INFLUENCE OF MANAGEMENT ON IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN AN ORGANIZATION: A CASE OF RAI PLYWOOD (K) LIMITED, ELDORET, KENYA

Benedict K. Muasya

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DECLARATION

I declare that this project report is my original work and that it has not been presented for any academic award to any other university.

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Benedict K. Muasya

(L50/82207/2012)

This Research project has been submitted for examination with my approval as a University supervisor

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Julius C. Koring'ura

Lecturer,

University of Nairobi

DEDICATION

This piece of work is dedicated to my family particularly to my wife Rose Wangeci and my children: Joshua Muasya, Meshack Mumo, Neema Mwende and Rehema Muthoni for their encouragement and moral support in times of need.

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My thanks also go to my supervisor; Julius Koring'ura for his tireless guidance in helping me carry out quality research.

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This research work would not have been complete without the invaluable assistance that I received from various people. I would like to thank God who has been with me and energized me throughout the long and sometimes challenging academic journey as without his love and strength, I would not have made it to this point.

Lastly, I sincerely thank my family members for their support morally, spiritually and financially; your love, encouragement, guidance and understanding has indeed kept me going.

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ABSTRACT

This study sought to analyze the role of management in Total Quality Management implementation at Rai plywood (K) Limited, Eldoret, Uasin Gishu County. The study looked into the commitment of the organization in terms of time and other resources and the sub sequent output. The specific objectives of this study were to establish the influence of planning on implementation of TQM at Rai Plywood Limited wood (K) Limited; to investigate the role of control on implementation of TQM at at Rai Plywood Limited wood (K) Limited; to establish the importance of employee training on TQM at Rai plywood (K) Limited and to establish the influence of staffing on implementation of TQM at Rai Plywood Limited wood (K) Limited. This study was prompted by the fact that the organization and their managers know and appreciate the mistakes in the implementation of TQM and thus find a better way of implementation. The study adopted a case study research design; as such it is an intensive descriptive and holistic analysis of Rai plywood (K) Limited, Eldoret as a single entity. The target population was 168 respondents and was drawn from organization management and employees from various departments. The study adopted Krejcie, & Morgan sampling method to select a sample frame. Descriptive statistics was used in data analysis by use of Statistical Package for Social Scientists (SPSS) version 17.0. The study also performed correlation analysis using the Pearson's Product Moment correlation test on objective. The study therefore concluded that the top management determined the success of the TQM programme being implemented. The study found that several factors must be taken into consideration such as participating, training and quality policy requirements. In order to make TQM implementation successful, proper steps should be followed when planning to implement it. The researcher recommended that all employees of the organization must be involved in the development of an implementation plan and any modification that occurs as the plan evolves. The suggestion for further study was to be carried out by other organizations to highlight the roles of each category of employees in the implementation of TQM.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Total quality management (TQM) has become a world-wide topic in the twenty-first century. Having its roots partly in the USA and partly in Japan, it was primarily adopted by some Japanese companies in the decades immediately after World War II. With the greater successes of Japanese companies during the 1980s, companies all over the world found that it was necessary to have good quality management practices in order to stay competitive (Lagrosen, 2002). Total quality management is an enhancement to the traditional way of doing business. It is a proven technique to guarantee survival in world class competition. Only by changing the actions of management will the culture and actions of an entire organization be transformed.

Total quality management (TQM) as a management approach of an organization is centered on quality, based on the participation of all its members and aiming at long term success. This is achieved through customer satisfaction and benefits to all members of the organization and to society. In other words, TQM is a philosophy for managing an organization in a way, which enables it to meet stakeholders' needs and expectations efficiently and effectively without compromising ethical values (ISO 8402, 1994). TQM has been widely implemented throughout the world. Many firms have arrived at the conclusion that effective TQM implementation can improve their competitive abilities and provide strategic advantages in the marketplace (Anderson, Fornell, & Lehmann, 1994). Several studies have shown that the adoption of TQM practices can allow firms to compete globally (Easton, 1993; Ernst and Young, 1991; Handfield, 1993; Hendricks & Singhal, 1996; Womack & Roos, 1990). Several researchers also reported that TQM implementation has led to improvements in quality, productivity, and competitiveness in only 20-30% of the firms that have implemented it (Benson, 1993).

According to a survey of manufacturing firms in Georgia, the benefits of TQM are improved quality, employee participation, teamwork, working relationship, customer satisfaction, employee satisfaction, productivity, communication, profitability, and market share (Dale, Zairi, Van der Wiele, & Williams, 2000).

According to Oakland (2006), TQM is a senior management led companywide initiative intended to improve effectiveness and to build quality into the service delivered. Involvement of the whole workforce and a commitment to doing the right things correctly is emphasize. Any organization basically competes on its reputation for quality, reliability, price and delivery and most important of these competitive weapons. Organizations have used quality strategically to win customers, steal business resources or finding and be competitive moreover this sort of attention to quality improves performance in reliability, delivery and price. Before anyone will buy the idea that quality is an important consideration, they would have to know that was meant by it. Quality is often used to signify excellence of a product or service. If we are to define quality in a way that is useful in its management, then we must reorganize the need to include in the assessment of quality the true requirements of the customer the needs and reputations.

As companies came to recognize the broad scope of quality, the concept of total quality emerged. According to James and William (2005), total quality is a people focused management system that aims at continual increase in customer satisfaction at continually lower real cost. Total quality management is a total system approach and an integral part of high level strategy. It works horizontally across functions and departments, involves all employees, top to bottom, and extends backwards and forward to include everyone in

the organization. Total quality stresses learning and adaptation to organizational change as key to organizational success.

According to James and William (2005), Total quality management is based on three fundamental principles the customer is the principal judge perception of value and satisfaction are influenced by many factors throughout the customers overall purchase, ownership, and service experience. To meet or exceed customer expectations, organizations must fully understand all products and services attributes that contribute to customer value and lead to satisfaction and loyalty.

Joseph Juran credited Japanese managers' full use of the knowledge and creativity of entire workforce as one of the reasons for Japanese rapid quality achievement. When managers give employees the tools to make good decisions and freedom and encouragement to make contributions, thy virtually guarantee that better quality service and products and services will result. In any organization, the person who best understands his or her job how to improve both the products and the process is the one performing it.

A process is a sequence of activities that is intended to achieve some results or a process is how work creates value for customers. Continuous improvement refers to both incremental changes, which are small and gradual, and breakthrough, or large and rapid improvements. These improvement may take any one of several forms as enhancing value to the customer through new and improved products and services, Reducing errors, defects, waste and their related cost, increasing productivity and effectiveness in the use of resources, and improving responsiveness and cycle time for such process as resolving customer complaints or new products introduction.

What are TQM practices really going on in manufacturing industries firms? The existing literature has shown that research has been done on TQM practices in Kenya higher education a case of University of Nairobi and TQM practices in Kenyan secondary schools (Ngware, 2006). No empirical research has been conducted dealing with influence of top management in Total Quality Management implementation in manufacturing firms. In order to bridge this influence of top management in Total Quality Management implementation gap, an investigation into the effects of TQM practices in Kenyan manufacturing institution is urgently needed. Such a study can explore the degree of the impact of TQM practices on overall performance in firms and help in identifying problem areas and possible remedies.

1.2 Statement of the problem.

The adoption of TQM by most organization has been hampered due to their non compliance with the procedure and principles of TQM implementation. While some organization, run TQM like a program which they expect to function and perform the magic by itself, others have used a half hearted approach to it, by using some bits and pieces of the principles. This has accounted for the failure of most organization in meeting up to their expected target from implementing this ideology (Ugboro & Obeng, 2000). The purpose of this study was to establish how TQM practices are employed while addressing these challenges by examining whether there are any gaps or discrepancies (positive or negative) between the influence of top management and Total Quality Management implementation. However good communication is seen to be vital to the success of the TQM program implemented in Rai plywood but the most important of all is commitment, not only from the senior management but from everyone in the

organization. Therefore this study set out to analyze the influence of top management in TQM implementation.

