P E TECHNIKON

AN INVESTIGATION TO ESTABLISH WHETHER THE IMPLEMENTATION OF A STRUCTURED TOTAL QUALITY MANAGEMENT SYSTEM WOULD ADD VALUE TO THE SOUTH AFRICAN BREWERY, EAST LONDON DEPOT.

BY

DANE HERMAN

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BY

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Masters Degree (Business Administration)

At the Port Elizabeth Technikon

Promoter: Mr S. Krause

Date Submitted: January 2004.

PORT ELIZABETH

DECLARATION

I declare that: **"An investigation to establish whether the implementation of a structured total quality management system would add value to the South African Brewery, East London Depot.**" is my own work and all sources used or quoted have been indicated and acknowledged by means of complete references. I have not previously submitted this thesis for a degree at another University or Technikon.

_____ _____

D. E. HERMAN Date

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Grateful thanks is extended to the following individuals who contributed to the successful completion of my study:

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- Mr. S. Krause, my promoter for his wisdom and expert knowledge
- To all my lecturers over the past three years for giving me the tools to have been able to complete this research
- My mother for her continued support and love.

SUMMARY

No matter how receptive or unreceptive an individual or a company is to the arrival of the age of technology, this phenomenon of change cannot be overlooked in the competitive global village. Companies must respond and change if they wish to survive into the next century.

The results and testing of the hypotheses in chapters four and five clearly indicate that there is a need for a structured Total Quality Management (TQM) system in the East London Depot, of South African Breweries (SAB). The vision of the company states that they aim to be the "benchmark of South African industry and the brewing world".

The mission of the company states that they wish to provide their consumers with the finest quality malt beverages, brewed and marketed by world - class people in a socially responsible and innovative manner. Two of the core values of the company are:

- Customer service and consumer focus
- Innovation and quality (http://Beernet)

Taking the afore mentioned as a guide line, it is evident that although there is a need for a structured TQM system at the East London Depot, there are key focus areas to concentrate on for the program to be successful.

The main focus area will be to change the perception of the staff with regards to doing things right the first time. Customer service is very important and should be understood by all. A competent person should be tasked with the implementation of the system. This person should then manage the system and ensure that the staff training and maintenance of documented procedures are adhered to. A TQM committee must also be established in order to perform the necessary audits.

As mentioned in chapter one, the aim of the depot management is to improve on it's current national ranking. A structured TQM program will make a huge contribution towards achieving the desired result. This will result in better results and achievement of goals. With this in mind this paper aims to investigate the feasibility of establishing a T Q M system at the East London Depot of SAB.

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CHAPTER 1

THE PROBLEM AND IT'S SETTINGS

1.1 INTRODUCTION AND BACKGROUND

"Total quality management (TQM) is arguably the most significant of new ideas, which have swept across the production/operations managements scene over the last few years (Slack, Chambers, Hartland, Harrison, and Johnston, 1998:673). There can be few, if any, managers in any developed economy anywhere in the world that has not heard of TQM. It certainly has had an impact on most industries, which goes beyond its recent fashion-ability. There are two reasons for this:

- The idea of TQM has a great intuitive attraction for many people, most of the people want "Superior Quality"
- A TQM approach to improvement can result in, sometimes dramatic, increases in operational effectiveness".

TQM can be viewed as a logical extension of the way in which quality related practice has progressed. Originally quality was achieved by inspection that is screening out defects before customers noticed them. The quality control (QC) concept developed a more systematic approach to not only detecting, but also treating quality functions other than direct operations. This method also made increasing use of more sophisticated statistical quality techniques. TQM include much of what went before in quality but developed it's own distinctive themes.

TQM is best thought of as a philosophy of how to approach quality management. It is a way of thinking and working in operations, which lays particular stress on the following:

- Meeting the needs and expectations of customers
- Covering all parts of the company
- Including every person in the company
- Examining all costs which are related to quality, especially failure cost
- Getting things ***right first time***
- Developing the systems and procedures which support quality and improvement.
- Developing a continuous process of improvement (Slack et al 1998:139).

SAB, East London Depot is currently ranked 14th out of 42 depots in the country. This ranking is determined by various factors such as sales volume, Customer service monitor (CSM) scores, National Occupational Safety Association (NOSA) audit results, administration audit, fleet audit, and finance audit results. The aim is to maintain and improve this 14th position.

In order to achieve this, management have committed to the introduction of a structured TQM programme in order to maintain ongoing focus on quality, which will in turn improve CSM score results, and result in improved efficiencies.

1.2 The statement of the problem

Against the back ground of national and global changes in the brewing industry and ongoing efforts to survive in the highly competitive turbulent environment the main research problem arises as:

"An investigation to establish whether the implementation of a structured quality management system would add value to SAB Depots in the Border Region."

1.3 THE STATEMENT OF THE SUB - PROBLEMS

The first sub problem: How and to what extent would a TQM system add value to the East London SAB Depot operation.

The second sub problem: To what extent would it be feasible to implement a TQM system at the East London SAB Depot.

The third sub problem: How to implement a TQM system into the East London SAB Depot

1.4 THE HYPOTHESES

The following hypotheses were formulated from the sub problems identified:

The first hypotheses: A TQM system would not add value to the East London Depot.

The second hypotheses: It would not be feasible to implement the TQM system at the East London Depot.

The third hypotheses: It would not be possible to implement TQM at the East London Depot

1.5 DEFINITION OF KEY TERMS

- Change: The shift from one state to another, a transformation of a company to a new company (Goetsch and Davis 2003:314).
- Company wide quality control: Provide good and low cost products dividing the benefit among consumers, employers and stockholders while improving the quality of people's lives (Ishikawa 1985: 234).
- Culture: A pattern of shared basic assumptions which are learnt and which are valid enough to be taught to new members as a correct way to perceive, think and feel in relation to problems. (Schein 1992: 23)
- ISO 9000: The nationally and internationally accepted standard for quality management systems. (Madu 1998: 291)
- Organisational cultures: The patterns of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaption and internal integration, and that have worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems (Schein 1992:23).
- Planned change: The deliberate design and implementation of structural, procedural, technological, cultural or personnel changes directed at increasing a company's effectiveness.
- Proactive change: When management make decisions to try new things in anticipation of changes in the environment.
- Procedures: Documents which detail the purpose and scope of an activity and will also identify how, when, where and by whom the activity is to be carried out (BS 4778).

- Quality manual: A document setting out the general policies, procedures and practices of a company (BS 4778).
- Quality policy: The overall quality, intention and direction of an organisation with regard to quality (BS 4778).
- Quality system activities: Aims to improve the company's deployment of policies (BS 4778).
- Reactive change: A decision to make changes in response to events in the environment that affect the company (Goetsch and Davis 2003:316).
- Total Quality Management: Systems for integrating quality technologies into various functional departments to achieve customer satisfaction (Ishikawa 1985:12).

1.6. Abbreviations

NOSA: National Occupational Safety Association

CSM: Customer service monitor

COD: Cash on Delivery.

CWO: Cash with Order

FBR: Full Beer Returns. Usually when a load is delivered in error, and returned in full by a customer.

ICCF: Invoice Capture Correction Facility. To correct mistakes on invoices, after obtaining approval to do so from the warehouse manager, as well as the consent of a customer.

MIDAS: Marketing Information and Debtors Accounting System. Used to manage every aspect of stock control, beer sales, distribution and debtors control.

OASIS On Board, At Site Invoicing System. An extension of MIDAS on portable computers, enabling a driver to capture the returns from a customer before

printing an invoice/delivery note, thus enabling a customer to obtain credit for returns when it is collected.

1.7 The importance of this research

Due to the fact that SAB - Miller now occupy the number two ranking world wide with regards to manufacturers and distributors of beer and related beverages, the researcher found it imperative to enhance the quality of service which the East London Depot offers.

South Africa is regarded as a third world country. The irony of the situation is that the company is operating to first world standards in a third world country and in an economy that is regarded as developing. These factors place a huge responsibility on the company to be world class in all aspects of the operation.

At the dawn of the new millennium companies are focusing their efforts on issues such as advanced skills, creative logic and constant innovation. By explicitly applying Total Quality Management as a management strategy, the following company objectives will be achieved:

- Company flexibility
- The lean organisation concept of delegation and decentralisation of management responsibilities
- Organisational integration resulting in cooperation between different departments
- Holistic quality management approach

- Goal orientation in the problem solution process
- Continuous organisational learning and development through TQM
- Pursuing of personal objectives (Slack et al 1998:602).

There is a great demand for new product introduction with shorter product deadline time. This demand results in engineering and technology doubling in less than five years, high levels of expenditure on acquisition of facilities and components and the supply of products to the customer with total customer satisfaction is part of the new generation companies. This means:

- Being TQM focused will help management identify problems that can result from a project or projects instead of just focusing on the yielded benefits.
- With excellence in Total Quality Management, the customer's desires, business goals, growth and strategies are inseparable.
- Lack of understanding how TQM should work and not applying TQM principles and tools effectively will result in many problems surfacing much later in the production process. This will result in a much higher cost to correct the problem as well as increasing the company risk and customer dissatisfaction.
- From a strategic management point of view executives must define the meaning of TQM success in terms of company parameters.
- TQM culture must be developed within the confines of corporate culture to be able to promote teamwork, cooperation, trust and effective communication.

- Successful companies will be differentiated by their ability to do strategic planning based on TQM principles and respond correctly to environmental change.

1.8 THE DELIMITATIONS

The research will be conducted at the East London Depot of the South African Breweries. There are no off site installations or facilities which form part of this research.

1.9 ASSUMPTIONS MADE

The following assumptions were made with respect to the problem statement and sub problem:

The first assumption: A TQM system is the correct system to implement at the East London Depot.

The second assumption: It would not be financially viable to implement the system at the East London Depot due to it's size and volume of sales.

The third assumption: It would be possible to implement TQM at the East London Depot

1.10 METHODS OF THE STUDY

1.10.1 Research Methodology

- Primary (Empirical)

The empirical study consists of the following:

1.10.2 Measuring instrument

Data was collected by means of a structured questionnaire and interviews. The researcher developed a structured questionnaire for this research project to determine whether the implementation of the TQM system at the East London Depot would be feasible. The questionnaire was presented to top and middle management within the depot whop gave their views. The data was then analysed, assimilated and the results were evaluated.

The secondary information was obtained from a number of literature sources published articles. A full and comprehensive description of the method of the study and the motivation are given in chapter 3.

1.11 STRUCTURE OF THE STUDY

This study is divided into six chapters. Chapter 1 serves as the introduction to the study. It discusses the problem and sub-problems, the hypotheses of the study, delimitations of the field of study, the assumptions made, the method of study and the importance of the study. The theoretical aspects of TQM are analysed in Chapter 2. In chapter 3 the type of data is identified as well as the population and sample frame, the method for collecting data, the sample method and size are chosen, and the plan and construction of the questionnaire are analysed. The results of the biographical issues, total quality management issues and interviews will be reported in Chapter 4. The testing of the hypotheses, consolidated test, and other findings will be captured in Chapter 5. A summary, conclusion and recommendations are given in Chapter 6.

CHAPTER 2

THE VALUE OF A TQM SYSTEM

2.1 INTRODUCTION

Oakland (2002:3) states that any organization competes on it's reputation, for quality, reliability, price and delivery – and most people now recognise that quality is the most important of these competitive weapons. Unfortunately, in many companies the management and workforce have not been exposed to, or really understood the total quality management concepts and these situations make the task of implementing TQM all the more difficult.

This chapter will give a brief overview of total quality management, an action plan to implement TQM and the factors such as organisational culture and change management that has an effect on TQM. This will enable the reader to gain a better understanding and perspective of TQM implementation.

2.2 TOTAL QUALITY MANAGEMENT

There are many definitions of TQM, with some experts offering the following definition "TQM means that the organization's culture is defined by, and supports the constant attainment of, customer satisfaction through an integrated system of tools, techniques and training. This involves the

continuous improvement of organisational processes, resulting in high - quality products and services."

(Kreitner and Kinicki 2002:15). Total quality management refers to the constant improvement of quality of products and processes of the firm in order to consistently deliver increasing value to customers.

It is important to know that there is no one strategy that is appropriate to any business. The aim is to look at the concepts and tools necessary to create an individual strategy. These concepts have been stepping stones for companies that achieved world class status.

To reap all potential benefits, all concepts must interact and support each other, no one concept should be used in isolation. Quality is the totality of features and characteristics of a product or service that bears on its ability to satisfy implied or stated needs. Stated needs are determined by the contact, whereas implied needs are a function of the market and must be identified and defined. These needs involve safety, availability, maintainability, reliability, usability, economics and the environment.

2.2.1 The need for quality

The need for quality is to turn total quality into practice and this places the following demands on a company:

- To get an understanding what the customer wants and to provide it immediately on demand at the lowest cost (Schroeder 2000:135)

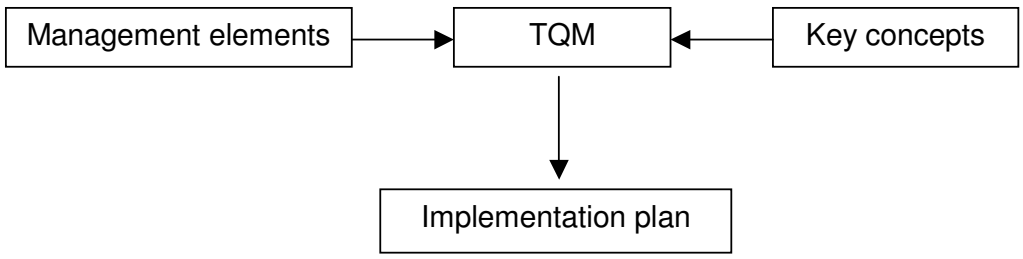
- To provide products and services of high quality and reliability consistently
- To keep up with the pace of change of technology as well as political and social trends
- To be one step ahead of the customer's needs, that is to predict what the customer will want one or ten years from now (Schroeder 2000:131)

The attainment of these abilities requires an organised approach by management, an approach of managing for total quality, managing for effectiveness and involving each and every activity and person at all levels of the company. This is the Total Quality Management approach.

2.2.2 A model framework for TQM

The following diagram represents a model for TQM:

Diagram 1: TQM model



Source: Adapted from Bank (2000:41)

2.2.3 Key concepts of TQM

TQM is defined as both a philosophy and a set of guiding principles that represent the foundation of a continuously improving company. It is the application of quantitative methods and human resources to improve all processes within the company and exceed customer needs now and in the future. The basic key concepts of TQM to be considered are as follows:

- External and internal customers
- Never-ending improvements
- Control of business processes
- Upstream preventative management
- On-going preventative action
- Leadership and teamwork.

2.2.4 Management elements for TQM

Planning the improvement strategy for a company is a very important task, to start it is necessary to define a series of strategies and methods for the key elements of the management framework by answering the following questions:

- What is the mission, aims and objectives that the company wishes to achieve in the short and long term and how are these to be communicated to the staff, suppliers and the customers?
- How is the company going to collate external customer and competitor intelligence?
- How is the company going to measure performance?
- How is the company going to highlight and communicate improvement opportunities?

- By what means are improvements opportunities to be implemented?
- How is the company going to coordinate the total quality programme?

2.2.5 Basic stages of implementation

To make the change to total quality, we need to complete the following evolutionary process:

Stage 1:	Establish the need
Stage 2:	Establish the company's position
Stage 3:	Benchmark the company
Stage 4:	Get buy-in
Stage 5:	Develop a business strategy
Stage 6:	Start the culture change
Stage 7:	Implementation
Stage 8:	Follow-up and evaluation.(Slack et al 1998:693)

As described, TQM is the philosophy about quality that must involve everyone in the company in the quest for quality, not only from the customer, but also from the supplier. The following five factors will go a long way in ensuring the success of any TQM program:

- Continual improvement – The quest for quality should be continuous.

- Competitive benchmarking – Identify companies that are the best at something and model the company after them.
- Employee empowerment – To give workers the responsibility for improvements and the authority to make changes themselves, gives a strong motivation for the employees. Employees are ultimately the closest to the job and have insight into problems and solutions.
- Team approach – The use of teams for problem-solving to achieve consensus and get people involved, and the spirit of cooperation among employees.
- Knowledge of tools – Everyone is trained in the use of quality control and improvement techniques.

TQM is a philosophy that must start with every individual. It must become part of everyday life of the entire work force; they must feel proud about the products that they manufacture by giving the best possible quality products or service to their customers.

