Original Research Article

The Effect of Quality Management Practice on Business Performance of SMEs in Merhabete/Alem Ketema/, North Shoa, Ethiopia

ABSTRACT

The study investigated the quality management practices and business performances of SMEs in Merhabete/Alem Ketema, Ethiopia. Four key dimensions of quality management practices including customer focus, human resource focus, supplier quality management, and continuous improvements were used as independent variables accompanied by different measurement instruments under each variable, while a non-financial performance variable was used to measure the business performance. Primary data was collected using a self-administered questionnaire from a sample of 245 employees. Data were analyzed using descriptive and econometrics analysis. The findings indicate that the four key independent variables had a positive and significant effect on the performance of SMEs. The study recommended that SMEs should ensure that the objectives of the organization are linked to customer needs and expectations to improve performance, and they should allow participative consultation and engagement of employees in making decisions on quality issues and provide freedom to act with responsibility and accountability.

***Key Words**: Quality Management Practices, SMEs, Customer Relations, Supplier Quality Management, Business Performance.*

Introduction

Studies about the origins of total quality can be traced back to nearly 80 years ago to the first use of statistical tools to improve the quality of manufactured products partly in the USA and partly in Japan as well. Chen and Wong (2004) emanated that it was primarily adopted by some Japanese companies in the decades immediately after World War II with the greater successes of Japanese companies during the 1980s. In line with this, with the blossoming of the public sector in almost every economy, quality imperative is no longer the sole concern of manufacturing. As a result, any service organizations are facing the same ground realities as those that confronted their manufacturing counterparts in the past. This led to quality moving from its manufacturing origins into public organizations (Naveed et al., 2011).

In developing countries, the economic importance of SMEs is similarly higher. In Ethiopia, for example, as discovered by the CSA survey of 2003, SMEs account for the bulk of nonagricultural economic activities and nearly 95.6% of total industrial employment. Despite the large number, the SME sector in Ethiopia is exposed to a number of constraints related to policy, and structural and institutional problems that hinder sustained growth, development and long term planning (Ageba & Ameha, 2006). The government of Ethiopia developed a National Micro and Small Enterprise Strategy in 1996/97. However, the duty has been given significant emphasis since 2004/2005. In line with this, the government has decided to establish SMEs coordinating body at regional level. Hence, SME's Development Agencies

are set up in all regions so that it can play a great role in alleviating poverty & reducing unemployment, helping out the sector to play pivotal role as a base to medium and large scale industry (Ageba & Ameha, 2004).

In line with this, the Amhara regional government officially established Micro and Small Enterprises Development Agency with regulation number **205/2003**. The agency was tasked with creating more quality employment opportunities and increase returns on investment in social security, secure increased standards of life and to bring sustainable economic growth to the region. In addition, the sector serves in promoting the development of women, youth and others as important drivers of economic development through fostering growth, technology adoption and innovation for poverty reduction (Commission on Legal Empowerment of the Poor, 2006).

Through analysis of the Ethiopian Quality Award (EQA) self-assessment report evaluation (2009), generally, quality management practices in Ethiopia was found to be low in all the tenets including leadership, policy and strategy, resources management, process management, customer satisfaction, business performance and impact on society. This study mainly focused the effect of Quality Management Practices and business Performance in Ethiopia SME particularly in Merhabete (Alem Ketema Town). Many small manufacturing enterprises are registered each year, but most of them find it difficult to sustain the business, the few that survive are at risk of foreclosure and bankruptcy, thus find it challenging to meet with customers quality demands for the products and services they offer. This has caused a decline in domestic investment and the inability of existing SMEs to expand their operations in Merhabete, Alem Ketema Town, North Shoa Ethiopia.

Research into the relationship between quality management practices and the performance of organizations' is scarce, and the results seem sometimes contradictory. Further empirical research in this area seems to be necessary. Particularly the researcher hardly found any previous studies which are specifically conducted to examine the relationship between quality management practices and the performance of small manufacturing enterprise in Ethiopia. Therefore, the researcher believed that there is a gap of knowledge about the relationship between quality management practices and business performance and also a problem with implementation of TQM practice in the study area within Ethiopia's SME sector. Accordingly, this study will investigate the effect of quality management practices and business performance in SMEs in Merhabete, Alem Ketema Town. With this in mind, the general objective of the study was to investigate the effect of quality management practices and business performance in SMEs in Merhabete, Alem Ketema Town. While the specific objectives include:

1. To determine the effect of customer focus on business performance in SMEs located in Merhabete, Alem Ketema Town.
2. To analyse the effect of continuous improvement and organizational performance of SMEs in Merhabete, Alem Ketema Town.
3. To determine the extent to which human resource focus on business performance impacts SMEs in Merhabete, Alem Ketema Town.
4. To analyse the effect of supplier quality management business performance of SMEs in Merhabete, Alem Ketema Town.

