



**St. MARY UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**THE NEXUSES BETWEEN QUALITY MANAGEMENT
PRACTICE AND OPERATIONAL PERFORMANCE OF
ETHIOPIAN LEATHER INDUSTRY:**

A CASE OF THREE SELECTED LEATHER FACTORY

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ADDIS ABABA, ETHIOPI

**St. Mary's University
School of Graduate Studies**

**The Nexuses between Quality Management Practices
and Operational Performance of Ethiopian Leather**

Industry:

A Case of selected Leather Factory

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**St. MARY'S UNIVERSITY SCHOOL OF GRADUATE
STUDIES -MBA PROGRAM**

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Practices and Operational performance of
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ACRONYMS/ABBREVIATIONS

AA-Addis Ababa

ELI – Ethiopian Leather Industry

LIDI-Leather Industry Development Institute

QM-Quality Management

QMP- Quality Management Practices

OP-Operational Performance

TQM-Total Quality Management

CSF-Critical Success Factor

SD-Standard Deviation

MoI-Ministry of Industry

CSA-Central Statistical Agency

GTP-Growth Transformation Plan

GDP-Gross Domestic Product

SPSS- Statistical Package for Social Science- Soft ware

RBV- Resource-Based View

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DEDICATION

This Thesis Work is Dedicated to My Beloved Mother “Shewaye Geda”

Even if you passed away on the completion of this research study, your spirit is always in my heart. I'll never ever forget your scarification in my life up to now, particularly in ups and down journey of my education.

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ABSTRACT

The purpose of this study is to assess the nexus between QMP and operational performance of Ethiopian leather industry. Quality management practices (QMPs) have been proposed to improve operational performance (OP) and received substantial attention in recent researches. Although continuous attention given to QM in industrialized countries however, it is only since the last decades that researcher have started to analyze quality management practices in developing countries. While study have suggested that QM practice helps to improve OP, the researcher analyzed as there is gap/lack of empirical data in Ethiopian firms'. This study empirically examine the extent to which the nine identified QMPs and OP are correlated and how QMPs impacts on OP in Ethiopian leather industry; and it, therefore, bridge a gap in the literature. The explanatory research design was undertaken with the help of the semi-structured questionnaire to conduct the research. The research had done based on the responses of management staffs working in the selected case leather factory. The data was planned to collect from 65 of the population by using self-administered questionnaire tested proposed model. The final response rate was 43; based on this the analysis was carried out. The statistical findings revealed that there is significant correlation between QMPs and OP i.e. (4.35, 40, 0.68 and 93%), the average mean, frequency, SD, and percent respectively. Moreover, Pearson correlation result revealed that ($p=.379$ and $r= .027$), the main hypothesis "there is positive and significant relationship between overall Quality management variables and firms operational performance" is supported at the significance level of $r<0.05$. Therefore, the results of this study supported a model proposed. As this research provided valuable knowledge in QMP regarding the management perception towards firms' operational performance; the synergy among the QM factors brings about exceptional improvements in the firm OP. Therefore, firms Management must focus on the identified QM constructs to achieve higher levels of customer satisfaction in the industry and improve the perception on critical success factors that have high effect on OP and allocate sufficient resources to practice QMP successfully to have industry competitive advantage. Finally, this study offers the base to conduct similar research in related area.

Keywords: *Quality management (QM), QM indicators, operational performance, leather industry Ethiopia*

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

In such a competitive environment resulted from world globalization and liberalization, firms survive with much difficulty unless they create the competitive advantage over their competitors (Adam et al., 2001; Samson & Terziovski, 1999; Terziovski & Samson, 1999). In response to increase global pressures – customers' demanding superior quality of products and services, the global marketplace has become very competitive, many organizations have adopted practices such as Total quality management (TQM), and benchmarking. Many scholars claim that managers can implement TQM in any organization in any sectors of the economy such as manufacturing, service, education, and government (Dean & Bowen, 1994), and that it generates improved products and services, more satisfied customers and employees, reduced costs, improved financial performance, enhanced competitive, and increased productivity (Zu, 2009; Kaynak, 2003; Deming, 1986). Quality refers to the degree to which a product or service meets customers' specifications and needs. Given that quality is a strategic competitive tool hence it is so crucial and organizations' must acknowledge the strategic implications that quality will have on its competitive position. (Yong and Wilkinson, 2002; Hansen, 2001).

Organizations that adopt a quality management strategy focus on achieving and sustaining a high quality outputs using management practices as the inputs and quality performance as the outputs (Flynn, Schroeder, & Sakakibara, 1994). The pioneers in TQM, such as Deming, Juran, Cosby and Feigenbaum, highlighted the importance of the quality philosophy as an essential competitive weapon for the transformation of an organization.

QM is considered essential for an organization's success, as well as for its relationships and partnerships with its customers and suppliers. Quality management actually indicates the quality of a company's management, and quality assurance (QA) practices initiate and develop confidence among an organization's customers and its other stakeholders. The main instigator of TQM implementation is senior management, which creates the values, goals, and systems needed to meet customers' expectations and improve the performance of the organization (Ahire et al., 1996). Focusing on customers helps a business remain cognizant of which changes are occurring in its environment and

the knowledge that the business needs in order to develop the product or service. Similarly, benchmarking enables organizations to continuously compare and measure themselves against leading businesses around the world in order to obtain information and provide guidelines for rational performance goals (Boone & Wilkins, 1995). Moreover, top management commitment and participation in TQM practices are the most important factors for the success of TQM practices. Thus, managers should demonstrate more leadership than traditional management behaviors to increase employees' awareness of quality activities in TQM adoption and practices (Sadikoglu E. et al. (2014). A general consensus has emerged recently that a company's most valuable resource is its people. Accordingly, employees should receive adequate training regarding their company's policies and methods. The concept of quality commonly includes QM principles, teamwork-related skills, and problem solving (quality-related training). Setting a goal of reaching zero defects, and renewing the commitment to such a goal, will help the company approach perfection and meet their profitability (Richman & Zachary, 1993), which will effect in a positive way on the organization performance. Due to fierce competition among industry, customer taste and preference highly volatile in the ongoing current market dynamism, organizations are now focusing on satisfying customers' needs. The strategy that many organizations have adopted to achieve customer satisfaction involves emphasizing quality products and services; this approach is unsurprising given that an organization hoping to achieve, enhance, and sustain competitiveness must provide superior quality products and services to its consumers (Lai et al., 2002).

The present study aimed to investigate the relationship between QM practices and operational performance, to examine how each QM indicator influences OP measure of productivity and profitability the industry. It also aims to produce empirical evidence regarding the relationships between QM, operational performance, which earlier researchers may have known about but some described only implicitly/ indirectly. While some studies have suggested that QM helps to improve performance; few have used statistical evidence to back up such claims. The present study would attempt to estimate the impact of QM practices can have; it therefore fills a gap in the literature regarding quality management practices in the Ethiopian leather industries.

1.2. Theoretical Background

The wide QM/TQM literature has not yet reached a consensus regarding the definition of quality. TQM ‘gurus’ such as Garvin, Crosby, Ishikawa, and Deming have each provided different definitions of quality and TQM. Garvin et al. (1987) defined quality in terms of transcendent, user-based, product-based, and manufacturing- and value-based approaches. In defining quality as “fitness for use”, Juran’s focus was on the planning, control, and improvement of quality (Mitra, 1987). In a similar vein Crosby’s (1996) definition of quality was “conformance to requirements for specifications” based on customer needs. Crosby identified a 14-step zero-defect quality improvement plan in order to improve performance. Deming argued that quality involves a predictable degree of dependability and uniformity that has a low cost and is suited to the market. Quality is now among the most important drivers of global competition. Thanks to increased global competition and consumer demand for quality, increasing number companies have to acknowledge the strategic importance of quality management that helps to provide high-quality products and/or services if they are to be successful. According to the literature on this subject, QM provides the basis for the most competitive advantage. This subject has attracted increasing attention in recent years, even in developing countries such as Ethiopia.

TQM is based on continuously improving the performance of an organization’s processes and the quality of outputs of those processes; that is, the products and services. TQM is a team activity that requires a particular culture, discipline, and knowledge of quality. QM can help increase a company’s competitiveness and organizational effectiveness, as well as improving its organizational performance and product quality (Ahire et al., 1996; Opara, 1996; Bayazit & Karpak, 2007; Ortiz et al., 2006). According to Deming (1986), quality improvements reduce costs, rework, errors, and delays, thereby helping create corresponding productivity improvements. In contrast, Agus and Hassan (2000), Bayazit and Karpak (2007), Kaynak (2003), and Ortiz et al. (2006) found that the impact of *training and commitment from senior management* is very important in the implementation of TQM in publicly listed manufacturing companies. Research with appropriate analytical methodologies and measuring tools can significantly contribute to investigating work on QM constructs which analyzed reasons of the relationship between QM practices, and firm’s performance. The intention of this study was to analyze the nexuses between QM, and organizational operational performance of leather

industry, i.e. to analyse how the identified QM indicator influences firm's performance. As mentioned above, many scholars identified relationships among QM practices and examined its impact on organizational performance, but the finding inconsistencies and conflicting results among scholars. These findings suggest that a positive relationship exists between the QM practices or TQM and firm operational performance (i.e. productivity and profitability). In general, a large body of literature highlights the positive impact of QM practices on firm's operational performance (Jaafreh A., et al. 2013:2).

Therefore, quality management (QM) plays an important role in the operational performance of an organization. Therefore, it appears that quality practices are important for boosting operational performance of Ethiopian leather industry and also helps to have competitive advantage in the global market. Overall, that study's findings indicate that QMP has a significant positive impact on customer satisfaction and competitive advantage, which helps improve the companies' operational performance.

1.3 Organizational Profile

Ethiopia is known as the most population in livestock production in the globe and ranks first in Africa. According to the statistical data from CSA, the livestock (cattle, sheep, and goat) number of accounts 103, 55 million livestock population. However, its productivity and contribution for GDP is shows the rivers. Annual production of hides and skin during the aforementioned budget year shows 104,760 tones. Ethiopian leather industry is organized under Leather Industry Development Institute (LIDI), that has been established by the council of Ministers according to Regulation No.181/2010, is expected to provide technical support or facilitate the development and transfer of leather and leather products industries technologies and to enable the industries become competitive and beget rapid development. The industry categorized under three sub sectors. These are twenty nine footwear factory, twenty one tannery and ten goods and garment factories which are operating all over the country.

As the data obtained from MOI, displays Ethiopian leather industry represents about 13 percent of GDP and the export performance of GTP(2010-2015) targets of the sub-sector it has been planned to achieve an export earnings of 418.43 million USD during the just ended Ethiopian budget year /2006 E.C/. However, during the aforementioned budget year 132.95 million USD (only 31.77%) was

achieved from the export of finished leather and other leather products. Among the three sub-sectors of leather industry, in the last four years the leather footwear sub-sector has appeared to be responsible for the majority (63.5%) of the exports (by value) required reaching the overall targets for the sub-sector. In addition, the leather footwear sub-product grew its quantity of exports as well its value of exports over 63% and (54%), respectively year-on-year, during the last four years of GTP period. As far as the share of footwear export is concerned, in 2006 E.C, it was envisaged to reach 61.20% from the total leather and leather products export. However, the performance has appeared to be slower than it was planned by GTP.

Vision

Enable the Ethiopian leather industry competitive in the world market.

Mission

Make Ethiopian more beneficiaries from leather sector by providing transparent, efficient and sustainable services in investment, production and marketing.

1.4. Statement of the Problem

In recent decades, the level of awareness towards QM has increased drastically and has gone to its peak to become a well-established field of research (Arumugam et al., 2008; Yusof and Aspinwall, 1999) due to intense global competition, increasing consumer consciousness of quality, rapid technology transfer, and towards achieving world-class status. In response to these challenges and to facilitate the organizations in achieving higher quality levels, many companies are implementing TQM approach and quality initiatives for achieving sustainable competitive advantage and enhanced company performance. Past studies on the relationships between QM/TQM practices and quality performance have showed significant and positive results (Arumugam et al., 2008; Faisal Talib, et al. 2010; Abdulrahman Alsughayir, 2013; Pignanelli, A. and Csillag, J. M 2012; Ahire et al., 1996; Flynn et al., 1994; 1995). Quality management (QM) has been proposed to improve business performance i.e. productivity and profitability and received considerable attention in recent researches.

An organization's success is determined as much by the skill and capability of its management as by almost any other factor. *Recently*, the global environment is changing faster; competition between

organizations is increasing especially for manufacturing organizations. With the increasing competitive, business survival pressure and the dynamic, changing customer-oriented environment, quality management (QM) has been recognized as one of the important issues and generated a substantial amount of interest among managers and researchers. QM has been regarded as one of effective ways for firms to improve their competitive advantage. Masood ul Hassan, et al. (2012:2), asserts that, although continuous attention given to QM in industrialized countries including USA, Japan, UK and other European countries, however, it is only since the last decades that researchers have started to scrutinize/analysis quality management practices in developing countries. This is mainly due to the fact that developing countries are breaking the conventional trade barriers, opening their markets to international opponents and starting to see dramatic improvements in quality and now the demand for quality can no longer be the privilege of the developed world. (Hassan, et al. 2012, Satish, et al. 2010, Al-Swidi, et al. 2012). Though, there is considerable literature available that have evolved to examine the link between QM and operational performance across the globe, but still little is known about the effect of QM practices on company's operational performance from Ethiopia, and there is a gap in literature availability particularly within the context of leather industry.

Just as the present proves, it is clear that the changes that took place in the global economy over the past few years have not passed without consequences in our country especially in manufacturing organizations (MOI GTP, Ethiopian development policy 2011). According to the data obtained from MOI, Ethiopian leather industry represents about 13 percent of GDP and the export performance of GTP(2010-2015) targets of the sub-sector it has been planned to achieve an export earnings of 418.43 million USD during the just ended Ethiopian budget year /2006 E.C/. However, during the aforementioned budget year 132.95 million USD (only 31.77%) was achieved from the export of finished leather and other leather products. It's also highlighted that the reason for low export performance were due to lack of the required Management capability, low-quality of the raw materials ,low capability of Product development, R&D, Fashion and Design (Lack of the required Technology in every aspects), as well as infrastructural problems, transport, logistics, power, foreign currency, and custom clearance constraints. This implies that there is a gap in quality management practice to boost the industry operational performance in relation to the national potential capacity.

