be drawn from the research. If data is collected from individuals, the type of data that is collected will depend upon the unit of

analysis. Individuals can be studied as individuals, as members of a group or as representatives of organisations"(Terre Blanche & Durrheim, 1999)

In terms of an argument posed by Terre Blanche & Durrheim, it should be noted that this study focused on two units being **documents** as evidence on how the Quality Management System was developed, implemented and maintained, and **individuals** as employees of this organisation, who were involved in the development, implementation and maintenance of this Quality Management System. The documents were analysed as the primary data source of how the quality management system was developed, implemented and maintained. The individual interviews of employees and questionnaire surveys were used to determine the methodology followed when this quality management system was developed, implemented and maintained.

3.4 DESCRIPTION AND JUSTIFICATION OF THE RESEARCH DESIGN

A research design is a strategic framework for action that serves as a bridge between the research question and the execution or implementation of research.

> "A research design is a plan that guides the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the designed and planned nature of observation that distinguishes research from other forms of observations" (Terre Blanche & Durrheim 1999).

The aim of a research design is to plan and structure a given research project in such a manner that the eventual validity of the research findings is maximised (Mouton & Marais: 1990 in Terre Blanche & Durrheim 1999).

Since the study aimed to analyse documents and assess common perceptions of a shared experience, through individual interviews and questionnaire surveys, the idea of a shared external reality posed an element of positivism. The literature on perceptions prescribed an interpretive paradigm and both paradigms thus served to guide the study. This has allowed

the researcher to study the documents and subjective world of employees' individual perceptions. It was also assumed that many perceptions would be shared among employees.

Firstly, Terre Blanche & Durrheim (1999) define paradigms as "all encompassing systems of interrelated practice and thinking that define for researchers the nature of their enquiry along three dimensions – ontology, epistemology and methodology. Ontology specifies the nature of reality and what can be known about it. Epistemology denotes the nature of the relationship between the researcher and what can be known.

> "Methodology specifies how the researcher may go about practically studying whatever he or she believes can be known. In these terms the interpretive paradigm assumes that the reality to be studied consists of document analysis and people's subjective experiences of the external world, collected through individual interviews and questionnaire surveys" (Terre Blanche & Durrheim, 1999).

The design of this study involved document analysis, on how this quality management system was developed, implemented and maintained as the first phase of the research to collect primary data. This was followed by second phase which involved questionnaire surveys to assess the degree to which employees' perceptions were shared on how this quality management system was developed, implemented and maintained as secondary data source. Then followed individual interviews as the third phase to add and broaden the survey findings. This procedure allowed a three pronged approach for evaluation of this Quality Management System on how it was developed, implemented, and maintained, and whether it was done according to the fundamental requirements as outlined in the literature review.

The outcome of the research will be beneficial to this organisation, and give a specific view of the effectiveness of the intervention and also provide this organisation's management with useful information at an organizational level. This will give this organisation an opportunity to evaluate the methodology followed whilst developing and implementing this quality management system, with a view of correcting any non-fundamental methods that might have been followed. This will benefit the organisation in the sense that, the Quality Management System will be sustained over a long time and will not loose its impetus, as worded by Pycraft et al (2000).

The study focused on the literature around "reality" and how this implies that actual conditions in the workplace are less important than the way in which they are perceived by

employees. This takes us into the deeper philosophical issues of what is assumed to constitute reality.

The overall plan of this research project follows the outline stated below. The case study is grounded in an evaluation which uses both qualitative and quantitative methods (Jansen: 1988). The main data collection techniques used by the study were document analysis, questionnaire and individual interviews surveys.

Phase One (document analysis).

Phase One of the research involved qualitative analysis of documents which involved analysis of the project plan and implementation plan documents to determine:

- Where, how and why QMS was introduced?
- What were the expectations?
- How the expectations were to be measured?

Phase two (questionnaire surveys).

From the document analysis questionnaire questions were developed. The questionnaires were then distributed and analysed. This was the quantitative part of the study.

Phase three (individual interviews).

The individual interviews then took place to add to broaden the survey findings from phase two. This was the qualitative part of the survey.

Both qualitative and quantitative procedures were used to get a more complete and comprehensive view of the QMS intervention. This known as triangulation in research terms

A qualitative thematic analysis of data collected from the questionnaires and the individual interviews concluded the research (Vaughn, S., Shay Schumm, J. and Sinagub, J., 1996).

3.5 QUALITATIVE AND QUANTITATIVE METHODOLOGY OF CHOICE

Research methodology can be divided into two basic paradigms or traditions; namely quantitative and qualitative (Bryman: 1988). According to Bryam these two types of inquiry are sometimes viewed as competing views about the ways in which social reality ought to be studied, and at other times as different ways of conducting social investigations (Bryman: 1988).

Quantitative and qualitative research methodologies operate within different epistemological frameworks (Schroder, K., Drother, K., Kline, S. and Murray, C: 2003). Quantitative research's epistemological underpinnings are those of the natural sciences and positivism (Bryman, 1988:13). The basic theory of positivism is that the scientific method is suitable for studying all forms of knowledge, including social phenomena (Bryman, 1984:76; Bryman, 1988:14). In summary, quantitative research's main concerns are reliability, objectivity, representativeness, generalisability, replication and validity of research findings (Schroder: 2003).

On the other hand, the qualitative methodology is underpinned by a philosophy different from that informing the quantitative methodology. "Unlike the quantitative methodology, which draws the bulk of its intellectual inspiration from natural science and from certain tenets of positivism, qualitative approaches draw their strength from their philosophical underpinnings or the assumptions of phenomenology, symbolic interactionism, verstehen, ethnography and naturalism" (Bryman: 1984; Bryman: 1988; Lindloff: 1995 and Deacon: 1999).The reason for using both approaches is outlined in the following paragraphs of this chapter.

The above intellectual overviews are all committed to studying the performance of business or social phenomena being investigated in their natural contexts and from their own perspective, thus observing the setting being studied.

The above informed the method that was followed in this study. Both a qualitative and a quantitative dimension were used as an approach in this study. This involved document analysis, and individual interviews and questionnaire surveys. It should be noted that the quantitative dimension came from the fact that the data collected from the questionnaires were analysed in a quantitative manner.

Quantitative approaches generally answer what, and how questions, whereas, qualitative approaches explore why issues.

Frey, L.R., Botan, C.H., Friedman, P.G. and Kreps, G.L.(1991), concur adding that qualitative observations provide greater depth of information about what documents say and how people perceive performance in the context of the actual situations in which they occurred (Bryman:1984).

> "In its investigation, the tradition uses naturalistic methods of inquiry as opposed to positivist approaches that use natural science methods to study an organisation. It also has the advantage of having the most appropriate methods of capturing the insider views of those used in the study or investigation" (Bryman: 1984:78).

This research is a balanced form of research because it gives the researcher an opportunity to peruse primary data through document analysis and to develop secondary data through individual interviews and questionnaire surveys. It is the above strengths of the qualitative methodology and its associated techniques that prompted the use of this tradition in collecting data from this organisation.

Before embarking on the field research by means questionnaires and individual interviews, a qualitative and quantitative content analysis of this organisation was analysed through document analysis, in order to elucidate the basic codes of meaning encoded in this organisation.

3.6 RESEARCH PROCEDURE FOLLOWED IN THE CASE STUDY

The study sought to evaluate employees' perceptions on an implemented Quality Management System at one of the South African government departments, to assess the methodology used to develop, implement and maintain the quality management system. This decision to use this particular government department was informed by the magnitude of this project and justified on the grounds that this government department is one of the few organisations that developed and implemented a quality management system in the public sector environment. And it is very important to identify the method used to develop the quality management system, in order to understand the fundamental principles of implementing quality management systems. Understanding the fundamentals will contribute

in ensuring that a sustainable method on development, implementation and maintenance of quality management system is conceptualised thus leading implementation of sustainable quality management systems which does not loose their impetus over time of implementation. If this is compared with most abandoned quality management systems which lost their impetus over time of implementation as recorded by Pycraft et al (2000), the possibility exists for this government department quality management system model to be used to benefit operations or organisations in the public sector, which are not performing well.

Mode of entry into this organisation

It should be noted that it is not easy to gain entry into this government organisation due to the bureaucracy and confidentiality of information. Fortunately the permission was granted, on condition that the name of the department should not appear anywhere in the research and instead, the wording "one of the government departments" should be used. This was followed by analysis of the organisational and geographical structure, with a view of understanding how the organisation functioned and to get some preliminary information on why and how the Quality Management System was introduced.

The selected areas of study within this organisation were accessed through a formal introduction by the office of the head of the department, after the application had been granted. The office of the head of the department mandated the QMS department to co-ordinate the whole research programme, and be the point of contact between the organisation and the researcher. This process was then progressed by a physical visit and formal introduction of the researcher to the QMS department, which in turn identified all five areas where QMS programme had been implemented. The researcher then selected two areas in Gauteng and the QMS department as sample areas from which the interviewees would be drawn. The introduction entailed a lengthy discussion of the research topic, objectives and the use to which data would be put. Fortunately, in both the areas selected and in the QMS department, this proved to be an important task as everybody involved in the intervention was concerned about knowing the effects of the QMS programme on the organisation, and they were willing to assist in the research. The head office also viewed this research as a tool that could be used to make a decision on whether the QMS programme should rolled out to other areas, as planned in their medium and long-term strategic objectives.

Phase one (document analysis).

Particular documents were selected purposefully and these included documents which were used as project and implementation plans of the system, and other documents used to maintain the quality management system.

The aim of document analyses was to identify the following:

- Description of the reasons why the quality management system was introduced.
- Description of what the Quality Management System entails.
- Description of how the Quality Management System was developed and implemented.
- Description of the key performance indicators (KPI) of successful implementation.

Phase two and three (questionnaire surveys and individual interviews).

Phase two of the study was quantitative in nature, and these involved questionnaire surveys, whereas phase three was qualitative and involved individual interviews of employees.

Distribution of questionnaires and the conducting of individual interviews.

In conducting individual interviews and in the distribution of the questionnaires, the following steps were followed:

- determining the sample size;
- recruitment of participants;
- interview and questionnaire distribution setting;
- the interview and questionnaire guide.

In qualitative research, the assumption that the bigger the sample the better, is challenged because qualitative studies are less concerned with producing findings that can be generalised more widely than in providing insights into complex human and social phenomena in specific circumstances (Deacon:1999). Jensen and Rosengren argue in support, “if, for example, the task is to tease out subtle details from informants about their perception of the QMS programme, it is no use of course, to turn to a representative sample of an organisational population. Such a task requires small-scale, in-depth studies...” (1990:23). Thus, in its sampling, the tradition is not concerned about the representativeness

of the sample. This means that smaller samples are used in qualitative research than in quantitative research (Deacon: 1999).