Literature Review and Hypotheses

A number of studies have been carried out that try to relate the impact of quality management practices over business performance. The majority of these studies conclude that there is a positive relationship between the implementation of quality management practices, and business (organizational) performance improvement (Lee & Sandri, 2001;

Singels et al., 2001; Boulter & Bendell, 2002; Dick et al., 2002; Ozgur et al., 2002). As several empirical studies show, implementing quality management practices effectively influences firm performance positively (Huarng & Chen, 2002; Parast et al., 2011; Shahin & Dabestani, 2011). Firms that implement quality management focus on providing more value for their customers and improving the efficiency of processes. Continuous improvement of processes and product quality leads to increased revenues (through product reliability) and reduced costs (through process efficiency). Although the majority of the studies carried out state that there is a positive relationship between quality management practices and performance, as was just mentioned, there is also a group of authors that did not find enough evidence to support such a relationship (Conca et al., 2004; Quazi et al., 2002). Even though there are small numbers of studies conducted on the effect of quality management practices on organizations' performance, still little is known about the effect of quality management practices on business performance particularly in case of SMEs in Ethiopia.

This study is hinged on the Quality Improvement Theory. Quality Improvement Theory proposes that a component of quality management is that it places duty regarding fabricating associations decisively at the entryway of top administration (Deming, 1986). Deming (1986) noticed that no quality administration framework could prevail without top administration duty; the administration puts resources into the procedures, makes corporate culture, chooses providers and grows long haul connections. Deming's Quality Improvement Theory gives business an arrangement to take out low quality control issues through successful administrative systems. Management's conduct shapes the corporate mentality and characterizes what is essential for the achievement and survival of the firm.

Hubert (2000) has put forward the hypothetical approach of Deming (1986) in regard to the quality administration framework, and it visualizes the production of a hierarchical framework that encourages participation and figuring out how to encourage the execution of process administration rehearses. This, thus, prompts the persistent change of the procedures, items, and administrations and imparts worker. The theoretical approach of Deming (1986) with respect to the quality management system detailed by Hubert (2000), presupposes the creation of an organizational system that adopts cooperation and learning to facilitate the implementation of process management practices. This, in turn, leads to the continual improvement of the processes, products, and services and helps to introduce employee satisfaction. These are critical to promoting customer focus, and, ultimately, helping in the survival of any organization.

The responsibilities of top management should take the lead in changing processes and systems (Oakland, 2004). Leadership plays a crucial role in ensuring the success of quality management because it is the top management's responsibility to create and communicate the vision to move the firm toward performance improvement. Top management is responsible for most quality problems and methods to solve them. These methods include an appropriate working environment and climate for work that is free of fault finding, blame or fear and instead provide clarity of issues, communicate effectively and provide appropriate environment for work to enhance performance (Lamport et al., 2010). Deming's quality improvement theory is relevant to this study in that quality management practices is a quality management system which can be used to enhance quality of products and services through continuous improvement and which organizations can use to realize performance.

Hypotheses Formulation

The Effect of Business Performance on SMEs

Business performance refers to meeting the firm's objective or the success of the business. Daft (2000) opines that business performance is the firm's ability and capacity to achieve organizational objectives. Previous studies have widely investigated how to improve business performance and different predictors and factors of firm performance. The main purpose of any enterprise (firm) is to provide customers with products and services that meet and satisfy their needs and wants. In the field of organizational studies and strategic management literature, performance is considered as one of the most important constructs (Combs et al., 2005). Therefore, researchers have conducted considerable amount of research work on enterprise's performance seeking to understand the factors, processes, and other antecedents that can increase the enterprise's outcomes (Jing & Avery, 2008). According to Rogers & Wright (1998), business performance of a firm has widely been studied as a dependent variable in organizational research studies. Hitt et al. (2007) is of the view that manufacturing firms have an overall strategic goal of maintaining a performance that leads to a competitive edge in the market. Psomas et al. (2010) argue that performance contributes to providing the competitive advantage to the firms in high competition in the market. The company takes advantage over its competitors and performs better in business.