2.3 BENCHMARKING

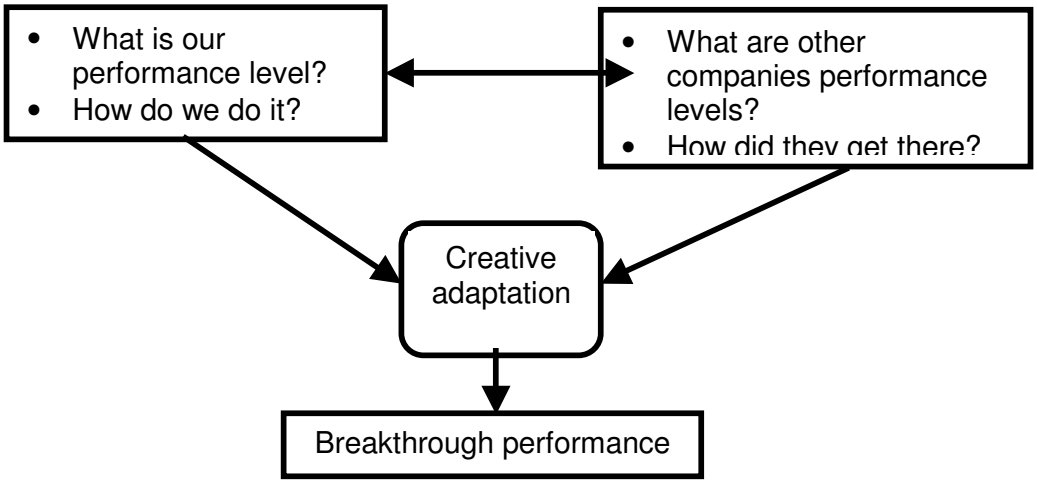
A process for measuring your company's method, process, procedure, product and service performance against those companies that consistently distinguish themselves in that same category of performance. Benchmarking is a customer-driven commitment to continuous improvement, thus highlighting the strategic importance of benchmarking. Oakland (2000:125) states that benchmarking can be defined as the systematic comparison of elements of performance in an organisation against those of other

organisations, usually with the aim of mutual improvement. Benchmarking should be coupled to a process of continuous improvement.

2.3.1 Benchmarking concept

Diagram 2 represents the benchmarking concept.

Diagram 2: Benchmarking concept



Source: Adapted from Bendell, Boulter and Kelly (1993:101)

The following are important concepts regarding the benchmarking concept:

- Core competencies – capability that meets three tests:
  - It has a wide application in the business.
  - It should make a significant contribution to perceived customer benefits.

- It should be difficult for a competitor to imitate (Bendell et al 1993:102).

- Key business process – cross functional core functions:
  - Control business via strategic direction, financial control and business planning
  - Design products via customer requirements translated into features
  - Market products promotes product sales
  - Purchase materials via the procurement of materials for manufacturing
  - Produce products
  - Distribute products
  - Service products
  - Support business manages the business infrastructure (Baily, Farmen, Jessop and Jones 1994:297).
- Critical success factors – qualitative measures:
  - Business effectiveness as per quality
  - Efficiency as per the cycle time
  - Economics as per costs.

2.3.2 Benchmarking objectives

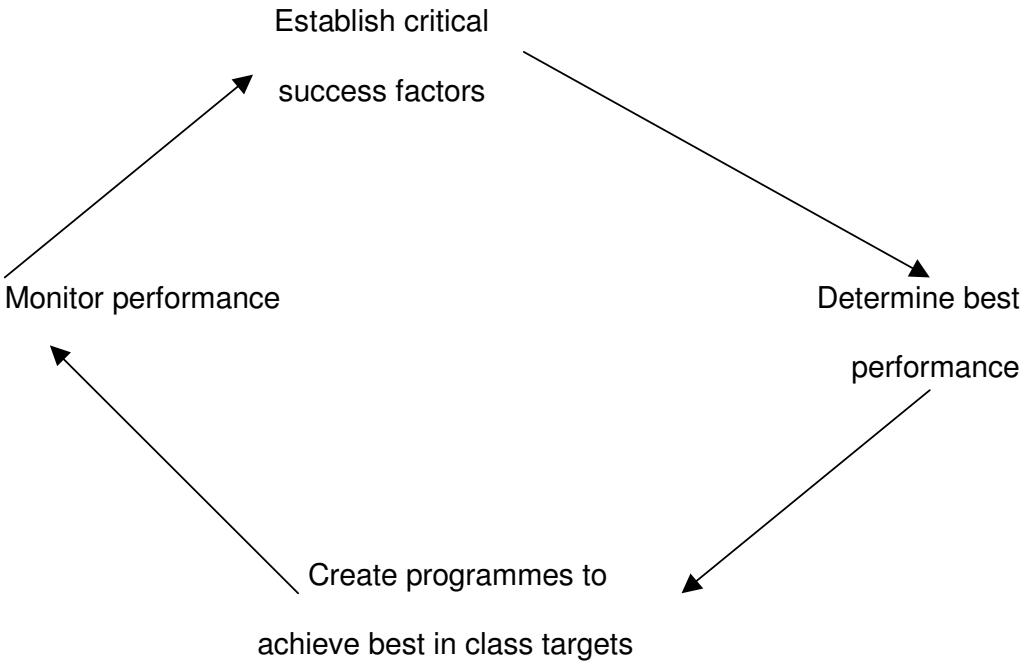
Mastering life is the process of moving from where you are to where you want to be and the following objectives will enable you to achieve this:

- Develop a network of organisations who make use of benchmarking as a competitive tool
- Develop a data-base of local strategic importance to serve the needs of industry
- To make local industry aware of the performance gaps that exist thereby ensuring that corrective action be taken
- To initiate the sharing of experience and experiences amongst local industry so as to facilitate development of the local economic region and the quality of life for all
- Provide standards and norms as a basis from which benchmarking initiatives may be launched
- Clarify and define shortcomings through local consortium studies
- Develop ways and means of addressing those shortcomings
- To initiate a sense of camaraderie amongst local industry through the medium of sharing and exchanging ideas and communication via common interest groups
- To promote the region was being productive and competitive and therefore receptive to investment (Bounds, Dobbin and Fowler1994:234).

2.3.3 The benchmarking process

To ensure success with benchmarking the following process as depicted in Diagram 3 and keep the following guidelines in mind:

Diagram 3: The Benchmarking Cycle



Source: Adapted from Bank (1992:44)

- Benchmarking must be supported by senior management and management should be actively involved.

- Training is critical for the benchmarking teams and process. A poorly trained team will not get good results despite the best intentions.
- Benchmarking should be a team activity, the teams should include management, experts, consultants and those people directly involved in the process.
- Benchmarking is an ongoing process, it must be part of an organisation's strategy and development.
- Benchmarking efforts must be organised, planned, and carefully managed, it is a structured approach and requires planning and monitoring just like any other management tool.

Ultimately, benchmarking can be the best weapon against complacency, and used correctly, benchmarking can lead to the competitive edge in today's business marketplace.

2.4 WORKPLACE IMPROVEMENTS

In this rapidly changing world of manufacturing, the stability and very existence of enterprises depends on improvements in productivity and increases in manufacturing and administrative quality. Even in calmer times, the competitive advantage of any manufacturing enterprise is based largely on its ability to adapt to a changing internal or external environment through plans for corrective action.

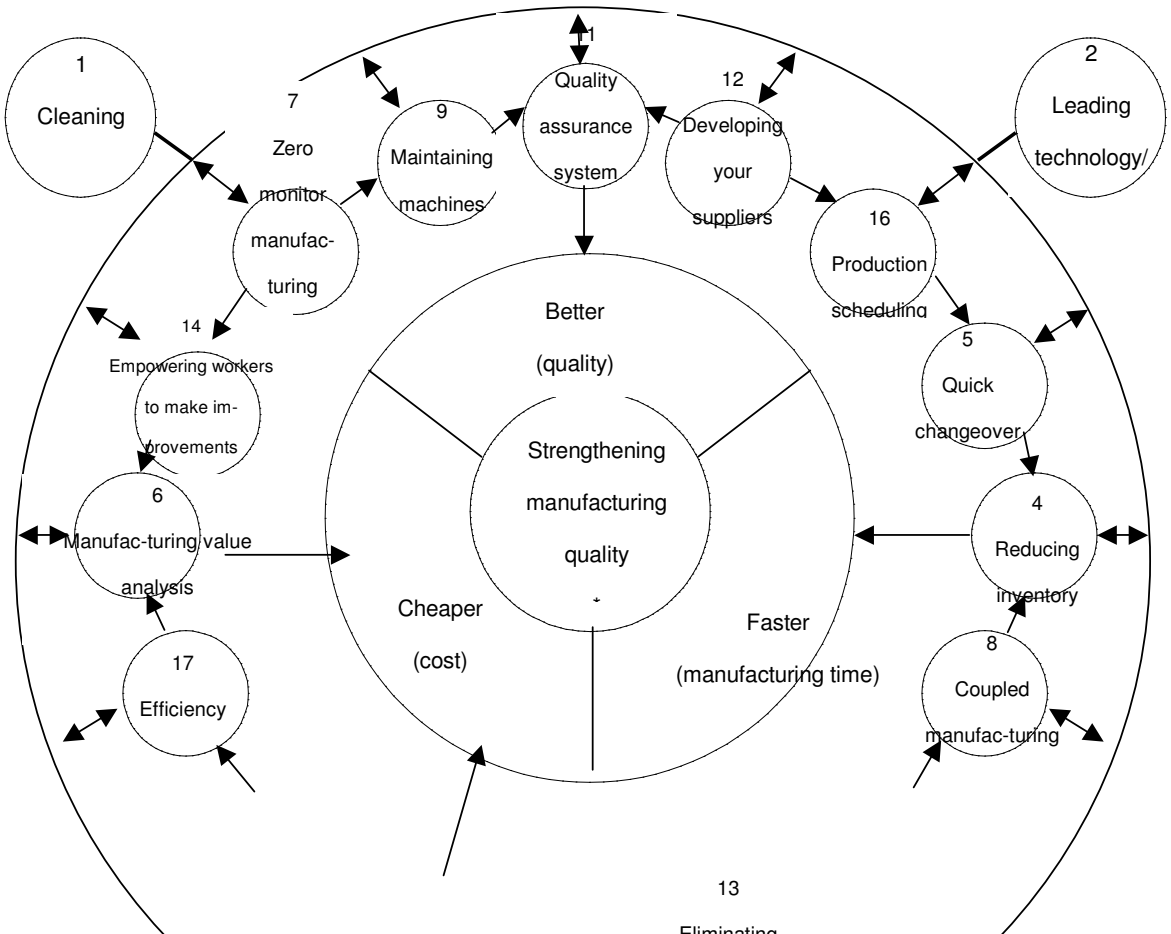
To improve manufacturing quality means that we should constantly seek ways to manufacture better quality goods faster and less expensively, as well as more safely. To reach these universal manufacturing goals we draw a simple

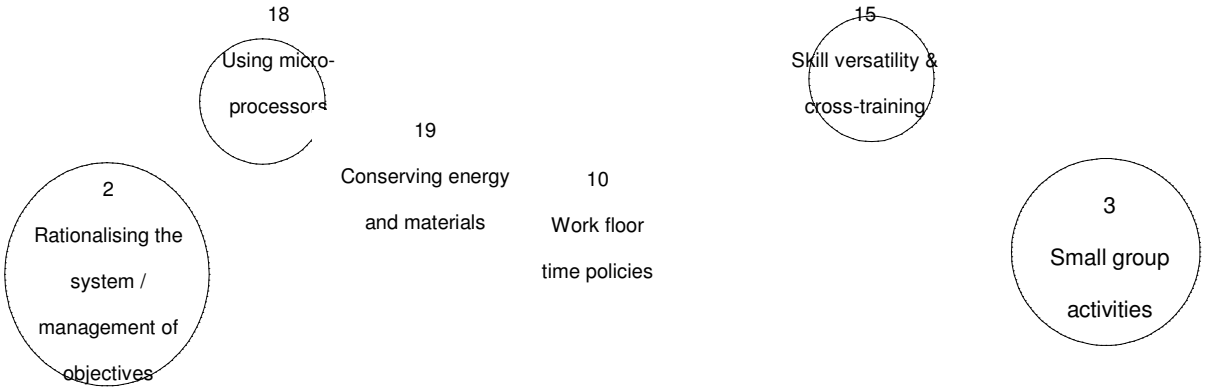
analogy of climbing a mountain. The first step is to evaluate where you are now in relation to where you wish to be. Next you must plan your method and route. The quickest way to reach the top might be to hang a rope and struggle directly up the face. It lacks support for those who want to follow, only by building steps can the entire organisation conquer the mountain which will take some time. But only by going through the full process can you ensure that everyone will eventually reach the summit.

2.4.1 The 20 keys to workplace improvements

The 20 keys to workplace improvement presents a system that defines the meaning of excellence in twenty areas of manufacturing that have a major impact on quality, delivery and cost. This demonstrates how improvements in these areas work together to improve a company's overall competitiveness. In addition it shows how to assess the progress level of your own company in each area and indicates how to plan a strategy for improving all the areas in an order that addresses your own particular needs. The 20 keys was developed by Kobayashi and he also devoted his work to the big picture approach what is called the Practical Program of Revolutions in Factories (PPORF) or the 20 key system. To introduce the 20 keys of the PPORF system look at the 20 keys relations in Diagram 4 below as developed by Koboyashi.

Diagram 4: 20 keys relations diagram





Source: Adapted from Kobayashi (1998:23)

The diagram shows four external corners, including the first three keys and the final key,that support the 16 internal factors. Among the internal factors, three keys are given special emphasis because of their direct relationship to the stronger manufacturing quality (see heavy arrows in centre). Interrelationships between the keys are shown with smaller arrows between them.

2.5 CHANGE MANAGEMENT

Currently we are experiencing a fast pace of change and the prospects are great that it will become faster and faster. Change will affect every part of life from personal values to technology, and events move so quickly that long-term stability is threatened. The levels of strategy within companies vary

depending on complexity, stage of diversification and the effect of change on a company.

Change can be defined as the shift from one state to another, a transformation of a company to a new company. As successful firms sustains dynamic equilibrium within its environment, if the environment changes suddenly and dramatically then a successful company in that environment will have to change in a revolutionary way. However, organisational environments seem to be changing all the time so we would expect to find the successful companies develop by continually taking small steps to stay adapted. One would not expect successful companies to drift away from the equilibrium and then have to make dramatic and revolutionary changes to get back into step.

The cost of change is high, strategic change usually requires a change in power because those formerly in power had developed and supported an earlier strategy. This is applicable in most companies since people are influential in maintaining the status quo. Change is an integral part of life and successful change can be approached only through modification of certain factors in a company. Managers can take four different approaches to change namely technology, structure, task and people. These four interrelated approaches are identified by factors they seek to change and these approaches are all interrelated in such a way that using any approach will have an impact on the other approaches (Juran and Gryna 1980:127)

2.5.1 RESISTANCE TO CHANGE

A strong common denominator in successful companies is that they all find a way to get some of their members to take risk, to try something new and different, to scout out the tends of the future. If an organisation is too tightly structured to allow this kind of deviant behaviour, if every employee is required to go a previously identified source of knowledge, there will be no research and development, no attention paid to the long-term future, and all too often in this era of rapid change, no future at all. Avoiding the adaptation trap always requires some effort in scouting out new directions, new alternatives, and new sources of knowledge before it is too late. Taking off in these new directions to find new sources, however, often requires both organisational and personal changes, and there generally is a strong resistance to change, both on the individual and organisational level (Juran and Gryna 1980:127)

Changing is in the eye of the beholder, and if the beholder has initiated the change, then it is logical, rational and well thought out. If the beholder perceives the change as being done to them or if they disagree with the change, it is illogical, irrational and improperly conceived. Organisational change needs to be carefully planned and managed. Individuals vary in the appreciation of the need for change and in their tolerance for accepting change, and these differences are important to consider in planning any organisational change effort. It appears that each person has an optimal need for change or variety. If the amount of change in a person's life is less than optimal, the person will intentionally seek a change or some variety.

If, on the other hand, there is too much change in a person's life, that person will strenuously resist any additional change. Organisational change efforts that follow long periods of stability are less likely to be resisted than those that follow low periods of turbulence. Even after periods of stability, there could be some individuals who are low in their appreciation of the need for change who will resist that change and be rather intolerant of efforts to advance that change. One may wonder why, if some change is necessary and desirable to human existence, and so much resistance to change is evident in companies that seek to shape their future. The following are some of the reasons:

- Reasons for change have not clearly been communicated.
- People fear the unknown.
- People fear failure in a new situation.
- People prefer the present situation.
- People are not confident in the person proclaiming the change.
- People were not involved in planning the change.
- The new goals are irrelevant to many people.
- People resist leaving friends and familiar surroundings.
- Timing of the announcement is wrong.
- People resist the change simply because it is change.

(Goetsch et al 2003:207)

2.5.2 MANAGING RESISTANCE

Understanding these and many more reasons for resistance to change will help the company anticipate resistance, attempt to identify its sources and reasons and modify their efforts to manage that resistance to ensure the

success of your change efforts. Specifically, it has been suggested that companies consider the following tactics for managing resistance:

- Involve all interested parties in contributing to planning the change.
- Clearly articulate the need for change and the goals and objectives of the change process.
- Prepare a written document setting forth these goals and objectives to reduce misunderstandings.
- Address the individual needs of those who will be impacted by the change, help people retain what they treasure wherever possible.
- Have people involved in planning the change.
- Design flexibility into the change, include enough wiggle room to accommodate expectations.
- Allow for the completion of the current change before beginning the next change effort.
- Design communication sessions in which those impacted by the change can air their feelings about the change early enough to positively contribute to the change process.
- Be open and honest with people, accept the reality that there will be some negative consequences from the change, at least for some people and be concerned with maintaining the trust of all.
- Do not leave an opening to return to the status quo, and do not announce decisions unless you are ready to move ahead with the changes.
- Continually focus on the positive aspects of the change.