1.3 The purpose of the study

The main purpose of this study was to assess role of management in Total Quality Management implementation at Rai plywood (K) Limited, Eldoret, Uasin Gishu County

1.4 Research objectives

The study was guided by the following objectives:

1. To establish the influence of planning on implementation of TQM at Rai Plywood Limited wood (K) Limited

2. To investigate the effect of control on implementation of TQM at at Rai Plywood Limited wood (K) Limited

3. To establish the influence of employee training on TQM at Rai plywood (K) Limited

4. To establish the influence of staffing on implementation of TQM at Rai Plywood Limited wood (K) Limited

1.5 Research questions

The questions that the study answered were:

1. What is the influence of planning on implementation of TQM at Rai Plywood Limited wood (K) Limited?

2. What is the role of control on implementation of TQM at at Rai Plywood Limited wood (K) Limited?

3. What is the influence of employee training on TQM at Rai plywood (K) Limited?

4. What is the influence of staffing on implementation of TQM at Rai Plywood Limited wood (K) Limited?

1.6 Significance of the study

The study is to help the organization and their managers know and appreciate the mistakes in the implementation of TQM and thus find a better way of implementation. The study will help the future researchers when undertaking TQM geared towards understanding the role of the top management in its implementation by providing the necessary information.

The result is informant to the management and hence influence quality of service offered by the organization

The findings of the study will help minimizing the rate of customers' complaints on TQM process by making sure that the TQM program implemented is to the customer satisfaction.

1.7 Limitation of the study

Even though different efforts have been made, the researcher faced some challenges while doing this study. To begin with, the fact that the majority of the respondents' educational background is low creates some negligence in filling the questionnaire. Some do not give values to the questionnaire and some others do not return it totally.

Furthermore, since respondents have been in a tight work, some were not as such willing to fill the questionnaires. Since the respondents were scattered in different sites, some difficulties were faced in giving orientations, following up respondents and collecting responses. Some of the questions in the questionnaires were not filled by the respondents due to fear to give sensitive information to another party to comprehend professionally the TQM concepts. The researcher had to explain to the respondents who may be caught up with such problem in order to come up with more appropriate suggestions and answers from them.

Unwillingness of the respondents especially managers to freely participate in the exercise as " suspicious" However, the researcher had to convinced them that the exercise is meant for academic purpose only and any information will be treated as confidential.

1.8 Delimitation of the study

The study attempted to examine the influence of top management in Total Quality Management implementation against the eight principles of TQM as proposed by KEBS (2008). It was conducted at Rai plywood (K) Limited, Uasin Gishu County. A sample of 83 respondents selected from the different departments within the organization. Data was collected by use of questionnaire. Furthermore, there was also need to assess whether the influence of top management in Rai plywood (K) Limited have made any significant effect on Total Quality Management implementation and if not how that can be improved. The study applied the eight principles of quality management (Kenya Bureau of Standards, 2008) to assess the extent to which TQM has been implemented at Rai plywood (K) Limited and its effect on overall business performance.

1.8 Assumption of the study

This study was based on the following assumptions:

   i.   There exists a relationship between role of top management and Total Quality Management implementation

   ii. Employees and the management provided unbiased responses

1.9 Operational definition of terms

Total quality management: It is a set of principles and practices whose core idea includes understanding customer needs, doing things right the first time and striving for continuous improvements

Quality policy   Is a guide for everyone in the organization as to how they should provide products and services to the customers.

Quality   Fitness for purpose or for use, the totality of features and characteristics of a product or service that on its ability to satisfy stated or implied needs

Performance   Using available resources to achieve targets

1.10 Organization of the study

The project is organised as follows:

The chapter one the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, limitations of the study and scope of the study, chapter two, literature review, chapter three , research methodology, Chapter four contains the data analysis, presentation and discussion of the findings. The conclusion and recommendations will form the chapter five of this

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discussed views of other scholars and researchers on the subject of study. The role of top management in the Total quality management (TQM) implementation is very crucial in any organization that promotes quality and wants to survive in the competitive environment and achievement of organizational goals.

2.2 Literarture related to the Concept of Total Quality Management

Total quality management is defined as both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization. It is the application of quantitative methods and human resources to improve all process within an organization and exceed customers need now and in the future.

According to Oakland (2001), each part of an organization has customers, whether internal or external and the need to identify what the customer requirements are and then set out meeting them, forms the core of a total quality management approach such an approach requires a good quality management system, statistical process control (SPC) and teamwork. These are complementary in many ways and share the same requirements for an uncompromising commitment to quality. TQM must start with the most senior management and flows from top to bottom by education through the organizational linkages. A good quality management system therefore, involves consideration of all the major areas of operation of business and application of TQM concept for co-ordinating and integrating variety of efforts.

Oakland and Drummond (2003) said that for successful implementation of TQM, knowing, defining, monitoring and controlling process is vital. Whether we do with TQM concepts must be viewed as a process. The organization must fully invest in people. They further point out that using time efficiency is very important. There must be a vision, planning and disciplined application of skill and effort.

Chopin (2001) point out clearly that total quality management works where there is in depth understanding of everyone and everyone is on lookout for improvement.

Artley, and Stroh, (2001), states quality must be people centered, by empowering them. Implementation succeeds if the motivators towards total quality management are identified and known. Hakes (1992), Jeffries and Peter (1992), points out that for successful implementation of TQM certain basic concepts must be used. They say it's vital to understand improvement control, control the business process, plan for prevention and effective leadership and teamwork, it will enable TQM implementation to succeed. It is also exemplary to make sure the above factors interact and support each other. TQM implementation demands that every one must build partnership and take responsibility for TQM. The approach towards it must be a scientific one. We must be aware that there is no time people fail, but what fails is the process. Max Hand and Brian Plowman (Artley, and Stroh, 2001) , clearly state that hardly anyone goes over to work for the purpose of making mistakes. TQM therefore must be design in a way that it does not appear difficult for the implementation programs. They should be free from the implementation programs. They are free from criticism, blame and fear of the consequences of change. Excellence for quality is hard won and easily lost hence perpetual improvements. According to Slack, Chambers, Harland, Harrison and Johnson (1998), the full

understanding, support and leadership of an organizations stop management as emerged to be clear that without top management as emerged to e a crucial factor for TQM implementation. It is therefore clear that without top management support it is implacable that TQM implementation might fail.

According to Glen, John and Gerald (2004), top management must exhibit bold, practical, and proactive and create leadership that ensures a more valuable change. The top management must feel responsible for the quality of products and services. They have to establish a committed attitude through effective management of people and resources. They have to lead in the promotion, education and training and motivating people in the effort of quality improvement process. According to Mohanty and Lakhe (2004), some of the important considerations in implementing successful companywide quality control programs in Japanese companies are the top management involvement, emphasis on training, building a formal organization, use of informal quality control circle and giving award. He continued to state that top management in Japanese companies exhibit a total and firm commitment towards implementing quality control management programs top management initiates and supports through budget and time, companywide total quality control. Their involvement goes beyond financial commitment. They maintain their commitment by active involvement in quality control programs, quality control seminars and quality control improvement efforts. The significant features of these programs is that they start at the top of the company and progress downwards, level by level, to supervisors, foremen and workers

2.3 Literarture related to the Planning and Total quality management

According to Oakland (2001), the task of implementing TQM can be daunting and the chief executive faced with this may draw little comfort from the quality 'gurus'. The first decision is where to begin and this can be so difficult that many organizations never get started. This has been called TQP – Total Quality Paralysis. The preliminary stages of understanding and commitment are vital first steps which also form the foundation of the whole TQM; it is clearly only the planting of the seed. The understanding must be translated into commitment, policies, plans and actions for TQM to germinate. Making this happen requires not only commitment, but a competence in leadership and in making changes. Without a strategy to implement TQM through process management, capability and control, the expanded effort will lead to frustration (Oakland, 2001).

Individual effort is required in improvement but it must be co-ordinate and become involved with the efforts of others to be truly effective. The implementation begins with the drawing up of a quality policy statement and the establishment of the appropriate organizational structure both for managing and encouraging involvement in quality through teamwork. Collecting information on how the organization operates, including the cost of quality, helps to identify the prime areas in which improvements will have the largest impact on performance. Planning improvement involves all managers but a crucial early state involves putting quality management systems in place to drive the improvement process and make sure that problems remain solved forever, using structured corrective action procedures. Once the plans and systems have been put into place, the need for continued education, training and communication becomes

paramount. Organizations that try to change the culture, operate systems, procedures or control methods without effective, honest two-way communication will experience the frustration of being a 'cloned' type of organization which can function but inspires no confidence in being able to survive the changing environment in which it lives (Gibson, 2007).

