

# [Critical evaluation of total quality management management essay](https://assignbuster.com/critical-evaluation-of-total-quality-management-management-essay/)

1. Increased Efficiency: Companies that go through the ISO 9001: 2000 Quality Management Standards certification process have given a lot of thought to their processes and how to maximize quality and efficiency. 10

2. Increased Revenue: Studies have shown that ISO QMS certified companies experience increased productivity and improved financial performance, compared to uncertified companies. 10

3. Customer Satisfaction: Client confidence is gained because of the universal acceptance of the ISO standards. Customer satisfaction is ensured because of the benefits of ISO 9001: 2000 QMS to company efficiency, consistency and dedication to quality service. 10

## 1. 0 Title

A critical evaluation of total quality management (TQM) and its influences on competitive advantage. The case of Trinidad and Tobago Petroleum Marketing Company Limited (NP), automotive lubricant division

## 1. 1 Background

Slack (2004) explains that “ there is a growing realization that high-quality goods and services can give an organization a considerable competitive edge. Good quality reduces the costs of rework, scrap and returns and most importantly, generates satisfied customers. Some operations managers believe that, in the long run quality is the most important single factor affecting an organizations’ performance relative to its competitors.”

Quality management is extremely important in gaining and sustaining competitive advantage. Growth, survival and attainment of strategic goals are all major issues of any organization quality therefore become a major issue.

Existing as a private label company NP has made their way into a market filled with experienced multinationals via for increased market share. Competitors compete in terms of pricing and quality, thus NP has to make a strong dent into the impact of the customer on these bases. Vying for increased market share the need for core competencies arises and as such quality should be the number one focus.

## 1. 2 Company background

As with many companies The Trinidad and Tobago National Petroleum Marketing Company Limited (NP) has an unfolding history. This company is owned by the Government of Trinidad and Tobago and incorporated in 1972.

Many acquisitions by the Government took place which put NP in its position within the industry today. NP acquired the assets of Shell Trinidad Limited thereby inheriting their Lubricant Blending Plant sited at Sea Lots, on the outskirts of Port of Spain. Under license, it continued to produce a range of lubricants, blended according to the Shell formulations, until the National Petroleum Brand of lubricants was launched in 1981. Since then NP continues to improve its product rating, they keep abreast of significant technological advancement in the lubricants industry.

Despite competition from multi-national companies, NP brand continues to be a major player in the local and Caribbean markets, where it’s automotive and industrial lubricating oils and greases hold varying, but significant market share. NP stands out as one of the most successful state enterprises in the Republic of Trinidad and Tobago.[1]

## 1. 3 Mission

“ We are profitable environmentally conscious marketing company that delivers excellent and uncompromising customer satisfaction through inspired teamwork”

## 1. 4 Vision

“ To be the most valued marketers to all of our customers”

## 1. 5 Rationale for the study

Rivalry has always been a major determinant of quality of products or services. Quality management and competitive advantage is a marriage necessary for the success of a company. Thus the researcher believes that total quality management principles can be applied within NP’s operations to gain an advantage over their competitors.

In today’s competitive arena brand image is everything, therefore if a company is able to sell their image then increased market share can be attained. The researcher therefore believes that quality will be a key determinant on NP’s brand image and overall head point within the industry. A customers’ right to boast of brands have always been a trend in today’s world, thus the ability to gain customers who can boast of NP’s brand is essential. This aspect will be the basis of the issue as NP exists in an industry filled will multi-national players, thus competition is fierce and forceful.

With the economic downfall, companies were faced with increases in production costs, thus this cost was transferred to consumers. In the first quarter of 2010 NP’s prices of its automotive lubricants rose twice. During an economic turmoil customers demand value for their money. Essentially quality will determine customer’s perception of products, thus ensuring a sale and continued loyalty.

New methods of operations are expected to arise in an attempt to improve quality standards towards gaining a better positioning within the industry. Insights of best practices are also expected to arise. Improved efficiency and effectiveness in operations, branding, communication and services are all areas in which the researcher expects quality management to impact, thus this research can shed light on all of these areas to assist NP in attaining their mission and vision statement.

## 1. 6 Research Aims

Research question: Can the adoption of TQM contribute to competitive advantage at NP?

## Objectives:

To critically assess the strategic TQM at NP.

To evaluate the industry standards to benchmark TQM at NP.

To ascertain the extent to which NP is in compliance with industry standards.

To formulate recommendations with reference to quality management best practice and based on research findings.