- Do not attack those who resist the change; be responsible and accepting, but resolute in your decision.
- Continually look for areas of agreement between yourself and those who oppose the change and emphasise the agreement, not the differences that you have with them.
- Be attentive to the calendar in planning the change; avoid holidays and other sensitive times in announcing change.
- Clearly set out boundaries of the change and attempt to avoid unrealistic fears about future unplanned changes.
- In planning the change, make changes that negatively affect rights, benefits and privileges only as absolutely necessary.
- Include adequate training and readjustment process into the plans for change (Stacy, 1993: 125).

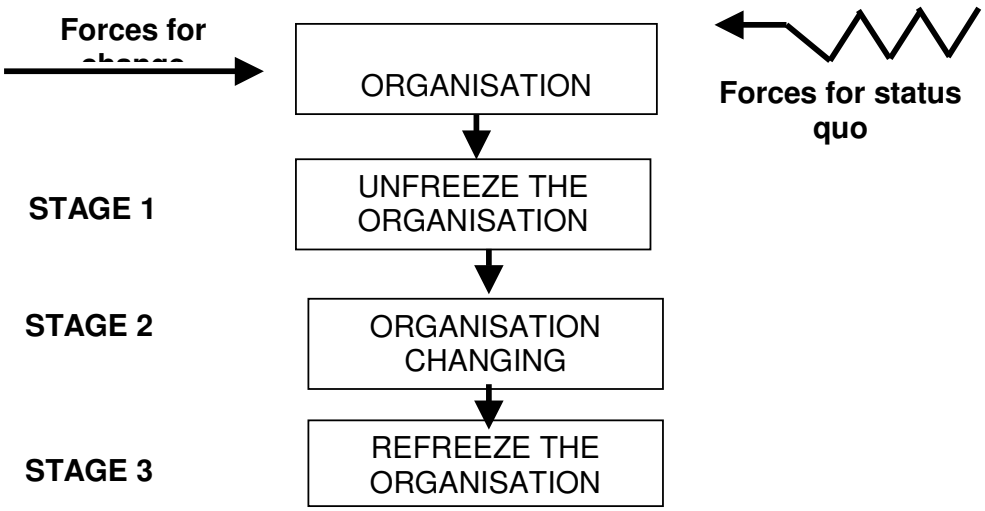
If things change too fast, disastrous things can happen in a company. A strong belief is that any change effort has to be applied and that the plan has to be implemented in order for the planning effort to be worthwhile. You must lay a proper groundwork, involving those who will be affected by change, obtaining commitment from the relevant stakeholder, especially the organisation's employees, and developing a comprehensive implementation plan, the steps typically neglected in most change efforts. One of the well-documented psychological laws of organisational behaviour is that involvement leads to commitment. Employ a high involvement approach to

achieve a high commitment, a high commitment that is essential for the success of the change effort (Stacy, 1993:127).

2.5.3 IMPLEMENTATION PROCESS

The simplest and most useful approach to successfully implementing such directional changes is found in the work of Kurt Lewin. His approach to organisational change involves a three step sequence of unfreezing-movement-refreezing, that is it must first unfreeze or break the patterns of the past, then move or try out new patterns, then refreeze or institutionalise those that have produced the desired results. Each of these steps must be carefully planned and managed. Lewin's three-step sequence can be seen in diagram 5 below.

Diagram 5: Implementation process



Source: Adapted from Bounds et al (1995:558)

2.6 ORGANISATIONAL CULTURE

Any change and cultural change in particular, can leave people confused and demoralised with them even resorting to subversion of the new orthodoxy. It therefore needs to be handled with kid gloves. The key to success is invariably communication, which much be consistent, appropriate and based on real care for, and understanding of people's sensibilities. You can never have too much communication when so much is uncertain.

Letting a gap develop between rhetoric and reality is one of the quickest ways of destroying morale. Mission statement's may be very laudable and are increasingly demanded by customers, but relatively few appear to be worth the paper they are written on, particularly if they are not vigorously supported by the actions of management. The mission as seen by the chief executive and his marketing consultants rapidly becomes an object of derision when the actions of management are obviously not recognising the workforce as the most valuable asset.

Changing the culture of an organisation from one based on antagonistic "them and us" relationships where individuals are poorly motivated to one based on trust, empowerment and focused team work is seen by many to be a prerequisite for truly world class performance. This is immensely difficult, if

not impossible to achieve, however, it is worthwhile examining how essential it really is and how close to this Utopia we can realistically expect to get.

Rarely is cultural change a simple case of management working to alter the attitudes of the workforce. In fact the changes required from management will often be far more onerous than those they seek from their personnel, and there is ample evidence of these being unable to cope with such demands, particularly at the most senior levels.

Many of the most successful examples of organisational and cultural change in industry can be clearly traced back to the new appointment of a visionary and dynamic chief executive. Recognising this, supplier assessment teams are increasingly focusing on the senior management rather than the quality management system as a meaningful guide to an organisation's true capabilities and potential for improvement.

Unless the majority of top management are visibly committed to total quality management, the job of any appointed change team will be poisoned chalice best refused. Also, unless expressions of commitment are accompanied by powerful external pressure for change, there may be good reasons for scepticism. It is a fact that in most cases real change only occurs when the pain associated with it is less than caused by maintaining the status quo. There is a lot of truth in the old saying that the only person who welcomes change is a baby with a wet nappy. Culture change exercises rarely live up to

expectations and there are some things that can go wrong and pitfalls to avoid. These include the following:

- Trying to change everything at once, people need something stable to hold on to
- Managers become infatuated with the process of change and losing sight of the original objectives
- Too much faith in consultants' answers and too little in those of company's own staff
- Experimenting with untried ideas developed by academics
- Empowered staff throwing out aspects of the organisation's system and procedures that are still crucial for success
- Change becoming synonymous with job losses and so arousing fear and mistrust at its very mention (Cleland and Gareis, 1994: 11-4)

2.7 PIONEERS OF TQM

Wille (1993: 15), states that all subjects have their gurus. A guru was originally a mystical teacher to whom people went to have their thinking and their lives transformed. Three such gurus are W. Edwards Deming, Joseph Juran and Phillip Crosby.

Wille (1993:16) states that Deming had a philosophy that happy people, delighted by what you have provided, become loyal customers. They will continue to demand what you supply and you will be on the pathway to profit and growth. (Gitlow et al 1995:18) states that Deming, in his theory of

management, lists nine paradigms that western managers frequently make use of, often without realizing it:

- "Reward and punishment are the most important motivators for people
- Winners and losers are necessary in most interactions between people and between organizations
- Results are achieved by focusing on productivity (as opposed to quality)
- Quality is inversely related to quantity
- Rational decisions can be made based on guess work and opinion, using only visible figures
- Construction, execution, and control of plans is solely the function of management
- Organisations can be improved in the long term by fighting fires
- Superiors are your most important customers
- Competition is a necessary aspect of personal and organizational life."

Deming states that leaders who manage in the context of the preceding paradigm are losing out in the new economic age. Such leaders need to understand the new paradigm of TQM. He calls this the 14 Points for management. These points provide guidelines for the shift in thinking required for organizational success in the 21st century. They are all inter active and should not be studied in isolation. Gitlow et al (1995:19) summarises the 14 points as follows:

1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business

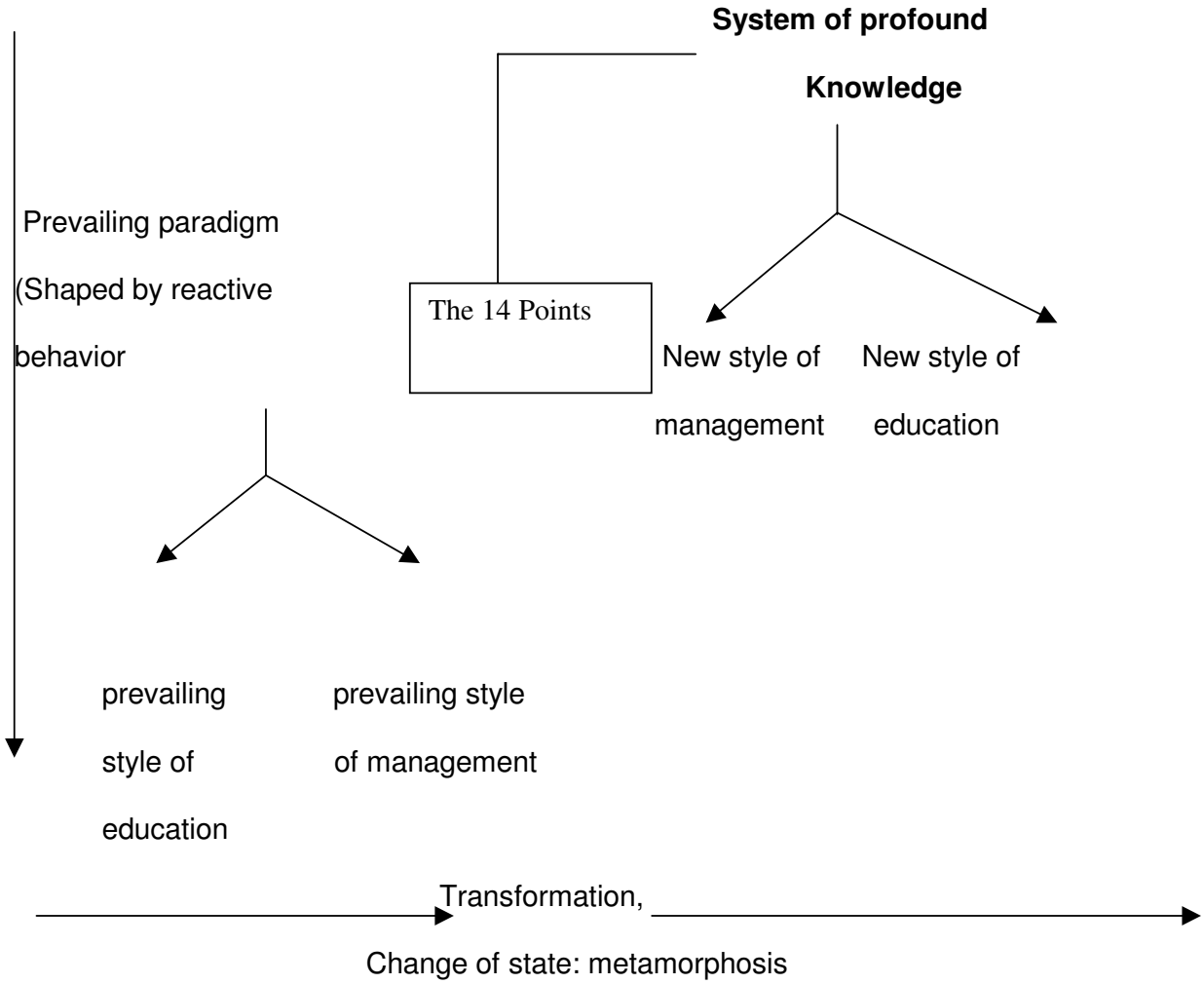
and to provide jobs – the company's vision and mission is stated clearly and is practiced by employees. The employees therefore know why the company is in business and what the future holds in store.

2. Adopt the new philosophy – staff are inspired to perform their daily tasks due to the fact that they know that their contribution and input makes a contribution to the company's performance. Their combined intellectual resources contribute to the company's success.
3. Cease dependence on inspection to achieve quality – tasks should be performed right the first time in order to reduce inspection time.
4. End the practice of awarding business on the basis of price tag – a topical example is when awarding a contract to a builder, the depot manager must ensure that the builder is registered with the compensation commissioner and has the relevant accreditation from the master builders association. This will indicate to the customer that the work quality of the contractor is as good as his price.
5. Continuous improvement – The brewing process is well established. However a person must never cease to look for ways to do things faster, better and cheaper. The main responsibility will be to constantly improve systems so that the innovations are more easily achieved.
6. Train and train and train – In order to maintain it's position as the second largest brewer in the world lots of time and money should be spent on training and development. Training and education are the cornerstones of greater consistency.
7. Institute leadership – Managers should ensure that staff, have proper equipment to work with in order for the depot's targets and objectives

to be met. A driver cannot expect to deliver his load on time if his truck breaks down often. Supervisors must ensure that defects are reported timeously so that immediate action can be taken to repair the faults.

8. Drive out fear so that everyone may work effectively for the company – Departmental managers should empower people to make decisions, which are in line with the businesses objectives. They will in turn feel that their contribution is valued.
9. Break down barriers between departments – All departments in the depot should understand what effect their actions have on the rest of the business.
10. Eliminate slogans, exhortations and targets, ask for zero defects and new levels of productivity – staff should be taught how to work smarter and not harder.
11. Eliminate quotas – set realistic sales and performance targets that are achievable. Very often targets are impossible to reach or very easily achievable. Targets should be set by use of statistical methods.
12. Remove barriers that rob the hourly paid worker his right to pride of workmanship – Get rid of performance appraisals, which link performance to remuneration. This is not an indication of quality.
13. Encourage education and self - improvement for everyone – People in all departments of the depot should be encouraged to constantly improve their qualifications through study.
14. Take action to accomplish the transformation – Senior management must lead the way and commit themselves to continuous quality improvements and innovation and also practice what they preach.

DIAGRAM 6: ISSUES INVOLVED IN TRANSFORMATION



Source: Adapted from Gitlow et al (1995:37)

According to Salvatore (2001: 67) there are five rules that determine the success of a TQM program:

1. The CEO should support the program unconditionally
2. All relevant stakeholders who could be affected by the program should be informed of it's benefits.
3. The TQM program must have a few clear strategic goals; that is, it must ask,

"what is the firm trying to accomplish? "

4. The TQM program must provide quick financial returns and compensation – people need to see early and concrete results to continue to support the program.
5. The TQM program should be site specific.

Oakland (2002: 27) states that if all employees are to participate in making the company successful then they must be trained in the basics of disciplined management. They should be trained to:

- **Evaluate** – the situation and define their objectives
- **Plan** – to achieve those objectives fully
- **Do** – implement the plans
- **Check** – that the objectives are being achieved
- **Amend** – take corrective action if they are not.

A typical example in a depot would be when the load planner is busy preparing the delivery plan for the following day. If he/ she makes use of the Evaluate, Plan, Do, Check, Amend (EPDCA) cycle when planning, the following factors would be relevant:

- **Evaluate** – Take note of the areas, which are due to receive deliveries the following day. When taking orders, per telephone, take cognisance of this fact. In this way the customer can be told when they can expect to receive their order. False promises are not made to the customer. The tele-sales staff will then also ensure that they have the correct order details, by repeating the order and confirming with the customer.

- **Plan** – The orders are planned on road show. The load planner must ensure that vehicle capacity is optimised.
- **Do** -The load plan for the following day is finalized. All orders received before 12: 00 will be included in the load plan. A copy of the plan is printed and checked to ensure that all owner-drivers are utilised and that there are no duplications and incorrect departure and arrival times on the plan.
- **Check** – The load planner will double check every thing before the final delivery plan, for the following day is printed and displayed at the site control office and handed over to the warehouse. The warehouse staff will then be able to pre – load the trucks at night, so that they can be ready to leave the depot early the next morning.
- **Amend** – If the load planner comes across a mistake, while perusing the plan, she can amend it before the final plan is printed and loaded onto the system.

2.8 CUSTOMER REQUIREMENTS

Bank (2000:23) states that the customer will invariably have approximately five questions regarding the quality if they are to be satisfied by the service provider. These questions are:

- The customer would want to know what the specifications of the product is that they are buying. For example, if the customer needs a floor polisher for a factory, they would like to know whether a model that looks more suited for domestic use, will be able to withstand the rigours of it's intended usage.

- The customer would want to know if they got the product, which they were promised. For example, if the customer is promised that a car they were buying had large rear leg room, they would expect that adults could be seated in comfort on the rear seat.
- The customer would want to know if the product that they were buying would continue to perform the function for which they originally bought it.
- The customer would want to be getting value for money.
- How long will it take before the customer can receive their purchase?

(Slack et al 2001:677) states that TQM can be viewed as a logical extension of the way in which quality related practice has progressed. TQM can thus be viewed as a natural extension of earlier approaches to quality management. It can be illustrated as follows:

TABLE 1: TQM can be viewed as a natural extension of earlier approaches

Quality management

TOTAL QUALITY MANAGEMENT	• Whole operation involved
	• Quality strategy
	• Teamwork
	• Staff empowerment
	• Involves customers and suppliers
QUALITY ASSURANCE	• Quality systems
	• Quality costing
	• Problem solving
	• Quality planning
QUALITY CONTROL	• Statistical methods
	• Process performance
	• Quality standards

INSPECTION	• Error detection
	• Rectification

Source: Adapted from Slack et al (2001: 673)

TQM should be regarded as a way of thinking and working in operations, which lays particular emphasis on the following:

- Meeting the needs and expectations of customers;
- Covering all parts of the organization;
- Including every person in the organization;
- Examining all costs which are related to quality, especially failure costs;
- Getting things "right first time", i.e. designing – in quality rather than inspecting it in;
- Developing the systems and procedures which support quality and improvement;
- Developing a continuous process of improvement

We shall now discuss each one of the factors mentioned above:

1. **TQM meets the needs and expectations of the customers**

   (Slack et al, 2001: 677) states that there is little point in putting a quality system in place – calculating costs, training and motivating people, and so on – unless it meets the requirements of the customer

2. **TQM covers all parts of the organization**

   (Slack et al, 2001:678) states that one of the most powerful aspects to emerge from TQM is the concept of the internal customer and supplier.