Qualitative research has no definite guidelines on the issue of sample size, and as a result, theoretical and empirical requirements of the study as well as the availability of time and resources seem to decide the size of samples (Deacon: 1999). It is thus argued that there is no consistency in sampling procedures used in focus individual research and that the sampling methods used are hybrids of already existing sampling strategies (Deacon: 1999).

Non-probabilistic sampling

Non-probabilistic samplings are not selected according to the principle of statistical randomness; they are selected according to other principles such as convenience or accessibility. This means that statistical theories of probability do not apply to non-random samples, making it impossible to know the degree of accuracy to which properties of the sample can be used to describe properties of the population (Terre Blanche & Durrheim: 1999).

This study used non- random sampling - also known as a purposive or judgmental sampling method - to sample the areas and the individual interview participants (Deacon: 1999). In total, two regional areas in two different regions, and the QMS department which is based at the head office, were chosen as the geographical areas of the study.

What informed choosing these three areas, was convenience and the fact that the research was concerned with persons involved in implementing the QMS programme, the study purposively selected three areas in the Gauteng Provinces out of five areas situated in four South African Provinces; KZN, Gauteng, Limpopo and Mpumalanga. The QMS department based in head office in Gauteng Pretoria was also purposively selected due to the fact that, this department was the champion in implementing the QMS programme throughout the four provinces. This means that the employees in this department have first hand information on the method that was used to develop and implement the quality management system.

What informed choosing this province of Gauteng was mainly an economic reason. Since Gauteng was the area of residence for the researcher, which implied that the expenses of the research, traveling costs in particular, would be minimal.

In the two regional areas, only one individual interview per area was conducted in each of the two, followed by three individual interviews in the QMS department, meaning five individual interviews were undertaken.

The individuals interviewed in the two areas were both managers, and were purposively selected for the interviews, given the fact that as managers, they were in charge of the implementation of the quality management system.

The three individuals interviewed in the QMS department, were the team leaders and were purposively selected for the interviews due to the fact that team leaders are the core of development and implementation of the Quality Management System.

As the research was concerned with the evaluation of the implemented QMS programme, the study purposively selected individuals in these groups, because they represented the core of a QMS intervention, and they were likely to have a better understanding of the method used to develop and implement the quality management system. The individuals in the management department in the two areas were the main custodians of the implemented QMS programme. Whereas the three team leaders in the QMS department were the main implementers of the QMS programme throughout the organisation.

It should be noted that questionnaire surveys were only conducted in the two regional areas. A total number of questionnaires equivalent to the total staff compliment were distributed in the two areas only. The questionnaire survey targeted all staff members at the team member level within the organisation. The rationale of targeting these particular staff levels for the questionnaire survey was influenced by the desire to evaluate their views given the fact that they represent the shop floor where the quality management system was mainly targeted.

For the sake of clarity, the two chosen areas were referred to as area 1 and 2.

The other reason of selecting these two areas was informed by the fact that the Quality Management System was rolled out in a staggered manner and these two areas happened to be the first areas of implementation, and as indicated above, they are both located in Gauteng which happens to be the researcher’s place of residence.

Similarly, for the interviews, the choice of managers and team leaders in two areas and the QMS department respectively, was influenced by the desire to evaluate the influence that they these staff members had in the development and implementation of the Quality Management System. In fact they were very much willing to be involved in the study.

According to Vaughn et al (1996), the aim of the research should be to recruit clearly identified individuals who could best address the purpose and goals of the research (Vaughn et al, 1996). Individuals who are invited to participate in a research must be able and willing to provide the desired information and must be representative of the population of interest" (Hansen, Cottle, Negrine & Newbold: 1998).

In this study, participants were drawn from those staff members who were regularly exposed to the QMS programme and had something to say about it (Schroder et al: 2003).

In the light of the above theoretical guidelines, this study had a maximum of five participants for the interviews, whereas the questionnaires were distributed as recorded in the table 2: below.

Table 2: Composition of individuals for interviews

Area	**Date**	**Composition**	**Total Number**	**Venue**
Region 1	June 2007 to Aug 2007	Manager	1	Johannesburg
Region 2	June 2007 to Aug 2007	Manager	1	Pretoria
QMS Department	June 2007 to Aug 2007	Team leaders	3	Head Office - Pretoria

Table 3: Composition of distributed questionnaires

Area	**Date**	**Composition Distributed To**	**Total Number**	**Total not Responded**	**Total Returned**	**Venue**
Region 1	June 2007 to Aug 2007	All employee levels	31	10	21	Pretoria
Region 2	June 2007 to Aug 2007	All employee levels	86	27	59	Johannesburg

The Interviews guide (See Appendix B)

The interviews guide, administered in English, was developed using the 10 fundamental concepts of developing and implementing a Quality Management:

- Performance objectives
- Leadership
- Motivation
- Change Management
- Employee Involvement
- Long-term Top Management Commitment
- Training
- Quality Improvement Projects
- Measure QMS progress
- Reward Accomplishment.

The interview guide's purpose was to serve as a guideline to chart the course of the interview from the beginning to the end (Vaughn et al: 1996). This meant that, the interview guide was like a research agenda (Schroder et al: 156).

The guide was prepared in advance to avoid a situation where the research might forget essential points as well as to keep the focus of the group on subjects relevant to the research objectives (Hansen et al: 1998 & Schroder et al: 2003).

The interview guide included an overview of the topic, framing and sequencing of important themes, key points, questions and issues, areas of discussion as well as guidelines and interview procedures (Lunt: 1996) &Vaughn et al: 1996). In drawing up a clear interview guide, the aim was to evaluate the interviewee's perceptions of the QMS programme, on whether it was perceived to have improved the operational efficiency of the department. An effort was made to ensure consistency in the use of the guide in all individuals interviews held during the study.

Before the interview guide was used in the actual interviews, it was piloted in order to see whether the questions outlined in the guide were comprehensibly structured and coherently

arranged, and whether they generated the desired discussion and responses relevant to the research objectives (Hansen, et al, 1998:265).

The pilot interviews were conducted with three individuals working in region 1 in June 2007. These interviews were held in the canteen in area 1, where a meaningful discussion was possible. The results of the pilot study were helpful in that they assisted in the restructuring of some questions in the interview guide as well as to add and even exclude other questions that did not add value to the study. Having piloted the guide, it was now ready for use in both regions 1 and 2, and the QMS department with the actual participants.

The Questionnaire (See Appendix A)

A questionnaire can be defined as a group of written questions used to gather information from respondents, and it is regarded as one of the commonest tools for gathering data in the social sciences (Vogt: 1993 in Terre Blanche & Durrheim 1999). A questionnaire usually consists of a number of measurement scales, open ended items for qualitative responses, as well as other questions that elicit demographic information from respondents. Drafting questions is a crucial aspect of developing any assessment instrument since what you ask for is what you get. With regard to the development of standardised tests, questions should be short and concise, relevant to the research purposes. Once the questionnaire has been developed, it is administered to sample of respondents.

"The questions are scored and analysed to determine how good the questionnaire is" (Terre Blanche & Durrheim, 1999).

As with the interview guide, the same method used for developing an interview guide was used. And the 10 fundamental concepts of developing and implementing a Quality Management System were used to develop the questionnaire. The research questionnaire, administered in English, elicited responses from staff members to evaluate their perceptions of whether the implemented QMS programme was perceived to have improved the operational efficiency.

It is recommended that a pilot study be conducted to check the questionnaire before it is administered to the final sample. Once the researcher is satisfied with the quality of each item of each scale in questionnaire, the reliability and validity of the scales can be determined.

"The most commonly calculated reliability information relates to the internal consistency of a scale, meaning the degree to which to which items of a scale all belong together or cohere" (Terre Blanche & Durrheim 1999).

The questionnaire, Appendix A, was piloted using two co-students to verify its readiness before the actual survey was to be conducted. After the pilot study, it was found to cohere.

3.7 DATA COLLECTION

> "The first stage to know about data collection from an interpretive perspective is that the word data is not universally popular. Data represent bits of discrete information that can be extracted from their context, whereas interpretive researchers typically work with material that is richly interrelated and would lose its meaning if broken down into discreet bits. Interpretive researchers do not make such clear-cut distinction between different phases of research, but may reformulate their research question as a result of new material they have collected of change their sampling strategy in response to new findings" (Terre Blanche & Durrheim, 1999).

Document Analysis

As part of the data collection, some documents which were used as part of the project and implementation plans of the system, and the other documents used to maintain the quality management system were analysed.

However, the main data was collected was derived from the individual interviews and questionnaire surveys. Interviews and questionnaires were used to provide primary data and also used to cross-validate the analysed secondary data from documents. Since the focus of this particular study was on the views of individuals with regard to the implemented QMS programme, unstructured face-to-face interviews were conducted, combined with questionnaires completed by the staff members.

Interviews

Interviews allow people to speak for themselves rather than to provide the respondents with a battery of responses to predetermined hypothesis-based questions (Babbie et al 2003:289). Unstructured open ended questions were asked, as this permitted a more intensive analysis on the issues (Neumann, 1993, in Anyamele: 2005).

> "Conducting interviews is a more natural form of interacting with people than making them fill out a questionnaire, do a test or perform some experimental task, and therefore fits well with the interpretive approach to research. It gives us an opportunity to get to know people quite intimately so that we can really understand how they think and feel. At one level, interviews are simply conversations, similar to the hundreds of short and long conversations we have all the time, but at the same time they are also highly skilled performances" (Terre Blanche & Durrheim 1999).

Planning the interview

According to Terre Blanche & Durrheim 1999, a more useful way of planning the interview in terms of how structured the interview should be is the most important thing. If all one needs from somebody is some straightforward information, a very structured interview, essentially just a list of standard questions would do fine. If you want people to talk in some depth about their feelings and experiences, you will not do better than plan for an unstructured interview, and have a sense of what kind of feelings and experiences you want to found out about, and maybe jot down some questions.

The most popular kind of interviews are semi-structured interviews, where you develop an interview schedule, or list of topics and perhaps sub-topics in advance (Terre Blanche & Durrheim: 1999). All interviewees were contacted via e-mail to be informed of the intention to conduct interviews by the researcher. The manner in which the interviews were to take place, the venue, date and time of the interview were agreed. This was followed by a phone call to confirm and verify whether indeed the message was received. The idea of recording the interview proceedings on audio cassette tapes (Hansen et al: 1998) was raised with all the five interviewees, unfortunately none of the interviewees agreed to be recorded even after reassurance given to the interviewees on the issue of confidentiality and anonymity.

Setting up the interview

> "When setting up an interview one needs to ensure that you are not going to be unduly disturbed in the interview context, and to ensure an adequate degree of privacy. One needs to sure that the interviewee has planned to put aside the required amount of time so that he or she is able to give the interview undivided attention" (Terre Blanche & Durrheim: 1999).