These aims are found to be most important as it is hoped to achieve a firsthand view into the quality management practices in relation to operations and how these practices contribute and impact on competitive advantage. This will in turn convey shortcomings and accommodate recommendations necessary in achieving an increased competitive advantage position in the industry.

## 2. 0 LITERATURE REVIEW

First hand knowledge is gained through the experiences of trial and error; companies have been able to create quality initiatives relevant to their operations. Various scholars have also contributed to the field of quality management by proposing models and frameworks. The researcher will examine secondary data from research to be conducted and analyze this against the literature review. Major areas of this literature review will therefore be:

Total quality management

Quality management systems

The process approach

Six sigma

Balanced scorecard

It is against these criteria that this literature review aims to provide pertinent information to critically assess the topic at hand. A definition of what a literature review is given as “ An extensive search of the information available on a topic which results in a list of references to books, periodicals, and other materials on the topic”[2]

## 2. 1 TOTAL QUALITY MANAGEMENT (TQM)

When considering business activities, ignoring quality can be a key ingredient for inefficiency and loss of profits. Hannagan (2002) claims that “ in business and management terms there are attempts to focus on a measurable concept of quality by concentrating on fitness for purpose” The main objective of businesses is to make the highest profits possible; therefore one must consider the TQM issues in an attempt to succeed.

## 2. 2 ORIGIN OF TQM

Slack (2004) explains that the origin of TQM was a development by several ‘ quality gurus’ beginning from as early as 1957. Feigenbaum 1957 introduced the term TQM and he defined it as “ an effective system for integrating the quality development, quality maintenance and quality improvement efforts of the various groups in an organisation so as to enable production and service at the most economical levels which allows for full customer satisfaction”.

## 2. 3 WHAT IS TQM?

Slack (2004) further goes on to state that TQM is best thought of as “ A philosophy of how to approach the organisation of quality improvement. He sees this philosophy as stressing on the ‘ total’ of TQM. It is an approach that puts quality at the heart of everything that is done by an operation and including all activities within an operation.”

## 2. 4 TQM QUALITY INITIATIVES MANAGED

Hannagan (2002) presents the thought that “ in an organisation that practices TQM, quality becomes the standard operating procedure and part of the culture.” Organizations adopt TQM as a way of life as it is proved by quality throughout production until the product or service reaches the external customer. This process is measured by the quality of materials purchased from suppliers, the approach to defect control on the production line, the appearance of the building, the way problems are solved for customers, the way employees are organized and the organizations internal communication system.

Hannagan (2002) continues by saying that “ TQM is predicted on a commitment to customers’ interest, needs, requirements and expectations and on the commitment of everyone to the constant improvement of the quality of everything that the organisation does and provides for the customer.” Hannagan (2002) goes on further by claiming that TQM is a strategic approach within an organisation which can provide an ‘ umbrella’ under which a number of quality initiatives can be managed. These initiatives include:

Statistical process control

Right-first-time

Just-in-time

Quality assurance

Benchmarking

Quality circles

Tauguchi method

## 2. 5 CRITISM OF TQM IMPLEMENTATION

Slack (20004) argues that “ not all TQM programmes which are implemented successfully are necessarily guaranteed to continue to bring long-term improvement.” These programmes may loose their impulse over time. This has been variously described as quality disillusionment and quality droop.

Various researchers and consultants who have implemented TQM, Slack (2004) argues have put forward prescriptions which are intended to reduce the risk of recurring. These include the following:

Do not define ‘ quality’ in TQM narrowly; it includes all aspects of performance.

Make all quality improvement relate to the performance objectives of the operations. TQM is a means of improving performance and not an end in itself.

TQM should not be viewed as a substitute for responsibilities of normal managerial leadership. It is important to note that ineffective managers are not made better simply by adopting TQM.

TQM is not an attachment of a company. It should be integrated with and indistinguishable from everyday activities.

TQM has a considerable intuitive attraction. It is sometimes tempting to exploit the motivation ‘ pull’ of TQM rather than thoroughly thought-out plans.

Different organizations will have different needs depending on their circumstances. TQM should be adapted to these circumstances.

Companies may push quality for its own sake, and shift too much responsibility down to the shop floor. In addition TQM is incompatible with more radical improvement approaches such as business process reengineering (BPR). TQM may also imply empowerment and liberal attitude toward shop floor staff; however it is argued that this is merely a further example of management exploiting workers. Critics have been known to define TQM as “ management by stress”.