Psomas et al. (2010) used ISO certified and noncertified manufacturing firms in Greece. The study findings indicated that ISO certified manufacturing firms significantly outperformed the non-certified ones with regard to product quality, firm performance, operational, market and financial performance. The study used financial and non-financial measures of performance and it was done in a developed country Greece. However, Ikay and Aslan (2011) in their study on SMEs in Turkey measured the difference between ISO-certified and non-certified firms on performance. The results showed no statistically significant difference between certified and non- certified firms in terms of performance. The current study focused on non- financial measures of SME performance and it was carried out in a developing country, Ethiopia. Additionally, the study measures quality management practices such as continues improvement, customer focus, Human resource focus, and Supplier quality management. The concepts are summarized in the conceptual framework on Figure 1.

The task of achieving the specific objectives led to the formulation of the study hypotheses which include:

H_1: Customer Focus has a positive and significant effect on business performance of SMEs.

H_2: Continuous Improvement has a positive and significant effect on business performance of SMEs.

H_3: Human resource focus has a positive and significant effect on Business performance of SMEs.

H_4: Supplier quality management has a positive and significant effect on Business performance of SMEs.

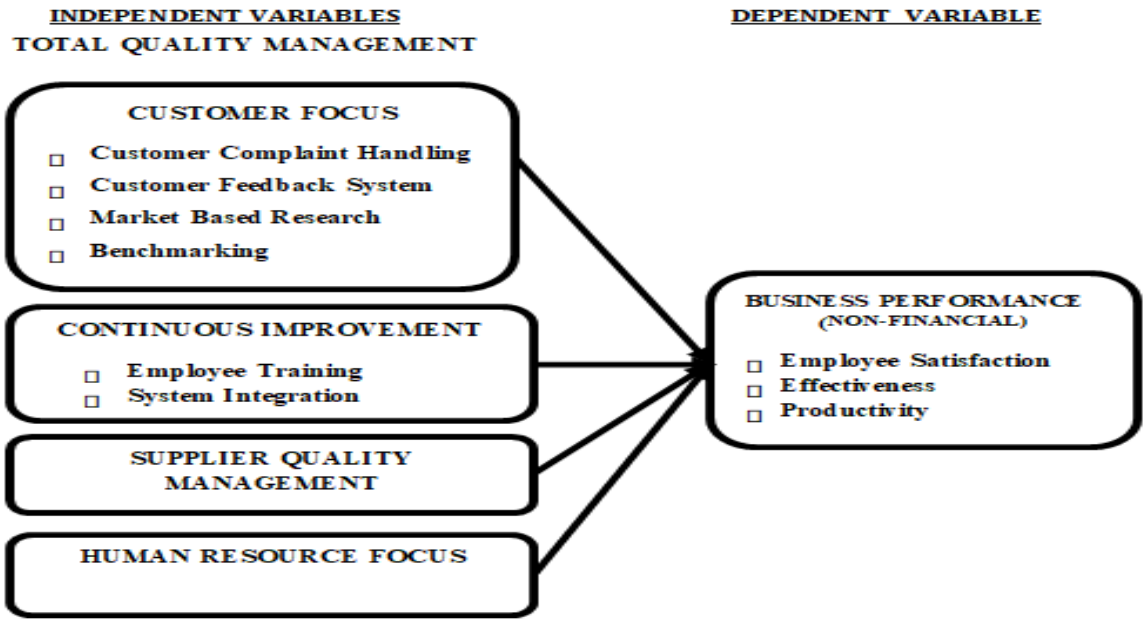

Figure 1: Conceptual Framework

Research Methods

The study was a quantitative research using explanatory research design to reveal the determinants of quality management practice. The explanatory studies were used because they establish causal relationship between dependent and independent variables. Primary data was collected from employees in SMEs in Merhabete, Alem Ketema using a structured close-ended questionnaire. A total of 124 SMEs were identified in the study area with total employee strength of 500. A proportional simple stratified random sampling technique was used to get a representative sample. The Taro Yemane (1967) method was used to calculate the sample size; the equation is given as follows:

$$n = \frac{N}{1 + N(e)^2}$$

n = signifies the sample size

N = is the population under the study

e = 0.05 the margin error

$$n = \frac{500}{1+500(0.05)^2} = 222.22 \approx 223,$$ Adding 10% non-response rate (222*0.1= 22)

Thus, a total of 245 employees working in SMEs were selected as respondents in this study. Copies of the questionnaire were distributed to the respondents face-to-face, the completed questionnaire were analyzed using descriptive and inferential statistics employing the STATA 14 software. Descriptive statistics employed include mean, percentage and standard deviation, while the inferential statistics applied include Pearson correlation and regression analysis.