All interviewees, as agreed prior to the day of the interviews, were prepared and ready for the interview.

> "It can be a good idea to start with a summary of what the interview is about but one should cut it short. One can follow this with a non-threatening open-ended question which gets the interviewee talking and helps to put them at ease. It should be remembered that the interview is a process of getting to know one another better" (Terre Blanche & Durrheim: 1999)

All interviews were conducted at the interviewee's place of work as planned. Due to the fact that interviews could not be recorded, the proceeding notes were then captured on paper and written down word by word, and this was followed by electronic typing for clarity and backup. On average each interview took about one hour, with notes of about four pages in length per interview. The typed electronic version was then e-mailed to all interviewees for them to verify and confirm captured information, and also to ensure that the interviewees were not quoted out of context. And this was followed by transcription of the five interviews data scripts into one consolidated interview script.

Questionnaire survey

> "Research design should always reflect careful attention to the ethical issues embodied in research projects. The essential purpose of ethical research planning is to protect the welfare and the rights of research participants, although there are many additional ethical considerations that should be addressed in the planning and implementation of research work. Obtaining consent from participants is not merely the signing of a consent form; consent should be voluntary and informed. This requires that participants receive full, non-technical and clear explanation of the tasks expected of them so that they can make an informed choice to participate voluntary in the research" (Terre Blanche & Durrheim 1999).

In this research, area management of this government department in the two areas 1 and 2 were asked for permission to distribute the questionnaires to all staff members. The number of questionnaires distributed was equivalent to the total staff complement in each area. The reason for distributing such a high number of questionnaires was to make room for spoilage. The questionnaires were placed in open box at the reception, with another box in a ballot box form placed next to it to receive the completed questionnaires. The staff members were asked to complete the questionnaires and place them into the ballot box after completion. Those who happened not to have enough time to complete the questionnaire on the spot returned them immediately. And for those who did not have enough time and for those who were unavailable, an arrangement was made for them to be issued with the copies for completion and return within two days. Within a week all completed questionnaires were returned, with an uptake of 32.3 and 31.3 percent in area 1 and 2 respectively. All questionnaires received were then consolidated into a quantitative table and a bar chart (see chart 1 and 2).

3.8 DATA RELIABILITY AND VALIDITY

Reliability is a statistical measure of how reproducible the survey instrument's data are, whereas, validity is assessment of how well a survey or index measures what it is intended to measure(Litwin:1995).

According to Terre Blanche & Durrheim: 1999, reliability is the degree to which results are repeatable, and this applies both to subjects' scores on measures and to the outcomes of the study as a whole. Terre Blanche & Durrheim 1999, further argue that, individuals will score similarly or reliable measures on numerous occasions. Similarly, the same set of results will be obtained repeatedly in replication of the study if the study is reliable. Since positivists believe they are studying a stable and unchanging reality, reliability is a highly valued criterion that indicates how accurate and conclusive the findings are.

> "Validity is the degree to which a measure does what it is intended to do. This means that the measure should provide a good degree of fit between the conceptual and operational definitions of construct, and the instrument should be usable for the particular purpose for which is designed. If a study possesses internal validity, then its findings are said to follow in a direct and unproblematic way from its method. If

it is said to sustain its findings or conclusions, a study needs external validity and if this external validity is present, its findings or conclusions can be generated beyond the confines of the design and the study setting. If the findings are true for all humans, and for all operationalisation of the measures used in the study, then the study possesses complete external validity" (Terre Blanche & Durrheim 1999).

According to Litwin (1995), in survey research, error comprises two components, namely, random and measurement error. Random error is the unpredictable error that occurs in all research, which may be caused by many different factors but is affected primarily by sampling techniques. There might be reliability and validity errors in this research. To mitigate this, one may select a larger and more representative sample, which will increase the cost of the study, so it is often neither practical nor feasible simply to expand the sample.

Mmeasures were taken to ensure that the reliability and validity of the results of this study was ensured, and the error rate was minimised as much as possible. As indicated earlier the study was subjected to serious time and budgetary constraints, which may have impacted on the reliability and validity of the results. For instance the organisation used for the case study is spread throughout the nine provinces of South Africa. This meant that it warranted a much bigger sample, which was going to increase the financial costs of the study. That was mitigated by confining the study in one province, because selecting a far bigger sample was neither practical nor feasible.

3.9 DATA ANALYSIS

Data is the raw material of research. In quantitative research, data consists of lists of numbers that represent scores of variables. Quantitative data is obtained through measurement, where the stage of data analysis is a preparatory stage where the raw data is transformed into data sets in machine readable format. Raw data consists of a collection of unprocessed measurements, unordered, containing errors and missing values and which must be transformed into an ordered error free data set before they can be analysed. Preparing data involves three tasks; coding, entering and cleaning. In an interpretive study there is no clear point when data collection stops and analysis begin. There is gradual fading out of the one and a fading in of the other, so that at first one is mainly collecting data and towards the end one is mainly analysing what has been collected.

> "A key principle of interpretive analysis is to stay close to the data, to interpret it from a position of empathetic understanding. The purpose of interpretive analysis is to provide thick description by which is meant thorough description of the characteristic, processes, transcriptions and context that constitute the phenomenon being studied, couched in the language not alien to the phenomenon, as well as an account of the researcher's role in constructing this description" (Terre Blanche & Durrheim: 1999).

For this study, raw data was collected through document analysis, personal interviews and questionnaire surveys. The raw data from personal interviews and data from questionnaires based on the response to the research question, which was to evaluate the employee perceptions to verify how the Quality Management System was implemented. After the data derived from interviews and questionnaires had been collected, it was analysed in order to establish the extent to which the research question had been addressed.

Data analysis involved transcription of data from the interview transcripts and the data derived from consolidation of the questionnaires and each interview, were analysed and consolidated.

Analysis of data from interviews.

As indicated in earlier in this chapter, interviews were conducted at the two areas and QMS department, all based in Gauteng. Interviews were conducted with selected senior staff members, one from Gauteng area 1 in Pretoria and the other one from Gauteng area 2 in Johannesburg, and three team leaders from the QMS department based in head office Pretoria.

<u>Performance objectives</u>

A question was asked of each of the four interviewees to determine the employees' perceptions of the implementation of the QMS by their employer, whether the aim of the QMS implementation was to maximise performance objectives or not.

Leadership

The question on leadership was to find out if the interviewees knew what the vision of their organisation was and their perception on whether the vision was well communicated and whether they thought the strategy and the people were focused towards that vision.

Motivation

A question was asked on whether they had a performance management system to motivate value adding work, and whether they felt people within the organisation were motivated or not. The other question on motivation was about the use of the reward system and discipline to extinguish unacceptable behaviour and encourage exceptional behaviour and whether their subordinates understood and accepted the performance expectations. The next three questions on motivation were whether subordinates felt it is possible to achieve their personal objectives, and whether their subordinates felt that high performance was more rewarding than average or low performance and lastly, whether subordinates felt that work-related benefits were distributed fairly. The other question on motivation was whether their subordinates knew where they stood in terms of current performance and long-term opportunities and whether rewards were administered on a timely basis to subordinates as part of the feedback process

Change Management

A question was asked on whether a change management programme was implemented concurrently with the development and implementation of a QMS programme. And the type of change management implemented.

Employee Involvement

A question was asked on whether employees were involved during the early stages of development of the QMS, and how, and whether they thought the employee involvement impacted on the QMS programme.

Long-term Top Management Commitment

A question was asked on whether they thought top management was involved and committed to the implementation of the QMS, and the type of commitment demonstrated. And also whether they thought top management regarded QMS as an important programme that could improve the general performance of the organisation.

Training

A question was asked on whether they and their subordinates receive QMS training and how often. And whether the training improved their understanding of QMS.

Quality Improvement Projects

A question was asked on whether implementation of the QMS led to individuals or groups applying the quality methods to identify the projects that improved organisational processes, which involved identifying output variations, and interventions to minimise deviations from quality standards and improve quality standards.

Measure QMS progress

A question on whether QMS performance was measured internally and externally was raised. And whether there was any benchmark in their area with other areas of the organisation in terms of measuring performance

Continual Improvement

A question was asked on whether there was some measures are put in place to ensure continual improvement of the QMS.

Analysis of data from questionnaires.

In research of this nature the researcher should not simply accept what the respondents tell him but probe for more information to inform and elucidate apparent anomalies and contradictory statements.

The statements from the interviews and questionnaire data are not only simple representations, true or false of what people think. Interviews statements and questionnaire data are raw data and they become a source of information only through analysis and interpretation (Jansen: 1982).

3.10 DIFFICULTIES ENCOUNTERED

The research in general went well; there were however some challenges encountered during the data collection. The first logistical challenge was to get permission to conduct the research from the top management. It took about two months before the permission was granted and then only with restrictive conditions. The QMS department which was the contact between the researcher and this organisation underwent a major restructuring. This led to the people that the researcher was dealing with being moved to another department and new people taking over. Fortunately this happened after the interviews were conducted.

The data collection was a challenge because this particular government department, as a state organ, operates in terms of a rigid bureaucracy, combined with secrecy and protection of confidential information. To a certain extent, these characteristics delayed the research. The idea of Lincoln and Guba as noted by Cantrell (1993:88) that the “design of naturalization inquiry cannot be given in advance, it must emerge, develop and unfold” was relevant to this study. The most problematic issue in collecting the data was whether or not the data was enough or knowing when saturation point was reached.

Technical problems were another challenge that was encountered during the data collection. At area two the interview was interrupted due to the fact that the interviewee was called to attend to an urgent problem. This interruption not only delayed the interview, but it changed the mood of the interviewee to a certain extent. The technical challenge was the fact that the researcher was not allowed to record the interview proceedings on a tape recorder. This

came with its own challenges as well, because it prolonged the interviews due to the fact that the researcher had to resort to taking notes on each and every point, and that takes time.

3.11 ETHICAL ISSUES

> "Research design should always reflect careful attention to the ethical issues embodied in research projects. The essential purpose of ethical research planning is to protect the welfare and the rights of research participants, although there are many additional ethical considerations that should be addressed in the planning and implementation of research work. Obtaining consent from participants is not merely the signing of a consent form; consent should be voluntary and informed. This requires that participants receive full, non-technical and clear explanation of the tasks expected of them so that they can make an informed choice to participate voluntary in the research" (Terre Blanche & Durrheim 1999).

An application letter for permission to conduct an interview was sent by the author to the gatekeeper. It took a while before permission was granted by the gatekeeper. Permission had been granted in principle by this government department for this study to be conducted, on condition that the name of this department should not appear anywhere in the research report, and is replaced with "one of the government departments in South Africa", the reason being the confidentiality of the information. A reassurance was given to this department's management that that the conditions would be observed and complied with as expected. This was formalised through signing of a confidentiality statement by the researcher.