An organization may, of course, have already taken several steps on the road to TQM. If good understanding of quality and how it should be managed already exists, there is top management commitment, a written quality policy, and a satisfactory organizational structure, then the planning stage may begin straight away.   When implementation is completed, priorities among the various projects must be identified. For example, a quality system which conforms to the requirement of 150 9000 may already exist and the systems step will not be a major task, but introducing a quality costing system may well be. It is important to remember however, that a review of the current performance in all the areas, even when well established, should be part of the normal operations to ensure continuous improvement (Gibson, 2007).

These major steps may be used as an overall planning aid for the introduction of TQM, and they should appear on a planning chart. Major projects should be time phase to suit individual organization requirements. The planning part will be continuous and draw together the requirements of all the steps in to a cohesive program of introduction. It may be useful at various stages of the implementation to develop checks to establish the true process. For example, before moving from understanding to trying to obtain top management commitment, objective evidence should be obtained to show that the next state is justified. Following commitment being demonstrated by the publication of a

signed quality policy there may be the formation of a council and /or steering committee. Delay here will prevent real progress being made towards TQM through teamwork activities. TQM may be integrated into the strategy of any organizations through an understanding of the core business processes and involvement of the people. This leads through process analysis, self-assessment and benchmarking, to identify the improvement opportunities for the organization, including people development (Rajan, 2006).

2.4 Literarture on the role of control system on implementation of TQM

The relationship between the degree to which total quality management practices were adopted within organizations and the corresponding competitive advantages achieved are explored. Relatively strong support for this relationship is found. In addition, data showed some support for the moderating influence of organizational structure of TQM implementation effectiveness. Specifically, to measures of organizational structure, labeled "control" and "exploration", its found to offer independence and interdependent influences on the financial performance of firms implementing TQM programs

The relationship between the degree to which total quality management (TQM) practices were adopted within organizations and the corresponding competitive advantages achieved. We found relatively strong support for this relationship. In addition, our data showed some support for the moderating influence of organizational structure on TQM implementation effectiveness. Specifically, two measures of organizational structure, labeled "control" and "exploration," were found to offer independent and interdependent influences on the financial performance of firms implementing TQM programs

Exacerbating this problem is the situation whereby "research is not providing the corrective function for TQM that it could and should" (Hackman & Wageman, 1995: 339). For instance, a reason given for the lack of conclusive evidence in the literature lies in the treatment of TQM as a "discrete phenomenon" (Westphal, Gulati, & Shortell, 1997). In fact, Hackman and Wageman found that only 4 percent of the 99 articles published between 1989 and 1993 on TQM "assessed the degree to which TQM interventions actually were in place" (1995: 321). Given the complexity and pervasiveness of implementing TQM in an organization (Westphal et al., 1997), it is important to assess the degree to which TQM practices have been implemented when evaluating TQM's relationship with competitive advantage.

In addition, it has been argued that for an organization to realize the value of a TQM implementation, it must have an internal organizational structure that is capable of fully supporting the implementation (Waldman & Gopalakrishnan, 1996). According to Shea and Howell (1998), the preferred structure for organizations that implement TQM balances the need for control of activities with the flexibility needed to respond and adapt quickly to the changing marketplace. It is thus important to assess organizational structure when evaluating an organization's TQM implementation. The purpose of this study was to examine the degree to which a comprehensive set of TQM practices was implemented in a set of organizations, the effect of organizational structure on implementation effectiveness, and the corresponding competitive advantages gained through TQM. The setting for this examination was the general medical hospital industry. This industry is particularly appropriate for the study of the effectiveness of TQM program implementation since it commenced using TQM as an industrywide recipe for

success in the mid to late 1980s and continues this effort to the present day (Westphal et al., 1997).

2.5 Literarture on the Employee training

The adoption of quality management practices has long been associated with an increase in the provision of employee training. The founders of quality practice in manufacturing emphasised the importance of employee development, education and training for the improvement of quality performance and firms seeking to implement quality management have consistently found it necessary to improve their training effort (Deming 1982, Ishikawa 1984). Firms pursuing a quality strategy have found it necessary to invest in 'human-capital-enhancing' activities such as training, in order to enhance performance improvements in productivity and customer satisfaction (Youndt, Snell, Dean and Lepak 1996).

Employees require some training in order to manage the enlargement of their work role following the delegation of responsibilities for quality, they also require some training in non-technical skills to be able to participate in quality improvement activities and they need a broader range of skills in order to flexibly respond to changing customer and market requirements (Schonberger 1994). Training for quality management requires the development of specific skill sets that support quality management practices. Such training is important, not only to ensure the successful adoption of quality practice, but also to ensure the achievement of the broader quality mission of improved firm competitiveness (Dertouzos, Lester and Solow 1992). The success of the quality strategies adopted by the firm and the effectivness of the

quality management system employed within the firm, are dependent upon the supply of appropriately skilled labour (Mason, van Ark and Wagner 1996, Prais 1995).

There are well established links between the provision of employee training and use of quality management practices but there is some debate about the extent to which the two practices may work together to enhance performance outcomes. Several empirical studies of enterprise training and performance have found no necessary link between employee training and the use of other management practices (d'Arcimoles 1997, Bartel 1994, Holzer, Block, Cheatham and Knott 1993). These studies suggest that training, in and of itself, can enhance the performance outcomes of firms.

Snell and Dean (1992) found that the use of advanced manufacturing technology (AMT) and the use of quality practices were both associated with the 'comprehensiveness' of employee training but they found no interaction effects from the use of these practices in combination.

Bartel (1994) examined job redesign, performance appraisal and employee involvement, finding that training was 'unaffected' by the implementation of these practices, in its performance enhancing effects. Bartel used a value-added measure of productivity based upon net sales per employee and found that the introduction of new training programs led to a productivity gain of 18.86% over three years. Significantly, this gain applied across the board to low performing and high performing companies, leading Bartel (1994:422) to observe that: "the implementation of formal employee training programs can enable businesses that are operating at below-expected levels of labor productivity to eliminate this gap."

Holzer, Block, Cheatham and Knott (1993) studied the effect of training grants on firms training effort and found that the one off training grants led to a doubling or tripling of the training effort during the period of the grant. This increased training effort was associated with a 0.5 to 0.7 percentage points decline in the scrap rate, a gain which persisted after a decline in the training effort. It was the extent of the training effort that seemed to influence improvements in quality outcomes rather than any necessary use of quality practices.

Training and development have been recognized as essential to the implementation of TQM. One of Deming"s 14 points was that all employees must be trained in quality improvement techniques. Companies committed to TQM invest in training. Samson and Terziovski (1993) believed that training is vital to the internal diffusion of quality ideas and practices, as without it there is no solid foundation for a formal quality program. TQM training is not a single effort, but should be conducted on a continuous basis (Vermeulen and Crous, 2000). Effective training pursuits must be planned systematically and objectively (Smyth and Scullion, 1996). Basically, training has to be oriented to the process methodology (Schonberger, 1994). Employee training is fundamental for many TQM programs such as the adoption of new quality concepts, the set-up and practices of customer satisfaction systems, the use of statistical quality control, or the change of culture or quality control circle (Bowen and Lawler, 1992; Yang, 2006). Moreover, employees require three basic areas of training (Clinton et al., 1994): principles of TQM, the use of TQM tools and problem-solving techniques.

Empirical studies show that the use of training and development programmes is more common in companies with ISO certification that those without it (Renuka and

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Venkateshwara, 2006). Similarly, Mandal et al. (1998) found important links between quality initiatives and employee involvement and training

Professional career development for TQM companies is considered an extensive and continual process with promotion opportunities for employees (Schuler and Harris, 1991), but using narrow career paths (Schuler and Jackson, 1987). Furthermore, it demands horizontal career development (Blackburn and Rosen, 1993). This includes movement between functions, job rotation and horizontal movement (Bowen and Lawler, 1992). "Horizontal" career development is likely to become more significant, and career paths may become more complex and diverse (Snape et al., 1995). Consequently, promotion criteria should be based on the acquisition of abilities (Schonberger, 1994).