Respondents were asked to rate their level of insight on the five variables on five-point Liker scale basis to obtain immediate information from SME employees. To measure all questions on total quality management and business performance, a scoring scale ranging from 1 = Strongly Disagree through 2 = Disagree, 3 = Neutral, 4 = Agree to 5 = Strongly Agree was developed. The Cronbach Alpha was used to test the reliability of the respondent data using STATA 14, while the study was validated by a qualified research advisor and language experts for clarity of the questionnaire statements.

Dependent Variable

Business Performance: the comparison of the value created by an enterprise with the value owners expected to receive from the enterprise. And it measures with the non-financial aspects like employee satisfaction (3 items), effectiveness (4 items) and productivity (3 items) (Alchian & Demsetz, 1972).

Independent Variables

Customer Focus: defined as the degree to which a firm continuously satisfies customer needs and expectations that measured by customer compliant handling (4 items), customer retention intervention (4 items) customer feedback system (2 items), market based research (2 items) and benchmarking (1 item) (Knowles, 2011).

Continuous Improvement: is designed to empower employees to solve problems that bugs them gradually improve the efficiency of their work process as well as the on-going improvement of products, services measured by employee training (3 items) and system integration (7 items) (Kaziliunas, 2010).

Human Resource Focus: is addresses key human resources practices those directed toward creating and maintaining a high performance workplace and toward developing enterprise to enable them and the organization adopt to change (4 items) (Samson, 2017; Shafiq et al., 2019).

Supplier Quality Management: is the system in which supplier quality is managed by using a proactive and collaborating approach, it continues through the entire life cycle of a product and for the duration of the relationship with that particular supplier (5 items) (Sadikoglu & Olcay, 2014).

Research Results and Discussion

Sample and Response Rate

The researchers distributed 245 questionnaires for 124 Small Manufacturing enterprises in Merhabete, Alem Ketema. Out of which 230(93.88%) were completed and returned. Babbie (1990) suggests that response rate of 50% is adequate, 60% is good, and 70% or above is very good. Based on the suggestion of Babbie, the respondent's rate in this research was very good. Because 230 questionnaires were collected from 245 total sample of the study, which cover 93.88% of the sample size. The analysis was made based on the responses obtained from the 230 questionnaires found to be valid for further statistical analysis.

Demographics of Respondents

The demographic variables taken into consideration in this study include age, sex, monthly salary, educational level and work experience in year. Table 1 summarizes the profile of the respondents in relation to the above mentioned demographic attributes of the respondents.

Table 1. Demographic Characteristics

Variable	Category	Frequency	Percent
Sex	Male	162	70.43
	Female	68	29.57
Age (years)	18-29 Years	95	41.30
	30-45 Years	61	26.52
	46-60 Years	57	24.78
	>60 Years	17	7.39

Educational level	Illiterate	10	4.35
	Primary	50	21.74
	Secondary	49	21.30
	TVET/Diploma	89	38.70
	Degree	27	11.74
	Masters and above	5	2.17
Experience	1-3 Years	105	45.65
	4-6 Years	73	31.74
	7-9 Years	45	19.57
	>9 Years	7	3.04
Salary (in Birr)	<3000 Birr	77	33.48
	3001-5000 Birr	129	56.09
	5001-10000 Birr	16	6.96
	>10000 Birr	8	3.48

Source: Own Survey, 2021

Fit Test Result

The internal consistency of the research instrument was tested using Cronbach's Alpha. This is important because the internal consistency of the scores analysis is used to test to what extent the separate items measure the similar concept (Sekaran, 2006). Saunders et al.(2009) clarifies that when the value of alpha is 0.9, it is considered excellent, greater than 0.8 is good, greater than 0.6 is acceptable, greater than 0.5 up to 0.59 is poor and less than 0.5 is unacceptable. The fit test result is presented on Table 2.