"The informed consent signed participants should also assume them of the parameters of confidentiality of the information supplied by them. Any limits of confidentiality should be clearly specified" (Terre Blanche & Durrheim 1999)

CHAPTER 4 - RESULTS

4.1 INTRODUCTION

This chapter presents the results of the study, which answer the research question. The method used to report the findings is described. The results of this study are derived from document analysis and the data derived through individual interviews and questionnaire

surveys. According to Fink (1996), if the report is being submitted to a funding agency, such as a government or a foundation, the composition and format may be set for the researcher. However, if the research is for a different purpose, then the researcher may decide what to include and how long the report should be.

The result of this research includes the following:

- Findings from the document analysis
- Findings from the questionnaires and
- Findings from the interviews

According to Fink (1995), surveys produce observations in the form of narrations or number, of which narrations are responses stated in the survey participant's own words, which are then counted, compared and interpreted or discussed, often using methods borrowed from communications theory and anthropology. The same analogy as indicated by Fink (1995) has been followed in this research, in terms of presentation of data from document analysis, interviews and questionnaires. The data is presented as raw as it was obtained and followed by discussion of the findings in the following chapter. The raw data from interviews is captured in the attached Appendix C, where as the data from the questionnaires has be captured on individual questionnaires and stored for safe keeping.

As stated by Neuman (1997:70) in Titus (2004:63), people may or may not have the same perception on the same thing; the experience of five respondents has been highlighted through the chapter and their perceptions on QMS.

The names of the people interviewed are not revealed for confidentiality purposes, Interviewee 1 to 5 is used to protect their identity. For confidentiality purposes, the name of the organisation has also been changed to one the South African government department.

4.2 PRESENTATION OF DATA

Although the purpose of this section is to present the results, not to interpret them, a certain amount of interpretation is necessary so that the reader can understand what the results mean (Terre Blanche & Durrheim 1999).

Findings from interviews and questionnaires are outlined in this section without discussion of data, which is covered in the following chapter.

4.3 FINDINGS FROM DOCUMENT ANALYSIS

As indicated in Chapter three, some document were analysed as part of data collection. The documents belonged to the QMS department located at the Head Office in Gauteng.

According to the analysed documents, development and implementation of the quality management system was conducted as follows:

Phase 1 - Determination of the scope of QMS implementation

The ISO 9001: 2000 Requirements for a Quality Management System framework was adopted and implemented in core or primary functions of the business, with the exclusion of secondary or support services. The idea of implementing QMS was sold to and bought by the Executive Management at the National Management Forum, where a short demo of the Zoom In Zoom Out (ZiZo), the benefits thereof, roles, responsibility and involvement of the external consultant were requested.

Phase 2 – Development of Procedures

Draft policies and procedures were required by the ISO9001:2000 standard. All the mandatory policies, procedures and objectives were developed in terms of the requirements of the standard.

Phase 3 - Training

Project implementation and awareness training were carried out simultaneously running parallel. Training and awareness sessions were carried out in three phases, where phase 1 involved top management, phase 2 Middle Management and phase 3 all other levels of personnel. Various quality awareness posters, information cards and brochures were developed. It was the sole responsibility of the officers allocated to specific offices to ensure their distribution and the awareness thereof. All documents, including audit reports, were published via the internal electronic communication channel. The training mainly involved training staff members on the fundamental principles of quality management and training on the newly developed procedures. Phase 3 took about three months to complete.

Phase 4 – Pilot implementation of procedures

After training was given, the organisation embarked on the next phase which involved piloting of the developed procedures in selected areas to determine whether the procedure

was adequate for implementation. Phase 4 took about three months to implement all procedure, and this was followed by evaluation of the QMS through internal audits.

Phase 5 – Evaluation of QMS and rollout

Evaluation of the QMS involved conducting internal audits to determine whether the implemented procedures ensure business adequacy and the KPI's were complied with.

4.4 FINDINGS FROM INTERVIEWS

As indicated in Chapter three, interviews were conducted at the two areas and the QMS department, all based in Gauteng. Interviews were conducted with selected senior staff members, one from Gauteng area 1 in Pretoria and the other one from Gauteng area 2 in Johannesburg, and three team leaders from the QMS department based in the head office, Pretoria.

The major points that emerged from the interviews were: the perception that QMS has been well developed; QMS had been well implemented; QMS has been well sustained and there are measures in place to ensure continual improvement.

Performance objectives

A question was asked of the four interviewees to find out what their perception was of the implementation of the QMS by their employer, whether the aim of the QMS implementation was to maximise performance objectives or not. They all answered that the implementation of the QMS was for that purpose of maximising the performance objectives of their organisation. And they felt that improvement of quality of service, speed of delivery of service, dependability and reliability of the service provided, flexibility of the service provided and reduction of costs, were the main goals that the organisation's QMS sought to achieve.

Leadership

The question on leadership was to find out if the interviewees knew what the vision of their organisation was and their perception of whether the vision was well communicated and whether they thought the strategy and the people were focused towards that vision.

All of them knew what the vision was. Four said the vision was well communicated and only one was against that. Three said yes and two no to the question, that the people and the strategy supported the organisation's vision and the organisation performance was moving in the right direction

Motivation

A question was asked on whether they had a performance management system to motivate hard work, and whether they felt people within the organisation were motivated or not. The other question on motivation was about the use of a reward system and discipline to extinguish unacceptable behaviour and encourage exceptional behaviour and whether their subordinates understood and accepted the performance expectations. The next three questions on motivation were whether subordinates felt it was possible to achieve their personal objectives, and whether their subordinates felt that high performance was more rewarding than average or low performance and lastly, whether subordinates felt that work-related benefits were distributed fairly. The other question on motivation was whether their subordinates knew where they stood in terms of current performance and long-term opportunities and whether rewards were administered timeously to subordinates as part of the feedback process

All of them said they had a performance management system. And as for people motivation, only two said they felt people were motivated, the other three said they felt were not motivated. On the issue of reward and discipline to overcome bad behaviour, three said that this objective was not achieved and felt that the objective had been achieved. However, on the issue of whether their subordinates understood and accepted that superior performance brought a reward, they all felt that this was the case. Whether subordinates felt that work-related benefits were distributed fairly, they all said that they thought that their subordinates felt the distribution was fair. On the question of whether their subordinates knew where they stood in terms of current performance and long-term opportunities, only three felt that this was so. On whether rewards are administered on a timely to subordinates as part of the feedback process, they all said that this was the case

Change Management

A question was asked on whether a change management programme was implemented concurrently with the development and implementation of a QMS programme. And the type of change management implemented.

All said a change management programme was implemented together with the QMS programme. This was done through a change management programme called ‘who moved your cheese”. The reason for implementing the programme was to prepare employees for a new change, which was to be brought about by the implementation of the QMS programme.

Employee Involvement

A question was asked on whether employees were involved during the early stages of development of the QMS, and how, and whether they thought the employee involvement impacted on the QMS programme.

Three said that employee involvement was only focussed on document control training, on ZIZO. As for the impact on QMS three said that although training was given on the benefits of QMS, it could have been better if an appropriate training have been given to lower level employees.

Long-term Top Management Commitment

A question was asked on whether they thought top management was involved and committed to the implementation of the QMS, and that the commitment was demonstrated visibly. And also whether they thought top management regarded QMS as an important programme that could improve the general performance of the organisation.

Three answered that top management was neither involved nor committed to the implementation of the QMS. This also indicated that top management just provided financial resources, and only got involved when there was poor performance. Two disagreed that top management was involved and committed to the implementation of the QMS.

Training

A question was asked on whether they and their subordinates received QMS training and how often and whether the training improved their understanding of QMS.

They all said yes, they had received training together with their subordinates. However, on the question of frequency of training, interviewee1 said he received two sessions of training, whereas Interviewee2 indicated that he received only one session of training.

Quality Improvement Projects

A question was asked on whether implementation of the QMS led to individuals or groups applying the quality methods to identify the projects that improved organisational processes, which involve identifying output variations, and interventions to minimise deviations from quality standards and improve quality standards.

They all agreed that the implementation of QMS projects helped geared towards the improvement of organisational processes. They further indicated that the following quality improvement projects were implemented to improve organisational processes:

- Suggestion scheme Alternative Dispute Resolution (ADR), led to implementation of a system where detained goods were subjected to rent payment. Previously customer goods were stored free of charge, and this led to high storage costs being incurred by the organisation.
- Standardisation of assessment system in one area
- A suggestion scheme gave staff members an opportunity to come up with value adding suggestions.

Measuring QMS progress

A question on whether QMS performance was measured internally and externally was raised. And whether there was any benchmark in their area with other areas of the organisation in terms of measuring performance

They all answered that the QMS performance was measured both internally and externally. As for the question of benchmarking, three said benchmarking was undertaken and involved their areas being measured for performance against other areas.

Continual Improvement

A question was asked whether measures were put in place to ensure continual improvement of the QMS.

One answered that there were no such measures and four said that, there were some measures put in place to ensure the continual improvement of the QMS, and that this was done through management review sessions and audit sessions.

4.5 FINDINGS FROM QUESTIONNAIRES

The research questionnaire, which was administered in English, elicited responses concerning recipient's perceptions about the implemented QMS. This was developed from data analysis information and using data from document analysis and data from the literature review.

The questionnaire attempted to determine staff members' perceptions of the QMS programme.

The questionnaire was distributed to only two areas out of the five where QMS was piloted. The reason being, the size of the population was so big that it was impossible to do all the five areas.

What was measured?

Respondents were asked questions which required a yes or no answer. Some of the questions required an explanation and others did not (refer Appendix A – Questionnaire).

On each item, the total number of yes's or no's was added to determine the number of respondents who were for or against the question asked. The biggest number which may be a yes will then be referred to as 'for', whereas the biggest number of no's will then be referred to as being 'against', and vice versa. The data was then plotted of bar charts refer bar chart 1 and 2.