Training delivers greater benefits, some scholars argue, if management focuses upon the strategic effectiveness of that training rather than simply upon its ability to enhance employee task effectiveness. Employee training is of greater value to the firm in developing human capital if its affect is mediated by the quality management system. If firm specific skills are developed that not only improve the skills of individual employees but also enhance the effectivness of the quality management system... skills should

This line of argument posits a mediated effect as an explanation for the effect of training upon performance, as a counterpoint to the direct effect examined above. The strategic effectiveness thesis holds that there are benefits to be derived from employee training, if that training is part of a consistent set of human resource management practices (Brown, Reich and Stern 1993) and that set of human resource management

practices is aligned to production practices for the achievement of strategic business objectives. If there is internal consistency in the work and production systems of the enterprise, then this generates a systemic benefit that is reflected in higher performance (MacDuffie 1995). In the case of quality, the strategic effectiveness thesis holds that the training effort should be targeted to the type of quality management program being

2.6 Literarture related to the Influence of staffing on implementation of TQM

The nature and extent of changes in the environment have had a significant impact on business organizations, consequently, companies have considered and prioritized their requirements (Smyth and Scullion, 1996).Total quality management (TQM) and human resource management (HRM) have been an important theme in management and business research for the past few decades due to its potential to affect a range of organizationally and individually desired outcomes. Human resource management and total quality management are becoming more interlinked (Boselie and Wiele, 2002). A number of commentators suggesting that only the integration of HRM and TQM managed organization will be able to survive in the future (Redman and Mathews, 1998). The HR professionals played a central role in creating and communicating the TQM vision of the company (Palo and Padhi, 2005).

HRM is important for TQM success in any sphere of activity (Daniel Jime´nez-Jime´nez and Martı´nez-Costa, 2009). Despite differences in nomenclature (workforce management, employee relations, employee satisfaction, etc.) and the different practices considered (training, teamwork, empowerment, etc.) there is a consensus in the literature that highlights the important role of human resource management in implementing a

TQM system in an organization (Aldakhilallah and Parente, 2002; Chandler and McEvoy, 2000; de Menezes and Wood, 2006; Mandal et al., 1998; Vouzas, 2007; Wilkinson et al., 1991). Enterprises that devote themselves to the implementation of TQM also need to perform HRM aggressively, if they are to increase the firm"s performance significantly. A total quality system is comprised of two distinct systems: the management system and the technical system. The management system is concerned with issues of HRM (Evans and Lindsay 1996). Gunasekaran (1999) develops a conceptual model for the implementation of TQM. The model presents seven major strategies in the successful implementation of TQM. Of these, six are related to HRM. This study considers 33 HRM practices, which are those that are most commonly identified in the literature as enhancers of TQM.

Traditional HRM practices conflict with TQM and should be changed (Schonberger, 1994). Although organizations have initially focused on a production-oriented perspective of quality (Wilkinson et al., 1991), the recent literatures has underlined the importance of HRM for success (Vouzas, 2006). In fact, the "soft dimensions" of TQM (customer orientation, leadership, culture or HRM) as they have been described by many authors (Bou Llusar et al., 2009; Fotopoulos and Psomas, 2009). Therefore, the human resource function must take the lead in activities such as job design and teams that promote cooperation, empower employees to provide information, participation and autonomy, select employees that can adapt to the organizational culture, foster programmes of training and development with quality goals and define appraisal and compensation policies which support quality targets. A fruitful cooperation between HRM and TQM can produce better organizational results. The alignment of HR and

quality policies, such as creating and communicating the TQM vision, preparing the organization and employees for TQM implementation and generating quality awareness among the employees across all levels, functions, and departments, should contribute to an increase company performance (Palo and Padhi, 2005)

It is necessary to consider employee's behaviour, attitudes and values for any TQM program to be successful. There is a major drive towards increased staff training. Companies have recently doubled the size of their training program and this will increase again as TQM is implemented at various stages throughout the organization.

There has been a substantial amount of training as follows: Training was provided for the quality team, e.g. quality and facilitating courses. In-house training has been provided by the quality team. Reference was also made to the recruitment process, appointing people with specific qualities and values that will contribute to the continuing success of the organization (Smyth and Scullion, 1996).

More sophisticated recruitment and selection techniques are needed for TQM (Wilkinson et al., 1994). Successful recruitment and selection of employees with the proper knowledge, skills, abilities, and attitudes compatible with a TQM philosophy can be a driving force supporting continued program effectiveness (Clinton et al., 1994). This implies, according to Rees and Doran (2001), the identification of competences derived from a TQM strategy and the use of multi-method selection.

According to Ahmad and Schroeder (2002) the goal of the recruitment and selection process should be to identify prospective employees who could work in teams,

have problem solving aptitude and are forthcoming with ideas to improve processes or at least have values and behaviours consistent with the quality management philosophy.

2.7 Theoretical framework

TQM may be integrated into the strategy of any organization through an understanding of the core business process and involvement of the people. This leads through process analysis, self assessment and benchmarking, to identifying the improvement opportunities for the organization including people development.

The identified processes should be prioritized into those that require continuous improvement, those that require re-engineering or redesign and those that lead to a complete rethink or visioning of the business. Performance-based measurement of all process and people development activities is necessary to determine progress so that the vision, goals, mission, and critical success factors may be examined and reconstituted if necessary to meet new requirements for the organization and its customer, internal and external (Oakland 2006)

This all starts with the vision, goals, strategies and mission which should be fully though through, agreed and shared in the business, what follows determines whether these are achieved. The factors which are critical to success, the CSFs – the building blocks of the mission are then identified. The key performance indicators (KPIs), the measures associated with the CSFs, tell us whether we are moving towards or away from the mission or just standing still.

Having identified the CSFs and KPIs, the organization should know what its core processes are. This is an area of potential bottleneck for many organizations because, if the core processes are not understood, the rest of the framework is difficult to implement.

If the process are known we can carry out process analysis and identify opportunities for improvement ISO 9000 standard based systems should be easily established at this stage, rather than needing a separate and huge effort and expense. self-assessment and benchmarking, will identify further improvement opportunities. This will create a very long list of things to attend to, many of which require people development, training and education. Next is prioritization to identify those processes which are run pretty well and subject them to a continuous improvement. For those processes which we identify as being poorly carried out, perhaps forecasting, training or even financial management, we may subject them to a complete revisioning and redesigning activity. That is where BPR comes in. what must happen to all processes, of course, is performance measurement, the results of which feed back to the benchmarking and strategic planning activities.

2.8 Conceptual framework

The study was based on conceptual framework as shown below

Fig 2.2 Conceptual Framework

Staffing

- Human resource management,
- Employee involvement
- Quality education and training,

Influence of planning

- Availability of policies
- Visions
- Missions
- Core Values

Implementation of Total Quality Management

- Continual improvement
- Factual approach to decision making
- employee satisfaction,
- customer satisfaction
- service quality

Role of control

- Availability of Monitoring And Evaluation
- Rules
- Guidelines

Employee training

- Awareness rising on TQM concepts
- Personal development opportunities

(Source: Author, 2013)

Top management must exhibit bold, practical, and proactive and create leadership that ensures a more valuable change. The top management must feel responsible for the quality of products and services. They have to establish a committed attitude through effective management of people and resources. They have to lead in the promotion, education and training and motivating people in the effort of quality improvement process

The education and training part will be continuous and draw together the requirements of all the steps in to a cohesive program of introduction. It may be useful at various stages of the implementation to develop checks to establish the true process

2.8 Summary of Literature Review

The existing literature has showed that research has been done on TQM practices in Kenya higher education, Factors Affecting TQM Processes in State Corporation for Customer Satisfaction, and TQM practices in Kenyan secondary schools. Little or no empirical research has been conducted dealing with influence of top management in Total Quality Management implementation. In order to bridge this gap, an investigation into the effects of TQM implementation in manufacturing institution is needed.

Total quality management system can add greatly to productivity and quality service delivery, however implementing the system within the organization can prove to be a very challenging task. The top management should therefore understand that they have a role to play in the success of TQM implementation. The literature reviewed indicates that most managers are not conversant with TQM hence need to assess this perception in order to create awareness besides sensitizing stakeholders

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Methodology refers to the application of the principles of data collection methods and procedures in any field of knowledge. This section described research design, target population, sampling design and sample size, research instruments, validity and reliability of research instruments and data analysis technique.