## 2. 6 QUALITY MANAGEMENT SYSTEMS (QMS) AND PROCESSES

“ A quality management system is a network of processes, and a process is made up of people, work, activities, tasks, records, documents, forms, resources, rules, regulations, reports, materials, supplies, tools and equipment -these are all the things that are needed to transform inputs into outputs. In general, a quality system includes all the things that are used to regulate, control, and improve the quality of products and services.”[3]

## A SIMPLE FLOWCHART SHOWING HOW PROCESSES ARE CHARTED IN AN ORGANISATION

SOURCE: http://www. praxiom. com/process-approach. htm

## QUALITY MANAGEMENT SYSTEM (QMS) PRINCIPLES AND STANDARDS

SOURCE: http://www. abcb. demon. co. uk/iso9k2kworkbook\_part5. html

Quality management system seeks to identify external quality related input requirements specified in Licenses to Trade, regulations, specified customer requirements and the chosen management system standard(s).

In addition quality systems seek to define performance measures, as applicable, to the system requirements and generate the result or evidence that system requirements have been executed. The next step is to measure, monitor and report extent of compliance with these performance measures.[4]

To achieve a standard the first step is to implement a QMS. Implementing a QMS can help your business to: achieve greater consistency, reduce expensive mistakes, increase efficiency, gain customer satisfaction, effectively market your business, exploit new markets manage growth more effectively and constantly improve your products, processes and systems.

## 2. 7 THE PROCESS APPROACH

The ISO 9000 series of standards is the main set of International Standards applying to the management of quality systems. It includes ISO 9001, the key internationally agreed standard for a QMS. Achieving ISO 9001 certification could mean new business. This certification can help distinguish ‘ you’ from competitors.

Slack (2004) refers to the ISO 9000 series as “ a set of worldwide standards that establishes requirements for companies’ quality management system.”

Slack (2004) recognizes that there are four additional principles which ISO 9000 stresses upon. He argues that quality management should be customer focused. In addition he states that quality performance should be measured. Thirdly Slack sees the need for quality management to be improvement driven. Fourthly top management must demonstrate their commitment to maintaining and continually improving management systems.

## ADVANTAGES AND DISADVANTAGES OF CERTIFICATION

## ADVANTAGES:

## 1. Increased Efficiency: Companies that go through the ISO 9001: 2000 Quality Management Standards certification process have given a lot of thought to their processes and how to maximize quality and efficiency.

## 2. Increased Revenue: Studies have shown that ISO QMS certified companies experience increased productivity and improved financial performance, compared to uncertified companies.

## 3. Customer Satisfaction: Client confidence is gained because of the universal acceptance of the ISO standards. Customer satisfaction is ensured because of the benefits of ISO 9001: 2000 QMS to company efficiency, consistency and dedication to quality service.[5]

## DISADVANTAGES:

The actual change to ISO 9000 for operations can be very expensive. As is well known in business and industry, it is difficult to change the habits of long-time employees. New ways are usually resisted by everyone. This resistance cuts into profits and also decreases company morale.

There are times when companies feel that the existing set of operational procedures is already working well and they do not feel a change is necessary. Now these companies have the choice of loosing a customer or implementing ISO 9000. Either way money is lost in the short term.[6]

## 2. 8 SIX SIGMA INITIATIVES

Six Sigma simply means a measure of quality that strives for near perfection. Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects in any process whether it is from manufacturing to transactional and from product to service.

The fundamental objective of the Six Sigma methodology is the implementation of a measurement-based strategy that focuses on process improvement and variation reduction through the application of Six Sigma improvement projects.[7]

Slack (2004) explains that Six Sigma processes are executed via belts. Master Black Belts are the experts in the use of Six Sigma tools, techniques and implementations. Six Sigma Black Belts can take a direct hand in organizing improvement teams. Green Belts work within improvement teams; they are not full-time positioned and have normal day-to-day process responsibilities. It is expected that they spend at least twenty per cent of their time in improvement projects.

## ARGUMENTS FOR AND against THE SIX SIGMA INITIATIVE

Slack (2004) identifies the following positive perspectives of the Six Sigma initiative:

Improvement activity is generally neglected in most operations and if it is to be taken seriously, it deserves the significant investment required.

If operated well, Six Sigma improvement projects controlled by experienced personnel can save more than their cost.

Slack (2004) identifies the following flaws of the Six Sigma initiative.

It can be too hierarchical in the way it structures its various levels of involvement in the improvement activity.

It is expensive. Training and improvement time can prove to be costly.