Figure 1: Questionnaire Distribution Figures Area 1

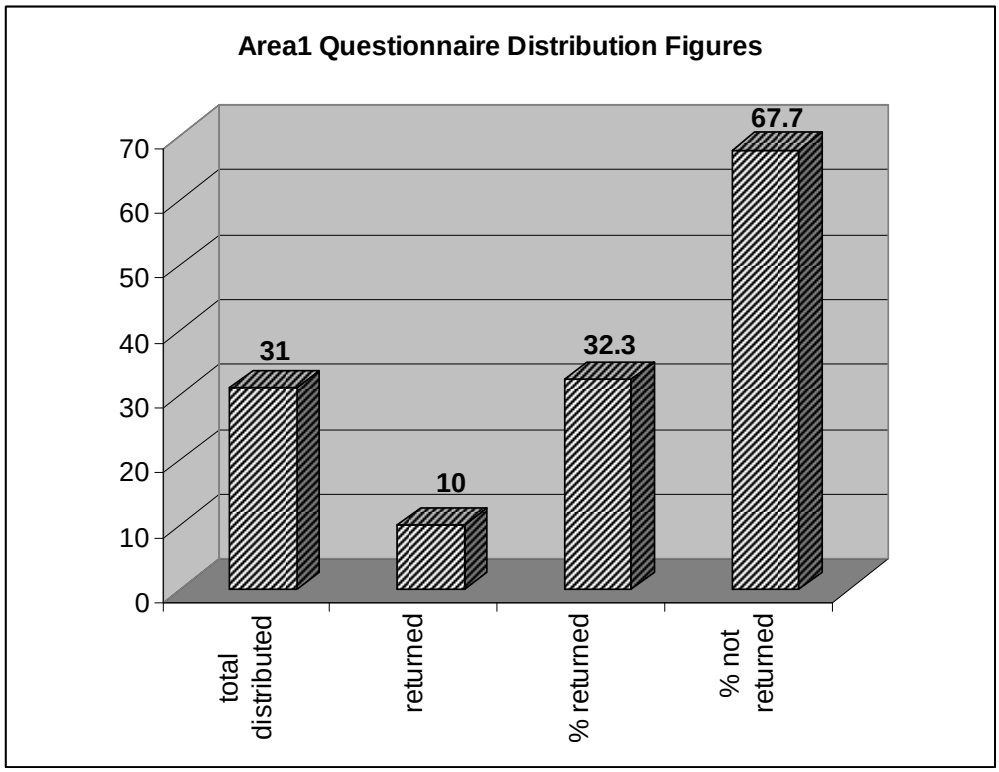


Figure 2: Questionnaire Distribution Figures Area 2

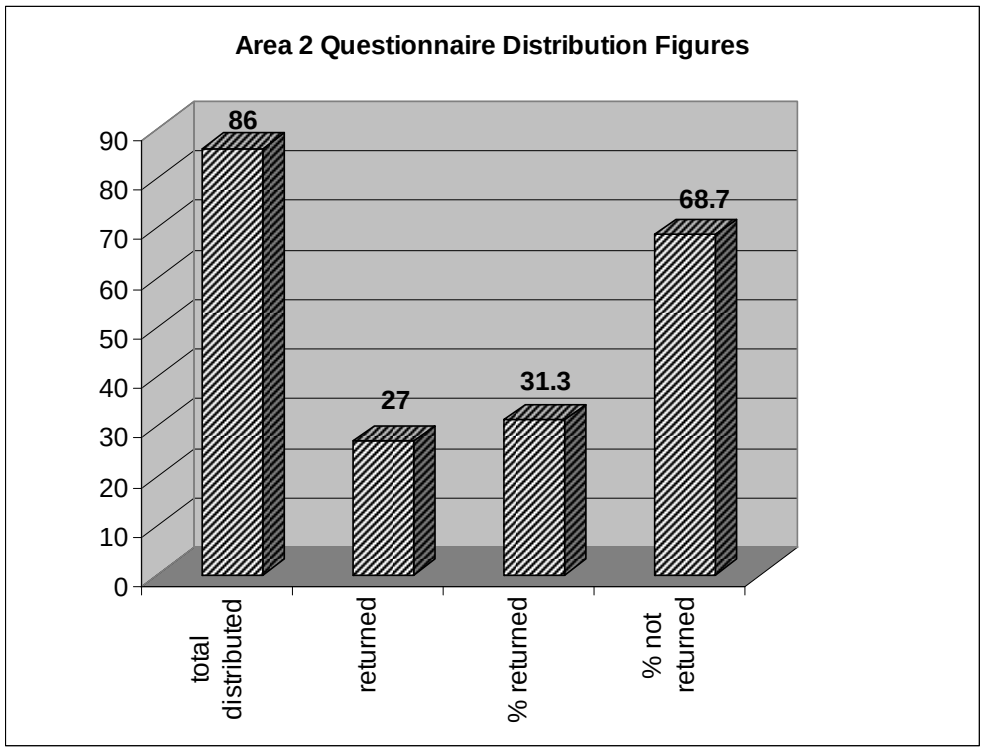


Figure 3: Questionnaire survey results from Area 1

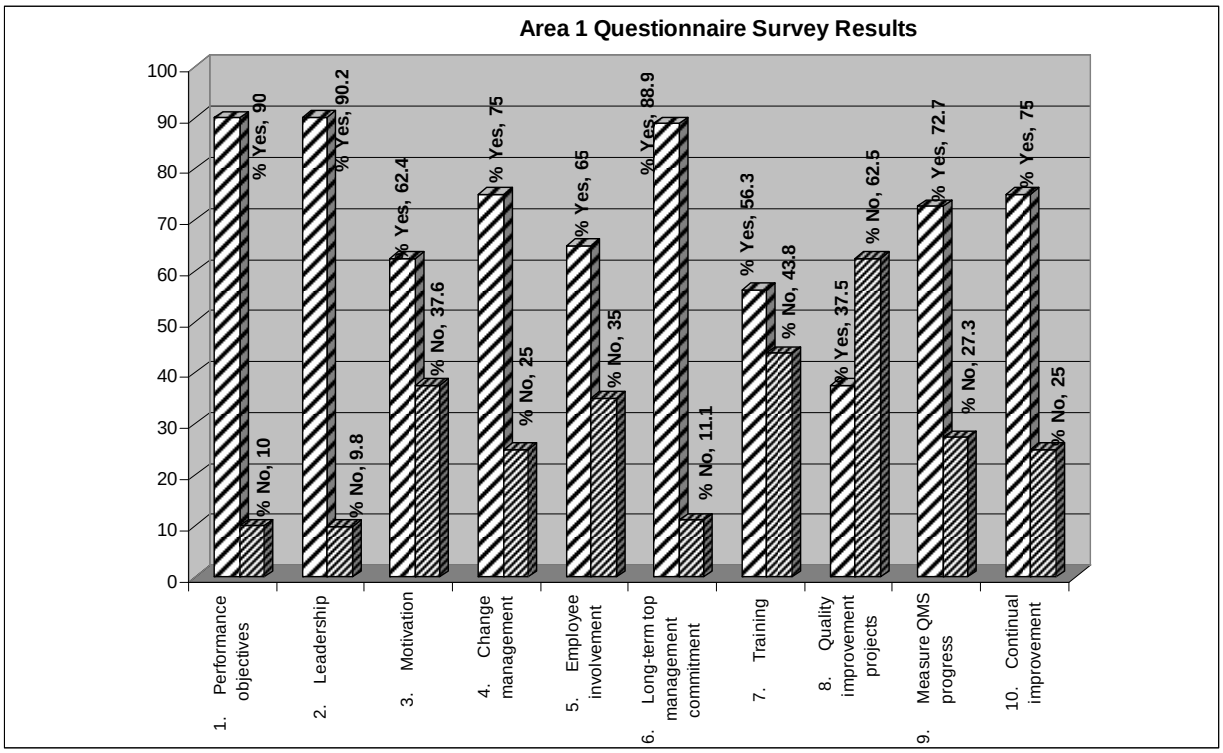
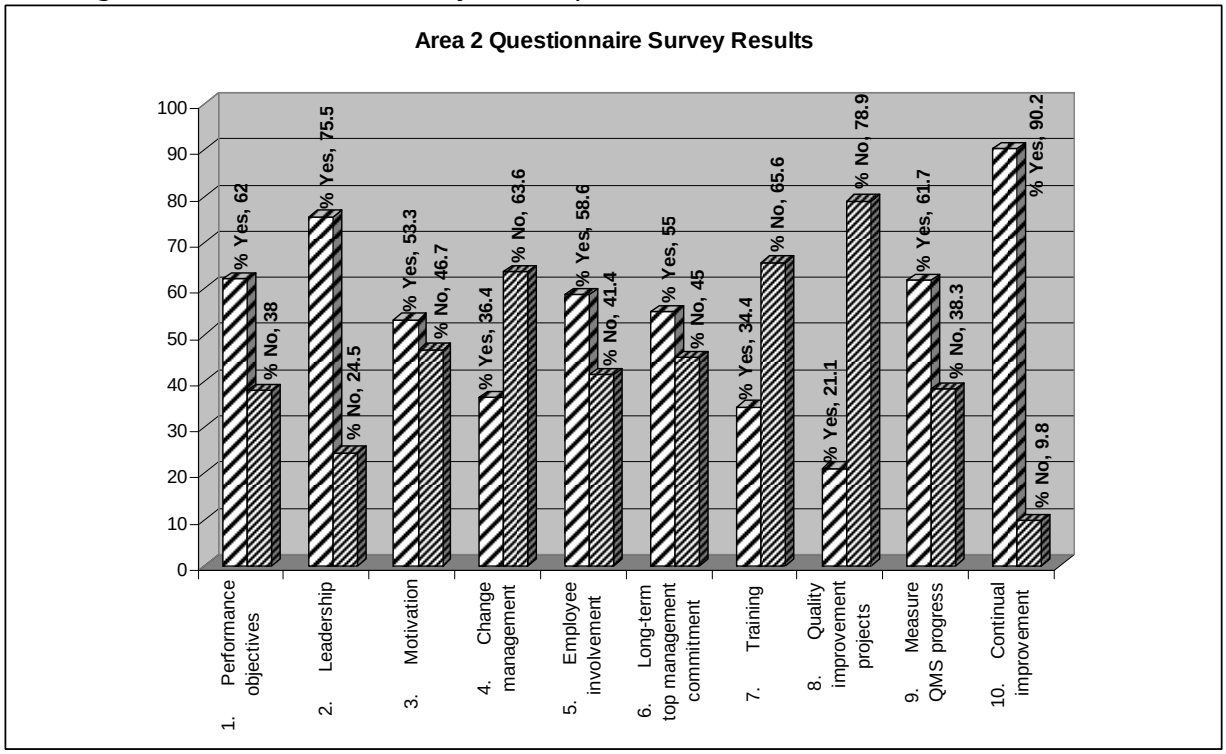


Figure 4: Questionnaire survey results from Area 2



Questionnaire Distribution Summary

Area 1

A total number of 31 questionnaires were distributed in Area 1. Of the 31 distributed questionnaires, only 10 questionnaires which constituted 32.3% were return. Whereas 21, which constituted about 67.7% of the total distributed were spoilt.

Area 2

A total number of 86 questionnaires were distributed in Area 2. Of the 86 distributed questionnaires, only 27 questionnaires which constituted 31.3% were return. Whereas 21, which constituted about 68.7% of the total distributed were spoilt.