3.2 Research design

The study adopted a case study research design; as such it is an intensive descriptive and holistic analysis of Rai plywood (K) Limited, Eldoret as a single entity. It is an investigation of single entity in order to gain insight into the larger cases. According to Oso and Onen (2005) in a case where the number of organizations that can be investigated are few, a small sample is available and an in-depth analysis is necessary, a case study is the most appropriate. According to Patton (2002) case studies are useful when one needs to understand a particular group of people, a particular problem, or unique situation in depth. This design was suitable for it describe rather than predicts which is effective for studying a single entity such that a case study carried out gain an insight to the larger cases.

3.3 Target population

The target population refers to the group of people or study subjects who are similar in one or more ways and which forms the subject of the study in a particular study. The

study targeted the staff Rai plywood (K) Limited, Eldoret. The table below shows how the target population was drawn

Table 3.1 Target population

Category	Target population
Branch manager	1
Departmental heads	13
Administration department	7
Stores department	11
Plywood and sawmill department	29
Polypropylene plant and Foam plant department	22
Chipboard, Mechanical and Electrical department	33
Furniture and Block board department	17
Fire and Power plant department	25
Total	**168**

3.4 Sampling procedures

This study applied

Krejcie & Morgan (1970), The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. In the article "Small Sample Techniques," the research division of the National Education Association has published a formula for determining sample size. Regrettably a table has not been available for ready, easy reference which could have been constructed using the following formula

$$s = X^2 \, NP \, (1-P) \div d \quad (N-1)+X \quad P \, (1-P).$$

$$s = X^2$$

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

The relationship between sample size and total population is illustrated in table 3.2 It should be noted that as the population increases the sample size increases at a diminishing rate and remains relatively constant at slightly more than 380 cases

Table 3.2 Sample size

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

3.5 Research instruments

Questionnaires were developed from the objectives of the study and were administered on the respondents. They had five point likert scale items and also open ended and closed ended questions. They sought personal information of the respondents and that concerning the influence of top management in Total Quality Management implementation. They were distributed to respondents by the researcher and research assistants giving respondents sufficient time to answer the questions. This method was appropriate for the respondents given that they were literate, the information needed could be provided in writing and it was easy to classify and analyze the data collected especially on closed ended questions. It also catered for the population since it was large in relation to the available time (Oso and Onen, 2005; Kasomo, 2007).

Questionnaires were therefore appropriate for this study since they enabled collection of data from a large sample of respondents and upheld confidentiality (Kombo and Tromp, 2006).

3.5.1 Piloting of the instruments

Piloting was carried out by convenient sampling in Rai plywood (K) Limited, Eldoret where 12 employees were sampled. The respondents from different department sampled were deemed to share common backgrounds. The 12 respondents were obtained based on purposive technique after issuing check lists to the respective supervisors describing the characteristics of respondents. They were selected based on the fact that departments in the organization, represented similar characteristics as the sampled other departments in

terms of population and human activities. This process helped the study test for content validity as well as has the opportunity to experience and feel the nature of the research.

3.5.2 Validity of the instrument

Although the data collection methods selected above is appropriate for the study, there was need to ensure they are valid and reliable. Validity is the extent to which a research instrument measures what was intended to measure (Nsubuga, 2000; Mugenda, 2008). For validity, the study reviewed relevant literature to ensure content validity. This enabled the study to identify different concepts and dimensions related to the role of top management in implementation of total quality management in an organization. Expert opinion was also soughted from senior researchers and academicians from University of Nairobi and other institution and suggestions on the improvement of the research instruments was gotten from them.

3.5.3 Reliability of the Instruments

Reliability on the other hand is the extent to which a given instrument yields consistently the same results when repeated measurements are taken from the same subjects in a research under the same conditions (Kombo and Tromp, 2006; Mutai, 2006; Saunders, 2009). To ensure reliability of the study, respondents were randomly selected to give each member of the target population an unbiased and equal chance of participating in the study.

3.6 Procedures of data collection

The researcher personally administered the research tools after a prior visit that assisted in refining timings of distribution of questionnaires. Prior visit provided a rough picture

of the respondents' expectations. The researcher agreed with the respondents when the research instruments were administered and specific dates of collecting the questionnaires. Adequate time was given to the respondents to respond to the questionnaires.

3.7 Data Analysis and Presentation

Quantitative data was collected through questionnaires. At the end of data collection, all completed questionnaires were thoroughly coded and organized for computer analysis. The data was analyzed using Statistical Package for the Social Sciences (SPSS) version 17.0 to generate findings and emerging trends in the data that was collected. Presentation of the findings was made in appropriate and well interpreted diagrams and figures. Descriptive data analysis techniques comprising of means and standard deviation were used to measure central tendencies and dispersion where applicable. It was presented in tables in terms of frequencies and percentages. This was used on the questionnaires for the respondent's. The same was done for data from questionnaires that were open ended in nature.

The researcher also used Pearson's Product Moment Coefficient techniques to measure associations and the effects of the independent on the dependent variables (Polonsky and Waller, 2005; Kasomo, 2007; O'leary, 2007).

3.8 Ethical Considerations

In order to protect the rights and welfare of respondents and to ensure that the study does not psychologically, socially and financially harm them as emphasized by Mugenda (2008) and Polonsky and Waller (2005), the study got an informed consent from

respondents and organization before they participated in it. They were made aware of the purpose of the research and expected benefits of the research. They were also assured of their anonymity, privacy and confidentiality of the information they gave.   The instruments for data collection were also designed in such a way that the above was achieved.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the results of data analysis pertaining to the objectives of this study. The chapter begins with the demographic characteristics of the respondents such as age, educational level, tenure and gender which were all presented using cross tabulations. The descriptive for the items in the instrument were also presented using means for each item to define the relative opinion of the respondents for that particular item

4.2 Questionnaire Return Rate

The data was analyzed by ensuring it met the minimum requirements for qualitative and quantitative analysis. The questionnaires were therefore checked for missing data and unfilled parts as well as for normality of the distribution.

The dependent, independent and moderating variables were measured on Likert Scales of 1 to 5 ranging from 5:– Strongly Agree to 1:- Strongly Disagree. This was done for all items measuring those variables, this is because the way the sample for the study was randomly selected and the measurement of the data on the interval scale enabled the study to use this technique. Each respondent score on each item was then aggregated into a composite score for each independent variable (Role of top management; Steps to be undertaken when planning; quality policy requirements and employee training), dependent variable (Implementation of Total Quality Management)..

4.3 Demographic profile of the Respondents

The demographic features of the respondents are vital to this study. They provide a base for further analysis of the specific research objectives. Demographic analysis is crucial since demographical factors affect respondents' social, economic, political behaviors hence they are useful tools in analysis of research objectives. This was done to avoid biasness. The demographic profiles of respondents were analyzed using five aspects namely the gender of the respondent, age, length of service, position in the organization and education level.

4.3.1 Gender of the respondents

Data on employees' gender was sought to give the researcher an insight analysis on whether Rai plywood (K) limited has attained a third of gender rule in its employment policy. The results of these items are indicated in table 4.1

Table 4.1 Gender of the respondent

	Frequency	Percent	Cumulative Percent
Male	52	67.5	67.5
Female	25	32.5	100.0
Total	77	100.0	

Source: Research study, 2013

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The results indicated majority of respondents were male and minority was female. The gender difference in the organization was not high. This is facilitated by the work environment as most of the job description in the organization needs active and productive workers.

4.3.2 Age bracket

The researcher found it important to collect data on the age of the respondents since age show experience of personnel in the organization and also dispute any doubt as pertain the age group that is employed by the organization. Data on the findings was presented in table 4.2

Table 4.2: Age of the respondents

	Frequency	Percent	Cumulative Percent
20-24 years	2	2.6	2.6
25-29 years	4	5.2	7.8
30-34 years	23	29.9	37.7
35-39 years	27	35.1	72.7
40-44 years	8	10.4	83.1
45-49 years	9	11.7	94.8
50-54 years	3	3.9	98.7
55 and above years	1	1.3	100.0
Total	77	100.0	

Source: Research study, 2013

The findings showed that majority respondents are between 35-39 years while minority respondents are 55 and above years. Based on the findings its evident that majority are between age 30-34 years this age group being youthful in nature provides an opportunity for an organization to develop an appropriate organizational culture that can support positive organizational performance.