This is recognition that everyone is a customer within the organization and consumes goods or services provided by other internal suppliers.

3. **Every person in the organization contributes to quality**

   Slack et al (2001:678) states that TQM is sometimes referred to as 'quality at source.' This is an indication of the impact that each staff member has on quality. It is therefore every person's responsibility to get quality right.

4. **All costs of quality are considered**

   The cost of quality must be controlled by all persons. Slack et al (2001:681) states that these costs of quality are usually categorized as:

   Prevention costs – these include failure prevention costs

   Appraisal costs- the costs which are incurred due to quality assessment and control

   Internal failure costs – costs associated with rectification of internal process errors

   External failure costs – costs associated with undetected errors which reached the customer.

5. **Quality systems and procedures**

Slack et al (2001:687) states that the documentation which is used in a quality system can be defined at three levels:

Level 1 – Company quality manual

Level 2 – Procedures manual

Level 3 – Work instructions, specifications and detailed methods for performing work activities

There can also be a data – base, which can contain all other reference documents.

2.8.1 THE INTERNAL CUSTOMER

Madu (1998: xxviii) defines the internal customer as" the end user or consumer of a product or service who is affiliated to the supplier." Bank (2002:26) states that people are very attentive to external customer service, but completely fail to recognize the existence of their internal customers. The quality requirements, of the internal customer, have to be met in order for it to cascade to the external customer. In order for TQM to be fully effective within an organization, quality requirements need to be agreed upon buy both the internal customer and supplier. Therefore the two parties should agree on the required quality levels.

2.8.2 SIX SIGMA

Bank (2000:208) defines six sigma as being" a statistical term which measures the extent to which a process varies from absolute perfection"

The basic idea behind the concept is for the firm to strive to make less than 3.4 defects per million which would equate to a 99.99971 percent perfection rate. During the 1980's engineers at Motorola developed the technique in order to reduce the amount of defects, which reached the customer.

The term six sigma is a statistical one, which measures the extent to which a process varies from perfection (Bank 2000:209). Burger (2003:1) states that Six Sigma is credited with impressive financial benefits to companies such as General Electric and Honeywell. The financial benefits are gained from continuous improvement in the company's processes. Areas such as customer satisfaction, product cycle times, manufacturing, distribution and delivery and defect reductions can benefit from Six Sigma.

Companies can hereby statistically report on their defects by stating the amount of defects they have per million. A conversion table given by Bank (2000:209) translates these numbers into sigma:

" 6 sigma = 3.4 defects per million

5 sigma = 230 defects per million

4 sigma = 6210 defects per million

3 sigma = 66 800 defects per million

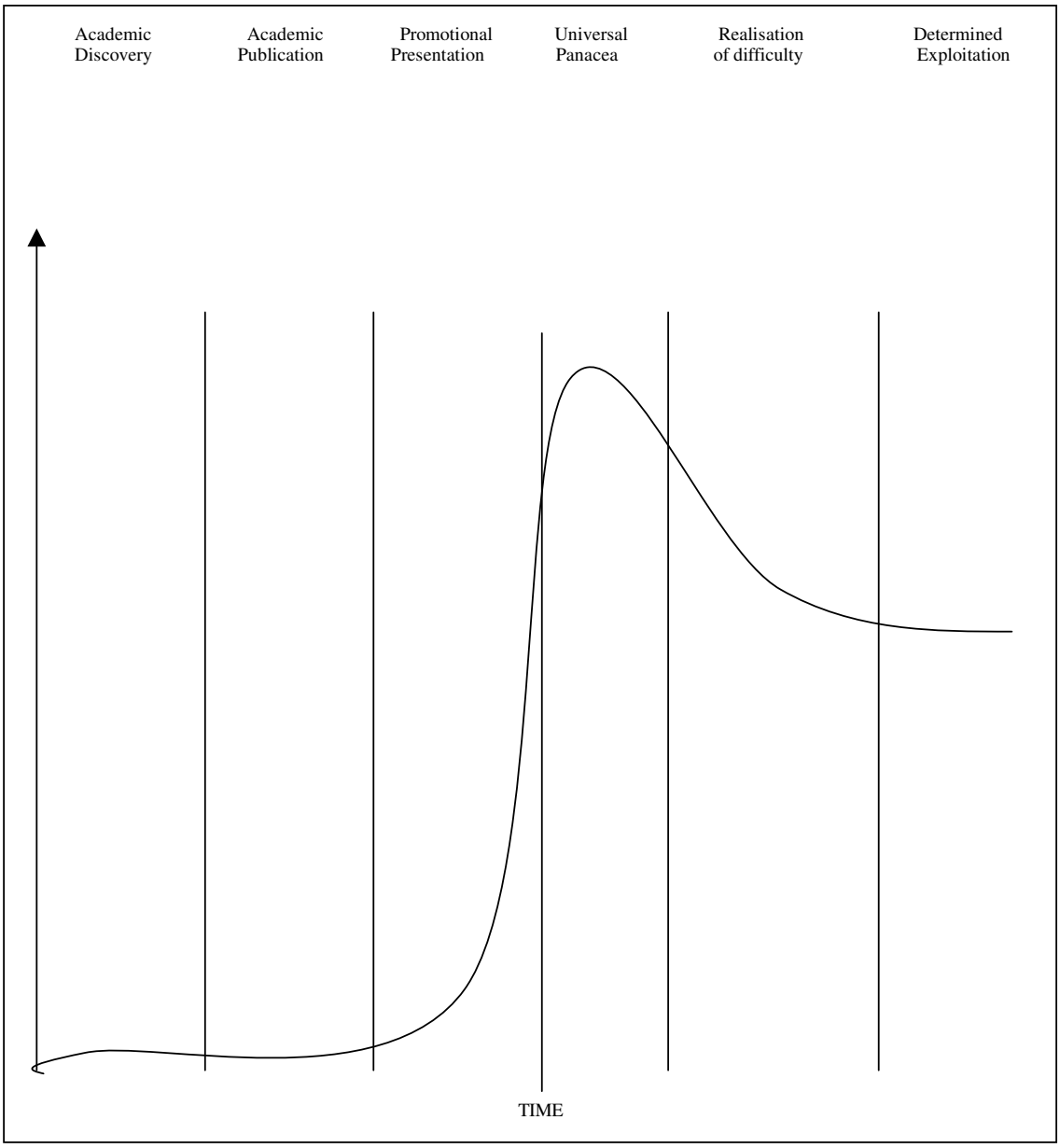
2 sigma = 308 000 defects per million

1 sigma = 690 000 defects per million"

2.8.3 TQM – just another fad?

Many companies continually evaluate whether certain practices, such as TQM, are here to stay or if it another " nice to have" system. Bank (2002:225) purports that many fads of American origin, such as the balanced score card, 360 ° feed back, the virtual value chain, empowerment, the learning organization and managerial diversity are constantly introduced into the market place. Bank (2000:225) describes the various stages of a management fad in diagram 7:

DIAGRAM 7: Life cycle of a management fad



TITIM TIME

Source: Adapted from Bank (2000:225)

Another of the so-called management fads is the balanced score-card. Robert Kaplan and David Norton first developed it, in 1990. The manager could analyse the business from four different perspectives. These offered the manager immediate access to them regarding key performance areas. These were:

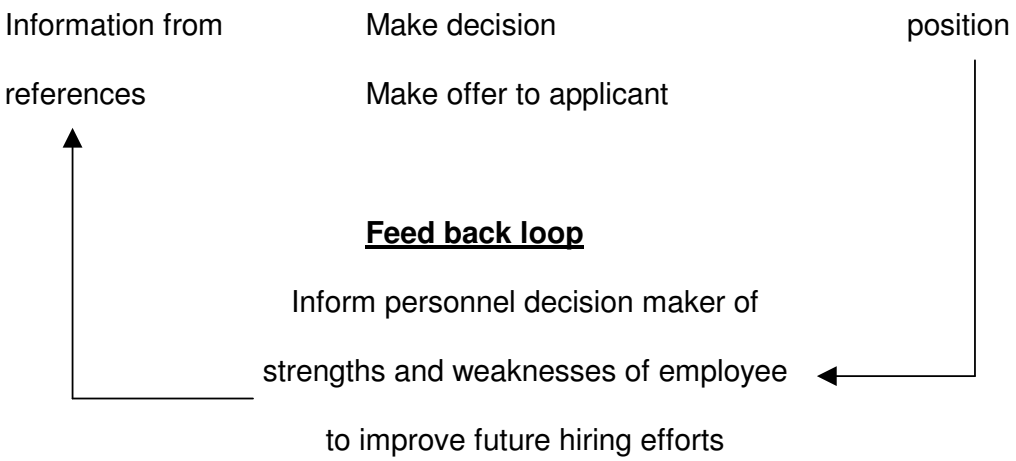
- How does the customer see the company.
- What should the company exceed expected levels at.
- Deals with continuous improvement and value adding factors.
- What perception does the shareholders have of the business.

Gitlow, Oppenheim and Oppenheim (1995: 54) defines a process as the transformation of inputs

(Manpower/services, equipment, materials/goods, methods and environment). The transformation involves the addition or creation of value in one of three aspects: time, place or form. A topical and common example of a process is the hiring of a person.

FIGURE 9: HIRING PROCESS

Input	Process	Outputs
Resume	Synthesised information	Employee
to		
Interview →	Evaluate information →	fill vacant



Source: Gitlow et al (1995: 57)

2.8.4 Questions to consider

Gitlow et al (1995: 58) states that there are various questions, which can assist in the definition and documentation of the process. These are listed below:

1. Who owns the process? Who is responsible for the process's improvement?
2. What are the boundaries of the process?
3. What is the flow of the process?
4. What are the process's objectives?
5. Are process data valid?

The researcher is of the opinion that these questions are adequately answered in the following assessments of operational processes in the selected three aspects of the depot. Uys (1995:97) states that to implement a

TQM system is a big task, which unless planned properly, can lead to total confusion.

2.9 STANDARD OPERATING PROCEDURES

Uys (1995:97) states that all procedures should be written up in a standard format called standard operation procedures (SOP's). The average SOP need not be longer that 1- 2 pages and should not take a long time to prepare. Where such SOP's already exist, they should be reviewed and updated in the light of the foregoing. The following format was used throughout in order to maintain the degree of uniformity and consistency of the research.

1. PURPOSE

The purpose, which the document is going to serve, is briefly explained in

this section

2. SCOPE

Indicates the scope and delimitations of the document

3. REFERENCES

Indicates references to legal or other documents

4. DEFINITIONS

Any definitions used in the document are defined

5. RESPONSIBILITY

Stipulates who is responsible/ accountable for the implementation of the

process which is documented

6. DOCUMENTATION

Any supporting documentation is listed

7. PROCEDURE

A detailed analysis of the procedure to be followed is given

8. RECORDS

Any applicable record schedule is listed

Source: Adapted from Uys (1994:98)

2.10 TRAINING

Having worked their way through all SOP's, middle management should have a fairly good idea of a best operating practice system (Uys 1994:104). He further states that the next step would be to transfer this knowledge to the operating personnel. Once you have tackled an action item, tell the work force about it right away, get them to try it out, and then ask them for feed back.

The important principle is to give the workers "ownership" of the system. The worker should be made to feel that the improvement in his quality of working life brought about by the system.

Uys (1994:105) states that the team leader should ensure that the following is achieved, particularly during the feed back sessions:

- A climate for creativity should be created.
- Team members should be encouraged to speak out and contribute their own ideas or to build on others.

- Differing points of view and ideas should be allowed to emerge.
- Barriers to idea generation should be removed, such as incorrect pre conceptions.
- Attempts of team members to become creative should be encouraged.

2.11 DEFINING AND DOCUMENTING A PROCESS

Gitlow et al (1995: 57) states that defining and documenting a process is an important step towards improvement. For the purposes of this research document this will be illustrated by means of an example which details the procedure to be followed in order to ensure preservation of quality in the warehouse. The information obtained during this empirical study was obtained with the assistance of the warehouse manager, distribution manager and the depot manager.

The implementation of a TQM system at the East London Depot will have, inter alias, the following advantages :

"New staff can read the procedure and do the job to a defined standard in a shorter than normal timescale. This reduces both quality and training costs. Once written, or amended, procedures can be used to train and re–train staff. Thus, by producing training friendly procedures, there is only the single cost of their production, rather than repeated training costs. This is also useful when staff is engaged in holiday cover. They can cover jobs satisfactorily for their colleagues by reading the relevant procedures, even if they have never done that job before. This assists in developing staff flexibility, as they can be redeployed as necessary." The preservation of quality in the warehouse was

studied. All facets of this particular operation are detailed making use of the above eight points.

2.12 IMPLEMENTATION PROCESS

2.12.1 Introduction

This standard operating procedure was written in order to detail the process to be followed by warehouse personnel in order to ensure that the stock in the warehouse is stored and distributed in the correct manner. Factors such as stock age management, storage conditions, storage of empties, stacking and outer packaging is discussed.

2.12.2 Warehouse

1. **PURPOSE**

To ensure preservation of product quality

2. **SCOPE**

East London Depot

3. **REFERENCES**

N/A

4. **DEFINITIONS**

Service Excellence Charter

5. RESPONSIBILITY

Warehouse Manager

6. DOCUMENTATION

Stock Receipt

7. PROCEDURE

7.1 Stock Age Management

- Warehouse supervisor conducts stock count on oyster handheld (a business tool which is used to input stock figures per area) on a daily basis at 06h00.
- Stock information to be uploaded into handheld system and generate a stock age report
- Warehouse supervisor to hand over age analysis to stock controller
- Warehouse supervisor to update stock rotation boards to enable Forklift drivers to draw product on a First in first out (FIFO) basis
- Warehouse supervisor to update bin cards as per age analysis report
- Stock controller to review age analysis in weekly (Strategic sales forecast) SSF meeting
- Stock controller to communicate beer older than 28 days and get authorisation for release to trade from Sales Managers. This is recorded on the age analysis report

7.2 Storage Conditions

1. Storage conditions are defined in the Depot (Systems excellent charter) SEC Module 2 21.1. It addresses:

- Containers storage conditions
- Loading of vehicles
- Staging of loaded vehicles
- Call & Collect vehicles

This is monitored by management on an ongoing basis. It is formally audited twice per annum as part of the SEC audit.

2. Storage of Empties are: If empties have to be stored outside the Warehouse a gap of 15m must be adhered to between the wall of the building and the empties as per Insurance criteria.

3. Stacking of Product: the Safety Representative completes a quarterly checklist.

7.2 Outer Packaging

- Warehouse Supervisor to conduct visual check of all stock on floor at the beginning of each shift
- Warehouse Supervisor to identify damage of outer-packaging and attach quality label to pallet
- Supervisor to isolate all damage packaging at frozen zone and splitter to replace the damaged package
- Warehouse Supervisor to ensure that replacement packaging is always available

8. RECORDS

RECORDS SCHEDULE

Form #	Description	Retention Period	Storage Location	Disposal Responsibility
Hardcopy	Stock Age report	1 Month	Stock Controller's Office	Depot Manager
Hardcopy	NOSA checklist	5 Years	Risk Controller's Office	Risk Control Manager

2.13 CONCLUSION

In this chapter the theoretical aspect relating to the value of a TQM system was discussed in great detail. It is therefore evident that the theoretical aspect of the program has to be researched in order to implement a successful TQM program. The following chapter will deal with the research design and methodology, which documents the process of the research and design of the TQM program.

The implementation of TQM is a simple case of management implementing a new system. This requires aspects such as workplace improvements, organisational culture, change management, benchmarking the company, proper communication, training and education and finally a team approach.

All these factors are integrated and overlap one another. They are all consistent with an approach that recognises that change and improvements are vital to the company's prosperity. When a company is viewed as an open system, one begins to appreciate its dynamic nature and the importance of change and improvements to retain a part of that world. Companies that

have failed have been those whose managers misunderstood the importance of learning and adaptation to change.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The purpose of this chapter is to describe the process, which was used during the study. This chapter describes the process of testing the three hypotheses which are presented in chapter 1. The three hypotheses are listed below:

The first hypotheses: A TQM system would not add value to the East London Depot.

The second hypotheses: It would not be feasible to implement the TQM system at the East London Depot.

The third hypotheses: It would not be possible to implement TQM at the East London Depot

3.2 WHAT IS RESEARCH DESIGN

3.2.1 The concept of research

Mouton and Marais (1992:7) define research as a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it. Another definition states that research can be seen as a process of expanding the boundaries of our ignorance (Melville and Goddard 1996:14). Oxford dictionary (1995:1169) defines research as the systematic investigation into sources in order to establish facts and reach new conclusions or collate old facts by the scientific study of the subject or by a course of critical investigation. Finally, Leedy (1993:11) defines research as studious inquiry or examination, having for its aim the ***discovery*** of new facts and their correct ***interpretation***.