## 2. 9 THE BALANCED SCORECARD

The balanced scorecard is a strategic planning and management system that is used to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. It was originated by Drs. Robert Kaplan and David Norton as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more ‘ balanced’ view of organizational performance.

DIAGRAM SHOWING THE VIEW OF THE BALANCED SCORECARD FROM FOUR PERSPECTIVES

SOURCE: http://www. balancedscorecard. org/BSCResources/AbouttheBalancedScorecard/tabid/55/Default. aspx

The balanced scorecard suggests that we view the organization from four perspectives, and to develop metrics, collect data and analyze it relative to each of these perspectives:

The Learning & Growth Perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement.

The Business Process Perspective refers to internal business processes. Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements.

The Customer Perspective explains that the realization of the importance of customer focus and customer satisfaction in any business is essential.

The Financial Perspective states that often there is more than enough handling and processing of financial data. With the implementation of a corporate database, it is hoped that more of the processing can be centralized and automated.[8]

Quality indeed provides companies with a competitive edge. Total quality management looks at a company’s operations holistically and determines best practice quality initiatives. Though there are pitfalls to the strategic implication of TQM, compilation of proper initiatives can reduce the occurrence of such pitfalls. TQM initiatives can also result in customer satisfaction, thereby resulting in customer loyalty.

## 3. 0 METHODOLOGY

Saunders (2003) simply defines methodology as “ the theory of how research should be undertaken”. Haralambos (2000) however goes a bit further by explaining what methodology is concerned with. He sees methodology as being “ concerned with both the detailed research methods through which data are collected and the more general philosophies upon which the collection and analysis of data are based”.

The research to be conducted will take a deductive approach. This research approach is found to be the most appropriate, as a topic/ hypothesis is designed and a research strategy is designed to test the topic/ hypothesis. Although the research is a deductive piece of work, the researcher will adopt a mixed approach to data collection. That is the research paradigm will be a mixture of both qualitative and quantitative data. Generally the philosophies used are positivists and phenomenologist. Triangulation research will be conducted as this will increase validity and reliability.

Research question: Can the adoption of total quality management (TQM) contribute to competitive advantage at NP?

Having formulated the research topic it is essential that the researcher answers the research question. Thus essentially the researcher will undertake many strategies in addressing this question. By conducting structured research via hypothesis testing and analyze of information based on best practices and recommendations the answer to the research question will be attained. Thus the use of both primary and secondary data collection tools will be profound for this question.

OBJECTIVE ONE: To critically assess the strategic total quality management initiatives at NP.

In collecting data for objective one the researcher has found it fit to use case studies. Robson (2002) defines case study as “ a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence”. The data collection methods will include questionnaires, interviews, observations and documentary analysis. The researcher will select interviews and documentary analysis in an attempt to collect the data required.

Interviews will be conducted by the researcher. Structured interviews will be utilized. Two groups will be targeted: quality control managers and quality supervisors. This will be done in an attempt to gain information based on the quality methods and standards N. P. currently has. Also to establish the quality initiatives deployed from subordinates in the upper section of the organizational structure. This data collection method will be of primary nature. Interviews will be conducted to these groups because these are the groups with the required information.

Documentation analysis will also be selected as a means of data collection. The method used is necessary to gain information about N. P. and their documents based on quality control. It is intended to identify inspection points, certifications, specifications and any other relevant documents based on quality control initiatives. This data collection method is of secondary nature. This method will be used as it is upon these documents that N. P. thrives for their quality standards.

Analytical technique: the funnel technique will be used in conducting interviews. Quality initiatives are not easily shared therefore by beginning the interview with general questions and narrowing down, the groups targeted will feel comfortable and easy going thereby gaining the information desired.

Justification of methods: The researcher has found it useful to conduct interviews as detailed information is gained from people in a face-to-face situation, thereby allowing interviewers to explore issues in- depth. This method has its downside as it gives rise to the possibility of biasness due to interaction.

In conducting documentation analysis the researcher will analyze documents in an attempt to identify trends in sales performance relative to competitors’ performance with respect to the quality initiatives employed at this company.

OBJECTIVE TWO: To evaluate the industry standards to benchmark TQM at NP.

In collecting data for objective two the researcher found it useful to conduct surveys. Letts (2000) explains “ surveys are used in an attempt to gain hard facts.” Saunders (2003) goes on further on this point by claiming that “ surveys allow the collection of a large amount of data from a sizeable population in a highly economical way.” Data here is collected by using questionnaires, structured observations and structured interviews. Data collected from surveys are standardized, allowing easy comparison.