4.3.3 Respondents Level of education

The research sought to establish the level of education qualification of the respondents since it delineates academic qualification that determine how level of competency of an employee delivers in the organization. The findings on the employee education qualification are presented in table 4.3 below:

Table 4.3 Level of education of the respondents

	Frequency	Percent	Cumulative Percent
Certificate	27	35.1	35.1
Diploma	36	46.8	81.8
Degree	14	18.2	100.0
Total	77	100.0	

Source: Research study, 2013

It was reported that majority are diploma holders while minority are bachelor's degree holders. The result shows that majority of the employees are well educated. This implies that most of the employees do understand what is expected of them and thus they are capable of interpreting the TQM concepts

4.3.4 Working experience of the respondents

Data was collected to ascertain the level of working experience which has been attained by the respondents. Their experience level indicates their responsiveness to customer changing requirements. The findings are presented in the table 4.4

Table 4.4 Working experience of the respondents

	Frequency	Percent	Cumulative Percent
less than 1 year	3	3.9	3.9
Between 2-4 years	7	9.1	13.0
Between 5-7 years	18	23.4	36.4
Between 8-10 years	15	19.5	55.8
Above 10 years	34	44.2	100.0
Total	77	100.0	

Source: Research study, 2013

The results from the table indicated that majority have worked above 10 years while minority respondents have worked for less than a year. From the study it was established that majority of the respondents had worked in the organization for between 6-10 years enabling them get exposed in their working places and thus have skills regarding their roles for successful TQM implementation.

4.4 Influence of planning on implementation of total quality management

The study sought to establish the influence of planning on implementation of total quality management. Data on the findings were presented on table

Table 4.5 Iinfluence of planning on implementation of total quality management

Influence planning	Agree F (%)	Undecided F (%)	Disagree F (%)	Variance	Std Dev
Understanding and commitment for TQM assessment need	70 (90.9%)	7 (9.1%)	-	.084	.2894
Drawing up of a quality policy statement establishment of the appropriate organizational structure	61 (79.2%)	13 (16.9%)	3 (3.9%)	.267	.5169
Collecting information on how the organization operates	63 (81.8%)	13 (16.9%)	1 (1.3%)	.185	.4304
Continued training education and communication	63 (81.8%)	13 (16.9%)	1 (1.3%)	.185	.4304
Understanding quality and how it should be managed	65 (84.4%)	11 (14.3%)	1 (1.3%)	.168	.4105
Review of current performance.	63 (81.8%)	12 (15.6%)	2 (2.6%)	.219	.4684

Source: Research study, 2013

On the statement Understanding and commitment for TQM assessment need 90.9% were in agreement, while 9.1% were undecided and none disagreed with that statement

On the statement it draws up of a quality policy statement establishment of the appropriate organizational structure 79.2% agreed while 3.9% disagrees with the statement and 16.9% were undecided with the statement

Collecting information on how the organization operates and Continued training education and communication 81.8% were in agreement, while 16.9% were undecided and 1.3% disagreed with that statement

Understanding quality and how it should be managed 84.48% were in agreement, while 14.3% were undecided and 1.3% disagreed with that statement

Based on the findings that it review of current performance, 81.8% agreed while 2.6% disagrees with the statement while 15.6% were undecided with the statement

Pearson's product moment correlation coefficient test was used to correlate the influence of planning index and implementation of total quality management index.

The results (50%) indicated that a moderately strong positive and significant relationship exists between influence of planning and Implementation of total quality management in the organization.

4.5 Influence of employee training on total quality management

For the success of total quality management in an organization there should be employee involvement and therefore the researcher found it appropriate to establish the extent of employee training in total quality management. Data on the findings were presented in table 4.6

Table 4.6 Response on level of focus by the training

Training	SA	A	U	D	SD	Variance	Std Dev
	F (%)	F (%)	F (%)	F (%)	F (%)		
Awareness rising on TQM concepts	56 (72.7%)	20 (26%)	1 (1.3%)	-	-	.233	.4828
Personal development opportunities	44 (57.1%)	24 (31.2%)	3 (3.9%)	4 (5.2%)	2 (2.6%)	.941	.9702
Clear understanding of TQM principles and practices	38 (49.4%)	35 (45.5%)	4 (5.2%)	-	-	.355	.5959
Reduce resistance to change	32 (41.6%)	36 (46.8%)	7 (9.1%)	2 (2.65)	-	.543	.7369
To promote accountability	36 (46.8%)	27 (35.1%)	9 (11.7%)	3 (3.9%)	2 (2.6%)	.948	.9739

Source: Research study, 2013

Awareness rising on total quality management concepts 26% agreed with the statement, 72.7% strongly agreed while 1.3% were undecided and none of the respondent disagree or strongly disagree with the statement

Personal development opportunities 5.2% disagree, 31.2% agreed while 57.1% strongly agreed while 2.6% strongly disagree and 3.9% undecided with the statement.

Clear understanding of TQM principles and practices 49.4% strongly agreed, 45.5% agreed, 5.2% indicated undecided while none disagree or strongly disagreed with the statement.

Reduce resistance to change 9.1% of the respondents were undecided with the statement while 46.8% were in agreement, 41.6% strongly agree, 2.6% disagree with the statement

To promote accountability 35.1% agreed with the statement, 46.8% strongly agreed while 11.7% were undecided while 3.9% of the respondent disagree and 2.6% strongly disagree with the statement

Pearson's product moment correlation coefficient test was used to test this relationship. Employee training index was correlated with the Implementation of total quality management index.

The results (59%) indicate a moderately strong positive and significant correlation between Employee training and Implementation of total quality management .

4.6 Type of control system on implementation of total quality management

The study wanted to find out if the types of organizational controls system used management control on implementation of total quality management in the organization. Data on the findings are presented on table 4.7

Table 4.7 Type of control on implementation of total quality management

Types Control	Frequency	Percent	Cumulative Percent
Feedforward controls	51	66.2	66.2
Concurrent controls	26	33.8	100.0
Total	77	100.0	

Source: Research study, 2013

Based on the findings majority indicated that feed forward controls is mostly used management control on implementation of TQM while minority responded that concurrent control is what is used

4.6.1 Effective Organizational Control Systems

The study aimed at establishing the characteristic of effective organizational control systems in the organization.

Table 4.8 Effective Organizational Control Systems

Characteristics	SA	A	U	D	SD	Variance	Std Dev
	F (%)	F (%)	F (%)	F (%)	F (%)		
A focus on critical points	54 (70.1%)	23 (29.9%)	-	-	-	.212	.4607
Integration into established processes	42 (54.5%)	29 (37.7%)	6 (7.8%)	-	-	.410	.6404
Acceptance by employees	54 (70.1%)	19 (24.7%)	4 (5.2%)	-	-	.336	.5796
Availability of information when needed	45 (58.4%)	21 (27.3%)	10 (13%)	1 (1.3%)	-	.590	.7683
Economic feasibility	54 (70.1%)	19 (24.7%)	4 (5.2%)	-	-	.336	.5796

Source: Research study, 2013

Note: SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

On the statement that it focus on critical points 70.1% strongly agreed, 29.9% agreed while none disagree with the statement

Integration into established processes 37.7% agreed while 54.5% strongly agreed while 7.8% were undecided and none disagree or strongly disagree with the statement.

Acceptance by employees 70.1% strongly agree, while 24.7% agreed with the statement while 5.2% were undecided and none disagree or strongly disagree with the statement

Availability of information when needed 1.3% of the respondents were undecided with the statement, 58.4% strongly agreed, 27.3% were in agreement while 1.3% disagree with the statement

Economic feasibility 5.2% were undecided while 24.7% agreed and 70.1% strongly agreed with the statement.

Pearson's product moment correlation coefficient test was used to correlate the organization control systems index and Implementation of total quality management index. This was done in an effort to establish the correlation between the two variables and the strength and direction of that relationship at 0.05 level of significance.

The results of the correlation test indicated that control systems positively affected Implementation of total quality management.

4.7 Influence of staffing on implementation of total quality management

The researcher sought to know the extent the influence of staffing on implementation of total quality management by seeking the views of managers, supervisors and other employees in the organization to rate their participation as always, sometimes or never.