Table 2. Data Reliability Test

Variables	**No. of Items**	**Sign**	**Alpha**	**Internal Consistency**
Business Performance	**10**	**+**	**0.7480**	**Acceptable**
Employee Satisfaction	3	+	0.7873	Acceptable
Effectiveness	4	+	0.7323	Acceptable
Productivity	3	+	0.7462	Acceptable
Continuous Improvement	**9**	**+**	**0.7558**	**Acceptable**
Employee Training	3	+	0.7809	Acceptable
System Integration	3	+	0.7730	Acceptable
Benchmarking	3	+	0.7674	Acceptable
Customer Focus	**12**	**+**	**0.7366**	**Acceptable**
Customer Complaint Handling	4	+	0.7381	Acceptable
Customer Retention Intervention	4	+	0.7375	Acceptable
Customer Feedback System	2	+	0.7798	Acceptable
Market Based Research	2	+	0.7574	Acceptable
Human Resource Focus	**4**	**+**	**0.7622**	**Acceptable**
Supplier Quality Management	**5**	**+**	**0.7622**	**Acceptable**
Test Scale			**0.7711**	**Acceptable**

Source: Own Survey, 2021

The results from Table 2 show that the test results for all the variables were acceptable with values above 0.7 which Saunders et al. (2009) considered as acceptable.

Descriptive Analysis of Variables

The researchers used various statistical data analysis tools such as mean, standard deviation, minimum, maximum, frequency and percentile to analyse the collected data. They are presented in Table 3.

Table 3. Summary Statistics on Independent Variables

Variables	Obs.	Mean	Std. Dev.	Min.	Max.
Continuous Improvement	**230**	**3.172**	**0.484**	**1.77**	**4.33**
Employee Training	230	3.839	0.396	3.00	4.67
System Integration	230	2.910	0.757	1.00	4.67
Benchmarking	230	2.768	0.984	1.00	5.00
Customer Focus	**230**	**3.083**	**0.519**	**1.90**	**4.37**
Customer Complaint Handling	230	2.988	0.836	1.50	5.00
Customer Feedback System	230	3.133	0.826	1.25	5.00
Market Based Research	230	2.889	0.583	1.50	3.50
Benchmarking	230	3.323	0.745	2.00	5.00
Human Resource Focus	**230**	**2.836**	**0.964**	**1.00**	**5.00**
Supplier Quality Management	**230**	**3.493**	**0.413**	**2.60**	**4.40**

Source: Own Survey, 2021

Following Table 3 above the description with regard each independent variable is presented as follows;

Continuous Improvement practice 3.172, which is below average, indicating that the existing, continues improvement practice employee training, system integration and benchmarking. In employee training mean values are **3.8939** this means enterprise has training policies for employees, Employee are continuously trained to enhance internal quality performance and improve their problem solving skill in study area of SME. In system integration **(2.91)** not has continuous improvement of quality systems leading to increase revenues, has no continuous monitoring and improvement of quality system and procedures to enhance performance. In benchmarking **(2.678)** the enterprise has no time limit to meet efficiency of products delivery and not have quality practice. The enterprise also has no set benchmarks for internal quality realization and conformity.

Customer Focus also have the mean value is **3.083**, which is below average indicating that customer focus practice (customer compliant handling, customer feedback system, benchmarking and market based research) practice is not properly apply on SME at study area.

Human Resource Focus is one of total TQM practice and the mean value is **2.836**, which is below the average which indicate human resource practices like 'Right person is selected for right job``, Proper and efficient training is provided to newly selected personnel, Career development training to employees is provided by the enterprise (both internal and external) and Health and safety practices are not properly apply on SME, because of the enterprise was not emphasis on human resources focus.

Supplier Quality Management is another independent variable which affects business performance; the results show that it returned a mean value of **3.493**. It indicates moderate to average. That means the SMEs have moderately provided certification to suppliers and routine audits take place to maintain the quality of standards, employees periodically visit the supplier to inspect and evaluate the products for improving quality, knows the detailed information about the supplier and their performance, suppliers regularly take feedback from the SMEs, so as to maintain quality standards because of SMEs regards quality of products more important than price for selecting a supplier.

The summary of statistics of all variables that are evaluated based on a 5-point liker scale (from "1" "strongly disagree" to "5" "strongly agree'). According to Zaidaton and Bagheri (2009), when the mean score below **3.39** was considered as low, the mean score from **3.40** up to **3.79** was considered as moderate and mean score above **3.8** was considers as high as illustrated by Comparison bases of mean of score of five-point Liker-scale instrument. Thus, details of the analysis are presented in Table 4.

Table 4. Summary Statistics on Business Performance

Variables	Obs.	Mean	Std. Dev	Min.	Max.
Business Performance	**230**	**3.185**	0. **.531**	1.60	4.40
Employee Satisfaction	230	2.658	0.759	1.00	5.00
Effectiveness	230	3.496	0.828	1.00	4.75
Productivity	230	3.299	0.751	1.00	4.33

Source: Own Survey, 2021

Employee satisfaction: is one of organizational performance measurement tools which had a Mean value of **2.658** which indicates below average, which implies that the SMEs management has not involved employees on decision making on all quality matters, or offers employees opportunity for career growth through training and development, There is no improved information flow between top management and employees within the enterprise that leads to satisfy its employees.