While some studies have suggested that QM practice helps to improve performance (Faisal Talib, et al. 2010); few have used statistical evidence to back up such claims (Kannan et al. 2005, and Sadikoglu et al. 2014). Particularly there is lack of research articles focusing on QM practice and its consequence on firms manufacturing operational productivity and profitability performance in less developed African nations like Ethiopia that provide solution to improve the quality of product used as a source of competitive advantage. The present study was attempted to produce empirical evidence on the subject matter by analyzing the impact of QM practice can have on leather industry operational performance; and it therefore bridge a gap in the literature regarding quality management practice and its attitude towards operational performance in the Ethiopian leather industry. Furthermore, this research would clearly contribute to the discipline of quality management of the firm the case conducted.

1.5. Research model and questions

1.5.1. Research model

Based on the literature review, a conceptual framework is developed and a research model has been proposed to examine the extent to which the nine QM practices that are practiced and implemented in the leather manufacturing companies and to explore the relationships between identified QM practices and industry's operational performance by measuring the 'productivity and profitably' as performance indicator. Based on the literature review, a research framework was developed (see Fig. 1) and demonstrates the relationship between QM practices and industry operational performance through exploring the combined direct effects of nine QM practices on operational performance i.e., industry productivity and profitability. In this theoretical research framework, the independent variables are the nine identified QM practices and a dependent variable is the firm's operational performance i.e. productivity and profitability.

1.5.2. Research Questions

The main purpose of the study was to investigate the nexus between QM practice and operational performance in Ethiopian Leather Industry. The study guided by and contributes to the attempt of answering the following key two research questions:

1. What are the overall relationship among the identified quality management (QM) practices with firms' operational performance i.e. productivity and profitability?

2. Do the identified QM practices have significant positive relationship with firms' operational performance?
3. What is the perception of industry management body towards the impact of identified quality management dimensions on operational performance?

1.6. Research Hypotheses and frame work

An integrated evaluation of the body of knowledge produced by the empirical researches shows relationships between quality management practice and operational performance in many papers, while on the other hand some relevant researches cannot show these relationships. According to Pignanelli et al. (2008:4), most of the previous studies report that overall identified QM practices have significantly positive been related to productivity and firm profitability. Similarly, the study of Jaafreh A. Bakhit, et al., (2013), showed that there was a significant relationship between quality management practice (QMP) and operational performance (OP). The replication of studies in other setting can contribute and enrich this body of knowledge. Such researches with Ethiopian Business firm data are even more necessary, because the lack of empirical studies of this kind in the country. The objective of this study is to examine the relationship between QM practices elements and organizational performance. Based on the above literature review, a research framework was developed. Figure 1 Research framework illustrated this relationship. In this framework, QM practice elements are independent variables, and organizational performance is a dependent variable correspondingly, and these relationships deal with main hypotheses below.

Thus, a comprehensive review of literature suggests the extent of implementation of nine QM practices in the business industries. Though, there exist a number of QM practices, but the identified nine practices are frequently used and projected in leather industries for better quality oriented results. Accordingly, the researcher offers some hypotheses regarding the directional relationship between QM practice and operational performance, as it's a statement of the research question in a measurable form.

Based on the literature reviewed, research objective and statement of the research question in measurable form the researcher proposes the following hypothesis:

H 1: There is a significant positive relationship between overall identified QM practices with industry operational performance (i.e. productivity and profitability).

H 1a: There is a significant positive relationship between overall identified QM practices with industry operational performance (i.e. productivity).

H 1b: There is a significant positive relationship between overall identified QM practices with industry operational performance (i.e. profitability).

H 1.1: Customer focus for QM practices has a significant positive relationship with operational performance.

H 1.2: Training and education for QM practices has a significant positive relationship with operational performance.

H 1.3: Supplier chain management for QM practices has a significant positive relationship with operational performance.

H 1.4: Employee involvement/relation for QM practices has a significant positive relationship with operational performance.

H 1.5: Benchmarking for QM practices has a significant positive relationship with operational performance.

H 1.6: Strategic quality planning for QM practices has a significant positive relationship with operational performance.

H 1.7: Teamwork in for QM practices has a significant positive relationship with operational performance.

H 1.8: Product design for QM practices has a significant positive relationship with operational performance.

H 1.9: Top-management commitment for QM practices has a significant positive relationship with operational performance.

To understand the relationship of each QM practice with operational performance of on leather industry, the hypotheses were discussed and tested on the literature review and analysis section. The hypothesis model's was also depicted in figure to simply more and see annex-f.

1.7. Objectives of the Study

The general objective of the study was to investigate the nexus between quality management practices and industry' operational performance of Ethiopian leather industry. Based on this general objective, the following were specific objectives of the study.

- To investigate the relationship between QM practice with industry operational performance (i.e. profitability and productivity).
- To provides a brief review on the conceptual development of quality management and an in-depth review on empirical studies conducted on the relationship between quality management indicators with industry operational performance.
- To examine the extent and explore the relationships between identified TQM practices and industry operational performance.

1.8. Significance of the Study

The rationale of this study was to assess the nexus between quality management indicators, and operational performance of the Ethiopian leather industry. An organization's success is determined as much by the skill and motivation of its members as by almost any other factor. Recently, the global environment is changing faster; competition between organizations is increasing especially for manufacturing industry. With the increasing competitive, business survival pressure and the dynamic, changing customer-oriented environment, quality management (QM) practices has been recognized as one of the important issues and generated a substantial amount of interest among managers and researchers. QM has been regarded as one of effective ways for firms to improve their competitive advantage.

The relationship identified by the research was summarized as recommended guidelines helps for practitioners conducting events under different scenarios. As this research's main purpose is of academics or educational, the major significance relies on equipping the researcher with the necessary skills and techniques to undertake research. Thus, it helps to develop the *curiosity* of researcher on the subject matter for professional career development. On the other hand, the findings of this research will help the firm understudy to better diagnose the impact of QM practice on productivity and profitability. Finally, this study will serve as the ground for those who want to conduct further studies in the related area. As such, it is expected to benefit both researchers and practitioners.

1.9. Delimitation/ Scope of the Study

This study delimited to the assessment of the relationships between nine identified quality management practice with industry operational performance, i.e., profitability, and productivity. The target population was taken from three systematically selected Ethiopian Leather factories. According to the data obtained from MOI and LIDI, Ethiopian Leather Industry has categorized by three sub-factories under Leather Industry Development Institute (LIDI) that has been established by the council of Ministers according to Regulation No.181/2010. These are twenty nine footwear factory, twenty one tannery and ten goods and garment factories which are operating all over the country. Due to its number of projects and geographical dispersion, the data collection for the research was delimited to the three footwear factory found at Addis Ababa: Peacock, Anbesa, and Tikur Abay shoe factory. Since the main focus of the research was on the quality management practice with industry operational performance of leather industry, it is assumed that the QM practice mainly understood and practiced by the management staffs of the factory. The student researcher has taken the total respondents from the target population of the study, and about 44.4% from Dire leather industry (peacock shoe factory), 28.8% Anbesa shoe factory, and the rest 26.7% from Tikur Abay shoe factory. The target respondents comprise only managerial and some senior quality professional staffs of the factory who are working on a permanent basis. It was also decided for the simplicity and reliability of data that was collected.

The result of this study was mainly based on the opinion and ideas of the respondents who were selected judgmental randomly. Though, the impact of quality management practice on firms' operational performance is contesting issues which deserve [time series](#) data collection, the data collection for this study delimited to the opinion of respondents which is collected once. The study had delimited to [explanatory](#) method by using a [systematic](#) random sampling.

Most of the studies conducted on current literatures of QM practices and operational performance shows that its scope is characterized by a view that QM indicators are too amorphous. Its amorphous nature made very difficult to clearly determine the scope and boundaries. Therefore, due to all the possible constraints explained above, though, QM indicators covers the nine identified as top-management commitment, customer focus, training and education, supplier chain management,

employee relation, benchmarking, strategic quality planning, teamwork, and product design, and on the other hand, operational performance covers only productivity and profitability of the firm, the researcher has delimited the scope of the study to the impact of nine identified QM practices on operational performance i.e. productivity and profitability of the leather industry.

1.10. Conceptual Definitions

Quality refers to the degree to which a product or service meets customers' specifications and needs.

(Alsughayir, 2003:7). Also defined as the key aspect of quality is essentially the extent to which the company is able to meet stakeholder expectations on certain dimensions that have value for them (Saner & Eijkman, 2005)

QM (quality management) can help increase a company's competitiveness and organizational effectiveness, as well as improving its organizational performance and product quality.

QM Practice: The International Standard for Quality management (ISO 9001:2008) adopts a number of management principles that can be used by top management to guide their organizations towards improved performance. (http://en.wikipedia.org/wiki/Quality_management)

Performance refers to excellence, and includes profitability and productivity among other non-cost factors, such as quality, speed, delivery and flexibility. The concept Performance is often confused with productivity. (Pekuri A., et al., 2011:28)

Profit is defined as the relationship between operational profit and net sales, the operational profit that does not include financial operations, and therefore reflects the ability of the company to generate profit with its primary activities. (A. Pignanelli, et al, (2008:7).

Profitability is the return **on assets** or sometimes by profitability as a percentage of sales (Corbett et al., 2005),

Productivity is often defined as a relationship between output produced by a system and quantities of input factors utilized by the system to produce that output. (Aki Pekuri, et al, 2011)

QMP (quality management practice) is a set of management practices applicable throughout the organization and geared to ensure the organization consistently meets or exceeds customer requirements. (Bayazit, 2003) It's formed from a set of quality-related indicators, methods and techniques adopted by the surveyed firms.

TQM (total quality management) is a continuously improving the performance of an organization's processes and the quality of outputs of those processes; that is, the products and services. (Masood ul Hassan, et al. 2012:3)

TQM can be defined as a holistic management philosophy that strives for continuous improvement in all functions of an organization, and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale. (Hale kaynak, 2003)

1.11. Organization of the Paper

The research study is organized in to five chapters. The first chapter deals with the introduction part which encompasses the background of the study, the statement of the research problem, objectives of the study, significance of the study, scope of the study and limitations of the study. The second chapter deals with the review of related literature. Chapter three focused on the research methodology, data collection and procedures, sample and sampling techniques, whereas the fourth chapter presented the result analysis and discussion of the data.

Finally, conclusions and recommendations were presented under fifth chapter. In general the present study has attempted to enrich the quality management indicators-related literature and suggests perception of which factors practicing managers should emphasize in order to stimulate the adoption of QM concepts despite limited resources.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

2.1. Introduction

This section reviews the bodies of knowledge that the researcher examined the impact of QM on profitability and productivity. In response to increase global pressures – customers’ demanding superior quality of products and services, the global marketplace has become very competitive, many organizations have adopted practices such as total quality management (TQM), and benchmarking. Many scholars claim that managers can implement TQM in any organization in any sectors of the economy such as manufacturing, service, education, and government (Dean & Bowen, 1994), and that it generates improved products and services, more satisfied customers and employees, reduced costs, improved financial performance, enhanced competitive, and increased productivity (Zu, 2009; Kaynak, 2003; Deming, 1986). Increasingly, more importance is being given to “quality” in organizations. This is mainly because organizations are realizing that quality management strategies are the most important strategy tool in competitive advantage in the business operation. (Flynn, Schroeder, & Sakakibara, 1994). This emphasis can also be partly attributed to the new emerging values of Organizations that adopt a quality management strategy focus like kaizen in Ethiopia on achieving and sustaining a high quality outputs using management practices as the inputs and quality performance as the outputs.

Moreover, with the increased emphasis on creativity, and autonomy, which people are increasingly acquiring and enjoying in the society, the expectations of people are fast changing. Given that quality is a strategic competitive tool (Yong and Wilkinson, 2002; Hansen, 2001), an organization have to appreciate the strategic implications that quality will have on its competitive position. On the other hand, A. Pignanelli, et al.(2008), discusses the interest in quality from the academic view, as a management model was consolidated in the first half of the nineties, when the research focus until then prevailing, based on an almost exclusive operation approach, was complemented by a management vision. A symbolic milestone of this period can be associated with a special edition about Total Quality, published by The Academy of Management Review in July’ 1994. In order to meet the

demand of establishing theories on quality as a management method, as well as its integration with the business administration theory, as presented by Dean Jr. et al. (1994)

Many studies of conducted on manufacturing sector have stressed the importance of producing high quality products, while also looking at ways to improve productivity and profitability. Although there is a lack of research literature on the impact quality management (QM) on operational productivity and profitability in Ethiopia, the practitioner literature describes the overall concept of and intended outcomes of QM. Now a day to cope with market dynamism, an increasing number of Ethiopian's manufacturing companies have embraced quality management (QM) tool to meet performance targets in areas such as productivity and profitability. (Ethiopian Kaizen institute, 2014).

Quality refers to the degree to which a product or service meets customers' specifications and needs. The key aspect of quality is essentially the extent to which the company is able to meet stakeholder expectations on certain dimensions that have value for them (Saner & Eijkman, 2005). Organizations are now focusing on satisfying customers' needs. The strategy that many organizations have adopted to achieve customer satisfaction involves emphasizing quality products and services; this approach is not unexpected given that an organization hoping to achieve, enhance, and sustain competitiveness must provide superior quality products and services to its consumers (Lai et al., 2002). Productivity and quality are integral components of organizations' operational strategies. Productivity plays an important role at both macro and micro levels. At micro-level, firms use productivity as a performance measure to benchmark against best-in-class companies to identify best practices. Quality management has become an important part of management culture, particularly in new enterprises characterized by supply chain, e-commerce and virtual enterprise environments. IJPQM addresses strategies, techniques and tools for productivity and quality management and improvement in manufacturing and service organizations. (www.inderscience.com/subform). This has led to the emergence of numerous quality systems and initiatives, including kaizen, just-in-time (JIT), total quality management (TQM), the Deming Prize, the Shying Prize, and the ISO standards.

In such a very dynamic, hostile and ever fierce competitive environment in business operation resulted from world globalization and liberalization firms survive with much difficulty unless they create the competitive advantage over their competitors (Adam et al., 2001; Samson & Terziovski, 1999;

Terziovski & Samson, 1999). With the increasing competitive, business survival pressure and the dynamic, changing customer-oriented environment, total quality management (TQM) has been recognized as one of the important issues and generated a substantial amount of interest among managers and researchers (Ahire et al., 1995; Benson et al., 1991; Flynn et al., 1995; Powell, 1995; Samson & Terziovski, 1999; Sousa and Voss, 2002; Terziovski & Samson, 1999). Since 1980s, TQM has been regarded as one of effective ways for firms to improve their competitive advantage (Kuei et al., 2001).