For more information about the questionnaire data refer to Chapter Five on discussion of findings.

CHAPTER 5 - DISCUSSION OF THE FINDINGS

5.1 INTRODUCTION

This chapter tries to make sense of data from literature review, document analysis, individual interviews and questionnaire surveys.

The discussion of the findings follows a pattern where the theoretical information noted in the literature reviewed will be compared with results from the interviews and questionnaire in the following sequence:

- A concept from literature
- Interviews results – how interviewees responded to that particular concept
- Questionnaires results – how people surveyed responded to that particular concept.

These will then be followed by discussion of findings from documents which were used to record the development, implementation and maintenance of the QMS intervention.

5.2 FINDINGS ON PERFORMANCE OBJECTIVES

According to Pycraft el al (2000), performance objectives are the main goals that the organisation's operations seek to achieve. Operations aim at satisfying the customers through developing their five performance objectives, namely; quality, speed, dependability, flexibility and costs. It is said that if customers value low-priced products or services, the operation will put emphasis on its cost performance. Secondly, if they insist on error-free products or services, the operation will concentrate on its quality performance. If a customer emphasis is on fast delivery, this will make speed important, whereas a customer emphasis on reliable delivery will make dependability important. Should a customer expect very innovative products and services, the operation must provide high degree of flexibility in order to get its innovations to its customers before its rivals. If a wide range of products and services are demanded by customers, the operation will need to be flexible enough to provide the necessary variety without excessive cost.

Findings on performance objectives

Interviews

According to the five interviewees, the QMS was implemented mainly for the purpose of improving the performance objectives of the organisation all five of them believed quality, speed, reliability and dependability of service delivery of the organisation, including reduction of costs, had been improved by the implementation of the QMS.

In terms of whether the costs had been reduced by the implementation of the QMS, an interviewee from area one stated that she was not sure because it was not easy to determine that, because there was no baseline data to measure against. Whereas the other four interviewees, indicated that costs had been reduced.

However, due to non availability of objective evidence, it could not be verified during the research whether the costs of service and the other four performance objectives had been reduced by the implementation of the QMS.

Questionnaire

The majority of the respondents 90% in Area1 and 62% in Area 2, agreed with the fact that performance objectives, namely, quality, speed, reliability and dependability of service delivery of the organisation, including reduction of costs had been improved by the implementation of the QMS, but there was a big differential between the two areas. The difference between the two areas might have been brought about by inadequate training in the one area which was less enthusiastic about the benefits of the QMS intervention.

5.3 FINDINGS ON LEADERSHIP

> "Leadership is an inherent requirement for implementation of a successful QMS programme. The reason being, leadership is the critical ingredient behind successful human endeavour – the difference between average and sustained excellence can be summed up in one word – leadership. Yet, judging from pervasive underperformance, leadership is our scarcest resource" (Charlton, 2000:30).

Leadership sets a direction in developing a vision of the future along with strategies for producing the changes needed to achieve that vision. It aligned the people in communicating the new direction to those who can create coalitions that understand the vision and are committed to its achievement. It can motivating people and keep them

moving in the right direction, despite major obstacles to change, by appealing to basic but often untapped human needs, values and emotions (*Charlton 2000 p.p. 55-56).*

Finding on Leadership

Interviews

The vision of this organisation is stated a follows, "To be an innovative agency that enhances economic growth and social development and that supports the country's integration into the global economy in a way that benefits all South Africans" (Business Report 2006).

The five interviewees *knew* the vision of their organisation, and they accepted that the vision was well communicated through various means including the internet and posters. They also acknowledged that employees supported the vision and were moving in the right direction, as required by the organisation and were also customer focused. They believed that the operational strategies supported the vision of the organisation.

Questionnaire

The majority of the respondents 90.2% in Area1 and 75.5% in Area 2 knew what the vision of their organisation was, and they accepted that the vision was well communicated through various means including the internet and posters. They acknowledged that employees supported the vision and were moving in the right direction, as required by the organisation and were customer focused. They also believed that the operational strategies supported the vision of the organisation.

5.4 FINDINGS ON MOTIVATION

Well motivated employees are required for successful implementation of QMS. Motivation is a psychological state that is said to exist whenever internal and/or external forces trigger, direct, or maintain goal-directed behaviours. It involves establishing moderately difficult and specific objectives that are understood and accepted – collaboratively. It removes personal and organizational obstacles to performance thus achieving the objectives. Rewards and discipline should be appropriate to extinguish unacceptable behaviour and encourage exceptional behaviour. Rewards and external incentives that are appealing to the individual - personally valuable should be implemented and be equitably available. Timely rewards and feedback on current performance and long-range opportunities should be

provided. Subordinates should be encouraged to understand and accept the performance expectations, and should feel it is possible to achieve the objectives. Subordinates should be challenged to feel that high performance is more rewarding than average or low performance, and that the rewards used to encourage high performance are worth the effort. Subordinates should be able to feel that work-related benefits are distributed fairly, and that they know where they stand in terms of current performance and long-term opportunities. Lastly, it should be ensured that rewards are administered on a timely basis to subordinates as part of the feedback process, and in recognition of good performance.

5.5 FINDINGS ON REWARD ACCOMPLISHMENT

According to Cummings (2001), methods of monitoring and reward systems should not be outcomes orientated only. These systems track the number of goods produced. The reason being such measures are chasing numbers at the expense of quality and do not necessarily reflect product quality and can be difficult to replace because they are ingrained in the organisation's traditional way of doing business. The focus should rather be on rewards that are process-oriented, where improvements such as an improvement in speed, demonstrated by reduction in cycle time, customer satisfaction with product quality, flexibility and dependability of the goods and services are in place. In short Cummings (2001) says that rewards should only be based on improvement of performance objectives, because the linkage between rewards and process-oriented improvements reinforce the belief that continuous improvement will be sustained and this will ultimately develop into an organisational culture

Findings on motivation and rewarding accomplishment

Interviews

Respondents accepted that there was a performance management system, and people were positively motivated due to that. All the five interviewees accepted that the rewards and discipline measures used to extinguish unacceptable behaviour and encourage exceptional behaviour were working for the organisation. And that the organisation should continue to give recognition of good performance through bonuses. According to one of the interviewees, a collective performance management system is better than an individual performance management system, the reason for this view being an observation that after

the migration from an individual to collective systems, there was an improvement of about 120% in a particular area.

Questionnaire

In both areas the majority of respondents 62, 4% in Area 1 and 53.3% in Area 2, accepted that they there was a performance management system and people were positively motivated due to the system. They accepted that the rewards and disciplinary measures used to extinguish unacceptable behaviour and encourage exceptional behaviour were working for the organisation. And that the organisation should continue to give recognition to good performance through bonuses. The problem was that almost half the employees surveyed did not agree with the performance management system and were presumably NOT positively motivated. The reason being that some employees believed that the reward system was not congruent with the volume of work - too much work for a small reward.

5.6 FINDINGS ON CHANGE MANAGEMENT

QMS implementation proposes a new way of doing things and it is therefore advisable for a change management programme to be implemented concurrently with the development and implementation of a QMS programme.

Kotter (1996:p20), holds that even if the right reason for change to take place, which may be in a form of high costs of production, bad quality of products or customer needs not met is present, needed change can still fail because of inwardly focused cultures, paralyzing bureaucracy, parochial politics, lack of trust, lack of team spirit, negative attitudes, lack of leadership and fear of the unknown.

Findings on change management

Interviews

Three out of five interviewees held that the QMS implementation was accompanied by a change management programme.

Questionnaire

Area 1, 75% of the respondents believed that change management systems were implemented concurrently with the QMS programme. Whereas in area 2, 63% said that the

change management programmes were not implemented during the development and implementation of the QMS.

5.7 FINDINGS ON EMPLOYEE INVOLVEMENT

Involvement of employees in any kind of programme will encourage compliance and ownership. QMS is a process which requires a collective effort from everyone within the organisation. It is therefore crucial for employees to be involved in the early stages of the programme.

“Organisations are faced with competitive demands for lower costs, higher performance and greater flexibility; as a result they are increasingly turning to employee involvement to enhance the participation, commitment and productivity of their members. It is believed that this increased employee involvement can lead to quicker, more responsive decisions, continuous performance improvement, and greater employee flexibility, commitment and satisfaction. Organisations use employee involvement as a broad term that covers empowerment, participative management, work design, industrial democracy and quick quality of work life, which covers the diverse approaches to gaining greater participation in relevant work workplaces decisions” (Cummings 2001:p172).

QMS is the most recent, and, along with high involvement organisations, the most comprehensive approach to employee involvement. Quality is achieved when the organisation’s goods and services exceeding the customer’s expectation. According to Cummings (2001), it is impossible to achieve or implement QMS without involvement of the employees. But, employee involvement and participation in the change process increases the likelihood that it will become part of the organisation’s culture. It is said that when implemented successfully, QMS also is aligned closely with the overall business strategy and attempts to change the entire organisation towards continuous quality improvement.

Findings on employee involvement

Interviews

The interviewees from the QMS department said that the employees were not involved during the early stages of development of the QMS. The reason for this was that they had resource constraints, which made it difficult to involve employees. However, one

interviewee from the operational areas indicated that employees were involved during the development and implementation of the QMS. Whereas another interviewee said that only middle management was involved in the programme, employees were only involved during the training on how to manage the document control system named the ZIZO.

Questionnaire

About 65% in Area1 and 58.6% in Area 2, of the respondents felt that employees were involved during the early stages of development of the QMS.

5.8 FINDINGS ON LONG-TERM TOP MANAGEMENT COMMITTMENT

> "It said that this stage involves helping senior executives to understand the importance of a long-term commitment to QMS. Without a solid understanding of QMS and the key success factors for implementation, managers often believe that workers are solely responsible for quality. Senior management have the authority and larger perspective to address the organisation-wide, cross functional issues that hold the greatest promise for the success of QMS. Commitment of senior management involves giving direction and support throughout the change process. It usually takes three or more years to establish an organisation-wide QMS, although technical improvement to the workflow can be as quick as six to eight months" Cummings (2001).

Senior management should be willing to allocate significant resources to QMS implementation, particularly to make large investments in training.

Findings on Long-term top management commitment

Interviews

Area 1 interviewee thought top management was not involved and not committed to the implementation of the QMS. The area 2 respondent said there was top management commitment and involvement. The three interviewees from the QMS department felt that top management was committed to but not involved to the required level and they could have done better.

Questionnaire

88, 9% of respondents in Area 1 and 55% in area 2 thought top management was involved and committed to the implementation of the QMS.