A closer look at this definition reveals that the italicised words, are important in comprehending the nature of basic research. These ideas are listed below:

- If there is no discovery, there is no research.
- There must be the interpretation of data for the enlightening awareness of what the facts mean.
- Research must always answer questions to solve problems.
- Research is a human activity that promotes critical thinking in a cross functional approach.
- Effective research is rational, systematic and is guided by constructive, critical assumptions and measurable data (Leedy 1993:12).

3.2.2 The concept of design

Yin (1994:20) defines design as the preparation of a working plan aimed at systematically assembling, organising and integrating data, in order to solve the research problem. Leedy (1993:125) states that research designs the planning, visualisation of the data and the problems associated with the employment of the data in the entire research project. The Oxford dictionary (1995:1169) states that design is a preliminary plan, concept or purpose.

From the above definitions research design can be interpreted as the preparation of an action plan aimed at organising and integrating data in an overall framework in order to solve the research problem. Basic to design are four fundamental questions that must be resolved with respect to the data:

- What are the data needed?
- Where are the data located?
- How will the data be secured?
- How will the data be interpreted?

The focus of research design is to maximise the validity and reliability of the research findings. According to Leedy (1993:128) the use of human subjects in research raises the question of ethical standards and should not go without careful scrutiny.

3.2.3 Validity and reliability

With any type of measurement, two considerations are very important. One of these is validity and the other reliability. Validity is concerned with the soundness, the effectiveness of the measuring instrument. The following questions can be asked:

- Does the measuring instrument measure what it is supposed to measure?
- What is the accuracy of the measurement?

There are several types of validity, the more common types according to Leedy (1993:41) are:

- Face validity – relies basically upon the subjective judgement of the researcher.
- Criterion validity – employs two measures of validity, the second as a criterion, checks against the accuracy of the first measure.

- Content validity – is the accuracy with which an instrument measures the factors or situations under study.
- Construct validity – is any concept such as honesty that cannot be directly observed or isolated.
- Internal validity – is the freedom from bias in forming conclusions in view of the data.
- External validity – is concerned with the generalisability of the conclusions reached from a sample to other cases.

Reliability deals with accuracy. According to Leedy (1993:42) it is the extent to which, on repeated measures, the indicators yield similar results. Reliability in quantitative research projects can be evaluated by repeating a question in a questionnaire. Reliability asks one question above all others, with what accuracy does the measurement, test, instrument, inventory or questionnaire measure what it is intended to measure. Webster's Revised dictionary (1996) defines research as:

- To search again; to examine anew.
- Systematic investigation to establish facts 2: a search for knowledge; attempt to find out:
- inquire into

The Oxford dictionary (1995:1169) defines research as the systematic investigation into sources in order to establish facts and reach new conclusions or collate old facts by the scientific study of the subject or by a course of critical investigation.

Leedy (1997:9) states that the core concept, which underlies all research is it's methodology. An intimate knowledge and understanding that research methodology directs the whole effort are necessary. In developing the methodology decisions have to be made which pertains to the organising, planning and directing of the study.

Leedy (1993:45) Research is the manner in which we attempt to solve problems in a systematic effort to push back the frontiers of human ignorance or to confirm the validity of the solutions to problems others have presumably solved.

Leedy et al (2001:3) states that research is not just a process of gathering information it is about answering unanswered questions or creating that which does not currently exist. Research can be seen as a process of expanding the boundaries of our ignorance. The discovery and the creation of knowledge, therefore, lies at the heart of research, or as Leedy puts it, research is "a systematic quest for undiscovered knowledge". Good research is "systematic" in that it is planned, organised and has a specific goal. It is also a never-ending process: discoveries and creations lead to new discoveries and new creations, and so on (Melville et al 1996:23). Research should therefore lead to discovery and interpretation of the results of such study.

Doyal et al (1986:1) is of the opinion that an even more restrictive doctrine called empiricism claims that scientists may only use empirical research methods such as observation, experiment, data analysis, and the like; all

other methods being regarded as speculative at best or deceptive at worst. Leedy and Ormond (2001:4) states that there are eight distinct characteristics of research:

- Research originates with a question or problem
- It requires a clearly articulated goal
- It follows a specific plan of procedure
- Usually divides the principle plan into more manageable sub problems
- It is guided by specific research problems, questions or hypotheses
- Research accepts certain critical assumptions
- It requires the collection and interpretation of data in an attempt to resolve the problem that initiated the research
- Research is by nature, cyclical or, more exactly, helical.

3.3 STATISTICS AS A TOOL OF RESEARCH

Leedy and Ormond (2001:32) states that statistics can be a powerful tool when used correctly in particular, when they are used to summarise and interpret data. Statistics is seen as typically more useful in some academic disciplines as others. Whenever statistics are used the researcher must remember that the statistical values obtained are never the end of a research endeavour, nor the final answer to a research problem.

3.3.1 Primary functions of statistics

Leedy and Ormond (2001:33) states that statistics have two principal functions: descriptive and inferential.

- **Descriptive statistics** summarise the general nature of the data obtained
- **Inferential statistics** assists in deciding whether differences in data are due to experimental intervention or due to a coincidence.

The human mind can only comprehend a certain amount of data. Statistics serves the purpose of condensing data and making it fully comprehensible for the researcher. An attempt is made by statistical information to make the big picture comprehensible.

3.4 CONSIDERING THE VALIDITY OF THE METHOD USED

According to Leedy and Ormond (2001:103) the validity of the research conducted, must be considered. The validity of the result which is obtained will have direct bearing on the research project as a whole. The questions to be asked will therefore be:

- Is the statistical data a true result of what was supposed to have been measured?
- Can the results be applied to other similar problems?

Leedy and Ormond (2001:102) states that the answers to these questions can be determined by validity testing. There are two types of validity namely, internal validity and external validity. Internal validity deals primarily with the relationship, which the obtained data has on other aspects of the research. Leedy and Ormond (2001: 105) say's that external validity deals with the

generalisation of the obtained results. Leedy (1997:32) mentions four more types of validity:

- Face validity – this relies on subjective judgement by the researcher
- Criterion validity - it is determined by relating the performance of one measure against another with the second checking the accuracy of the first measure
- Content validity – it is the accuracy with which an instrument measures the contents being studied.
- Construct validity – is concepts such as honesty, which cannot be directly observed or isolated.

According to Leedy and Ormond (2001:31) reliability can therefore be seen as the consistency of performance of a measuring instrument. The specifications of the measuring instrument must therefore be stated in order for the results to b quantifiable and regarded as an accurate assumption. Therefore defective measuring tools will result in a defective research endeavour.

3.5 THE SCIENTIFIC METHOD

According to Leedy and Ormond (2001:36) by using this method of research, insight into the unknown is sought. There are various ways of achieving this, namely:

- A problem has to be identified
- Gather enough data to solve the problem
- Use a hypotheses to solve the problem as a way of finding a resolution to the problem.
- The hypotheses have to be tested in order to determine whether it will solve the initial problem.

3.6 QUANTITATIVE VERSUS QUALITATIVE RESEARCH

Leedy and Ormond (2001:101) states that quantitative research answers questions which would relate to measured variables. Qualitative research, on the other hand seeks to provide the participant with the required understanding relating to a problem. A summary of the main differences between quantitative and qualitative research is given in table 2.

Table 2: The difference between quantitative and qualitative research.

QUESTION	QUANTITATIVE	QUALITATIVE
What is the purpose of the research?	Explains and predicts	Describes and explains
	Confirms and validates	Explores and interprets

	Tests theory	Builds theory
What is the nature of the research process?	Focussed	Holistic
	Variables known	Variables unknown
	Guidelines are established	Guidelines are flexible
	Design is static	Guidelines not static
	Context free	Bound by context
	Detached view	Personal view
What are the methods of data collection?	Sample large and representative	Small informative sample
	Instruments standardised	Observations, interviews
What is the form of reasoning used in analysis?	Analysis deducted	Analysis inducted
How are findings communicated?	Numbers	Words
	Aggregate data and statistics	Quotes and narratives
	Formal voice, scientific style	Personal vice, literary style

Source: Leedy and Ormond (2001:102)

The procedure that was applied to solve the main and sub problems was as follows:

- In chapter Two a literature study was conducted relating to TQM which dealt with, inter alia: Value that it would add to the business, Feasibility of implementing the system and Implementation process (SOP's)
- In order to solve the third sub – problem (how to implement a TQM system into the East London Depot) a questionnaire was developed based on the

hypotheses, which were established in chapter one. The study was focussed on the East London Depot, of the South African Breweries.

- The results gained from the survey are analysed in the following chapters.

3.7 THE EMPIRICAL STUDY

Leedy (1997:191) states that there are four research methodologies that can be used. They are:

- Analytical method – useful when quantitative data needs to be analysed
- Experimental method – deals with the cause and effect phenomenon. (Leedy,1997:230)
- Descriptive method, also called the normative method, deals with situations that demand techniques of observation as the principle method of data collection
- Historical method – looks at past and present events and also what their meaning (Leedy,1997:173)

In this study the analytical method was used.

3.8 SURVEY RESEARCH

Leedy and Ormond (2001:196) describe a survey as a situation in which a researcher poses questions to willing participants, summarising their response by making use of percentages and then draws conclusions about a particular population from the responses of the sample. Interviews are more

structured in a survey. Therefore a researcher asks a standard set of questions. In a semi structured interview the researcher can modify the questioning process in order to extract more detailed information from the respondent. Survey research typically employs three methods of performing the research:

- Face to face method – one of the advantage of this method is that the researcher can establish a relationship with the respondents and therefore extract more information in this way. This method is however time consuming but allows the researcher the opportunity of clearing up any misunderstandings or ambiguities.
- Telephone interviews – the advantages of this system is that the population sample size can be very large and the response rate will therefore be higher that for a questionnaire. However the researcher cannot establish a good rapport with the respondents. The research will also be biased due to the fact that it is only people with telephones that can partake in the survey.
- Questionnaires – this is quite a cheap method of conducting research. Questionnaires can be mailed to countless people who can decide if they wish to partake in the study or not. They also have the added advantage of remaining anonymous and not necessarily knowing the researcher. However their answers can be flawed due to misinterpretation of the questions. The rate of return is also quite low. This is the method that was used in this research survey.

Leedy and Ormond (2001:202) gives twelve guidelines for the construction of a questionnaire:

- Keep it short
- Language should be simple and unambiguous
- Do not make assumptions in the questions
- Leading questions should not be asked
- Be consistent
- Know how to categorise responses
- Keep the task of the respondent simple
- Clarity of instructions are very important
- If purposes of questions are unclear, always provide a rational explanation to the respondent
- Be professional in your approach
- Conduct a pilot study with a small sample
- Make sure the questionnaire fulfils all your needs

The questionnaire (appendix A) for this research was divided into three parts. They were however not indicated as such on the questionnaire, but the questioning methodology distinguished the three parts. Respondents were requested to indicate which answer they preferred. The answer choices were divided as follows:

1. 27 % of the questions required the respondent to selects a value between 1 and 5 in order to indicate the strength of their choice.
2. 65 % of the questions required a yes/ no answer

3. 8 % of the questions were multiple choice type questions.

3.9 THE PILOT STUDY

The questionnaire was reviewed by a lecturer at the Port Elizabeth Technikon, and also senior staff members of the East London Depot, of SAB. The necessary adjustments were made and reviewed by the research promoter. Results of the pilot study are not included in the survey results.

3.9.1 Administration of the questionnaire

The researcher distributed the questionnaire (Appendix A) and covering letter (Appendix B) to thirty eight staff members by e mail. All respondents were asked to return the questionnaires directly to the researcher. They were also given the assurance that the completion of the questionnaire was not time consuming. The deadline for returning the questionnaires was set for 13 November 2003.

3.9.2 The response rate

The questionnaires were handed out on the 05 the November 2003 and a response rate of 81 % was attained, which may be accepted as a good response.

Date received	Number of questionnaires distributed	Questionnaires returned	Percentage returned
13 November 2003	38	31	81

3.10 CONCLUSION

A quantitative method of research was found to be the most appropriate research strategy. A questionnaire was used as the main method of data collection. This chapter attempted to provide an analysis of the methodologies of research. The results of the test that was conducted will be analysed in the next chapter.

CHAPTER 4

THE RESULTS OF THE QUESTIONAIRES

4.1 INTRODUCTION

These results are a core part of this research project, and the response to the questionnaire and interviews will make a major contribution to

the identification of those topics or issues that form part of the hypotheses of this project.

4.2 SECTION A: BIOGRAPHIC INFORMATION

This section covers all the biographic issues of the respondents. Their designation and percentage response per designation is illustrated in the table below.

Table 3: Biographic details of respondents

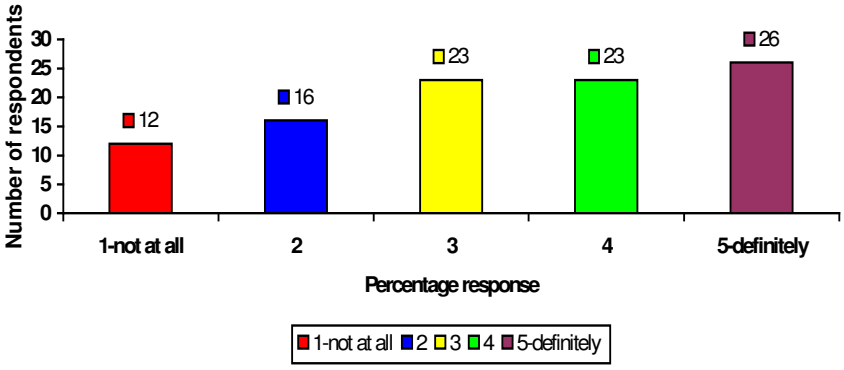
Designation	Respondents
District Manager	6.45 %
Depot Manager	13 %
Warehouse Manager	3.22 %
Distribution Manager	3.22 %
Warehouse supervisor	6.45 %
Warehouseman	3.22 %
Distribution supervisor	3.22 %
Administration assistant	3.22 %
Sales Manager	6.45 %
Sales representative	25.77 %
Sales coordinator	6.45 %
Site supervisor	6.45 %
Stock controller	3.22 %
IT Specialist	3.22 %
Human Resources specialist	3.22 %
Financial planner	3.22 %

4.3 SECTION B: QUESTIONAIRE RESPONSE

This sector gives a graphical illustration of the responses to the questions, which were contained in the questionnaire.

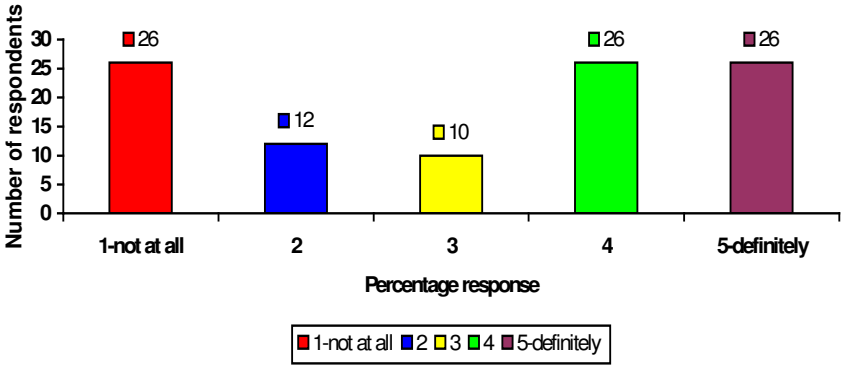
Question 1: Is there a TQM system operational at your depot?

Figure 1: Response to question 1.



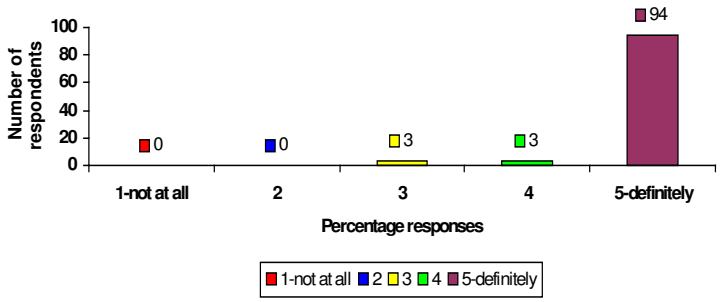
Question 2: Are you familiar with this system?

Figure 2: Response to question 2



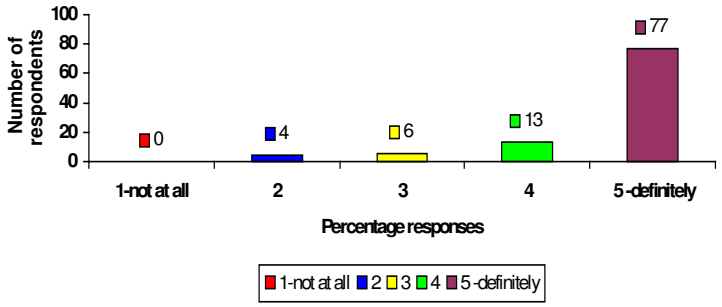
Question 3: Do you think a TQM system would add value to a depot?