Quality can affect the competitiveness of a company, both locally and globally. Hence it can help an organization to develop a vision that enables all members of an organization to focus on quality improvement. The results of A. Alsughayir, (2013) study suggest that companies should focus on the QM aspects of their manufacturing processes and provide more management support for such quality programs as benchmarking and quality measurement. Furthermore, education and training are important aspects of an organization's preparation for change, both with regard to the change itself and its permanent institutionalization within the organization.

2.2. Empirical Evidences

Research with appropriate analytical methodologies and measuring tools can significantly contribute to investigating work on QM/TQM which analyzed reasons of the relationship between QM/TQM practices and performance produce empirical evidence. The benefits of an effective TQM implementation can be studied with two different perspectives. Firstly, from the productivity angel, the reason that TQM has become a hot topic in both industry and academia is that it can be applied to improve/enhance global competitiveness (Flynn et al., 1995; Samson and Terziovski, 1999). Firms with effective TQM implementation can accomplish the internal benefits such as improving quality, enhancing productivity enhancement, or realizing better operating income (Corbett et al., 2005; Hendricks and Singhal, 1997). Secondly, from the profitability perspective, most of the studies that consider profitability as a dependent variable in the evaluation of quality management impact on performance, presented in the Literature Review, consider it as a one-dimensional construct, operationalizing it sometimes by return on assets or sometimes by profitability as a percentage of sales. This research chose this last alternative; to be more specific, the option taken was of the

relationship between operational profit and net sales. The operational profit was chosen given to the fact that it does not include financial operations, and therefore reflects the ability of the company to generate profit with its primary activities. (A. Pignanelli, et al, (2008:7). The research framework for quality management proposed by Talib, et al. (2010), suggested that the inputs of this framework are the quality management (QM) practices while quality performance represents outcomes. Further, product design process, process flow management, and top-management support have significant correlation with quality performance. (Id, 2010)

In general, a large body of literature highlights the positive impact of QM practices on firm's operational performance. According to A. Alsughayir, (2013:6) analysis, the study's results confirm that the relationship among quality practice, productivity and profitability are both situations dependent. It helps the researcher understanding the influence that QM variables have on both productivity and profitability individually and together. Since quality can affect the competitiveness of a company, both locally and globally, the use of QM as strategic competitive advantage can help develop a vision that enables all members of an organization to focus on quality improvement by implementing quality in strategic quality planning. (Alsughayir, 2013). The effects of firm's performance (profitability and productivity) can help an organization respond with an appropriate management strategy. In other words, higher-level QM practice leads to greater productivity and, ultimately, greater profitability. According to Esin et al (2014) TQM practices, in general, improve performance of the firm. Alsughayir, (2013), research confirms QM practice has a significant impact on operational performance of both productivity and profitability.

The study contribute to resolving the controversy regarding measuring the performance gains that result from the implementation of QM (Id: 6).The result that performance is likely to be improved when QM practices are strengthened indicates that the improvement of internal practices has a positive impact on the most important measures of performance. Global competition and reduced trade barriers have made it increasingly difficult for organizations to maintain market share. On the other hand, Alexander Pignanelli et al. (2008:10), made argue that the results of studies do not lead to a clear answer regarding the impact of quality on profitability. It's justified as the main finding was due to lack of evidence of improved profitability in the case study i.e. companies that adopted quality management. This research revealed relevant and controversial findings about the relationship

between quality and profitability, and discussed possible interpretations of the results according to theoretical concepts. (Id. 2008).

Similarly, Pignanelli, A. and Csillag, J. M (2012:7) states that most of the studies that consider productivity and profitability as a dependent variable in the evaluation of quality management impact on performance, presented in the Literature Review. Many scholars study identifies relationships among QM practices and examines the effects of these practices on performance, but the finding inconsistencies and conflicting results among scholars. *These findings suggest* that a positive relationship exists between the QM practices or TQM and firm performance (i.e. productivity and profitability). Moreover, the study has found that different TQM practices significantly affect different outcome. QM constructs like quality measurement, benchmarking, supplier relations, employee focus, and training all contribute strongly to the firm's operational performance.

2.3. Over view of QM/TQM practice indicators

An extensive literature review of the previous studies on QM/TQM has examined what constitutes QMP and what are the key practices for the success of QM/TQM to select TQM/QM frameworks for this study. (Sila and Ebrahimpour, 2002; Antony et al., 2002; Sureshchandar et al., 2002; Al-Marri et al., 2007; Zhang et al., 2000). Research into quality management and TQM has identified many critical success factors that affect an organization's position. These studies have provided different sets of practices considered essential to the impact of QM practice over firms' productivity and profitability. This leads to inconsistencies in previous research which made it difficult to reach a conclusion on the practices of TQM (Ooi et al., 2008; Hoang et al., 2006).

According to Bayraktar et al. (2008) study, the following critical success factors (CSFs) of TQM were identified: leadership, vision, measurement and evaluation, process control and improvement, program design, quality system improvement, employee involvement, recognition and award, education and training, student focus, and other stake holders focus. Kanji and Wallace (2000) go on to identify ten TQM practices: top-management commitment, customer focus and satisfaction, quality information and performance measurement, human resource management, employee involvement, teamwork, process management, quality assurance, zero defects, and communication. In Brah's et al. (2000)

study, the following 11 constructs of TQM were identified: top management support, customer focus, employee involvement, employee training, employee empowerment, supplier quality management, process improvement, service design, quality improvement rewards, benchmarking, and cleanliness and organization. Esin Sadikoglu et al (2014), study also analysis eight QM factors as leadership, knowledge and process management, training, supplier quality management, customer focus, and strategic quality planning. Similarly Ali B. Jaafreh, et al (2013), research investigates six QM practice like: top management (leadership), customer focus, process management and organizational performance, supplier quality, and employee relation. In the same way, Flynn et al. (1994) proposed seven quality practices of TQM: top management support, product design, process management, quality information, supplier involvement, workforce management and customer involvement.

In a similar vein, Mellat et al. (2007) incorporated the 13 quality management constructs proposed to evaluate the effectiveness of quality management practices. On the other hand, Masood ul Hassan et al. (2012), study focuses on the seven TQM practices: Top management's commitment to quality, Employee involvement, Customer focus, Fact-based management, Incentive and recognition system process, Monitoring and control, Continuous improvement. Moreover, a very recent study conducted by Talib and Rahman (2010) found nine important TQM practices in their literature review on service industries: top-management commitment; customers focus; training and education; continuous improvement and innovation; supplier management; employee involvement; employee encouragement; benchmarking; and quality information and performance.

Through the comprehensive review of the TQM literature, the present study identified a set of nine QM practices. They are: customer focus (CF), training and education (TE), supplier chain management (SCM), employee relation (ER), benchmarking (BM), strategic quality planning (SQP), teamwork (TW), product design (PD), and top- management commitment (TMC). The reasons for selecting these practices are:

- ✓ Have been used frequently (highest frequency of occurrences) by different researchers in the manufacturing industries.
- ✓ Have been identified as the key practices in QM/TQM implementation in both manufacturing and service industries (example Antony et al., 2002; Zhang et al., 2000; Khamalah and Lingaraj, 2007).

- ✓ Constitute practices that represent that most companies commonly used to build their capacities in order to meet competitive advantage in the industry.
- ✓ Significantly associated both in product and in the promotion of product quality (Ueno, 2008; Lakhali et al., 2006).

To understand the impact of QM practice on operational performance of the Ethiopian leather industry, each of the nine identified QM practice were discussed below, and tested on the analysis section.

1. Leadership Support (Top Management commitment)

The critical factor ‘top management support’ is cited by most researchers. Ali B Jaafreh et al (2012: 98) findings suggested that strong commitment from the top management is vital in quality management and leading to higher organizational performance and revealed as most of the researchers consented to his notion.

2. Product design

Product design examines an organization’s quality and service delivery performance in terms of timeliness, errors and costs of quality, responsiveness, and customer satisfaction. These indicators are used for measuring the product and service design quality (Faisal Talib et la 2010). On the other hand, Bhatt and Emdad (2010) empirically investigated the relationships between information technology (IT) infrastructure, product and service innovation, and business advantages and found that product and service innovation is positively related with business advantages beside the two factors like IT infrastructure and customer responsiveness.

4. Benchmarking

Benchmarking is the process of comparing performance information, within the organization as well as outside the organization. It also aims to measure organization’s operations or processes against the best-in-class performers from inside or outside its industry (Sit et al., 2009). The study by Yusuf et al. (2007) highlighted the usefulness of dynamic benchmarking for improving the performance of the organization and to achieve competitive advantage. Similarly, the study by Min et al. (2002) reported that benchmarking help in continuous service improvements and establishment of customer satisfaction (Talib et la. 2010).

5. Strategic quality planning

Strategic planning incorporates the development and deployment of plans (Lee et al., 2003), improve relationships with customers, suppliers, and business partners (Prybutok et al., 2008) and helps in achieving long and short term goals through participative planning (Teh et al., 2009). Particularly, there is lack of empirical studies that examines the effects of strategic planning on quality performance or any other performance measure. Indeed, a significant link is found between strategic planning and quality performance (Prajogo and Brown, 2004), knowledge management behavior (Ooi et al., 2009), role conflict (Teh et al., 2009), and customer satisfaction (Sit et al., 2009). Also, Feng et al. (2006) in there comparative study revealed that strategic planning in TQM practice is strongly associated with organization performance.

6. Teamwork

Teamwork refers to an increase in employees' control over their work and allows them to work as a group (Ooi et al., 2007b). This practice provides an atmosphere of mutual relationship, involvement, and participation throughout the organization. According to Ooi et al. (2007b), teamwork as a TQM practice is positively associated with employees' job satisfaction. They further found that, where teamwork was perceived as a dominant TQM practice, improvements in job satisfaction levels were significant. Yang (2006) commented that entire organization should work for improving quality and support for quality improvement activities by implementing teamwork practice. Formation of teams within an organization is critical to an organization's TQM success. Further, Silos (1999) suggested that teamwork will result in more committed and involved employees with the organization (Talib et la 2010).

7. Training and education

Training and education spread the knowledge of continuous improvement and innovation in service process to attain full benefits and business excellence. Talib and Rahman (2010) reported the critical role of training and education in maintaining high quality level within the service industry. Further, the research on TQM also found a positive correlation between training and education, and organization performance (Reed et al., 2000).

8. Customer focus

Organizations must be knowledgeable in customer requirements and responsive to customer demands, and measure customer satisfaction through QM implementation (Zakuan et al., 2010, Talib et la 2010). According to the review results from Hackman and Wageman (1995), obtaining information about customer is one of the most widely used QM implementation practices to improve quality performance of the organization

9. Supplier relation management

According to Zakuan et al. (2010), effective supplier quality management can be achieved by cooperation and long term relationship with the suppliers. This argument is also supported by Zineldin and Fonsson (2000), who found that developing supplier partnership and long-term relationships can increase the organization competitiveness and thus, improve performance. (Talib et la 2010) Many organizations have recognized that their competitiveness is based to a large extent on the ability to establish a high level of trust and cooperation with suppliers (Buono, 1997). Thus, organizations must choose the suppliers that enable them to increase competitiveness and performance.

10. Employee relations

Deming claimed that involvement and participation of employees at all level is must to improve the quality of the current and future product or service. Even non-managerial employees can make significant contributions when they are involved in quality improvement processes, decision making processes, and policy making issues (Sadikoglu and Zehir, 2010; Ooi et al., 2007a).Organizations should utilize all employees' skill and abilities to gain business performance. (Faisal Talib et la 2010) Therefore, the constructed hypothesis attempts to find a relationship between these nine identified QMP and operational performance. Hence, it is believed that these practices are suitable to be used in the Ethiopian leather industry context.

2.4 Operational performance

Organizations performances have an important role in our daily lives and therefore, successful organizations represent a key ingredient for developing nations. Thus, many economists consider organizations and institutions similar to an engine in determining the economic, social and political progress (Gavirea C. et al., 2011). Although the concept of operational performance is very common

in the academic literature; its definition is difficult because of its many meanings. For this reason, there isn't a universally accepted definition of this concept (C. Gavirea, et al, 2011). Research on performance measurement has gone through many phases over the last *three* decades: initially they were focused mostly on financial indicators; with time, the complexity of the performance measurement system increased by using both financial as well as non-financial indicators. (Ibd.). Performance measurement is very essential for the valuable management of an organization. Scholars have used different performance types such as financial, business, innovative, operational and quality performance while examining the association between TQM practices and performance (Zehir et al., 2012). As Richard P., et al. work highlight Organizational performance encompasses three specific areas of firm outcomes: (1) financial performance (profits, return on assets, return on investment, etc.); (2) market performance (sales, market share, etc.); and (3) shareholder return (total shareholder return, economic value added, etc.). Moreover, Talib et al. (2010,) shows in their study organizational performance categorized in two to main dimensions as financial and non-financial. It is one of the most important constructs in management research, and in this study the researcher reviews the contexts that frame organizational operational performance as a dependent variable with specific emphasis on how it is related and affected by firms QM constructs.

Performance refers to excellence, and includes profitability and productivity among other non-cost factors, such as quality, speed, delivery and flexibility. The concept Performance is often confused with productivity. Whereas productivity is a fairly specific concept related to the ratio between output and input, performance is a broader concept that covers both the economic and operational aspects of an industry. (Pekuri A.,et el., 2011:28) On the other hand, a number of studies have analyzed the positive and negative (or non-significant) relationships or correlations between TQM practices and various performance measures. This section presents an overview of different performance measures indicators. An extent review of previous TQM studies on organizational performance suggests that there are various performance measures indicators (Sadikoglu and Zehir, 2010; Monge et al., 2006; Zakuan et al., 2010). Arumugam et al. (2008) measured organizational performance from *quality performance* (example quality of product and service, customer relations, customer satisfaction with products quality, and level of quality performance relative to industry norms). Zakuan et al. (2010) in their study measured organizational performance through two categories which are satisfaction level

(example employee satisfaction and customer satisfaction) and business results (example productivity, number of successful new products, cost performance and profitability).