5.9 FINDINGS ON TRAINING

According to Cummings (2001), extensive training in the principles and tools of quality improvement is required for QMS to be successful. Training can be conducted in a period of a few weeks to more than two years; this should depend of the size and complexity of the organisation. Employees are typically trained in problem-solving skills and simple statistical process control (SPC) techniques, which are referred to as the seven tools of quality. Training should be given as a long term process if continuous improvement is to be realised. Employees should be given the knowledge to understand the variations in organisational processes, to identify sources of avoidable costs, to select and prioritise *quality improvement* projects, and to monitor the effects of changes on product and service quality. The knowledge gained by employees in analysing the source of variations systematically, will *improve the reliability* and *dependability* of manufacturing goods and services Cummings (2001).

Findings on training

Interviews

All the respondents said that they did receive QMS training together with their subordinates. The QMS staff members were trained on the ISO9001:2000 version, whereas other staff members from the areas only received in-house training given by the QMS department. One interviewee from the QMS felt that the training did not improve her QMS knowledge and understanding; it was only through personal capacitating that she managed to improve her understanding.

Questionnaire

56% of respondents in area 1 had been taken through QMS training, which was not the case in area 2, where 65, 6% of the respondents indicated that they never received QMS training.

5.10 FINDINGS ON QUALITY IMPROVEMENT PROJECTS

According to Cummings (2001) this phase of QMS implementation involves individuals and work groups applying the quality methods to identify the few projects that hold promise for the largest improvement in the organisational processes. These involve identifying output variations, interventions to minimise deviations from quality standards, monitoring of improvements, and repeating of this quality improvement cycle for an indefinite period. It is said that identifying output variations is a key aspect of QMS because such deviations from quality standards are measured by the percentage of defective products, or in the case of customer satisfaction, by on-time delivery percentages, or customer survey ratings. VF Corporation, a leading retail apparel firm, found that retailers were out of stock in 30 percent of their items 100 percent of the time. To change that VF revamped its systems to fill orders within twenty-four hours 95 percent of the time.

Findings on quality improvement projects

Interviews

All interviewees said that implementation of the QMS led to individuals or groups applying the quality methods to identify the projects that improved organisational processes These involved identifying output variations, and interventions to minimise deviations from quality standards.

Questionnaire

Respondents from both areas 62.5% in area 1 and 78.9% in area 2, disagreed with the fact that implementation of the QMS led to individuals or groups applying the quality methods to identify the projects that improved organisational processes. These involved identifying output variations, intervention to minimisation of deviations from quality standards. These responses differed from those gained from the interviews.

5.11 FINDINGS ON MEASURING QMS PROGRESS

According to Cummings (2001), this stage involves measuring organisational processes against quality standards. It is said that knowing and analysing the competition's performance are essential activities for any QMS efforts because it sets minimum standards

of costs, quality, and service and ensures the organisation's position in the industry over the short term. He further says that for longer term analytical efforts QMS practitioners should concentrate on identifying world-class performance, regardless of industry and creating benchmarks. Alaska Airline and Disney are used as examples in this case. Alaska Airline is considered as a benchmark of customer service in the airline industry, whilst Disney's customer service orientation is considered a world-class benchmark across all industries. The fundamental aim of QMS is to exceed the competitor's benchmark. It is said that the organisation by understanding benchmarks from other industries, promotes "out-of-the-box thinking.

Findings on measuring QMS progress

Interviews

All the respondents accepted that the QMS performance was measured internally and externally. The internal audit was conducted by the internal QMS department and, the external audit by the certification body of the South African Bureau of Standards (SABS). What conclusions were reached in these audits? The QMS department stated that benchmarking was mainly done as part of organisational performance monitoring and not as a quality issue.

Questionnaire

The majority of respondents from both areas, 72.7% in area 1 and 61.7% in area 2, accepted that the QMS performance was measured internally and externally and was value adding.

5.12 FINDINGS ON CONTINUAL IMPROVEMENT

A QMS programme never reaches a point where it is fully implemented. New objectives should be set from time to time to ensure that the programme is continually improved, and it does not loose its impetus.

Findings on continual improvement

Interviews

The interviewees indicated that continual improvement is encouraged through the audits conducted and also through the avoidance of previous mistakes

Questionnaire

The majority of respondents from both areas, 75% in area 1 and 90.2% in area 2, indicated that there are measures geared toward continual improvement of the QMS in place.

5.13 FINDINGS FROM DOCUMENT ANALYSIS

According to the documents analysed the methodology of developing, implementing and maintaining a the QMS system at this government organisation was slightly different from the literature in a sense that only two concepts were what the literature regards as fundamental principles of development, implementation and maintenance of a QMS.

The reasons why a Quality Management System was introduced.

According to the analysed documents, this organisation undertook an operational capability analysis to improve business performance and build steady state operations within the offices and across different regions. This exercise revealed that there was little uniformity in the manner in which the work was conducted. The analysis also showed that the operational environment was characterised by disparate islands of processes and information with different offices, regions and business areas operating divorced from each other. Although in some processes there were existing procedures that had to be followed, they were not carried out in a standardised and consistent manner as their roll-out and implementation was not done in a systematic way.

It is further stated that this practice created the following problems:

- The business was obsessed with KPIs that lead to various interpretations that may be favourable to the attainment of measures upon which results are assessed and rewarded. Measurements could take place in a manner that was advantageous to a Business Area as there were few uniform standards that were adhered to.
- Uncertainty as to whether measurements of performance reflected the same activity being measured across the different regions.
- Different regions adopted unique methods to perform work resulting in unique capacity planning methods and uneven utilisation.
- Target setting for the different products was compromised as non-standardised procedures were being utilised.

- Inconsistency in document control, as well as the maintenance of process or product performance records.
- When work within a process was taken over by a different member of staff, many steps had to be duplicated to ascertain exactly what had been done on a case. Duplication and rework caused capacity to be employed in unproductive efforts.

Description of what the quality management system entails

According to the analysed documents, for this organisation, the Quality Management System entailed a management system used to drive maximization of operational efficiency.

According to Operations Support Business Plan 2005/06 Revision 0, the following were stated as reasons for development and implementation of the QMS:

- Provision of governance, quality and management control
- Support stakeholder(customer) interaction
- Development and standardization of operational policies and procedures/processes
- Provision of business systems support
- To develop and maintain a QMS in line with ISO9001:2000 and obtain and maintain ISO certification.

Description on how the quality management system was developed and implemented.

According to the analysed documents, development and implementation of the quality management system was conducted as follows:

The ISO 9001: 2000 Requirements for a Quality Management System framework was adopted and implemented in core or primary functions of the business, with the exclusion of secondary or support services.

- The idea of implementing a QMS was sold to and bought by the Executive Management of the organisation at the National Management Forum, where a short demo of the Zoom In Zoom Out(ZiZo), the benefits thereof, roles, responsibility and involvement of the
- The services of an external consultant were requested.

- Draft policies and procedures were required by the ISO9001:2000 standard. All the mandatory policies, procedures and objectives were developed in line with the requirements of the standard.
- Operational policies and procedures were reviewed, amended and developed.
- Implementation of the project and awareness training was carried out simultaneously running parallel. Training and awareness was carried out in Three Phases, where phase 1 involved top management, phase 2 Middle Management and phase 3 all other levels of personnel. Various quality awareness posters, information cards and brochures were developed. It was the sole responsibility of the officers allocated to specific offices to ensure their distribution and awareness thereof. All documents, including audit reports, were published via the internal electronic communication channel.

Description of the key performance indicators of successful implementation

According to analysed documents fifteen KPI's had been identified by the QMS department, as benchmark for measuring the quality management systems to determine their compliance and success through pre planned internal audits of various offices by the QMS department.

This was coupled with pre-determined external audits conducted by the certification body using the minimum requirements of the ISO9001 code of practice. The findings were raised during the internal audits, a total of about 13 findings were raised, and these findings were expected to be closed within three months. The internal audits were followed by an external audit conducted by a Certification body, namely South African Bureau of Standards (SABS). About ten findings were raised by the SABS, and corrective action was implementation leading to certification of the piloted branch of this organisation.

The 15 KPI of successful implementation were outlined as follows:

1. Updated organisational structure
2. A drafted and implemented business plan
3. Availability of a procedure for reporting critical information to Head Office
4. Availability of a procedure for identification, assessment and control of risks relating to various business units.
5. Updated Management Control Programmes.
6. Meetings held by all teams as planned.

7. Availability of a system to record and monitor customer complaints.
8. Stakeholder interactions occurring within offices
9. Clearing of internal and external audit findings from previous audits by the office
10. Availability of procedures to communicate new and amended/revised policies/procedures to staff.
11. Not to use obsolete documents other than controlled QMS documents by staff
12. Use of calibrated measuring equipment within the office
13. Staff access to computers and any other equipment that might be pertinent to their areas of operation
14. Staff access to the electronic document management system
15. Awareness of documented QMS by staff members

CHAPTER 6 - SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The focus of this research was to evaluate the implemented QMS in order to determine how the QMS was developed, implemented and maintained. In this final chapter an overview of the research findings in the form of a summary will be outlined. This will be followed by the implications of the findings for other areas where the QMS programme still has to be implemented, and some recommendations for future research. The last section of this chapter will outline the limitations of this study.

6.2 SUMMARY OF FINDINGS

Though, according to the analysed document, the development, implementation and maintenance of the QMS were done, the methodology followed did not include all concepts outlined in the literature.

The major points that emerged from the research were the perception that QMS has been well developed; QMS had been well implemented; QMS has been well sustained and there were measures in place to ensure continual improvement.

For a QMS to be developed implemented and maintained, the following concepts should be taken into consideration:

Performance Objectives

Performance objectives namely; quality, speed, dependability, flexibility and costs are the main goals that the organisation's operations seek to achieve. Implementation of QMS should be improved on these objectives.

Leadership

Leadership is an inherent requirement for a successful implementation of a QMS programme. It sets a direction in developing a vision of the future along with strategies for producing the changes needed for successful implementation of QMS programme.

Motivation

Well motivated employees are required for successful implementation of QMS. Motivation involves establishing moderately difficult and specific objectives that are understood and accepted – collaboratively. It removes personal and organizational obstacles to performance thus achieving the QMS objectives.

Change Management

QMS implementation proposes a systems approach which in most instances presents a new way of doing things and it is therefore advisable for a change management programme to be implemented concurrently with the development and implementation of a QMS programme.

Employee Involvement

Involvement of employees in any kind of programme will encourage compliance and ownership. QMS is a process which requires a collective effort from everyone within the organisation. It is therefore crucial for employees to be involved in the early stages of the programme.

Long-term Top Management Commitment

Senior management have the authority and larger perspective to address the organisation-wide, cross functional issues that hold the greatest promise for the success of QMS. Commitment of senior management involves giving direction and support throughout the change process. It usually takes three or more years to establish an organisation-wide QMS, although technical improvement to the workflow can be as quickly as six to eight months.