The researcher will use questionnaires and structured observations in an attempt to collect the necessary data.

A questionnaire will be constructed containing twenty five questions, in which respondents will be asked to answer. The questionnaire will be handed out to other companies within the industry. These companies include Bel-Ray, Castrol, Havoline and Shell. A total of 10 questionnaires each will be given out at these companies. These questionnaires will be given to members within the quality departments of these companies. These members will be randomly selected within the department. Questionnaires will be given out to these members as it was them who will have the required information.

Structured observations will also be used to collect data. The researcher will adopt a participant observation approach to this method. While at the various service stations, quick shops and auto mechanic parts shops the researcher will spend time observing customers’ choice of lubricants when other brands are available. In addition observations will be made based on the prices of other brands compared to N. P.’s brand and customer perception of quality based upon this factor. Research will be done on both customers and companies’ quality departments. This will be undertaken as gaining an increased market share results in gaining a resource capability towards having a competitive advantage. Thus customer’s preferences of one product over another will give the researcher the entities of what constitutes competitive advantage based on quality. Thus making room for opportunities for benchmarking based on specifications utilized by other companies within the industry.

Justification of methods: Questionnaires will be utilized as the researcher wishes to question a large number of individuals within a short space of time. Time would constraint the researcher in conducting interviews with 40 persons individually within the industry. Participant observation will be used in an attempt to gain a complete understanding of the views, preferences and beliefs of the people being surveyed. In addition the researcher will interact with individuals of the sample in an attempt to gain reasons for their choice.

The researcher will acknowledge that there will be a major drawback by using questionnaires. That is they cannot address issues in-depth. It is for this reason that participant observation will be used hand in hand with the questionnaire as it will allow individuals to go in depth on issues.

Analytical technique: the researcher will use cognitive access in an attempt to gain information from customers. Participant observation requires interactive processes, therefore it is crucial to gain entry and carry out the research. The researcher acknowledges the fact that informal acceptance from intended participants will be necessary in order to gain access to the required information.

Cognitive access will be used as it is necessary for participants to feel understood and this will allow the researcher to gain an understanding of their social reality by allowing them to know what is being studied and the objective. This aims at making participants openly give information based on the objective of the research.

Objective three: To ascertain the extent to which NP is in compliance with industry standards.

Documentation analysis will be selected as the means of data collection for the attainment of this objective. This method is necessary for analyzing the information gained about N. P.’s documentations based on quality control. The N. P.’s quality initiatives discovered will be scrutinized along side information attained from the industry analysis. It is intended to identify gaps within the operation requirements relevant to inspection points, certifications, specifications and any other relevant quality control initiatives. This data collection method is of secondary nature. This method will be used as it is upon these analyses that gaps will be identified and compliance standards assessed.

Justification of methods: documentation analysis was found to be the most appropriate method as it will provide comparative and contextual data. This method will allow the researcher to compare and contrast findings when compared to secondary data.

OBJECTIVE FOUR: To formulate recommendations with reference to quality management best practice and based on research findings.

In collecting data for objective three the researcher will use the multiple- source secondary data process. This objective will be achieved by evaluating the literature and documentary secondary data and matching up the findings to the survey- based secondary data.

Documentary secondary data uses a combination of primary and secondary data. By reviewing the literature based on the selected topic, quality management best practice in relation to N. P. will be determined. In addition company’s print out from their intranet will be used to gain an inside view of N. P.’s perspective of quality management best practice.

Survey- based secondary data will allow the researcher to compare the findings gained from doing research via survey and case study methods to information derived from documentary secondary data. The researcher will be able to make recommendations based on this comparison. The comparison of the findings from both documentary secondary data and survey base secondary data will be necessary as this is the method which will reveal the necessary information.

Justification of methods: The multiple- source secondary data process was found to be the most appropriate as it will provide comparative and contextual data. This method will allow the researcher to compare and contrast findings when compared to secondary data. The researcher however acknowledges the fact that there may be no real control over the quality of data.

## 3. 1 ethical issues

The research will guard against any unethical methods of data collection. Essentially the criteria relevant to the methods of data collection chosen are as follows:

Voluntary participation and conformed consent: all participants will not be coerced into participating in the research. Consent will be sought after from all parties to be studied. All participants will be given a through breakdown on the study and its aims.

Confidentiality and anonymity: the researcher will not seek after names or any personal information which may reveal the participant’s identity. This will be made clear to all parties in advance of the method of data collection.

## 3. 2 Limitations of study

When conducting research and collecting data one must consider the l