Talib et al. (2010,) study stated that operational performance is one of the most important variables in the management research and arguably the most important indicator of the organizational performance. Now a day Managers began to understand that an organization is successful if it accomplishes its goals (effectiveness) using a minimum of resources (efficiency), which mean used profit as one of the many indicators of performance.

Thus, organizational theories that followed supported the idea of an organization that achieves its performance objectives based on the constraints imposed by the limited resources (Lusthaus & Adrien, 1998 after Campbell, 1970). In short performance is a set of *financial and nonfinancial indicators* which offer information on the degree of achievement of objectives and results (Id, 2011).

In this study, industry operational performance was measured through both financial and non-financial indicator (i.e., profitability and productivity). The reasons for choosing the two main dimensions operational performance as profitability and productivity indicator for measuring company's performance are; Several past research studies on TQM and organizational performance have taken operational performance as indicator for operational Performance (Terziovski and Samson, 1999, Zakuan et al. 2010, Talib et al. 2010, Arumugam et al., 2008, Pekuri A.,et el., 2011, Corbett et al., 2005). Based on the above literature, this study investigated the relationships between TQM practices and quality performance in Ethiopian leather industry.

2.4.1 Productivity and profitability

Measurement and Operationalization of Variables: An empirical examination of the proposed model of quality management in this study requires the operationalization of the theoretical constructs included in the model of study. Measurement statements for each construct were identified from previous studies, and developed by the author and adopted from previous studies (E.g., Alsughayir, 2013, Pignanelli, A. et al., 2012, Ooi, K.-B, 2007, Pignanelli, et al 2008, Gavirea C. et al., 2011, Ahire et al., 1996). Five point Likert's scale was used to measure model dimensions. Zakuan et al. (2010) in their study measured organizational performance through two categories which are productivity

variables (example employee satisfaction, customer satisfaction, production scrape rate and rate of returned product) and profitability variables (example, sales revenue, net sale profit, reduced cost of production, and operational cost). The effects of profitability and productivity can help an organization respond with an appropriate management strategy. In other words, higher-level QM practices leads to greater productivity and greater profitability.

According to Corbett et al., (2005), study, profitability is analyzed as a dependent variable in the evaluation of quality management impact on performance, presented in the Literature Review; consider it as a one-dimensional construct, operationalizing it sometimes by return on assets or sometimes by profitability as a percentage of sales. This research chose this last alternative; to be more specific, the option taken was of the relationship between operational profit and net sales. The operational profit was chosen given to the fact that it does not include financial operations, and therefore reflects the ability of the company to generate profit with its primary activities. (Corbett et al., 2005). Productivity is a fairly specific concept related to the ratio between output and input

2.5. Conceptual framework of the research

From the foregoing discussion, the conceptual framework that could be developed to study the impact of QM practices in leather industry in Ethiopia depend on the degree of Senior Management, which creates the values, goals, and systems needed to meet customers' expectations and improve the operational performance of the organization and the skill and motivation of its members as by almost any other factors. TQM can be defined as a holistic management philosophy that strives for continuous improvement in all functions of an organization, and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale (Hale kaynak, 2003). TQM practices have been documented extensively in measurement studies as well as in the studies that have investigated the relation of QM practices to various dependent variables. The QM practices identified in measurement studies by Abdulrahman Alsughayir, (2013:3, 7). Pignanelli, A. and Csillag, J. M (2012:7) in review states that most of the studies that consider productivity and profitability as a dependent variable in the evaluation of quality management practice impact on operational performance, presented in the Literature Review.

Based on the above literature review the conceptual framework of this study was developed. (See Fig. 1) The model demonstrates the relationship between QM practices and industry operational performance through exploring the combined direct effects of nine identified QM practices on two main business dependent variables operational performance i.e., industry productivity and profitability. By following the literature, this study focuses on the nine QM practices: top management commitment (TMC), customer focus (CF), training and education (TE), supplier chain management (SCM), employee relation (ER), benchmarking (BM), strategic quality planning (SQP), teamwork (TW), and product design (PD); and also two operational performance dimensions i.e. industry productivity and profitability.

Independent variables (QM constructs)

Dependent variables (OP

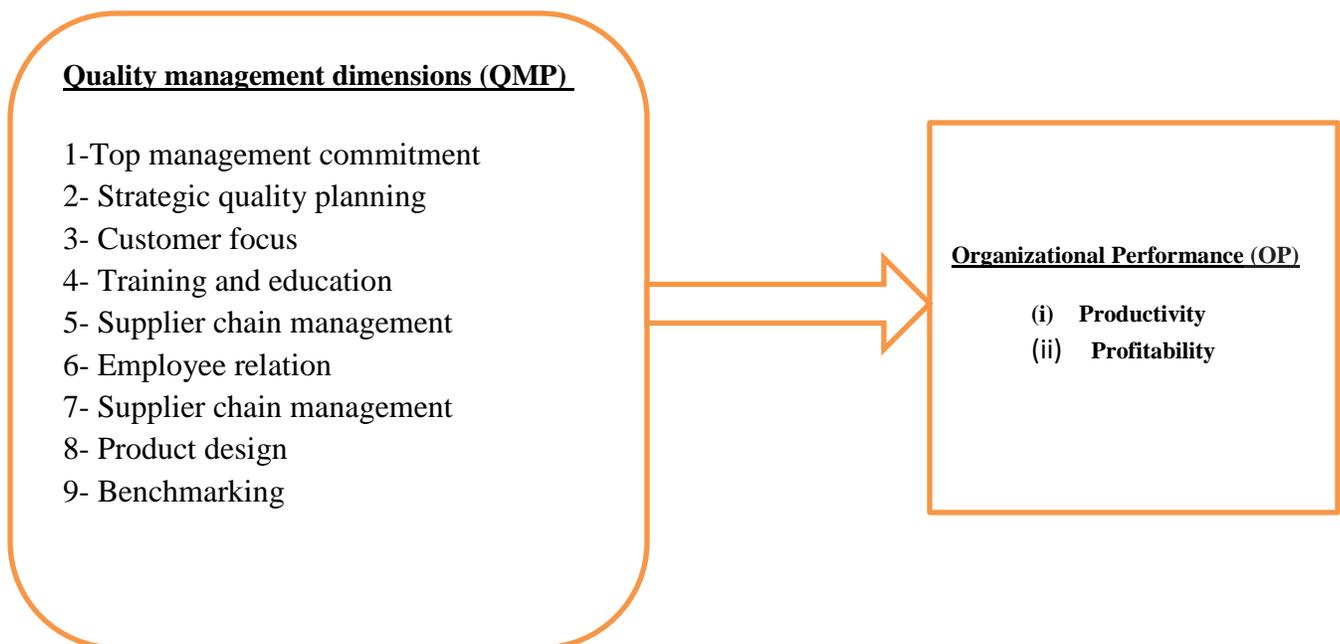


Fig.2.1. Research model or conceptual frame work of the relationship between QM practice, and firms' operational performance.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This part presents the research methodology employed in this paper. It discusses the research technique used in the study and the reasons for selecting such a technique. This includes the research design, sample size and sampling technique, data source and collection method, procedure of data collection, method of data analysis and questionnaire reliability test was presented.

3.1. Research Design

The research **was** employed explanatory research method because the study intended to examine the relationships between quality management practices with industry operational performance. In order to make it suit to the collection of the required information from a larger sample and make the analysis easier, the study used a quantitative technique survey method. Thus, data was gathered from sample management staff via survey questionnaire. As Zikmund (2000) defined, survey is a research technique in which information is gathered from a sample of people by the use of a questionnaire.

According to Saunders et al (2007), in terms of time horizon, research design can be classified under longitudinal or cross-sectional. A cross-sectional design focuses on a particular phenomenon at a specific period of time. In this case, one sample of a population can be taken and studied at a particular time as in a single cross-sectional study or two or more samples of a target population could be studied once as in multiple cross-sectional study (Malhorta & Birks, 2007). On the other hand, longitudinal study is a study where a particular phenomenon is studied at different period of time. In this study, the researcher had used a cross-sectional study because data were collected from a cross-section of management staffs of Ethiopian leather industry in one go.

3.2. Data Source and Instruments of Data Collection

The study used both secondary and primary data sources. The secondary data were collected via detailed review of related literature i.e. books, articles, journals, magazines, bulletins, documents on

quality management in the industry and many other relevant written publications. Primary source of data was collected via semi- structural survey questionnaire.

This study hypothesizes that firms with QM practices should have better effects on its operational performance. In order to examine the relationship between quality management practice, and industry operational performance, this study takes leather manufacturing information-related industries in Addis Ababa to be the sampling target to investigate the effects of QM practice implementation. A total of nine constructs which are considered to be important for effective QM practice implementation were used to form a questionnaire. The Likert type point was preferred in order to make questions interesting to respondents and thereby enhance their cooperation, ultimately to ensure maximum response rate. The questionnaire statements were developed and evaluated on a 1-5 Likert scale , where '1' indicates "strongly disagree" with the statement, '2' "disagree", '3' neutral, '4' "agree" and '5' refers to "strongly agree" with the statement to represent different attitude of respondents, means indicates respondents' disagreement or agreement with each item, respectively.

To identify the variables and develop the conceptual framework the instrument that the researcher developed in the present study has two main parts. The first part is made identified constructs that measure QM practices i.e. independent variables, while the second part is comprised of two level firms' operational performance (i.e. productivity and profitability) of which are considered as dependent variables. Altogether, nine widely referred extracted constructs of QM were: employee relation, training and education, supplier chain & quality management, customer focus, strategic quality planning, and top management (leadership) commitment, team work, bench mark, and product design. As the research was intended to investigate the relationship between QM practices/ indicator and firms' operational performance, a set of 32 point Likert scale survey questionnaire developed and distributed to management staffs of the firm.

The decision to select among the listed instruments was adjusted carefully by considering their advantages and disadvantages and the population size for each category on the process of data collection. The study intended to measure the perceptions that senior managers and production quality expert had of quality management practices and the effect on operational (i.e. profitability and productivity) in the industry.

3.2.1. Development of the survey instrument

This study hypothesizes that firms with TQM practices should have better effects on the operational performance of firms. In order to examine the relationship between quality management practice and industry operational performance, this study takes a case on leather manufacturing information-related industries in Addis Ababa to be the sampling target to investigate the effects of QM practice implementation. The researcher decided on leadership, training and education, supplier chain / quality management, customer focus, strategic quality planning, employee relation, product design, bench marking and team work as the factors of QM practices based on the literature review, and also included dual performance factors, namely, productivity and profitability, to cover the identified aspects of firm performance. Productivity measures the non –financial aspect (customer satisfaction, employee satisfaction, scrape rate, and rate of returned) while profitability examine financial aspect like cost, sales revenue, and net sale profit.

A total of nine constructs which are considered to be important for effective QM practice implementation are proposed to form a questionnaire. The questionnaire developed in this study consisted of three main sections, including the background of the company, the research motivation situation and description of the models, and specific questions designed to investigate QM constructs developed from the proposed research model. The survey questionnaire used by the researcher with some adaptation was standardized and developed based on an extensive literature review of the previous studies. (Ooi, K.-B, 2007, Pignanelli, et al 2008, Gavirea C. et al., 2011). To accurately represent the truth questionnaire instruments accurately developed in English using a five-point Likert scale. It was employed with a score of 1 indicating “strongly disagree” and 5 representing “strongly agree” to represent different attitude of respondents, means indicates respondents’ disagreement or agreement with each item, respectively. Therefore, to measure the impact of QM practices on various levels of improvement, this study incorporates dimensions of operational performance of the industry.

3.3. Data Sample, and Sampling Techniques

3.3.1. Data Population and Sample

The nature of the problem in this study determines that it leans more towards a causal. The main goal of explanatory research is to identify the relationship among variable. The literature review was carried-out in sufficient details to provide the understanding on the impact of QMPs on Firm's OP. The researchers also investigated how the previous studies done in order to study the relationship of QMPs and OP. The target population for this study is the footwear manufacturing management and senior quality expert staffs of the Leather Industry in Ethiopia.

3.3.2. Data Sampling Techniques

In order to ensure fair representation of the targeted population, a systematic judgmental sampling method was used. Therefore, the researchers believed that it is appropriate to consider the management staffs, since they are who primarily responsible in management practice operation in the factory to give reliable inputs on the subject matter. In this context, samples of the population are drawn from the data obtained from Ethiopian leather Industry. Ethiopian Leather Industry has three sub-factory and association organized under Leather Industry Development Institute (LIDI) as twenty nine footwear factory, twenty one tannery and ten goods and garment factories in different areas of the country.

Due to the Geographical location of the factory, and work nature the leather industry manufacturing are spread all over the country. The student researcher had projected to collect data from the *target population* of three judgmentally selected *footwear factories* and the *sample frame* selected for the study was composed of the management staffs of the shoe leather factory in Addis Ababa. In order to determine a sufficient sample size, a systematic judgmental sampling was applied. Because of the above mentioned hurdles, namely time and budget constraints, the researcher was forced to take a financially and time-wise approachable sample unit from leather industry to go through with the survey conducting: Dire Leather Industry (peacock shoe factory), Anbesa shoe factory, and Tikur Abay shoe factory that was selected systematically based on specified criteria. The researcher projected the baseline for selecting criteria as Production capacity over 1500 pairs shoe per day, over 350 permanent employees, and above 60% their product export market share compared to domestic one (see table 3.1).

Table 3.1: Baseline data used for sample selection criteria among shoe factory.

No	Name of Factory	Production capacity (pairs per day)	Total Employees (permanent only)	Export market share in %
1	Peacock	1500	337	90
2	Anbesa	2000	673	64
3	Tikur Abay	3500	480	62

Source: Survey data, March 2015

The data that was intended to be collected comprised of 22 (44.4%) peacock, and 13(28.8%) from Anbesa Shoe factory; from which all respondents (100%) had responded the questionnaires. Tikur Abay Shoe questionnaires were distributed to 12 (26.7%) management staffs where 10 (22.2%) of them had responded. The respondents were selected judgmentally based on their list that was taken from factories human resource department.