Senior management should be willing to allocate significant resources to QMS implementation.

Training

Employees should be trained in problem-solving skills and simple statistical process control (SPC) techniques, which are referred to as the seven tools of quality. Training should be given as a long term process if continuous improvement is to be realised. Employees should be given the knowledge to understand the variations in organisational processes, to identify sources of avoidable costs, to select and prioritise *quality improvement* projects, and to monitor the effects of changes on product and service quality.

Quality Improvement Objectives

These involve identifying output variations, interventions to minimise deviations from quality standards, monitoring of improvements, and repeating of this quality improvement cycle for an indefinite period.

Measuring QMS Progress

This stage involves measuring organisational processes against quality standards. It is said that knowing and analysing the competition's performance are essential activities for any QMS effort because it sets minimum standards of costs, quality, and service and ensures the organisation's position in the industry over the short term.

Continual Improvement

A QMS programme never reaches a point where it is fully implemented. New objectives should be set from time to time to ensure that the programme is continually improved, and to ensure that the QMS does not loose its impetus.

6.3 CONCLUSION

The thesis examined the TQM intervention in terms of its impact on the department's performance at two broad levels.

Firstly, at the level of systems and procedures, there was some evidence to suggest that the newly introduced computer system (ZIZO) had a positive impact on departmental efficiency

generally.

At the level of employee commitment and motivation, however, there were mixed messages. The responses from area 2 were generally less positive than those from area 1. The reasons for this discrepancy might arise from a realisation that attitude change in any group of people is a process rather than an event and that the intervention in area 1 was more advanced in terms of the TQM implementation than in area 2.

In this sense the evaluation could provide an additional benefit for those in the organization charged with the general implementation of TQM in other areas. The message in this respect is that time and resources spent on training and communication is well spent in terms of the positive motivation and increased commitment of and from the employees concerned with the day-to-day implementation of the process.

The implementation of the QMS programme did improve the process and procedures at this government organisation. It was quite evident that in a situation where the QMS is developed, implemented and maintained accordingly, this would result in operational efficiency being maximised, which will in tern improve the level of service delivery.

The argument is that the poor level of service delivery that is currently experienced in government and the public sector departments can be improved through implementation of QMS.

When QMS is implemented the issue of people attitude has to be addressed through various ways, which include provision of training and implementation of change management programmes. It is human nature to respond in a negative way when the outcome is not known. From the study it was proven that a positive trend was identified in the area where change management programmes and training was provided during the implementation of the QMS programme. In a long-term people gradually got more committed to change and developed a more positive attitude towards the QMS intervention.

6.4 IMPLICATIONS OF FINDINGS TO AREAS WHERE QMS PROGRAMMES STILL HAVE TO BE IMPLEMENTED

As indicated in the literature review, QMS is the new paradigm in managing organisations, and attention should be given to the manner in which it is developed, implemented and maintained. The how, when and whom part of the implementation of QMS was thoroughly investigated in this thesis. QMS as a management concept represents a fundamental change in the management approach of organisations. This study was particularly aimed at the application of quality principles in a government organisation.

The aim of the study was to evaluate an implemented Quality Management System (QMS) at one of the South African government departments. Information from both the literature review and the empirical study was used to identify a management strategy that could be used to develop, implement and maintain a QMS in governmental or public sector.

Should there be an implementation of QMS, measures should be taken to ensure that the QMS is developed, implemented and maintained taking into consideration the ten principles of QMS, namely; performance objectives; leadership; motivation; change management; employee involvement; long-term top management commitment; training; and quality improvement projects to measure QMS progress and the continual improvement of a QMS programme., These factors should be taken into consideration when developing, and implementing a QMS programme, to ensure sustainability and avoid or prevent the programme from loosing its impetus.

6.5 POSSIBLE AREAS OF FURTHER RESEARCH

It could not be verified that the performance objectives of the organisation's operations had been improved by the implementation of the QMS. This was mainly due to a lack of baseline data, which was supposed to have been determined before the QMS was implemented. The baseline data could be used as objective evidence and a benchmark to determine if the implemented QMS did improve operational efficiency. This is a possible area which can be further researched to obtain verification of these performance objectives.

6.6 LIMITATIONS OF THE STUDY

This study had some limitations. In the first place it took about a month before the author received permission from the department's management to conduct the research. This was followed by repetitive changes of the department's organisational structure leading to staff members being moved around the organisation. The staff members assigned to the researcher were moved to other areas and replaced by new people. It was not just the human resource department which created limitations for the study; even the accessibility of records and documents proved to be a serious challenge for the researcher. Some records or documents were viewed by the organization to be very sensitive and could not be made available for the research. The third and the fourth limitation of the study was the geographical spread of the department and the researcher's time constraints. Due to the geographical spread of the organisation and time constraints, not all areas of the organisation could be included in the interviews and questionnaire. In any future studies there should be enough time, to include all areas to improve the reliability of data. It should also be noted that some staff members were not prepared to elaborate on some of the asked questions, despite being reassured that their names would not be revealed in the document.

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APPENDIX A - QUESTIONNAIRE

Questionnaire for Staff Members

Name:

Age:

Office:

PERFORMANCE OBJECTIVES

Performance objectives namely; quality of service/product, speed of delivery of service, dependability and reliability of the service provided, flexibility of the service provided and reduction of costs, are the main goals that the organisation's operations seek to achieve. Do you think implementation of QMS was for that purpose?

In your view, have the operational costs been reduced as a result of implementation of the QMS?

Was the general quality of operations improved by the implementation of the QMS?

Do you think the speed of service provision to customers has improved after implementation of QMS?

Do you think the QMS led to the services provided by the organisation to its customers being more dependable and reliable?

Do you think the QMS led to innovative products/services and flexibility of operation?

LEADERSHIP

Do you know the vision?

If yes what is vision?

Do you think the vision is well communicated?

Do think people support the vision and are moving in the right direction of the vision?

Do you think operational strategies support its vision?

MOTIVATION

Do you have a performance management contract?

Do you think people within are positively motivated?

If yes do you use rewards and discipline appropriately to extinguish unacceptable behaviour and encourage exceptional behaviour?

Do your subordinates understand and accept the performance expectations?

Do your subordinates feel it is possible to achieve their personal objectives?

Do your subordinates feel that high performance is more rewarding than average or low performance?

Do your subordinates feel the rewards used to encourage high performance are worth the effort?

Do your subordinates feel that work-related benefits are distributed fairly?

Do your subordinates know where they stand in terms of current performance and long-term opportunities?

Are rewards administered on a timely basis to your subordinates as part of the feedback process?

CHANGE MANAGEMENT

The QMS implementation came up with new way of doing things; it is therefore advisable for a change management programme to be implemented concurrently with the development and implementation of a QMS programme.

Was the implementation of QMS accompanied by change management programmes?

If yes, what kind of change management programmes was implemented?

Leave space, no boxes

EMPLOYEE INVOLVEMENT

Were you the employees, involved during the early stages of development of the QMS?

If yes, how were they involved? Space, No boxes

Do you think employee involvement impacted on the QMS?

LONGTERM TOP MANAGEMENT COMMITMENT

Do you think top management is involved in and committed to the implementation of the QMS?

If yes what kind of commitment is demonstrated by top management?

Do you think top management regard QMS as an important programme that can improve the general performance of the organisation?

TRAINING

Did you receive any QMS training?

If yes how often?

Did the training improve your QMS knowledge and understanding?

QUALITY IMPROVEMENT PROJECTS

Did implementation of QMS lead to individuals or groups applying the quality methods to identify the projects that improved organisational processes? These involve identifying output variations, and interventions to minimise deviations from quality standards.

If yes list at least one project?

MEASURING QMS PROGRESS

Is QMS performance measured or audited?

If yes, in your view do you think the audits used to measure performance of QMS are value adding?

Is your area's performance benchmarked with other areas in terms of measuring QMS performance?

CONTINUAL IMPROVEMENT

Do you think there are measures put in place to ensure continual improvement of QMS?

APPENDIX B – INTERVIEW GUIDE

Interviews Guide

Name: [Optional]

Age:

Office:

PERFORMANCE OBJECTIVES

Performance objectives namely; quality of service/product, speed of delivery of service, dependability and reliability of the service provided, flexibility of the service provided and reduction of costs, are the main goals that the organisation's operations seek to achieve. Do you think implementation of QMS was for that purpose?

Have the operational costs been reduced by implementation of the QMS?

Was the general quality of operations improved by the implementation of the QMS?

Do you think the speed of service provision has increased after implementation of QMS?

Do you think the QMS led to the services provided by the organisation to its customers being more dependable and reliable?

Do you think the QMS led to innovative products/services and flexibility of operation?

LEADERSHIP

Do you know the vision?

If yes what is vision?

Do you think the vision is well communicated?

Do think people support the vision and are moving in the right direction of the vision?

Do you think operational strategies support its vision?

MOTIVATION

Do you have a performance management system?

Do you think people within are positively motivated?

If yes do you use rewards and discipline appropriately to extinguish unacceptable behaviour and encourage exceptional behaviour?

Do your subordinates understand and accept the performance expectations?

Do your subordinates feel it is possible to achieve their personal objectives?

Do your subordinates feel that high performance is more rewarding than average or low performance?

Do your subordinates feel the rewards used to encourage high performance are worth the effort?

Do your subordinates feel that work-related benefits are distributed fairly?

Do your subordinates know where they stand in terms of current performance and long-term opportunities?

Are rewards administered on a timely basis to your subordinates as part of the feedback process?

CHANGE MANAGEMENT

The QMS implementation come up with new way of doing things, it is therefore advisable for a change management programme to be implemented concurrently with the development and implementation of a QMS programme.

Was the implementation of QMS accompanied by change management programmes?

If yes, what kind of change management programmes was implemented?

EMPLOYEE INVOLVEMENT

Were the employees involved during the early stages of development of the QMS?

If yes, how were they involved?

Do you think employee involvement impacted on the QMS?

LONGTERM TOP MANAGEMENT COMMITMENT

Do you think top management is involved and committed to the implementation of the QMS?

What kind of commitment is demonstrated by top management?

Do you think they regard QMS as an important programme that can improve the general performance of the organisation?

TRAINING

Did you or your subordinates receive QMS training?

If yes how often?

Did the training improve their QMS knowledge and understanding?

QUALITY IMPROVEMENT PROJECTS

Did implementation of QMS lead to individuals or groups applying the quality methods to identify the projects that improved organisational processes? These involve identifying output variations, intervention to minimise deviations from quality standards.

If yes what kind of projects were they?

MEASURE QMS PROGRESS

Is QMS performance measured internally and externally?

Did you benchmark your area with other areas in terms of measuring performance?

CONTINUAL IMPROVEMENT

What measure is put in place to ensure continual improvement of QMS?