Table 4.9 influence of staffing on implementation of total quality management

Influence of staffing	Always F (%)	Sometime F (%)	Never F (%)	Variance	Std Dev
Improving quality	52 (67.5%)	19 (24.7%)	6 (7.8%)	.402	.6337
Increasing flexibility	26 (33.8%)	46 (59.7%)	5 (6.5%)	.333	.5767
Reducing costs	33 (42.9%)	34 (44.2%)	10 (13%)	.475	.6895
Commitment to TQM sharing success and failure	22 (28.6%)	41 (53.2%)	14 (18.2%)	.463	.6803
Reaching on how to improve TQM implementation	32 (41.6%)	39 (50.6%)	6 (7.8%)	.384	.6201

Source: Research study, 2013

The study indicated that staffing had an influence in improving quality where majority 67.5% of the respondents argued that they did it always while sometimes 24.7% and 7.8% reported never. They increase flexibility always 33.8% while 59.7% indicated sometimes while 6.5% indicated on never. Reducing costs was recognized 42.9% indicated always while sometimes indicated 44.2% while 13% responded on never. The findings also established that the top level management showed commitment to TQM sharing success and failure always 28.6%, sometimes 53.2% and never 18.2%. Finally the top level management were rated as always 41.6%, sometimes 50.6% and 7.8% indicated on never in reaching on how to improve total quality management implementation.

Pearson's product moment correlation coefficient test was used to test this relationship. influence of staffing index was correlated with the implementation of total quality management index.

The results (59%) indicate a moderately strong positive and significant correlation between influence of staffing and Implementation of total quality management in the organization

4.8 Obstacles to successful implementation of total quality management

The study wanted to find out the obstacles that hinders successful implementation of total quality management in the organization. Data on the findings are presented on table 10

Table 4.10 Obstacles to successful implementation of total quality management.

Obstacles	SA	A	N	D	SD	Variance	Std Dev
	F (%)	F (%)	F (%)	F (%)	F (%)		
Inability to change organizational culture	53 (68.8%)	17 (22.1%)	3 (3.9%)	4 (5.2%0	-	.646	.8037
Poor planning	28 (36.4%)	38 (49.4%)	5 (6.5%)	6 (7.8%)	-	.729	.8540
Limited staff training and education	31 (40.3%)	31 (40.3%)	4 (5.2%)	11 (14.3%)	-	1.035	1.0175
Inadequate attention to internal and external customers	25 (32.5%)	32 (41.6%)	11 (14.3%)	9 (11.7%)	-	.945	.9719
Inadequate use of empowerment and team work	30 (39%)	34 (44.2%)	7 (9.1%)	2 (2.6%)	4 (5.2%)	1.057	1.0283
Incompatible organizational structure and isolated individuals	33 (42.9%)	25 (32.5%)	15 (19.5%)	2 (2.6%)	2 (2.6%)	.963	.9812

Source: Research study, 2013

On the statement that inability to change organizational culture 68.8% strongly agreed, 22.1% agreed while 3.9% were undecided and 5.2% disagree with the statement

Poor planning 14.3% disagree, 49.4% agreed while 36.4% strongly agreed while 6.5% were undecided with the statement.

Limited staff training and education 40.3% strongly agree and agreed, while 14.3% disagreed with the statement while 5.2% were undecided with the statement

Inadequate attention to internal and external customers 14.3% of the respondents were undecided with the statement, 32.5% strongly agreed, 41.6% were in agreement while 11.7% disagree with the statement

It's incompatible organizational structure and isolated individuals 19.5% were undecided while 32.5% agreed, 42.9% strongly agreed, while 2.6% disagreed and strongly disagree with the statement.

4.9 Discussions of the findings

4.19.1 Influence of planning on implementation of TQM

Based on the findings on Influence of planning on implementation of total quality management, it's evident that the understanding must be translated into commitment, policies, plans and actions for TQM to germinate. Making this happen requires not only commitment, but a competence in leadership and in making changes. Without a strategy to implement TQM through process management, capability and control, the expanded effort will lead to frustration. Individual effort is required in improvement but it must be co-ordinate and become involved with the efforts of others to be truly effective.

4.9.2 To investigate the role of control systems on implementation of TQM

Based on the findings on the role of control systems on implementation of TQM. It's evident that the control can focus on events before, during, or after a process. Monitoring how organization act with customers is a control during the sales task. The relationship

between the degree to which total quality management practices are adopted within organizations and the corresponding competitive advantages achieved are explored. Relatively strong support for this relationship is found. In addition, data showed some support for the moderating influence of organizational structure of TQM implementation effectiveness. Specifically, to measures of organizational structure, labeled "control" and "exploration", its found to offer independence and interdependent influences on the financial performance of firms implementing TQM programs

4.9.3 The influence of employee training on TQM

Based on the findings on the influence of employee training on TQM, its evident that TQM requires involvement of everyone in the organization, from top to bottom, everywhere. People are the source of ideas and innovation and their expertise, experience, knowledge and co-operation has to be harnessed to get those ideas implemented. To harness this latent potential it is necessary to convince everyone of their role in total quality. The efforts need to be directed to create a companywide awareness and participative work environment. The objective of creating companywide awareness and participative and work environment is to ensure that employees; contribute to a better serve customers, make work processes safer; contribute to organizational openness and trust, contribute to team building and self-management, and perceive and implement successful global strategies.

4.9.4 Influence of staffing on implementation of TQM

Based on the findings on the influence of staffing on implementation of TQM, its evident that it is necessary to consider employees behaviour, attitudes and values for any TQM

program to be successful. There is a major drive towards increased staff training. Organization should doubled the size of their training program and this will increase again as TQM is implemented at various stages throughout the organization. Also, the nature and extent of changes in the environment have had a significant impact on business organizations, consequently, companies have considered and prioritized their requirements. Total quality management (TQM) and human resource management (HRM) have been an important theme in management and business research for the past few decades due to its potential to affect a range of organizationally and individually desired outcomes. Human resource management and total quality management are becoming more interlinked. A number of commentators suggesting that only the integration of HRM and TQM managed organization will be able to survive in the future. The HR professionals played a central role in creating and communicating the TQM vision of the company

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the major findings of the study sequentially in relation to the study objectives. From the summary, appropriate conclusions were drawn and recommendations given on to assess the role management in Total Quality Management implementation at Rai plywood (K) Limited, Eldoret, Uasin Gishu County

5.2 Summary of the study findings

The study sought to find out the extent to which organization challenges imperatively determined the role of top management. In order to attain this feat, the study formulated four objectives to be pursued. Each objective addressed specific challenge and how they affected total quality management implementation.

5.2.1 Influence of planning on implementation of total quality management

The study indicated that the Influence of planning on implementation of total quality management, it's evident that the understanding must be translated into commitment, policies, plans and actions for TQM to germinate. Making this happen requires not only commitment, but a competence in leadership and in making changes. Without a strategy to implement TQM through process management, capability and control, the expanded effort will lead to frustration. Individual effort is required in improvement but it must be co-ordinate and become involved with the efforts of others to be truly effective.

5.2.2 To investigate the role of control systems on implementation of total quality management

Based on the findings on the role of control systems on implementation of TQM, It's evident that the control can focus on events before, during, or after a process. Monitoring how organization act with customers is a control during the sales task. The relationship between the degree to which total quality management practices are adopted within organizations and the corresponding competitive advantages achieved are explored. Relatively strong support for this relationship is found. In addition, data showed some support for the moderating influence of organizational structure of TQM implementation effectiveness. Specifically, to measures of organizational structure, labeled "control" and "exploration.

5.2.3 The influnce of employee training on total quality management

Based on the findings on the influence of employee training on TQM, its evident that TQM requires involvement of everyone in the organization, from top to bottom, everywhere. People are the source of ideas and innovation and their expertise, experience, knowledge and co-operation has to be harnessed to get those ideas implemented. To harness this latent potential it is necessary to convince everyone of their role in total quality. The efforts need to be directed to create a companywide awareness and participative work environment.