According to the data provided to the researcher from the HR management department of the factories, there were 65 management staffs at the three selected factories. To be precise, peacock shoe factory had 22 management's staffs, Anbesa shoe factory had 23, and Tikur Abay shoe factory had 20. The researcher intends no need to use sample rather the total targeted respondents since it is fairly precise and manageable size. Then, the researcher used the total target respondents and distributed 65 questionnaires among the three selected shoe factories. The distribution number was; peacock had supplied with 22 respondents, Anbesa had given 23 management members and Tikur Abay had provided the rest 20. From all 65 distributed questionnaires 43 (66.2%) had been returned. The remaining 22 questionnaires had not been returned. To summarize the data collection from the target respondent i.e. the management staffs working in the three factories were about 65 *from which* 43 were valid response to conduct the survey as indicated in Table 3.2.

Table 3.2: Sample frame and proportionate sampling

Strata	peacock shoe factory	Anbesa shoe factory	Tikur Abay shoe factory	Total Population
Management Staff	22	23	20	65
Intended respond	22(33.8)	23(35.4%)	20(30.8%)	65(100%)
Valid/Actual Response	20 (30.8%)	13 (20%)	10 (15.4%)	43(66.2%)

Source: Factory Human Resource Department, March 2015).

3.4. Data Instrument reliability and validity of the research

To maintain data reliability and validity the instrument that the research student develops in the study has two main parts. The first part is made up of several constructs that measure QM practices, while the second part is comprised of performance measurements. The researcher has developed a questionnaire that was based on an extensive review of the literature and used five-point Likert scale interval based on nine quality management factors identified. Meanwhile, the items (commitment of top management/ leadership, training and education, supplier chain management, customer focus, strategic quality planning, employee relation, bench marking, product design and team work) included a five point Likert-type scale anchored/ fixed from (1) strongly disagree to (5) strongly agree, which indicates respondents' disagreement or agreement with each item, respectively. To facilitate data collection and ensure its reliability, the researcher himself follows up and collected the data on each and every one of the questionnaires spread out to Peacock, Anbesa, and Tikur Abay Shoe factory target respondents, and also the each factory HR department assign assistant had been helping out me in distribution & collection of the questionnaires.

The critical QM variables had content validity because the researcher has conducted a literature review to select the critical factors and measurement items, all of which were evaluated. The QM variables were adopted from prominent and contemporary studies or sources (Abdulrahman Alsughayir, 2013, Pignanelli, et al. 2008, Ali B. Jaafreh, et al.2013, Sadikoglu et al. 2014, Kaynak H., 2002, Arumugam,V.et al.2008, Kaynak, H. 2003, Mellat-Parast, et al. 2007).

The first step of data analysis involved subjecting each of the nine constructs to reliability and validity tests, and then calculating a single score to represent each construct. The research questionnaire was revived by another expert to evaluate its validity. To provide consistent reliable and valid result the researcher employed measurement instrument and decided on the identified factors of QM practices based on the literature review. Alpha (Cronbach's) reliability scale was used for this research study. According to Babin & Griffin (2009), when alpha values for pilot data test in a certain questionnaire are >0.70 , the questionnaire is considered to be a reliable and no further action with item deletion was required. Hence, the following table indicates the reliability determination statistics made for the pilot-test. The reliability scale result is .919 which indicates that there is a very high internal consistency.

Table 3.3: Reliability sample testing scale

Case Processing Summary			
		N	%
Cases	Valid	10	100.0
	Excluded ^a	0	0.0
	Total	10	100.0
a. List wise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.919	32

Source: SPSS version 20

Therefore, all of the constructs and variables in the present study are based on established instruments that have high reliability scores based on the methods of data analysis presented below.

3.5. Procedures of Data Collection

The researcher required permission from the industry and after permission approved, the questionnaires were distributed to the respondents. To facilitate data collection, the researcher himself follows up on each and every one of the questionnaires spread out to Peacock, Anbesa, and Tikur Abay Shoe factory, and also the each factory HR department assign assistant had been helping out me in distribution & collection of the questionnaires.

3. 6. Methods of Data Analysis

The data analysis for the research was both descriptive and inferential type. Descriptive statistics and inferential analysis was applied for the presentation, interpretation and discussion parts on various dimensions of the evaluation system. Frequency tables, charts, graphs, figures, percentages and Pearson correlation were used as appropriate to analyze, interpret, tabulate and present the result of the study. Descriptive analysis refers to statistically describing, aggregating, and presenting the constructs of interest or associations between these constructs, while, inferential analysis refers to the statistical testing of hypotheses (theory testing) for quantitative data analysis is conducted using software programs SPSS. The student researcher had examined the collected data in order to find and construct, themes and patterns that can be used to describe and explain the phenomenon being studied.

The data gathered through questionnaires was coded, entered into computer and analyzed and presented in the form of charts, diagrams, and tables by using SPSS (Statistical Package for Social Science) software version 20. Finally, conclusions were made based on the results/findings of the study and recommendations were forwarded on the basis of the data analyzed.

3.7. Ethical Consideration

Regarding ethical consideration an attempt was made to ensure all respondents to keep their identity and responses as confidential; so that all the information was given in full confidence. The questionnaire was distributed based on willingness of each respondent. In addition, the purpose of the questionnaire was clearly indicated beforehand within questions.

CHAPTER FOUR

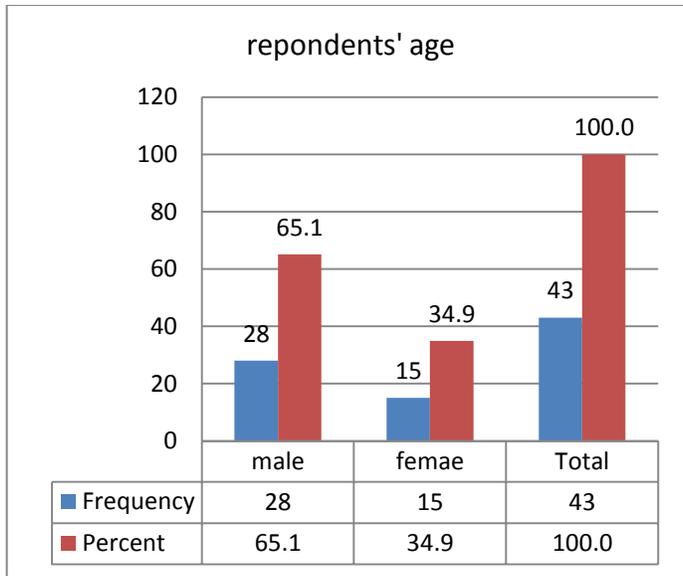
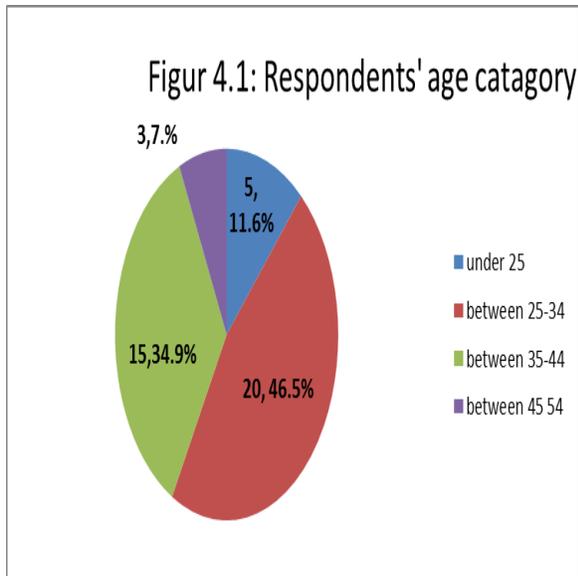
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter is meant for presenting, analyzing and interpreting the data and findings of the study. It consists of five sections. The first section presents and describes the relevant respondents' demographic characteristics while the second investigates the nexuses between QMPs and its effect on Ethiopian Leather Industry operational performance using descriptive statistics. The third section presents the result Pearson correlation to analysis the model.

4.1 Respondents' Demographic Characteristics

The information generated to address the stated research objectives is solicited from respondents with diverse demographic characteristics. The first part of the questionnaire consists of the demographic information of the participants. This part of the questionnaire requested a limited amount of information related to personal and professional characteristics of respondents. Accordingly, the demographic variables about the respondents were summarized and described in different figures and tables. These variables include: age, sex, number of service years of the respondents in the factory, the highest educational level achieved, field of specialization, and current position of work in manufacturing.

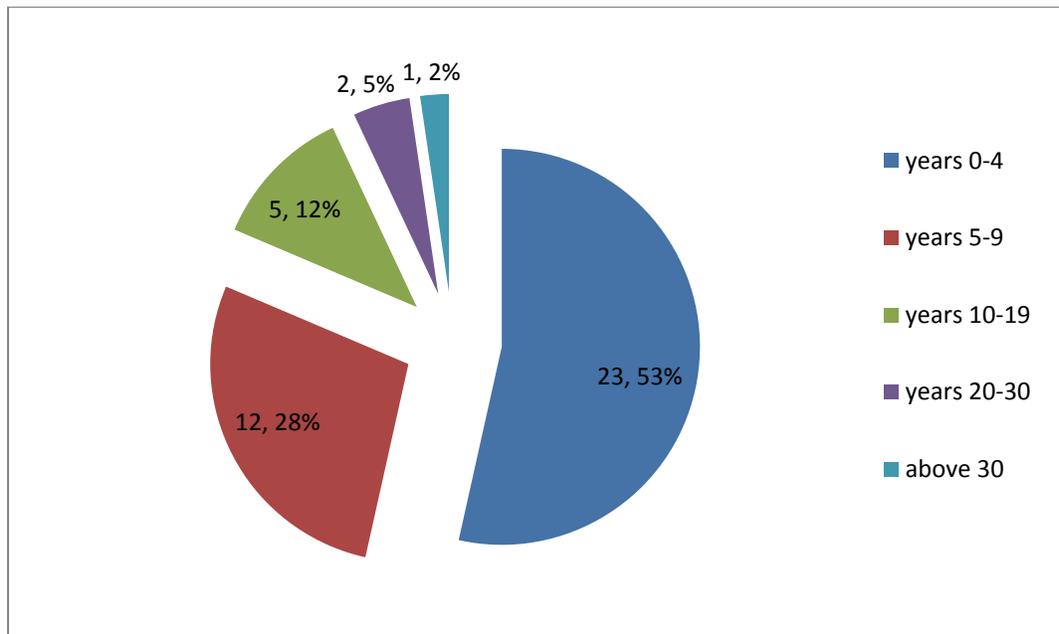
Figure 4.1: respondents' age and sex



Source: survey data, March 2015.

As indicated in Figure (4.1), about 28 (65.1%) of the respondents were male and the remaining 15 (34.9%) of the respondents were female. This implies that the majority of the respondents were males than that of females. Regarding respondents' age, the largest group 20(46.5%) was found between 25-34 years age group. The second largest group 15(34.9%) indicated their age were in the 35-44 age group whereas 5 (11.6%) and 3 (7.0%) indicate their age were in the under 25 and between 45-54 age groups respectively. From this it is possible to infer that the workforce composition of the respondents is found in young and middle age group which may require a strong HRD programs to enhance their productivity effort the factories by building their management knowhow capacity.

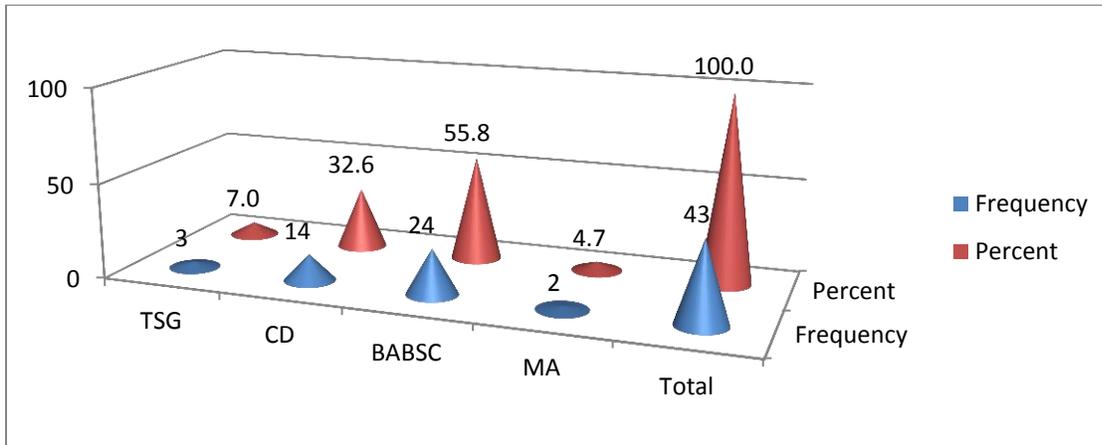
Figure 4.2: Respondents' work experience



Source: Survey data March, 2015

As it is shown in Figure 4.2, the majority of the respondents 23(53.5%), indicated that they have been working in the factory from 0 and 4 years. However, 12 (27.9%) and 5 (11.6%) of respondents indicated tenure with the factory of between 5 and 9 years and 10-19 years respectively. On the other hand, 2 (4.7%) individuals indicated that they had been working in the corporation from 20 to 30 years and only 1 (2.3%) indicated that they had served for more than 30 years.

Figure 4.3: Respondents' educational profile



Source: Survey data, March 2015

As one can observe from Figure (4.3), on the basis of educational qualification, the majority of the respondents are first degree(BA/BSC) holders which is 24 (55.8%) whereas 14 (32.6%), 3(7%), and 2(4.7%) of the respondents were college diploma(CD) holders, technical school graduate (TSG), and MA(post graduate) respectively. No respondent had the degree of PhD. Thus, to implement quality management effectively and efficiently, the industry must induce management staffs in developing their education and career to cope with global business competition.