Figure 3: Response to question 3



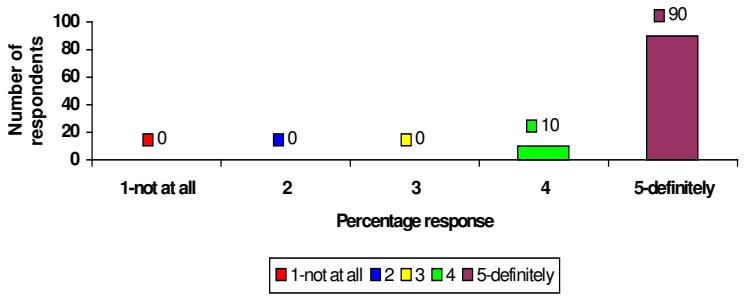
Question4: Is quality entrenched in the vision and mission of your depot or department?

Figure 4: Response to question 4



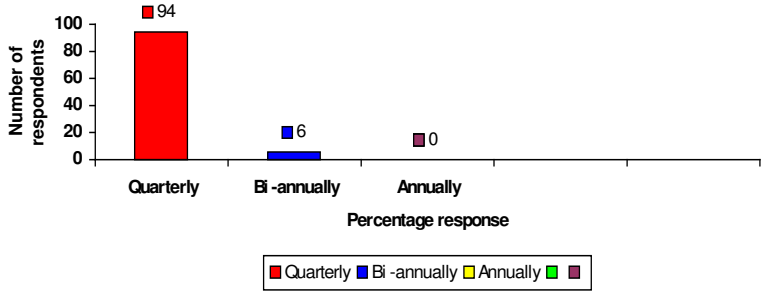
Question 5: Does your depot/department place emphasis on good customer service?

Figure 5: Response to question 5



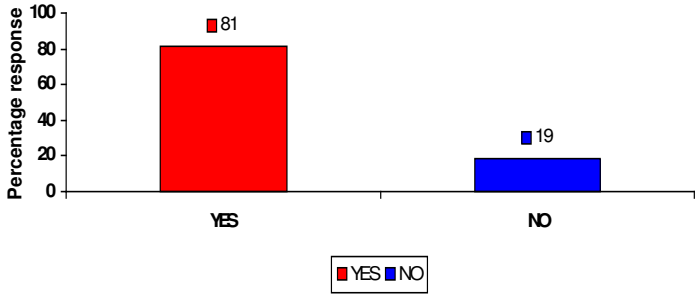
Question 6: How often are surveys conducted to assess customer satisfaction?

Figure 6: Response to question 6



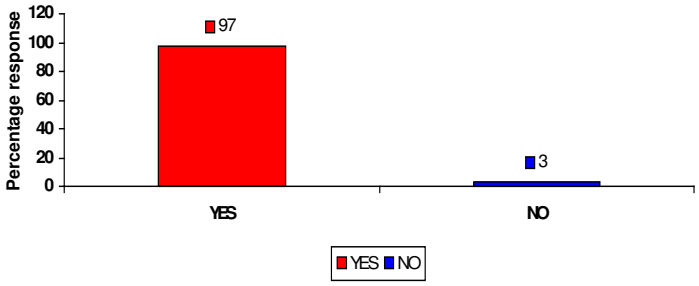
Question 7: Have you been trained, formally or informally, to understand the customer – supplier relationship?

Figure 7: Response to question 7



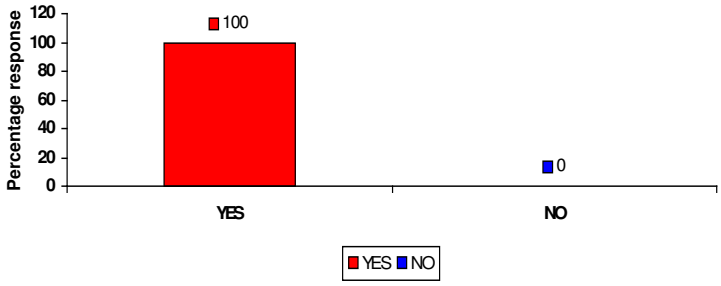
Question 8: Do you see a need for a formal TQM training program?

Figure 8: Response to question 8



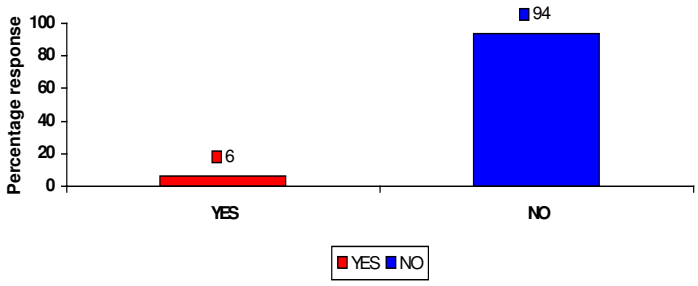
Question 9: Do you think a structured TQM program can decrease operating expenses?

Figure 9: Response to question 9



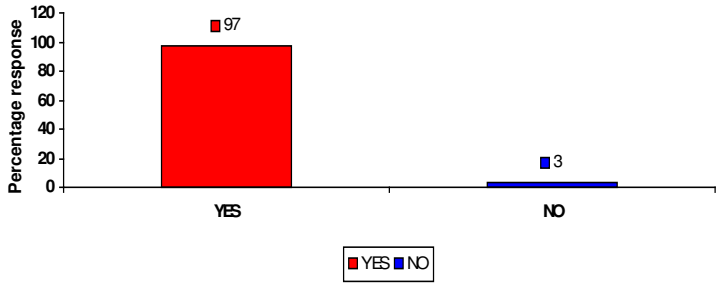
Question 10: Do you buy products or service on price alone?

Figure 10: Response to question 10



Question11: Do you think there is a need for improvement in the depot's present quality system?

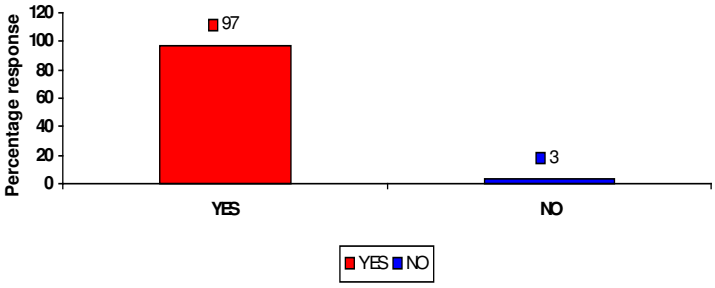
Figure 11: Response to question 11



Question 12: Do you think that understanding of the business process

(bigger picture) will lead to improved quality at the depot ?

Figure 12: Response to question 12

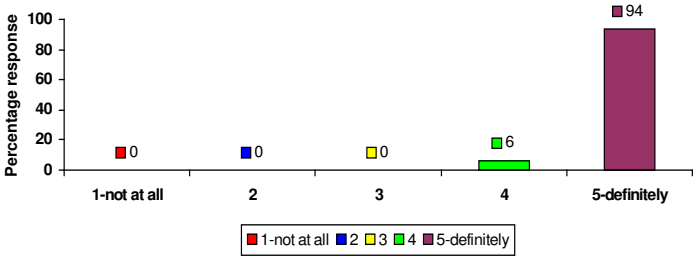


Question 13: Who is mainly responsible for quality in the depot?

Figure 13: Response to question 13

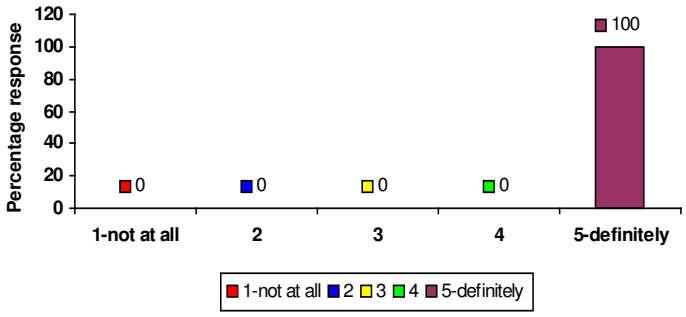
Question 14: How important is support from top management in the quality management of the depot?

Figure 14: Response to question 14



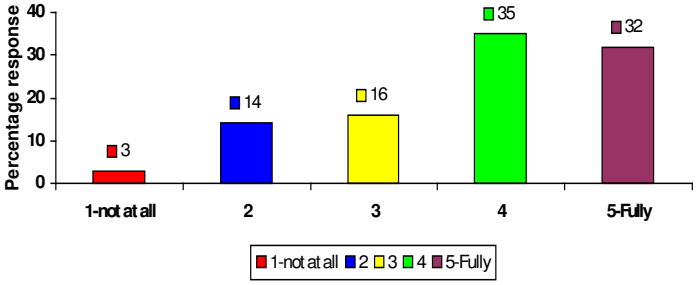
Question 15: How important is continuous improvement for the depot?

Figure 15: Response to question 15



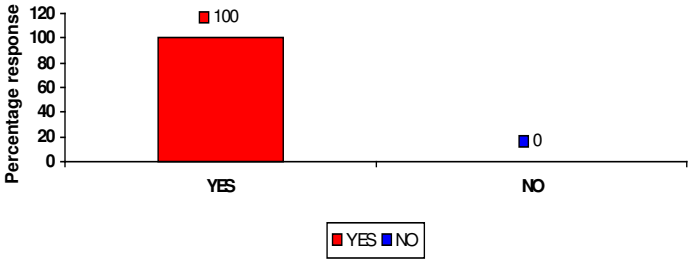
Question 16: Do you fully understand the concept of TQM?

Figure 16: Response to question 16



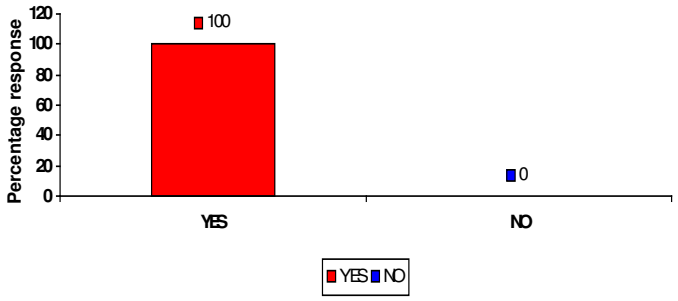
Question 17: Does it make sense to perform existing tasks in a more efficient and cost effective manner, where possible?

Figure 17: Response to question 17



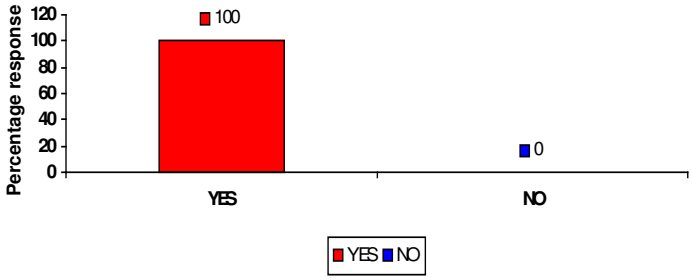
Question 18: Do you think the above can be achieved through TQM?

Figure 18: Response to question 18



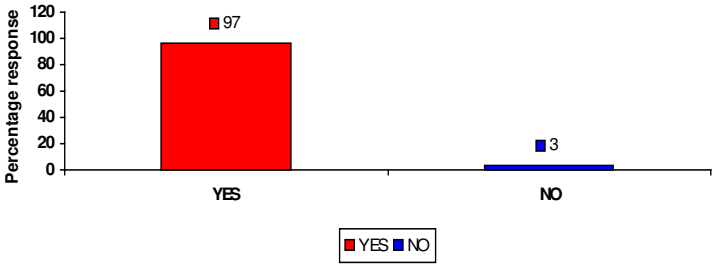
Question 19: Do you think a TQM system is a must have?

Figure 19: Response to figure 19



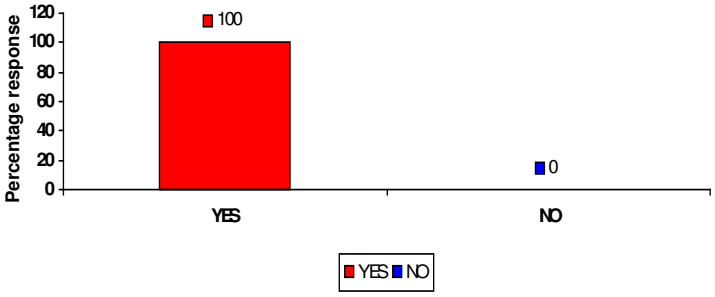
Question 20: Do you think a well - structured TQM system can improve your RSM scores?

Figure 20: Response to question 20



Question 21: Do you think a well structured TQM system can improve your CSM scores?

Figure 21: Response to question 21

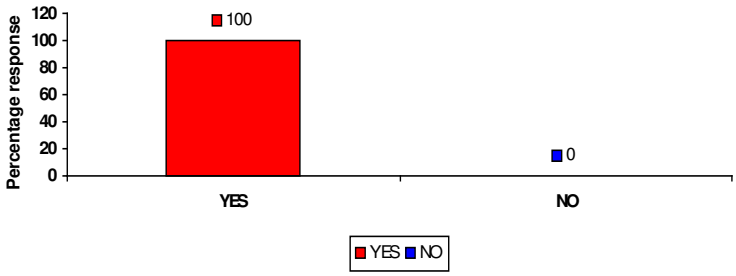


Question 22: Do you think that a TQM system can reduce your inventory costs?

Figure 22: Response to question 22

Question 23: Do you think a TQM system can reduce your process time?

Figure 23: Response to question 23

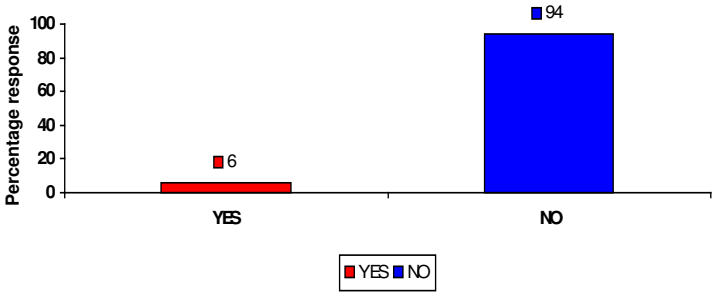


Question 24: Do you think it will be possible to implement a TQM system at the depot?

Figure 24: Response to question 24

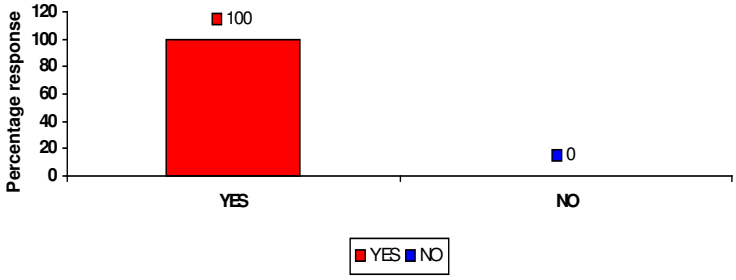
Question 25: Should TQM be reserved for internal processes only?

Figure 25: Response to question 25



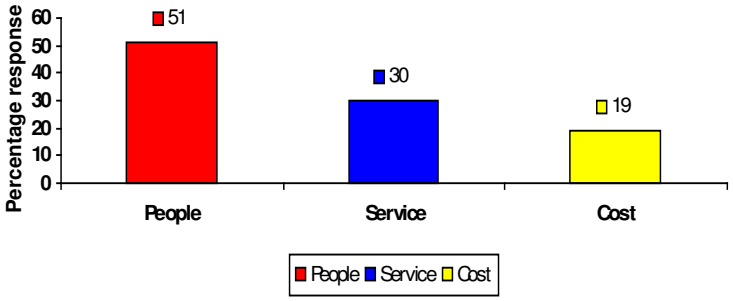
Question 26: Should a TQM process include internal as well as external customers?

Figure 26: Response to question 26



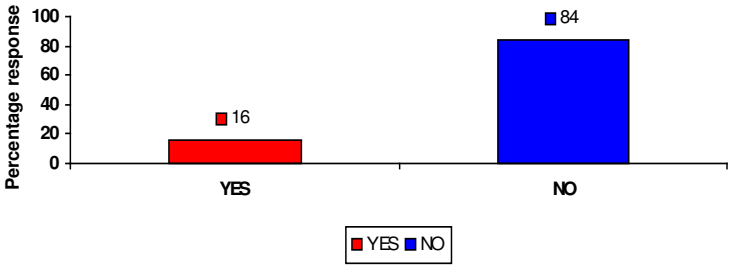
Question 27: Rate the following in order in relation to TQM

Figure 27: Response to question 27



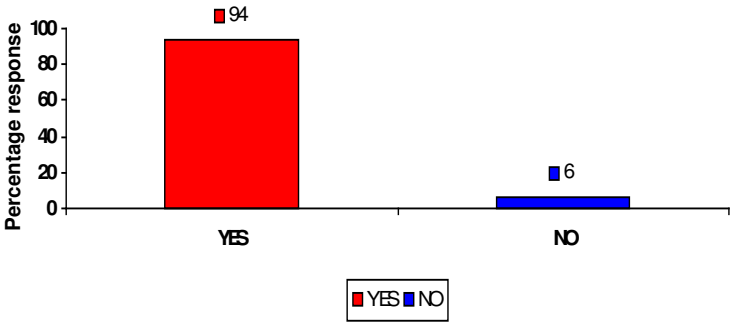
Question 28: Do you think it will cost too much to implement a formal TQM system at the depot?