5.2.4 Influence of staffing on implementation of total quality management

Based on the findings on the influence of staffing on implementation of total quality management, its evident that it is necessary to consider employees behaviour, attitudes

and values for any TQM program to be successful. There is a major drive towards increased staff training. Organization should doubled the size of their training program and this will increase again as TQM is implemented at various stages throughout the organization. Human resource management and total quality management are becoming more interlinked. A number of commentators suggesting that only the integration of HRM and TQM managed organization will be able to survive in the future. The HR professionals played a central role in creating and communicating the TQM vision of the company

5.4 Conclusion

Based on the study findings, the conclusion on the role of management in the implementation of TQM in an organization is given here below:

The study found that the control system should consider for successful implementation of TQM such as control can focus on events before, during, or after a process. Monitoring how organization act with customers is a control during the sales task. The relationship between the degree to which total quality management practices are adopted within organizations and the corresponding competitive advantages achieved are explored such as establish an organization for quality, identify the customer needs and perception of needs, educate and train for quality improvement, concentrate on prevention rather than detection philosophy, and review of quality management systems to maintain progress.

In conclusion, soft TQM practices have a positive impact on job involvement, career satisfaction and organizational commitment (Boon et al., 2005), that is, on the personnel function. A TQM orientation requires

The study established that the staffing has an influence in TQM implementation the

The study also establish that there are no designed steps to be undertaken when planning the implementation of TQM but emphasis where put on drawing up of a quality policy statement and the establishment of appropriate organizational structures, continual education training and communication, and review of current organizational performance. The study concluded that organizations should follow all the steps systematically when planning the implementation of TQM.

The study further identified the importance of employee training on TQM as; awareness rising on TQM concepts, personal development opportunities, clear understanding of TQM principles and practices, reduce resistance to change, and to promote accountability.

The findings finally identified obstacles to successful implementation of TQM as inability to change organizational culture, lack of continuous training and education, incompatible organizational structure and isolated individuals, and lack of management commitment. These obstacles did not affect the organization much. However, improper planning, paying inadequate attention to internal and external customers, and inadequate use of empowerment and teamwork were the major obstacles which affected the organization much and very much respectively.

5.5 Recommendations

In line with the findings and conclusions arrived at, the study recommends that:

On the influence of planning on implementation of TQM the study recommended that management must establish and maintain good procedures for internal communication among various levels and functions within the company. Therefore, a dialogue with employees and consideration of their relevant concerns need to be improved in company.

On the role of control on implementation of TQM the management should considered for successful TQM implementation, the study recommended that for a successful quality systems implementation, the company's top management must determine the level of experience and competence, and needs of education and training for employees. Appropriate education and training needs to be further emphasized in the company to make the employees at each relevant function and level to be aware of the importance of conformance with the quality policy and procedures and with the requirements of quality systems. Education and training on quality systems are quite time-consuming it is therefore advisable to start training as early as possible.

On the influence of employee training on TQM, the study recommended that organization management should have employee Training and education. The entire workforce of the organization should be trained so that it is able to support the success of the implemented TQM. If possible the terms recommendations should be followed. Individuals should be empowered to make decisions that affect the efficiency of their process

On the influence of staffing on implementation of TQM the study recommends that all systems and subsystems across the organization, must be consistent and fit together in order to meet individual and organizational objectives. Quality management can result in a change in the way in which HRM functions operate and possibly in a redefinition of the role of the function". In particular, as they pointed out, "quality can, undoubtedly, lead to a reassessment of the performance criteria for human resource managers. They cover the most important areas of HRM: job design, teamwork, staffing, training, career management, performance appraisal and compensation

5.6 Contribution of objectives to the study

To establish the influence of planning on implementation of TQM: The objective will translate into understanding must be translated into commitment, policies, plans and actions for TQM to germinate. Making this happen requires not only commitment, but a competence in leadership and in making changes. Without a strategy to implement TQM through process management, capability and control, the expanded effort will lead to frustration

To investigate the role of control on implementation of TQM: It's a fact that for an organization to realize the value of a TQM implementation, it must have an internal organizational structure that is capable of fully supporting the implementation. The preferred structure for organizations that implement TQM balances the need for control of activities with the flexibility needed to respond and adapt quickly to the changing marketplace. It is thus important to assess organizational structure when evaluating an organization's TQM implementation. The purpose of this study was to examine the degree to which a comprehensive set of TQM practices was implemented in a set of

organizations, the effect of organizational structure on implementation effectiveness, and the corresponding competitive advantages gained through TQM.

To establish the influence of employee training on TQM: the study shows that employees require some training in order to manage the enlargement of their work role following the delegation of responsibilities for quality, they also require some training in non-technical skills to be able to participate in quality improvement activities and they need a broader range of skills in order to flexibly respond to changing customer and market requirements

To establish the influence of staffing on implementation of TQM: the study shows how HRM is important for TQM success in any sphere of activity. Despite differences in nomenclature (workforce management, employee relations, employee satisfaction, etc.) and the different practices considered (training, teamwork, empowerment, etc.) there is a consensus in the literature that highlights the important role of human resource management in implementing a TQM system in an organization

5.7 Suggestion for further studies.

Based on the study undertaken, the following recommendations are made for further study. Since the study targeted Rai Plywood (K) Limited in Eldoret, similar studies should be carried out in other organizations to highlight the roles of each category of employees in the implementation of TQM.

There is need to investigate the factors and forces that shape the successful implementation of TQM process, specifically in public organizations.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE FOR EMPLOYEES AND MANAGEMENT

I am a student at University of Nairobi undertaking a Master of Arts in Project Planning and Management. I am carrying out a research on: **THE ROLE OF MANAGEMENT IN IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN AN ORGANIZATION** A Case Study of Rai Plywood (K) Limited, Eldoret. I will be grateful if you provide the information sought by the questionnaire provided. The response you give will be treated with utmost confidentiality and will be only for the purpose of this study

INSTRUCTIONS

a. Please respond to all the items.

b. use a tick to respond to close ended items and write your view in open ended item.

Section A: Background information

1. What is your gender (please tick one)

     Male

     Female

2. Indicate your age bracket.

Between 20-24 years	Between 25-29 years	Between 30-34 years	Between 35-39 years	Between 40-44 years	Between 45-49 years	Between 50-54 years	55 years and above

3. In what category do you belong?

Employee ☐

Manager ☐

4. Indicate the number of years you have worked at this organization?

Less than 1 year ☐

Between 2-4 years ☐

Between 5-7 years ☐

Between 8-10 years ☐

Above 10 years ☐

5. Indicate your education level?

Certificate ☐

Diploma ☐

Degree ☐

Masters ☐

SECTION B: SPECIFIC OBJECTIVES

A. INFLUENCE OF PLANNING

a) Do you understand total quality management?

Yes   ☐

No   ☐

b) What is the influence of planning on implementation of TQM at Rai Plywood Limited wood (K) Limited?

Influencing	Agree	undecided	Disagree
Understanding and commitment			
Drawing up of a quality policy statement establishment of the appropriate organizational structure			
Collecting information on how the organization operates			
Continued training education and communication			
Understanding quality and how it should be managed			
Review of current performance.			

B. EMPLOYEE TRAINING

a). What is the Influence of employee training on Total Quality Management?

Importance	Strongly agree	Agree	undecided	Disagree	Strongly disagree
Awareness rising on TQM concepts					
Personal development opportunities					
Clear understanding of TQM principles and practices					
Reduce resistance to change					
To promote accountability					

C. ROLE OF CONTROL

a) What is the types of organizational controls used?

Feed forward controls, [＿＿＿＿＿]

Concurrent controls [＿＿＿＿＿]

Feedback controls [＿＿＿＿＿]

b) What is the characteristic of Effective Organizational Control Systems on implementation of TQM at Rai Plywood Limited wood (K) Limited?

Characteristic	Strongly agree	Agree	undecided	Disagree	Strongly disagree
A focus on critical points					
Integration into established processes					
Acceptance by employees					
Availability of information when needed					
Economic feasibility					

D. STAFFING

a) What is the influence of staffing on implementation of TQM at Rai Plywood Limited wood (K) Limited?

	Always	Sometimes	Never
Improving quality			
Increasing flexibility			
Reducing costs			
Commitment to TQM sharing success and failure			
Reaching on how to improve TQM implementation			

b) What Obstacles hinders successful implementation of Total Quality Management?

Challenges	Strongly agree	Agree	undecided	Disagree	Strongly disagree
Inability to change organizational culture					
Poor planning					
Limited staff training and education					
Inadequate attention to internal and external customers					
Inadequate use of empowerment and team work					
Incompatible organizational structure and isolated individuals					