Table 4.1: Respondents' by job position

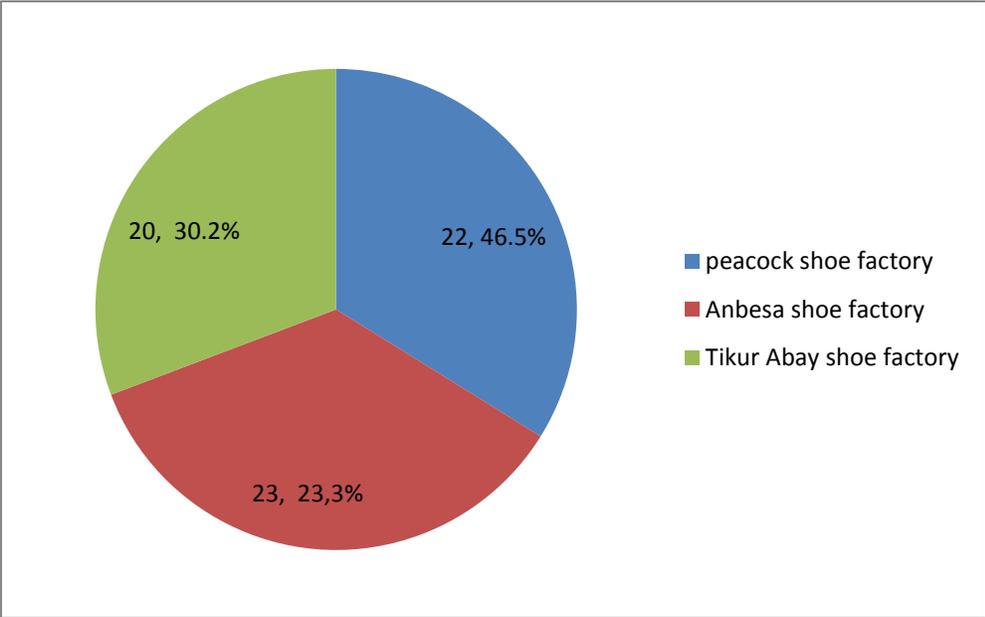
Job position	Frequency	Percent
General manager	1	2.3
Corporate Head	3	6.9
Deputy G/Manger	2	4.7
Department manager	3	6.9
Division Head	14	32.6
Section Head	11	25.6
Quality supervisor/controller	9	20.9
Total	43	100.0

Source: Survey data, March 2015

The data presented in the above table (4.1) was organized from three factory organizational structure and it was found that their structure was unlike and job position name vary accordingly. As table (4.1) displayed, 1(2.3%), was General Manager, 3 (6.9%) were Corporate Head, 2(4.7%) were deputy General manger 3(6.9%) were department manager,14(32.6%) were division heads, 11 (25.6%) were

section head, and 9(20.9%) were quality supervisors, and by position respectively. This implies that those respondents are factory management staffs and the majority i.e. about 14(32.6%) questionnaire answered by Division head means middle level management that represents research validity.

Figure 4.4: Respondents by work place



Source: Survey data, March 2015

As presented in figure 4.4, the majority of the shoe manufacturing firms that responded to the survey were under the peacock which comprised 30.8 percent of the number of respondents, followed 20 percent and 15.4 percent by Anbesa and Tikur Abey respectively. The peacock Footwear factory took a lion share 30.8% of respondents among the three target population sample. The researcher judgmentally undertook such rate due to the firm’s recognition in implementing QMP.

4.2 Data Analysis

4.2.1 Descriptive analysis

This study first applies the descriptive statistics to explore the general profile of the respondents. Based on the response gathered from the management staffs of the factory, since the questionnaire was designed by using Likert Scale and almost all the statements were measured on a five point scale with 1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5=Strongly Agree. The information obtained from the questionnaires were summarized and discussed in the following manner. The Statistical Package for the Social Sciences (SPSS) has been used to analyze the data. The Preliminary analysis was conducted to check for any violations in normality, equality of variances and linearity. Responses on all parts of the questionnaire were analyzed using frequency, means, percent, standard deviations, reliability, and Pearson Correlation has been presented to calculate different characteristics of the data. The data obtained from the questionnaires using descriptive statistics were summarized and discussed in the following manner. In order to elaborate the narrative results, the researcher used criterion-referenced definition for rating scales to describe the collected data.

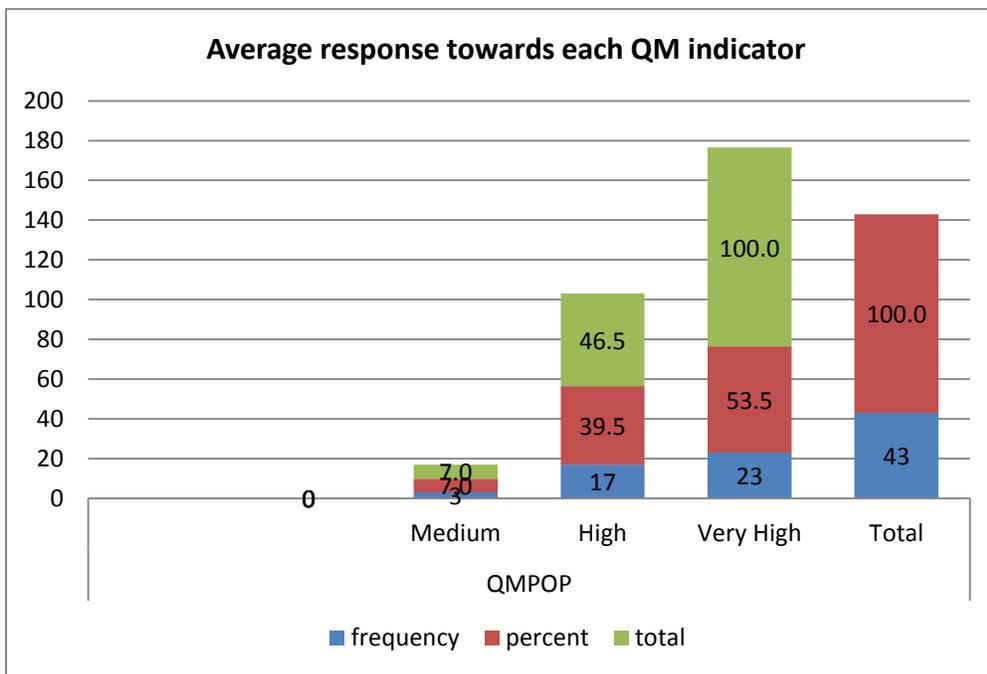
Table 4.2 Criterion-Referenced definitions

Criterion-Referenced definitions		
Mean rating	Degree of Agreement	Description
1.00 to 1.49	Strongly disagree	Very low
1.50 to 2.49	Disagree	Low
2.50 to 3.49	Neutral	Medium
3.50 to 4.49	Agree	High
4.50 to 5.00	Strongly Agree	Very high

In this study Likert Scale point the value “1 and 2” mean very low and low respectively and both represents non-significant relationship, “3” “Neither agree or disagree” i.e. neutral or in other word it’s in “ average or medium” level. While “4& 5” mean high and very high respectively and both shows significant positive relationship between QMP and firm’s OP. To better highlight the relationship between nine firms’ QM practices and their performance the researcher divided this latter variable into two categories (productivity and profitability). Since the model includes variables that are

considered to have an impact on performance, the researcher expect that factory that excel in terms of the nine variables that reflect their practices: (top management commitment (TMC), customer focus (CF), training and education (TE), supplier chain management (SCM), employee relation (ER), benchmarking (BM), strategic quality planning (SQP), teamwork (TW), and product design (PD)) to have high indexes of results. In essence, the researcher projected to identify to what extent firms' management perception are reflected in their results.

Figure 4.5. Average response



Source: survey, 2015

As it is shown in figure 4.5 above the average response respondents towards each QMP the minimum score or level of perception is (3) means medium and maximum score of (5). This implies that majority or commutative result of respondents (40, 93%) agree as there is significant relationship between model dimension. In other word, the average response out of 43 total respondents about 17, 39.5%, and 23, 53.5% perceives that the impact if QMP on OP is high and very high respectively.

Table 4.3. Results of descriptive statistics of firms QM practices to wards OP (*i.e. productivity*)

CSF	OQMP-OP	CF	TE	SCM	ER	BM	SQP	TW	PD	TMC
Mean	4.4651	4.3256	4.3721	4.1860	4.1395	4.2791	4.2791	4.3953	4.1163	4.5116
Std. Dev.(SD)	.63053	.64442	.65550	.62700	.69725	.59062	.66639	.54070	.69725	.70279
Validity N 43										

Source: Survey data, March 2015.

The means and standard deviations of each variable were shown in Table 4.3. The results regarding the relationship between the nine variables that incorporate the practices/capabilities and the performance is depicted in Table 4.3. In order to discuss the nexuses between QMPs and its effect on Ethiopian Leather Industry operational performance, nine items were identified from the questionnaire and the scores on responses of the sampled employees in the leather industry has been analyzed via descriptive statistics methods.

Based on SPSS version 20 data analyses, table 4.3 shows the results of descriptive statistics of QM indicators and the characteristics of QM dimensions used in this study. The results indicated the mean of the QM dimensions ranged from very high (4.51) to high (4.11). Top management Commitment (TMC) has the highest mean (4.51) while Benchmarking (BM) has the lowest mean (4.11) and also figure 4.6 shows that the level of respondent with a *minimum score of (3) and maximum score of (5)*. On the other hand, the overall QMP relationship with firm's operational performance i.e. productivity indicates as mean (4.47) and SD (0.63). The means of all the 9 variables in the study shows above the scale *midpoint* which is most respondents share similar opinions toward each variable in this study. Also the standard deviation (SD) is less than one; that is, the variations in respondent's opinions were small.

Table 4.4. Results of descriptive statistics of industry QM practices versus OP (i.e. profitability)

	CF	TE	SCM	ER	BM	SQM	TW	PD	TMC	Overall QMP-OP Profitability
Mean	4.2326	4.0930	4.1395	4.1860	4.0698	4.2326	4.2093	4.3659	4.5116	4.2791
Std. Deviation	.71837	.94652	.86138	.79450	.91014	.78185	.83261	.58121	.50578	.76612
Validity N 43										

Table 4.4 shows the results indicated the mean of the QM dimensions ranged from (4.51) to (4.07). Top management Commitment (TMC) has the highest mean (4.51) while Benchmarking (BM) has the lowest mean (4.07) with a minimum score of (3) and maximum score of (5). On the other hand, the overall 9 identified QMP relationship with firm's operational performance i.e. profitability. Overall QMP-OP (profitability) results of descriptive statistics indicated as mean (4.23) and SD (0.72).

Summary results of descriptive analysis are listed in Table 4.3 and 4.4 shows the means and SD of nine constructs range from (4.11) to (4.51), (4.51) to (4.07), and from (0.54) to (0.70), (0.51) to (0.95) for each both OP dimensions i.e., productivity and profitability respectively. Meanwhile, the mean and SD of overall commutative nine identified QM factors is (4.35) and (0.68) respectively. Therefore, mean, SD was used to determine the extent of spread of the data and shows the reliability of data and also displays high or significant relationship between model variables.

4.2.2. Correlation Analysis

The major statistical measure of the relationship is the correlation coefficient. Correlation analysis is primarily concerned with finding out whether a relationship exists and with determining its magnitude and direction (Saunders et al., 2007; Jaafreh et al., 2012). In other words, correlation indicates to the existence of the relationship between the variables. The results regarding the relationship between the nine variables that incorporate QMP and operational performance are depicted in Table 4.5.

4.3. Test Hypothesis

The main hypotheses proposed to answer the research questions. The hypothesis was tested by using the correlations as it was seeking to determine the relationships between nine quality management practices (independent variables) and two organizational operational performances (dependent variables) (Talib *et al.* 2010). There is one main hypothesis in this research, but to analysis the relationships of the overall identified QM variables against the two OP variables i.e. productivity and profitability, it's categorized in to two parts in survey instrument (questionnaire) part. Thus, the main hypothesis subdivided as “H 1a” and “H 1b” just for the analysis to test the correlation between the two dimensions.

The main hypothesis is:

H 1: there is significant, positive relationship between overall Quality management variables and firms operational performance i.e., *Productivity and profitability*.

H 1a: there is significant, positive relationship between overall Quality management variables and firms operational performance i.e., *Productivity*. According to Cohen, (1988), interpretation the following level correlation used to show the strength of variables relationships: Low if $p=0.10$ to 0.29 ; Moderate if $r=0.30$ to 0.49 ; and high when $r=0.50$ to 1.00 .

Table 4.5 Results of Pearson correlations between the model's variables (QMP and OP productivity)

	CF	TE	SCM	ER	BM	SQP	TW	PD	TM C	OQMP	OP (producti vity)
Pearson Correlation	.732**	.435**	.438**	.485**	.219	.307*	.286	.307*	.294	.351*	1
Sig. (2-tailed)	.000	.004	.003	.001	.159	.045	.063	.045	.055	.046	
N											43
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).											

Source: survey April 2015

The relationships between the nine QM variables and OP (productivity) employed in this study are presented in Table 4.5. Using correlation analysis, the results show that three out of nine constructs (BM, TW and TMC $p=0.159$, 0.063 , and 0.055 respectively) are negative correlation or not significant with OP i.e., productivity, and however; the rest all six out of nine variables correlation value suggests

are significantly correlated to the OP (productivity). Meanwhile, **H 1a** states that: there is significant, positive relationship between overall Quality management variables and firms operational performance i.e., *Productivity*. The average results of correlation analysis as shown in Table 4.5 ($p=0.351$, and $r= 0.046$) indicate statistically significant relationship between OQMP and OP productivity at the level $r < 0.05$. In other word, by dividing performance in its two components one can observe that the variable structure becomes more significant registering a significant relationship at 0.05 with the nonfinancial i.e. productivity performance.

Therefore; **Hypothesis H1a**: there is significant, positive relationship between overall Quality management variables and firms operational performance i.e., *Productivity*. Hence, the researcher can conclude that **H1a is supported**.

H 1b: there is significant, positive relationship between overall Quality management variables (OQMP) and firms operational performance i.e., *profitability*.

Table 4.6 Results of Pearson correlations between the model’s variables (QMP and OP-profitability)

	CF	TE	SCM	ER	BM	SQP	TW	PD	TMC	OQMP	OP (profitability)
Pearson Correlation	.116	.293	.513**	.398**	.212	.484**	.705**	.442**	.500**	.407**	1
Sig. (2-tailed)	.458	.057	.000	.008	.172	.001	.000	.003	.001	.007	
N											43
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).											

Source: survey April 2015

The second main hypothesis to be tested is H1b. Using correlation analysis, the results show that three out of nine constructs (CF, TE and BM $p=0.458$, 0.057 , and 0.172 respectively) are negative correlation or not significant with OP i.e., profitability, and however; the rest all six out of nine variables correlation value suggests are positive and significantly correlated at the level of $r < 0.01$ to the OP (profitability). The average results of correlation analysis as shown in Table 4.6 indicate a

positive and highly significant relationship between overall QM practices and operational performance, i.e. profitability ($r = 0.407$, $p < 0.01$). Hence, **H 1b** is supported.