Figure 28: Response to question 28



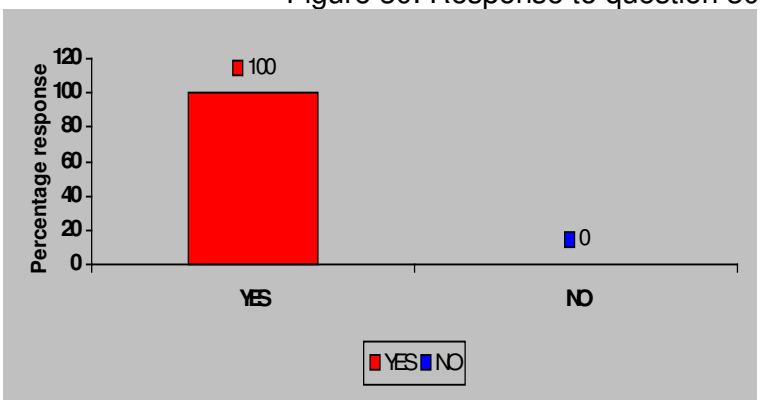
Question 29: Do you think the depot size and sales volume warrants the implementation of such a system?

Figure 29: Response to question 29



Question 30: Are best operating practices important to have for each depot?

Figure 30: Response to question 30



4.4 OTHER INFORMATION

The following is a summary of the additional information of interest shared by some of the 31 respondents;

- The depot is operating at a very high level of proficiency
- All respondents enjoyed working for the company
- Respondents generally had the impression of being privileged to work for the company and therefore regarded themselves as the best in their field of expertise
- There is a gap in multi skilling in certain areas of the business
- Small business units to take ownership of their operations in order to reduce losses
- Functional area turf protection
- Depots are focusing on functional efficiencies rather than taking a more strategic view
- Depot must focus on learning solutions
- Training and development must be to the depots benefit and not lip service

- Cross functional approaches must be a continuous reference tool
- Changing technology changes the whole face and modus operandi of business
- Little appreciation for cause and effect relationship
- Must get basics right in terms of depot objectives
- Learn from the rest of the world and adopt best practices.

4.5 CONCLUSION

This chapter contained a graphical representation of the response to the questionnaire that was completed by staff members. Additional information shared by the respondents was also mentioned briefly. In order to ascertain the need for the implementation of a TQM system, the respondents were required to express their thoughts on the subject by answering the questions, which were contained in the questionnaire. The questions were structured in such a way that they could be answered with ease by respondents who were familiar with TQM and those who were not.

The results obtained indicate a definite need for the implementation of a TQM system.

In the following chapter the 3 hypotheses, which were presented in chapter one, will be tested to determine their validity.

CHAPTER 5

TESTING THE HYPOTHESES

5.1 INTRODUCTION

When testing the hypotheses a number of terms have been used which need to be clarified. Firstly, the positive and negative values are calculated from the scope of the questions in the questionnaire as follows:

Negative : $(1 + 2 + 3) \times 100 = \%$

Positive : $(3 + 4 + 5) \times 100 = \%$

Positive : Yes

Negative : No

3 being indifferent, the respondent could be thinking in a positive or negative way, so for both calculations the value of 3 has been included (Authors own construction).

Secondly, when evaluating the written survey the terms used are:

- Minority : 33.3% and less
- Half : 50%
- Majority : 66.67% but less than 80%
- Most : 80% and more
- All : 100%

The following assumptions should be noted:

- The written survey respondents are likely to constitute the more committed SAB Border Depot operations employees due to the fact of having answered the questionnaire.
- No control can be exercised with respect to the percentage committed, versus percentage uncommitted respondents from a sample population.
- Finally, a summary of the results for each section is compiled and represented in a diagram where the positive results are superimposed over the negative results.

5.2 TESTING THE HYPOTHESES

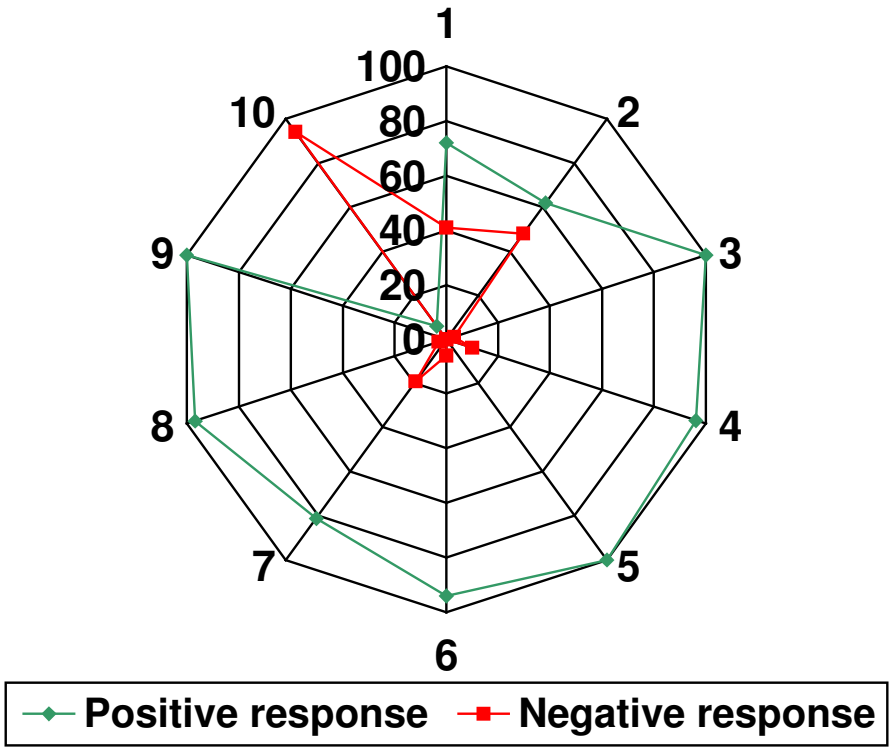
Hypothesis 1: A TQM system would not add value to the East London Depot

The salient findings of the survey can be summarised as follows:

Table 4: SUMMARY OF RESPONSES TO QUESTIONS 1 TO 10

Question	Positive %	Negative %
1	72	51
2	62	48
3	100	3
4	96	10
5	100	0
6	94	6
7	81	19
8	97	3
9	100	0
10	6	94

Figure 31: Summary of responses to questions 1 - 10



1. <u>Written survey</u>

From the written survey **<u>all</u>** of the respondents believed that:

- TQM would add value to the depot
- Will place more emphasis on good customer service
- Will definitely decrease operating expenditure

Also from the written survey **<u>most</u>** of the respondents felt that:

- Quality is entrenched in the vision and mission of the entire organization
- The organization and its depots have been trained to understand customer/supplier relationship
- Formal TQM training is a prerequisite

Finally from the survey **majority** of the respondents believed that:

- There is some form of TQM system operating in each depot
- The people are familiar with the system

2. Test

The findings of the written survey as depicted in Figure 31 do not support the hypothesis "That a TQM system would not add value to the East London Depot." This non-support is based on practice in industry, further international literature does not support the hypothesis.

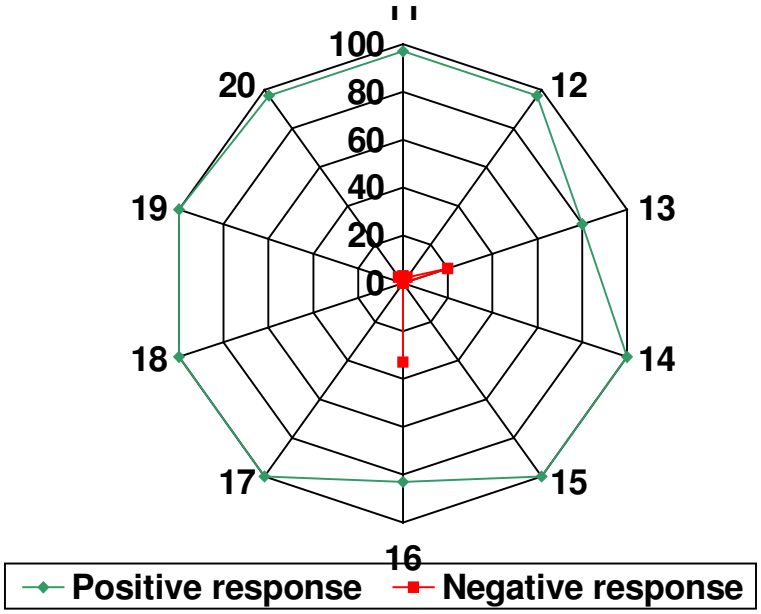
Hypothesis 2: It would not be feasible to implement the TQM system at the East London Depot.

The salient findings of the survey can be summarised as follows:

Table 5: SUMMARY OF RESPONSES TO QUESTIONS 11 - 20

Question	Positive %	Negative %
11	97	3
12	97	3
13	80	20
14	100	0
15	100	0
16	83	33
17	100	0
18	100	0
19	100	0
20	97	3

Figure 32: SUMMARY OF RESPONSES TO QUESTIONS 11 – 20



1. <u>Written survey</u>

From the written survey **<u>all</u>** the respondents believed that:

- Top management fully supports quality management within the depots
- All including top management fully agree that continuous improvement is important to the depot
- With TQM in place the depot cost objective will be achieved
- All agree that TQM is a must to have in the depots

Also from the written survey **<u>most</u>** of the respondents were of the opinion that:

- A better understanding of the bigger picture will improve the depots quality
- Quality is every body's responsibility
- Most of the people have a good understanding of the concept of TQM
- A structured TQM system will improve a depots RSM scores

2. Test

The findings of the written survey as depicted in Figure 32 do not support the hypothesis: "It would not be feasible to implement the TQM system at the East London Depot." This non-support is based on practice in industry, further international literature also does not support the hypothesis (Authors own construction)

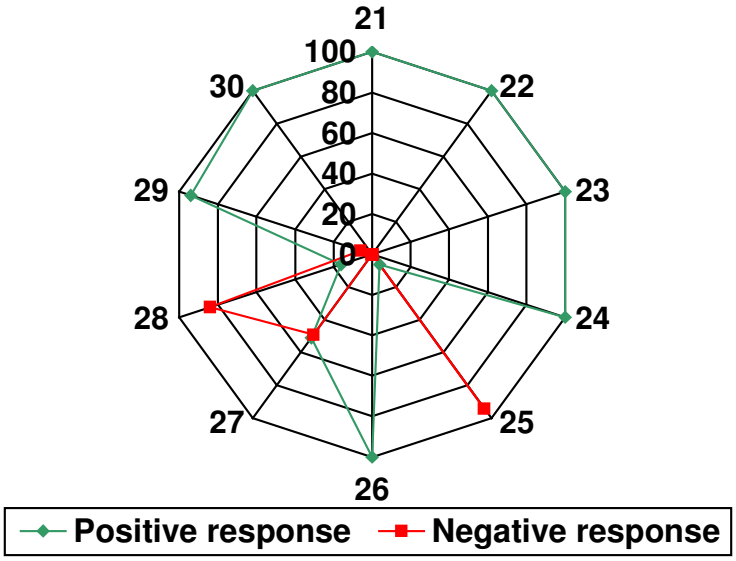
Hypothesis 3: It would not be possible to implement TQM at the East London Depot.

The salient findings of the survey can be summarised as follows:

Table 6: SUMMARY OF RESPONSES TO QUESTIONS 21-30

Question	Positive %	Negative %
21	100	0
22	100	0
23	100	0
24	100	0
25	6	94
26	100	0
27	51	49
28	16	84
29	94	6
30	100	0

Figure 33: SUMMARY OF RESPONSES TO QUESTIONS 11 - 20



1. <u>Written survey</u>

From the written survey **<u>all</u>** of the respondents believed:

- A structured TQM will improve the depots CSM scores and reduce the process and inventory costs
- It is possible to implement a TQM system
- Internal and external customers should be part of the TQM process
- BOP forms the basis of TQM and as important as TQM is to a depot so is BOP

From the written survey **<u>most</u>** of the respondents felt that:

- The size and sales definitely warrants a TQM system. TQM and a company's turnover is in no way related. Most of the respondents drew an inference to the two and linked turnover with quality.

2. Test

The findings of the written survey as depicted in Figure 33 do not support the hypothesis: "It would not be possible to implement TQM at the East London Depot." This non-support is based on practice in industry; further international literature also does not support the hypothesis.

5.3 CONSOLIDATED TEST

Based on collective findings of the surveys:

Hypothesis 1 :	Is not supported
Hypothesis 2 :	Is not supported
Hypothesis 3 :	Is not supported

5.4 OTHER FINDINGS

The following were secondary issues, mentioned by respondents to the questionaire which had no direct bearing on this research proposal. Some of these are hints of concerns, however, if combined will magnify the problem. The following concerns were focused on:

- Although the East London Depot is performing very well in all aspects of the business, dramatic improvement in results can be obtained by working outside of the set parameters.
- Management must be more progressive in their thought

- A general multi skills shortage at some levels and multi education leaders
- There is a definite need for change management so that employees can start focussing on doing things right the first time, all the time
- Unions have a negative effect on business
- Inflexibility of the labour market creates problems
- Government's inability to control violence is creating very little or no investment in South Africa
- Companies need to integrate technologies into business solutions
- Service quality levels are not improving fast enough
- Depots do not tend to focus on all important variables with which they are faced
- Up and down economic gyrations have a negative affect on technology resulting in negative affects on TQM projects
- Companies must think of implementing ongoing TQM communication campaigns
- In most companies the bottlenecks for TQM implementation is at the top
- Companies are not harvesting tacit knowledge.

CONCLUSION

The aim of this chapter was to test the hypotheses by making use of the data obtained from the questionnaire. The results obtained do not support any one of the three hypotheses. Other factors which respondents voluntarily mentioned at the end of the questionnaire deals with a wide range of topics which is pertinent to the successful implementation of successful TQM programs.

Chapter six will focus on various strategies for the implementation of a TQM system.

CHAPTER 6

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

This final chapter will focus on integrating the concepts of organisational culture, change management and TQM. The importance of a condusive climate for the introduction of a TQM program is also discussed. Steps which need to be taken in order to implement the program and which will ensure the success thereof are also highlighted.

6.2 SUMMARY

It is evident from the implementation phase that prior to any improvement program there has to be a top down and bottom up need for such a program. For any success with such a program, buy-in from all the stakeholders is of paramount importance. This calls for a development of a business strategy that is focused in on the company's corporate strategies and develops business plans covering all aspects of implementation of the improvement program.

6.3 STRATEGY FOR THE IMPLEMENTATION OF TQM AT SAB IN THE BORDER REGION

The conclusions indicate the importance of a Total Quality Management system. The implementation strategy is as follows where the literal meaning of

TQM means total involvement of all in the management of quality. It is however a holistic approach to quality and productivity improvements that is focused on the elimination of all forms of waste or non-value adding activities in a company. This is achieved by means of the creation of a cultural and habitual continuous improvements based upon the involvement of the entire workforce. The ultimate goal to TQM is to place every single member of the company in a state of self-control, and they must:

- know what they are supposed to be doing
- be provided with the knowledge of how they are doing
- be able to change what they are doing to what they are supposed to do.

Total Quality Management goes under a plethora of other names such as lean manufacturing, total quality excellence, total quality control and world class manufacturing. TQM is nothing new and once studied, seems to be basic common sense.

6.3.1 Establish the need

Prior to the implementation of an improvement program, there has to be a need for it, not only from the shop floor, but right from the top as well. Buy-in from the District Management team is crucial. Some of the factors why TQM or any improvement drive should be implemented are:

- There is a need to increase productivity of the company
- In order to remain competitive
- Benchmarks have moved

- If the company has not implemented some sort of quality improvement plan start as soon as possible or the company will perish
- Quality costs on average throughout the west are about 30% of total turnover for manufacturing companies and 55% for service industries prior to any improvement drives.

6.3.2 Determine where the company is currently

By utilising a third party to do an in-depth survey of the company's culture, productivity and quality and benchmark this against other companies worldwide, either major competitors or the best of the best. This will establish where the company is and this will get the message across to senior management. A perfect measurement tool to establish where the company currently is in terms of company culture and current operating practices is the 20 key system. Here you get measured against the best of the best. A useful starting tool to gauge the progress is a rough guideline by Peter Gilbert of Quality Management and Associates. This guideline follows that after a close examination of the quality activities of a company it reveals where the company sits in the spectrum of commitment and involvement. The following six levels and each level's factors will indicate where the company sits.

LEVEL 1: UNCOMITTED

- No formal quality improvement program
- Strong emphasis on sales and outputs
- Short term view of activities
- Frequent cost-cutting and retrenchment activities, a slash and burn policy

- Management and people driven by fear
- QC/QA manager very junior and poorly paid
- Looking at ISO 9000 due to customer pressure
- No real appreciation of the benefits or the strategic importance of quality
- No leadership.