4.4. Discussion

Based on the literature review, a set of nine TQM practices and two OP variables that are applicable to Ethiopian leather industry were identified separately from various TQM practices and Firms operational performance. As it was stated under review of literature, the overview of TQM practices and OP dimensions as recommended by different authors. This reduced set of practices were extracted based on their high frequency of occurrence in different research papers and are treated as major practices.

The nine major TQM practices are:

- (1) Top-management commitment (TMC);
- (2) Customer focus (CF);
- (3) Training and education (TE);
- (4) Supply chain management (SCM);
- (5) Benchmark (BM);
- (6) Employee involvement/ relation (ER);
- (7) Teamwork (TW);
- (8) Product design (PD); and
- (9) Strategic quality planning (SQP).

Two major industry operational performance identified are:

- (1) Productivity; and
- (2) Profitability.

These major practices of QM constructs and OP are presented in Table 5.1. Also, this literature review indicates that implementation of these QM practices and OP in the organization will result in many desirable outcomes and benefits such as productivity and profitability.

The benefits of an effective QM practice can be studied has become a hot topic in both industry and academia is that it can be applied to improve/enhance global competitiveness (Flynn et al., 1995; Samson and Terziovski, 1999). QM practices, in general, improve operational performance of the firm. Moreover, the study has found that different QM practices significantly affect different outcomes. The study result (table 4.5) of Pearson correlations between the model's variables

commutative nine identified QM factors is shows a positive and significant correlated. Even though , three out of nine constructs (BM, TW and TMC) are negative correlation or not significant with OP i.e., productivity, and Meanwhile; the rest all six out of nine variables correlation value suggests are significantly correlated to the OP (productivity). *Similarly* the findings’ of Sadikoglu E. et al. (2014), supports that leadership (TMC) is not significantly related to any performance measures.

The results give that overall QM practices improve all performance measures. Leadership/ top management commitment does not affect operational performance-productivity. This is supported by the results of Kannan et al. (2005) and Sadikoglu et al. (2014), study result confirms that successful training and education improves firm’s operational performance.

Similarly Phan, et al., (2011), and Kaynak H., (2003), study finding supports that training and education has been significantly related to operational performance. This research revealed relevant findings about the relationship between quality management practices and profitability, and discussed possible interpretations of the results according to theoretical concepts. (see tables 4.5,4.6 and 4.7).

Table: 4.7 Summary of correlation result Op-profitability

Correlations		OP-productivity	OQMP	CF	TE	SCM	ER	BM	SQP	TW	PD	TMC
Productivity	Pearson Correlation	1										
	Sig. (2-tailed)											
OQMP	Pearson Correlation	.371*	1									
	Sig.(2-tailed)	.014										
CF	Pearson Correlation	.369*	.732*	1								
	Sig. (2-tailed)	.015	.000									
TE	Pearson Correlation	.203	.435*	.665**	1							
	Sig. (2-tailed)	.192	.004	.000								
SCM	Pearson Correlation	.199	.438*	.495**	.581**	1						

	Sig. (2-tailed)	.201	.003	.001	.000							
ER	Pearson Correlation	.420**	.485*	.638**	.669**	.528**	1					
	Sig. (2-tailed)	.005	.001	.000	.000	.000						
BM	Pearson Correlation	.181	.307*	.391**	.424**	.548**	.390**	1				
	Sig. (2-tailed)	.244	.045	.010	.005	.000	.010					
SQP	Pearson Correlation	.281	.307*	.504**	.629**	.614**	.521**	.492**	1			
	Sig. (2-tailed)	.068	.045	.001	.000	.000	.000	.001				
TW	Pearson Correlation	.364*	.286	.237	.314*	.410**	.388*	.191	.479**	1		
	Sig. (2-tailed)	.016	.063	.126	.040	.006	.010	.220	.001			
PD	Pearson Correlation	.251	.219	.193	.217	.178	.147	.324*	.402**	.466**	1	
	Sig. (2-tailed)	.105	.159	.214	.161	.254	.348	.034	.007	.002		
TMC	Pearson Correlation	.294	.256	.202	.404**	.319*	.420**	.362*	.450**	.583**	.508**	1
	Sig. (2-tailed)	.055	.097	.195	.007	.037	.005	.017	.002	.000	.001	
*. Correlation is significant at the 0.05 level (2-tailed).												
**. Correlation is significant at the 0.01 level (2-tailed).												

Generally, the Overall QM Practices regarding the relationships between QM Practices and OP i.e. productivity and profitability, most of the previous studies report that overall QM practices have positively/significantly been related to productivity and firm profitability. On the contrary some of the scholars have found that the result was negatively or insignificant (A. Pignanelli et al. (2008:4). In this study, a QMPs framework is developed according to a comprehensive literature review and presents a relationship between QMPs and OP through examining the effects of the nine QMPs constructs on operational performance. Therefore, the synergy among the QM factors brings about exceptional or crucial improvements in the firm operational performances. Firm's Management must focus on the identified QM constructs to achieve higher levels of customer satisfaction in the industry, and also

improve knowledge/ perception on critical success factors that have high effect on operational performance and allocate sufficient resources to practice QMP successfully to have industry competitive advantage.

Table.5.2: Summary of Pearson correlations results of the hypothesis tested.

QM constructs	OP					Test result
	Productivity		Test result	Profitability		
	P	R		P	r	
CF	.732**	.000	Accepted	.116	.458	Rejected
TE	.435**	.004	Accepted	.293	.057	Rejected
SCM	.438**	.003	Accepted	.513**	.000	Accepted
ER	.485**	.001	Accepted	.398**	.008	Accepted
BM	.219	.159	Rejected	.212	.172	Rejected
SQP	.307*	.045	Accepted	.484**	.001	Accepted
TW	.286	.063	Rejected	.705**	.000	Accepted
PD	.307*	.045	Accepted	.442**	.003	Accepted
TMC	.256	.055	Rejected	.500**	.001	Accepted
OQMP	.351*	.046	Accepted	.407**	.007	Accepted
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).						

Source: survey result, 2015

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS RECOMMENDATIONS

This chapter deals with four sections: The first deals with summary of the study findings, second discussion, third conclusion, and finally limitation of the research and recommendations.

5.1 Summary of Findings

Summary results of descriptive analysis are listed in Table 4.3 and 4.4 shows the means and SD of nine constructs range from (4.11) to (4.51), (4.51) to (4.07), and from (0.54) to (0.70), (0.51) to (0.95) for each both OP dimensions i.e., productivity and profitability respectively. Meanwhile, the mean and SD of overall commutative nine identified QM factors is (4.35) and (0.68) respectively. Therefore, mean, and SD was used to determine the extent of spread of the data and shows the reliability of data and also displays high or significant relationship between model variables.

The results of Pearson's correlation test for independent variables and dependent variable was shown in Table 4.5 and 4.6. Table 4.6 shows the highest correlation values with OP (**productivity**) are customer focus (CF), training and education (TE), supply chain management (SCM), and employee relation (ER). This indicates that those four variables have a strong influence on OP (productivity). On the other hand, bench marking (BM), team work (TW), and top management commitment (TMC) have not influenced on OP. In general, the findings indicate that four of QM variables are supported and impact on OP (productivity) in their factory. So the result of the correlation analysis, therefore, supported all the QM constructs under hypothesized (H1a) relationships developed in this study excepted or rejected BM, TW, and TMC.

Moreover, as shown in table 4.7 above, six out of nine QM constructs (SCM, ER, SQP, TW, PD, and TMC) correlation value suggests are positive and significantly correlated at the level of $r < 0.01$ to the OP (**profitability**). On the contrary, three constructs (CF, TE and BM) result are found negative correlation or not significant with OP i.e., profitability. The researcher found in this study that,

benchmarking(BM) practice is the only QMP factor that have no directly and negatively affects firms operational performance i.e. both productivity and profitability.

The results regarding the hypothesis test of the relationship between the nine critical success factor (CSF) that incorporate QM practices and operational performance are depicted in Table 4.8. To better highlight the relationship between firms' QM practices and their operational performance the researcher have divided this latter variable into two categories (productivity and profitability).

As it is shown at table 4.8 the analysis of relationship between the performance of firms and their QM practice it reveals that three out of nine constructs ("BM, TW, and, TMC" and "CF,TE, and BM") have insignificant with both OP dimensions as productivity and profitability respectively. Meanwhile all the rest six constructs show a significant positive correlation at the 0.01 level and except SQP and PD for productivity at 0.05. *The result of main hypothesis (H 1)* shows that $p=.379^*$ and $r= .027$: there is positive and significant relationship between overall Quality management variables and firms operational performance at the significance level of $r<0.05$. In short, the results confirm what the researcher have stressed several times during this paper, namely, the perception of respondents influence the results this study , and also expected of firms performance

5.2. Conclusion

The object of this paper was to identify the QM variables that have a significant relationship with the operational performance within a sample of all management levels three Ethiopian leather manufacturing industry. To achieve this objective a systematic approach study was employed to determine the quality management dimensions used in the previous literature and suitable to be tested in this study. Although, past studies on QM/TQM practice have undertaken the identification and concept implementation of QM practices successfully but still the literature on the investigation of linkage between QM/TQM practices and organizational performance in context with Ethiopian leather manufacturing industry is in infant stage. In line to this, the present study attempts to bridge this gap and contribute to the development of conceptual framework and research model particularly for Ethiopian leather industry.

The findings of this study contributed to both theoretical and managerial perspectives. From the theoretical standpoint, the results gained from this study consistent with the theories and the previous literature which supported these theories by providing empirical evidence throwing in enrichment the body of knowledge about the QM theory. From the managerial perspective, the results of this study showed that there was a significant relationship between the nine identified quality management dimensions and operational performance. This means the managers should be concerned about these dimensions to enhance the operational performance of the organization.

Furthermore; when firms' operational performance is analyzed on its two components productivity and profitability separately with each nine QM constructs the following result is observed:

- The significant relationship with **both** productivity and profitability performance was registered for those practices that regard the supplier chain management (SCM), employee relation (ER), strategic quality planning (SQP), and product design (PD).
- Thus, firms that want to improve their operational performance (both productivity and profitability) should be directed primarily towards improving practices that reflect these dimensions;
- A non-significant impact, even though rejected in this study but not negligible on **both** productivity and profitability (OP) results was registered by the variable **benchmarking**.
- The variables customer focus, training and education, supplier chain management, employee relation, strategic quality planning, and product design have a significant impact at 0.05 only on the productivity results. This is somehow explainable because the productivity results quantifies to a large extent the clients satisfaction, the scrap rate, the rate of returned products and the quality quantified through the standards has a positive impact on the above firms productivity performance indicators.

It can be concluded that the overall identified QM practices improve operational performance in the firms. All aspects of QM practices should be effectively managed in a firm because each factor in QM practices has impact on firm operational performance. The synergy among the QM factors brings about exceptional or crucial improvements in the firm operational performances. Firms should improve knowledge/ perception on critical success factors that have high effect on operational performance and allocate sufficient resources to practice QMP successfully to have industry competitive advantage.

5.3. Recommendation

In developing such a framework on QMP, the researcher would like to forward the following suggestion to concerned body to discharge their responsibility in the development of business and management body of knowledge, and improvement of industry operational performance.

Some of the managerial implications of this study are:

- ✓ This research provided valuable knowledge in QMP regarding the management perception towards the relationships between QM practices and firms operational performance of ELI, and hence it's suggested that mangers have to implement in their firms to improve OP.
- ✓ Management must focus on the identified QM constructs to achieve higher levels of satisfaction in the industry which can provide an advantage over other industries in retaining the competitive environment;
 - Thus, it's recommended that the mangers of factories have to give exception in their managerial function.
 - Allocate sufficient resources to practice QMP successfully to boost industry OP .
- ✓ The finding of QM practice may guide managers on how to improve firm's OP in these applications in order to have competitive advantage in the industry.
- ✓ The result determines the significant QM practices and their impact on operational performance in the Ethiopian leather industry, thus it's recommended that mangers have to give due attention in their managerial function.
- ✓ The model can also provide a baseline measure for the extent of QM practices that is in place at a company. Thus, knowledge of this baseline can help in implementing and gaining continuous improvement in the company operational performance.
- ✓ Moreover it's recommended that Managers can further enhance their knowledge in driving the identified key QM practices from the study and maximize the potential of the formal quality management system.
- ✓ As the finding of this survey merely relies on the subjective opinion of industry management staffs, its needs further research work to verify in Ethiopian industry context.

- ✓ Hence R&D play a crucial role in GDP, a concerned body have to give due attention for business & management research to cope up the industry with global change forces, particularly ‘professional Association- if any’, practitioners ,and academicians to contribute their national and social responsibility.

Research Contributions

Moreover, in developing research framework and analyzes the result on QMP, the present study can help in:

- ☞ Understanding the awareness of QMP or any other quality program in Ethiopian leather industry.
- ☞ The study investigating and the reduced gap of empirical evidence regarding QM practices management perception in Ethiopian leather industry.
- ☞ Identification of the key QM practices for effective operational performance in Ethiopian leather industry.
- ☞ Finally, the study will provide a significant contribution in developing a better understanding of the QM practices and operational performance in leather industries, and also this study offers the base to conduct similar research in related area.

Future research implication

5.4. Limitation of the study

The major constraints faced by the researcher whilst conducting this study **were**: First, lack of empirical research on the subject matter especially in our country, and also **the non-availability of adequately published and documented data about Ethiopian leather Industry.**

Second, the study used **subjective** measures of the perception of management level staffs of the industry which may not give accurate information to test the hypotheses. Furthermore, the study asked for perceived data about QM practices and its impact on firm’s operational performance, but the respondents might have given desired data, which made their firms look good. Meanwhile, the researcher did not ask for the names of the firms and respondents which caused which firms belong to which sector. Anonymity of the firm and respondent in the survey may improve accuracy and completeness of the responses.

Lastly, shortage of budget due to the fact that it is self-financed, and also due to time constraints; i.e. the researcher observed that research work needs not only free time, but also free mind. Thus, the research concerned only the impact of quality management practice on firms' operational performance i.e. the relationship between QM practice, productivity and profitability at Ethiopian leather industry a case of three selected footwear factories of Ethiopian leather industry.

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APPENDICES

A-F

Appendix A. Questionnaire

St. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

MASTERS OF GENERAL BUSINESS ADMINISTRATION (MBA) PROGRAM

Questionnaire to be filled by the three selected of leather/ footwear manufacturing industry management staffs.

Dear Respondents:-

I would like to express my sincere appreciation for your generous time and honest and prompt responses.

Objective of the Questionnaire:

This questionnaire is designed to collect information about the quality management practice and its impact on industry operational performance (i.e. productivity and profitability). The information shall be used as a primary data in this research which being conducted as a partial requirement of the student researcher's study at St. Mary University for completing his MBA program. The researcher will be willing to submit a copy of his final report to your leather factory (organization) when it is ready. Thus, he wants to get your permission for collecting the necessary information even when it is meant for academic use. Therefore, your genuine, honest, and prompt response is a valuable input for the quality and successful completion of the research project.

General Instructions:

- There is no need of writing your name, and Participation in this survey is voluntary.
- In all cases where answer options are available please tick (✓) in the appropriate box.

Confidentiality:

This research would like to assure you that this research is only for academic purpose authorized by the St. Mary University. No other person will have access to data collected. In any sort of report I might publish, I will not include any information that will make it possible to identify any respondent.

Part I: Participant Information

1. Sex: Male Female
2. Which of the following age categories describes you?
 Under 25 25-34 35-44 45-54 Above 55 years
3. Number of years you have worked for the factory:
 0-4 5-9 10-19 20-30 Above 30 years
4. Educational Qualification:
 Technical school graduate Master Degree
 College Diploma PhD
 BA/BSc Degree
5. Your field of specialization in terms of highest educational status _____
6. Your current position (job) in the factory _____

Part II: Questions related to QM practice to wards operational performance

Listed below are statements about the relationship between Quality Management indicators and operational performance, i.e. productivity and profitability of the industry. Please indicate your level of agreement with the statements so that your answers to these questions will enable the researcher to assess what you think about the quality management practice (QMP) on operational performance (OP) in your firm.

- QMP (quality management practice) means a set of management practices applicable throughout the organization and geared to ensure the organization consistently meets or exceeds customer requirements. It's formed from a set of quality-related indicators, methods and techniques adopted by the firms.
- *Performance refers to excellence, and includes profitability and productivity among other non-cost factors.*
- *Productivity is a fairly specific concept related to the ratio between output and input*
- *Profitability as a percentage of sales i.e., the relationship between operational profit and net sales.*

A. Quality Management constructs.

S/ N	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	<i>The relationship between quality management(QM) practice and operational performance, i.e. productivity</i>					
1.	The overall identified quality management (QM) practices has a significant positive relationship between with industry operational performance i.e. <i>productivity and profitability.</i>					

2.	Customer focus for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i> .					
3.	Training and education for QM practices have a significant positive relationship with industry operational performance i.e. <i>productivity</i> .					
4	Supplier chain management for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i> .					
5	Employee involvement/relation for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i> .					
6	Benchmarking for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i>					
7	Strategic quality planning for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i>					
8	Team work for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i>					
9	Product design for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i>					
10	Top-management commitment for QM practices has a significant positive relationship with industry operational performance i.e. <i>productivity</i>					
S/ N	<i>The relationship between quality management (QM) indicators and operational performance (i.e. profitability)</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Customer focus for QM practices has a significant positive relationship with industry operational performance i.e. <i>profitability</i> .					
2	Training and education for QM practices have a significant positive relationship with industry operational performance i.e. <i>productivity</i> .					
3	Supplier chain management for QM practices has a significant positive relationship with industry operational performance i.e. <i>Profitability</i> .					
4	Employee involvement/relation for QM practices has a significant positive relationship with industry operational performance i.e. <i>profitability</i> .					
5	Benchmarking for QM practices has a significant positive relationship with industry operational performance i.e. <i>Profitability</i> .					

6	Strategic quality planning for QM practices has a significant positive relationship with industry operational performance i.e. Profitability.					
7	Team work for QM practices has a significant positive relationship with industry operational performance i.e. Profitability.					
8	Product design for QM practices has a significant positive relationship with industry operational performance i.e. Profitability.					
9	Top-management commitment for QM practices has a significant positive relationship with industry operational performance i.e. Profitability.					
10	The overall identified QM practices has a significant positive relationship between with industry operational performance i.e. Profitability.					

B. operational performance dimension measurement (, i.e. productivity and profitability)

S/ N	<i>Operational performance i.e. productivity indicators</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Customers' satisfaction improved due to factory QM practice.					
2	There is high degree of employee satisfaction as QMP like top management commitment.					
3	Production scrape rate highly reduced due to factory QMP					
4	Rate of returned product improved as QM indicators practiced					
S/ N	<i>Operational performance i.e. profitability indicators</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The sales revenue of the factory improved as the factory implements QM practice.					
2	The net sale profit of the factory improved due to factory QM practice					
3	Cost of Production highly reduced as scrape rate and rework reduced due to factory QMP					

4	Operational cost (logistic and marketing cost) the factory reduced because of QM indicators practiced					
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Part III. Additional Questions

1. What are the real significances that you expect regarding the practice of Quality Management indicator towards your factory operational performance improvement?

2. Would you please suggest if there is anything to be changed with regard to the current quality management practice to boost your firm operational performance?

Thank you for your help in this important research! If you have any questions or comments, please contact [St. Mary's University -School of graduate study, e-mail:abetade@gmail.com, and phone number 0911112281, prospected graduate of general MBA July, 2015].

With many thanks.

Appendix -c

QM constructs statistical result

Statistics

	OP	CF	TE	SCM	ER	BM	SQP	TW	PD	TMC
N Valid	43	43	43	43	43	43	43	43	43	43
N Missing	0	0	0	0	0	0	0	0	0	0
Mean	4.4186	4.2093	4.3023	4.1395	4.0698	4.2791	4.1860	4.3721	4.0930	4.5116
Std. Deviation	.79380	.96506	.86009	.77402	.82794	.59062	.93238	.61811	.75005	.70279

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
OP	43	3.00	5.00	4.4651	.63053
CF	43	3.00	5.00	4.3256	.64442
TE	43	3.00	5.00	4.3721	.65550
SCM	43	3.00	5.00	4.1860	.62700
ER	43	3.00	5.00	4.1395	.63925
BM	43	3.00	5.00	4.1163	.69725
SQP	43	3.00	5.00	4.2791	.66639
TW	43	3.00	5.00	4.3953	.54070
PD	43	3.00	5.00	4.2791	.59062
TMC	43	3.00	5.00	4.5116	.70279
Valid N (listwise)	43				

Appendix –D

Correlations

		OP	CF	TE	SCM	ER	BM	SQP	TW	PD	TMC
		productiv									
OP prod.	Pearson Correlation	1	.732**	.435**	.438**	.485**	.219	.307*	.286	.307*	.294
	Sig. (2-tailed)		.000	.004	.003	.001	.159	.045	.063	.045	.055
	N	43	43	43	43	43	43	43	43	43	43
CF	Pearson Correlation	.732**	1	.665**	.495**	.638**	.193	.504**	.237	.391**	.202
	Sig. (2-tailed)	.000		.000	.001	.000	.214	.001	.126	.010	.195
	N	43	43	43	43	43	43	43	43	43	43
TE	Pearson Correlation	.435**	.665**	1	.581**	.669**	.217	.629**	.314*	.424**	.404**
	Sig. (2-tailed)	.004	.000		.000	.000	.161	.000	.040	.005	.007
	N	43	43	43	43	43	43	43	43	43	43
SCM	Pearson Correlation	.438**	.495**	.581**	1	.528**	.178	.614**	.410**	.548**	.319*
	Sig. (2-tailed)	.003	.001	.000		.000	.254	.000	.006	.000	.037
	N	43	43	43	43	43	43	43	43	43	43
ER	Pearson Correlation	.485**	.638**	.669**	.528**	1	.147	.521**	.388*	.390**	.420**
	Sig. (2-tailed)	.001	.000	.000	.000		.348	.000	.010	.010	.005
	N	43	43	43	43	43	43	43	43	43	43
BM	Pearson Correlation	.219	.193	.217	.178	.147	1	.402**	.466**	.324*	.508**
	Sig. (2-tailed)	.159	.214	.161	.254	.348		.007	.002	.034	.001
	N	43	43	43	43	43	43	43	43	43	43
SQP	Pearson Correlation	.307*	.504**	.629**	.614**	.521**	.402**	1	.479**	.492**	.450**
	Sig. (2-tailed)	.045	.001	.000	.000	.000	.007		.001	.001	.002
	N	43	43	43	43	43	43	43	43	43	43
TW	Pearson Correlation	.286	.237	.314*	.410**	.388*	.466**	.479**	1	.191	.583**
	Sig. (2-tailed)	.063	.126	.040	.006	.010	.002	.001		.220	.000
	N	43	43	43	43	43	43	43	43	43	43
PD	Pearson Correlation	.307*	.391**	.424**	.548**	.390**	.324*	.492**	.191	1	.362*
	Sig. (2-tailed)	.045	.010	.005	.000	.010	.034	.001	.220		.017
	N	43	43	43	43	43	43	43	43	43	43
TMC	Pearson Correlation	.294	.202	.404**	.319*	.420**	.508**	.450**	.583**	.362*	1
	Sig. (2-tailed)	.022	.195	.007	.037	.005	.001	.002	.000	.017	
	N	43	43	43	43	43	43	43	43	43	43

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

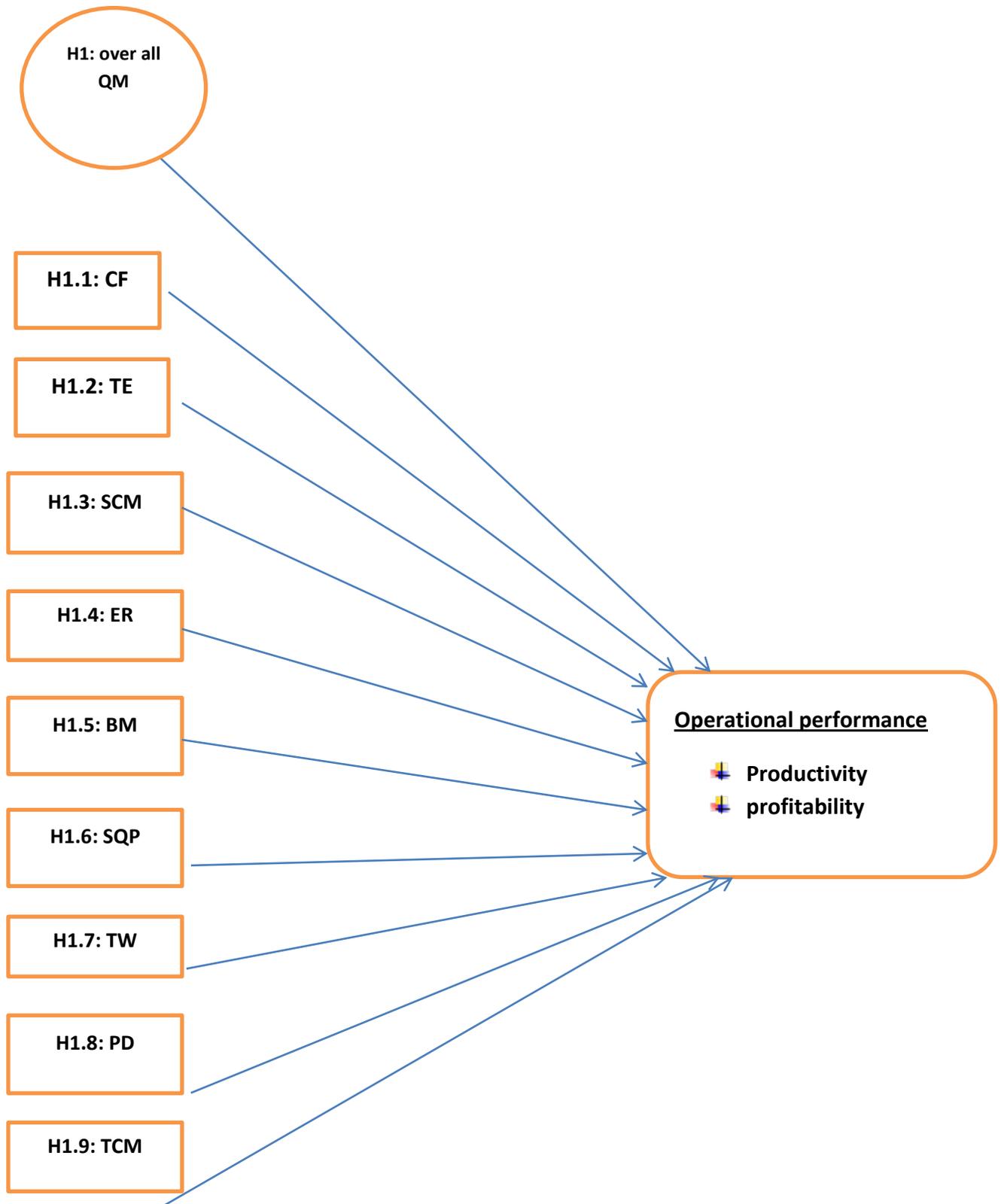


Fig. 1.1 Research hypothesis model or conceptual frame work of the relationship between QM practice, and firms' operational performance.

Annex . Descriptive Statistics of dependent variables (productivity)

	N	Minimum	Maximum	Mean	Std. Deviation
Productivity:					
Customer Satisfaction	43	3.00	5.00	4.3488	.61271
Employee Satisfaction	43	4.00	5.00	4.4419	.50249
Scrap rate	43	3.00	5.00	4.3488	.68604
Retained rate	43	3.00	5.00	4.3023	.70828
Profitability:					
Sales Revenue	43	3.00	5.00	4.3256	.71451
Net Sale Profit	43	3.00	5.00	4.2791	.76612
Cost of production	43	3.00	5.00	4.3488	.68604
Operation cost	43	3.00	5.00	4.3488	.68604
Valid N (listwise)	43				

DECLARATION

I, undersigned, declare that this work entitled “**The nexus between quality management practices and operational performance of Ethiopian Leather Industry**” is outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor.

This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of Master of Business Administration [MBA] .

By: Abegaz Tedesse Merga

Signature_____

Date_____

ENDORSEMENT

This is to certify that this project work, “**The nexus between quality management practices and operational performance of Ethiopian Leather Industry**” undertaken by Abegaz Tadesse for the partial fulfillment of Master’s of Business Administration [MBA] at St. Mary University, is an original work and not submitted earlier for any degree either at this University or any other University.

Research Advisor

Abdurezak Mohammed (PhD)

Date