LEVEL 2: THE DRIFTERS

- Have started some form of excellence/customer care or total quality process
- Quality improvement is seen as some sort of program and not a process
- Attitude of “what comes next” is evident
- Unduly high expectations of ISO9000
- Teamwork superficial
- High degree of scepticism between management and staff
- No real change in corporate culture
- Large gaps between management’s perception of TQM progress and the rest of the company
- Lack of TQM game - plan.

LEVEL 3: THE TOOL PUSHER

- Have been in TQM for 2 – 3 years
- Impetus of TQM is flagging
- Tendency to look for the latest quick fix such as quality/productivity/safety award

- Top management saying all the right things but not backing them up with meaningful actions
- Emphasis on current rather than future problems
- Repeated claims from some quarters that TQM is not working.

LEVEL 4: IMPROVERS

- Policy deployment and policy solving structures in place
- Sophisticated process control activities in place
- Long term education in place
- Cross-functional teams and employee participation evident
- Competitive benchmarking used
- Leadership culture emerging
- Quality champions clearly discernible
- Trust among all levels is developing
- The “hype” or “pizzazz” associated with TQM has faded
- Preoccupation with numbers is diminishing.

LEVEL 5: AWARD WINNERS

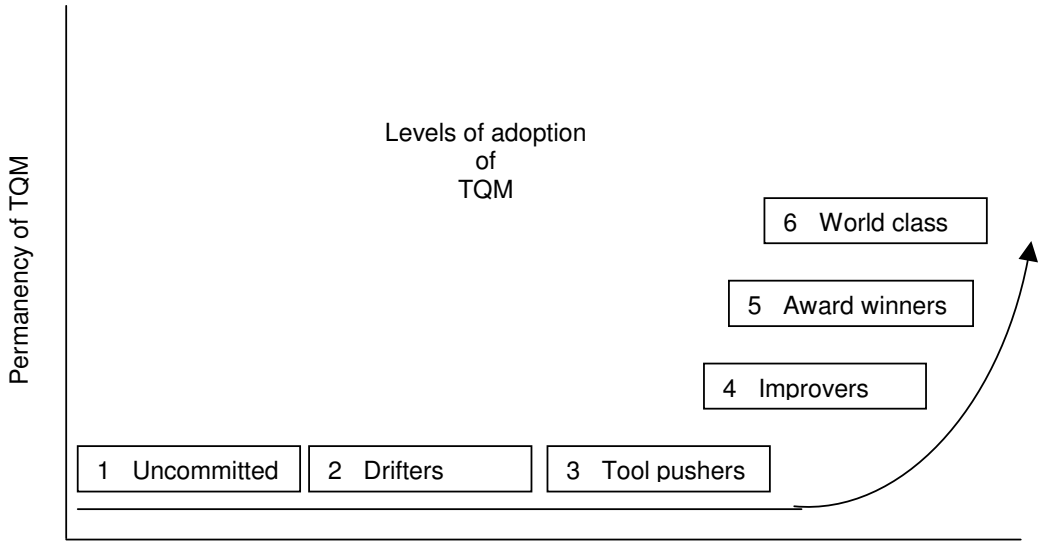
- Strong leadership culture
- TQM has had major impact on corporate culture
- Strategic benchmarking widely employed
- Effective cross-functional teams producing significant improvements
- Participative culture evolving
- Management widely relinquishing some of its decision making powers
- TQM widely believed to be best way of running a business.

LEVEL 6: WORLD CLASS

- Customers' desires, business goals, growth and strategies are inseparable
- Total quality is an integrative self-evident organisational truth
- A vision of the entire company is aligned to the voices of the customer
- TQM is a way of life and a way of doing business

After evaluating the company by using the six levels the company can now position itself on the graph indicated below.

FIGURE 34: Position in the spectrum of commitment and involvement



SOURCE: Adapted from Peter Gilbert

6.3.3 Benchmarking

Benchmarking the company's current performance, operational practices, company culture and performance measures makes this vital to establish a firm benchmark on where the company currently stands overall and will make it easier to track any improvements. The determination of current company

culture can be done by an intensive employee survey. It is best to get outside specialists in to get an unbiased view and professional interpretation of the results. The following method can be used to benchmark a company against world class companies.

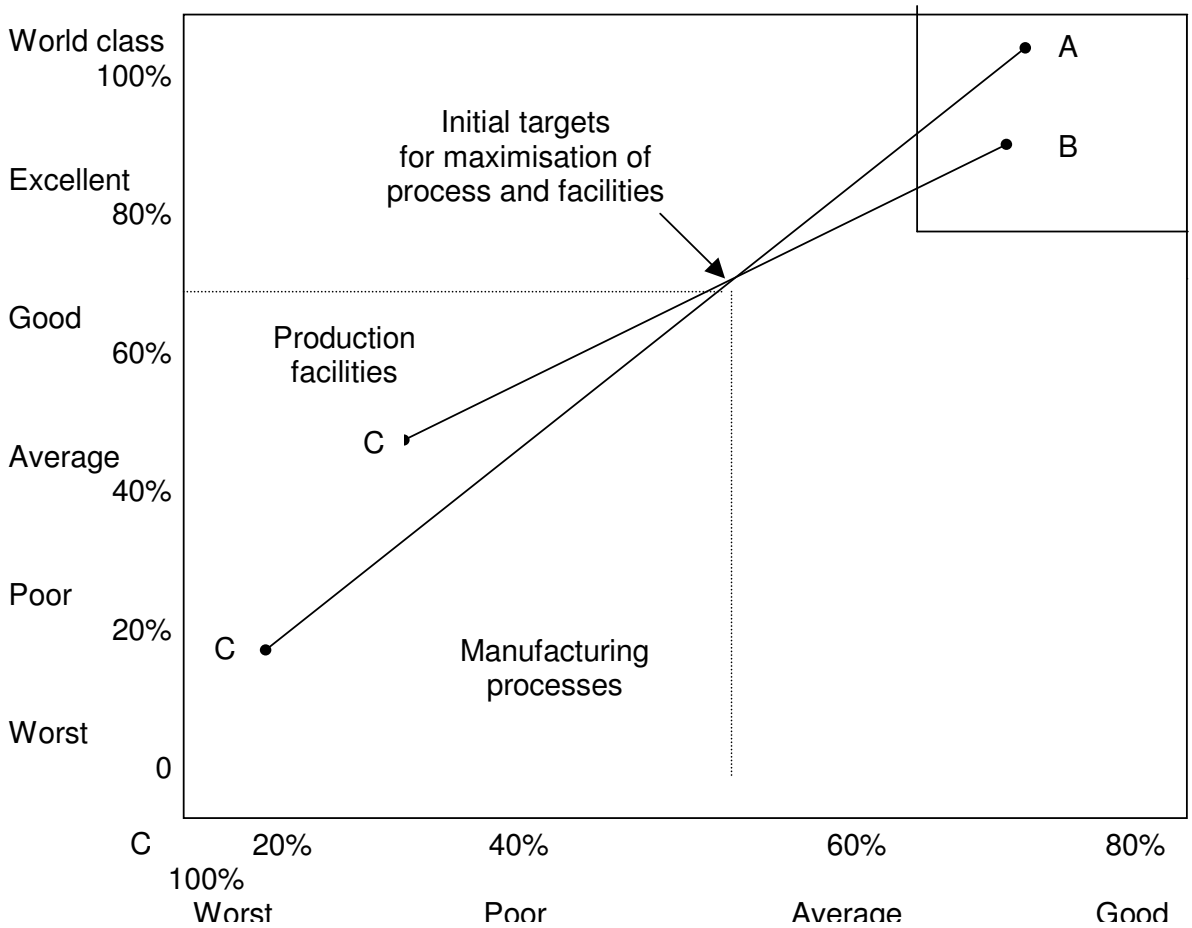
BENCHMARKING MODEL

Company A - Benchmark company for manufacturing processes

Company B - Benchmark company for production facilities

Company C - Own company

FIGURE 35: Benchmarking process



Source: Authors own construction

6.3.4 Get buy-in from key players

Company must get buy-in from senior management as well as the backing from

trade unions. Senior management backing is the most crucial element of any improvement drive. Management must be firmly convinced of the need to improve across board. There must also be top-down alignment as to where the company needs to go. The more in trouble the company, the easier it will be to convince senior management to change. If nothing changes in the procedures of a company, its organisation or the attitudes of its management, employee attitudes will not change either.

6.3.5 Develop a business strategy

The first step in developing a business strategy is to establish precisely what type of business the company is in and senior management must then provide a business positioning statement. Any company that goes on an improvement drive requires a Vision. This should be done by a core cross-functional team of the company who should research and benchmark the company with similar types of organisations. The team must then provide a draft vision that is put forward to the whole company for scrutiny. A vision is a statement of intent, a statement of where the company wants to be at some point in the future.

With the vision there must be a mission statement and objectives, which will indicate how the vision is to be achieved. The main purpose of the vision,

mission statement and objectives is to ensure alignment of all departments and functions in terms of their respective strategies. The main focus here is around primary functions such as marketing, logistics, finance and manufacturing. Each of these require a strategy to be developed that will ensure the attainment of the vision.

6.3.6 Start the cultural change in the company

The most difficult and traumatic time a company goes through is when it undergoes a cultural change, and this is what TQM is all about. The most valuable tools to use during this period are the employees themselves. Utilise the employees from all levels to develop desired behaviours for the company which everyone must visibly commit themselves to. These can be done during shared values workshops away from the workplace. A crucial aspect during this period will be an intensified training program throughout the company about TQM, world class techniques, various quality tools, teams and teamwork, the concepts internal and external customers and problem-solving and decision-making. The decision now for the company is whether or not to utilise permanent functional or multi disciplinary teams, problem-solving teams or a combination of all. There is no wrong or right in this, as long as there can be clear-cut goals for teams and individuals and these can be revisited on a regular basis by means of customer feedback.

Only when satisfied that a conducive environment has developed, is it wise to start with the implementation of the harder aspects of TQM, such as, quality management system and structured problem-solving? Further steps in the cultural change will involve:

- Shop floor involvement in the development of procedures, work instructions, process control, performance measures, development of job designs, delegation of responsibilities, workstation layout and ergonomics
- Management being assessed by the shop floor in terms of the quality of service
- A complete restructure of the organisation towards a decentralised structure
- A total change of performance measures
- A major focus on on-going training in the new way if doing things and proper introduction of new employees
- A major change in the recruitment and promotional policies.

6.3.7 Implementation

It is easier to implement the technical aspects of an improvement program into a well-established framework of teams and team goals as incorporation will ensure that things will get done. Technical aspects can include the following:

- ISO 9000 or a relevant quality system
- Best Operating Practices
- New Performance Measures
- World class manufacturing.

Incorporate these initiatives into the business plans with responsibility, accountability and deadline dates agreed by all.

6.3.8 Follow-up and evaluation

It is critical that the follow up and the evaluation of progress is done on a regular basis to ensure constant focus by all.

6.4 CONCLUSION

It is clear from the study that organisational culture, change management and total quality forms an integrated whole and neither can be developed in isolation without affecting the other. The concept of total quality management is fostered to create positive organisational culture through change management. A number of further recommendations are given below to assist with the implementation of a total quality management system:

- The company should have a dedicated department to implement total quality management and the manager must have full responsibility and accountability with the reporting structure to the Depot and District Managers. The reason for this is the program and all its facets become too big and complex for an interim or cross-functional part-time team.
- When implementing a strategy that has a direct effect on people, implement the strategy as quickly as possible to avoid negative effects of uncertainty and waiting as a result of poor decision-making.
- The superior planning and implementation of an average strategy has a far better result than the average planning and implementation of a superior strategy.

Proper planning and research must be done before implementing a total quality management program and its various strategies. The reason that

some effects resulting from poor planning and research, lack of communication, re-engineering and down-sizing are as follows:

- leaves workers and managers burnt out
- ruthlessly pursuing efficiency at the expense of the workers
- most companies want to achieve productivity inputs but less than a quarter do achieve
- more than half expect to reduce bureaucracy and speed up decision making but only fifteen percent do achieve, and finally
- firms are cutting muscle instead of fat.

The purpose of this study was to determine whether it would be feasible to implement a TQM system at the East London SAB Depot. Organisations are adapting to the fact that quality is the most important tool to ensure success. Productivity and competitiveness can be greatly influenced by TQM.

The results of the survey questionnaire was conclusive with regards to the respondents opinion that a TQM system definitely need to be implemented at the East London Depot. Some of the respondents had an idea as to what a TQM system entailed while others did not.

The sub problems dealt with the value adding aspect of TQM, the feasibility of implementing a TQM system as well as the methods to be used in order to effectively implement the system at the depot.

The hypotheses stated the opposite to the above. The results of the survey did not support any of the three hypotheses and therefore favoured the implementation of a TQM system

The next step would be to begin staff training and getting support for the changes which are needed to be implemented. Thereafter SOP's need to be compiled, in conjunction with the relevant and affected staff members.

The road to quality improvement is a long one, but it will lead to greater efficiencies and cost saving in the end.

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4 November 2003

SURVEYS ON TOTAL QUALITY MANAGEMENT AT SAB DEPOTS,

Dear Colleague,

I am currently engaged in post-graduate studies, the topic of my masters thesis being “The investigation into the feasibility of implementing a Total Quality Management (TQM) system at an SAB depot”.

As part of my research I will be conducting a survey to obtain data on the influence of business, environmental and other factors on the practice of TQM. For this purpose, a number of respondents, including yourself, have been selected to participate in the survey.

As a result of your involvement in and experience of operations in an SAB depot, your views and opinions concerning existing practices in quality management will be of major importance, not only in respect of this study but also as a further contribution to the advancement of TQM in SAB depots.

Enclosed please find the questionnaire. It would be greatly appreciated if you could spare a few moments of your valuable time to contribute to the study by completing the questionnaire and returning it to me by e - mail, not later than **10 November 2003**.

All data obtained will be treated in the strictest confidence and the findings of the study will be made available to participants after completion of the study.

Should you require any further information concerning the study as a whole or this survey in particular, please do not hesitate to contact me at:

Telephone: **043 7400 502 (Home)**

043 7311 626 (Work)

083 455 6051 (Cell)

e-mail: dane.herman@sabreweries.com

I look forward to receiving your response and thank you in anticipation for your willingness to participate.

Yours sincerely

Dane Herman

MBA student

TOTAL QUALITY MANAGEMENT SURVEY (TQM)

Respondents name

Title and capacity

Telephone number

E-mail address

An investigation whether the implementation of a structured TQM system would add value to SAB Depots in the Border region

Mark with an 'X' next to the appropriate number as per example

1	2X	3	4	5

1. **Is there a TQM system operational at your depot?**

1	2	3	4	5

5 = definitely
1 = not at all

2. **Are you familiar with this system?**

1	2	3	4	5

5 = definitely
1 = not at all

3. **Do you think a TQM system would add value to a depot?**

1	2	3	4	5

5 = definitely
1 = not at all

4. Is quality entrenched in the vision and mission of your depot or department?

1	2	3	4	5

5 = definitely
1 = not at all

5. Does your depot / department place emphasis on good customer service?

1	2	3	4	5

5 = definitely
1 = not at all

6. How often are surveys conducted to assess customer satisfaction?

	Frequency	
3.1	Quarterly	
3.2	Bi-annual	
3.3	Annual	

7. Have you been trained, formally or informally, to understand the customer – supplier relationship?

YES	NO

8. Do you see the need for a formal TQM training program?

YES	NO

9. Do you think a structured TQM program can decrease your operating expenditure?

YES	NO

10. Do you buy products or services on price alone?

YES	NO

11. Do you think that there is a need for improvement in the depot's present quality system?

YES	NO

12. Do you think that understanding of the business process (bigger picture) will lead to improved quality at the depot.

YES	NO

13. Who is mainly responsible for quality in the depot?

Everybody	Managers	Designated persons

14. **How important is support from top management in the quality management of the depot?**

1	2	3	4	5

5 = Extremely important
1 = not important at all

15. **How important is continuous improvement for the depot?**

1	2	3	4	5

5 = Extremely important
1 = not important at all

16. **Do you fully understand the concept of TQM?**

1	2	3	4	5

5 = Fully
1 = not at all

17. **Does it make sense to perform existing tasks in a more efficient and cost effective manner, where possible?**

YES	NO

18. **Do you think that the above can be achieved through TQM?**

YES	NO

19. **Do you think a TQM system is a " must have? "**

YES	NO

20. **Do you think a well - structured TQM system can improve yourRegional sales monitor (RSM) scores?**

YES	NO

21. Do you think a well - structured TQM system can improve your Customer service monitor (CSM) scores?

YES	NO

22. Do you think that a TQM system could reduce your inventory costs?

YES	NO

23. Do you think a TQM system can reduce your process time?

YES	NO

24. Do you think it will be possible to implement a TQM system at a depot?

YES	NO

25. Should a TQM process include internal as well as external customers

YES	NO

26. Should TQM be reserved for internal processes only?

YES	NO

27. Rate the following in order of importance/criticallity with relation to TQM.

People	
Service	
Cost	

Rating 1- 3

28. **Do you think it will cost too much money to implement a formal TQM system at the depot?**

YES	NO

29. **Do you think that the depot size and sales volume warrants the implementation of such a system?**

YES	NO

30. **Are best operating practices important to have for each depot function?**

YES	NO

Any additional information you wish to share?