Effectiveness: is another business performance indicator of SMEs with a mean value is **3.496** considered as moderate, which implies the employee are to some extent well trained on quality matters to enhance efficiency, to delivered the products to customers on time, use maximum physical facilities and quality administrative system was applied moderately.

Productivity: is a performance measurement tool with a mean value of **3.299** which indicate below average and that the SMEs were not certified ISO compliant to measure defects and wastages, and there is no improved lead time up to delivery and cost reduction methods.

Pearson Correlation Analysis

The Pearson´s correlation coefficient (r) was used to conduct the correlation analysis to find the level and direction of the relationships between dependent and independent variables. The result indicates the all factors have positive and significantly relationship with successful implementation of quality management practice on SMEs for enhancing business performance. That means for business performance, the correlation coefficient range has **r** values between **0.5614** up to **0.6458,** continuous improvement that have **r** values **0.5614** which moderate correlation and the other customer focus, human resource focus and supplier quality management has r values from **0.6063** up to **0.6458** which means strong positive relation with business performance indicates the correlation

is significant at 1% level of significance. As shown in Table 5, the result below each independent variable had correlation value stated as follows.

Correlation Analysis between continuous improvements with business performance - Continuous improvement is positively related to business performance with a Pearson correlation coefficient r=**0.5614** and p-value is **0.0001**, which is less than 0.01. Therefore, there is moderate positive correlation and statistically significant correlation at 1% level of significance.

Correlation Analysis between customer focus with business performance - Customer focus is positively related to business performance with a Pearson correlation coefficient r=0.6063 and p-value is 0.000, which is less than 0.01. Therefore, there is strong positive correlation and statistically significant correlation at 1% level of significance.

Correlation Analysis between human resource focus with business performance - Human resource focus is positively related to business performance with a Pearson correlation coefficient r=0.6458 and p-value is 0.0001, which is less than 0.01. Therefore, there is strong positive correlation and statistically significant correlation at 1% level of significance.

Correlation Analysis between supply quality management with business performance - Supply quality management is positively related to business performance with a Pearson correlation coefficient r=**0.6093** and p-value is 0.000, which is less than 0.01. Therefore, there is strong correlation and statistically significant correlation at 1% level of significance. Using Pearson correlation determining the degree of association between the indicated internal factors, hypotheses was tested the table 5.

Table 5. Pearson Correlation Coefficient Variable

	Respondents	Correlation Coefficient	P-value
Continuous Improvement	230	0.5614	0.0001*
Customer Focus	230	0.6063	0.0000*
Human Resource Focus	230	0.6458	0.0000*
Supplier Quality Management	230	0.6093	0.0000*

Note: * indicates the correlation is significant at 1% level of significance.

Source: Own Survey, 2021

Hypothesis 1:

H_1: Continuous improvement has positive and significant effect on business performance

Regression coefficient result shows that business performance was significantly influenced by continuous improvement since beta value **= 0.2056** and P-value **= 0.002 < 0.01** and similarly continuous improvement has positive and significant effect business performance are statically significantly at 1% level of significance's. The result revealed that when the continuous improvement improved by 1%, business performance also increased by 20.56%. Therefore, the result revealed that business performance of SME was significantly predicted So, null hypothesis is rejected whereas alternative hypothesis is accepted. The result is in line with several previous studies, among others Li et al. (2016) stated both in manufacturing and service industries, and Continuous Improvement (CI) is recognized as the most useful aspect to enhance competitiveness, efficiency, quality, and performance accordingly. Moreover, based on Maletič et al. (2012) found that CI had a positive and significant impact on maintenance performance. The findings also provide

empirical evidence that continuous improvement can be an effective way to improve maintenance performance (Terziovski, 2001).

The study also concludes that continuous improvement and innovation management strategy and system have a significant impact on SMEs performance. On the other hand, TQM is defined especially as a management philosophy that enlarges an organizational culture, through continuous improvement committed to customer satisfaction (Abusa & Gibson, 2011). Abusa and Gibson (2011) revealed that continuous improvement was significantly correlated with only one performance improvement, which is customer satisfaction.

Hypothesis 2:

H_1: Customer focus has positive and significant effect on business performance

Based on the above result for regression coefficient customer focus is the other statistically significant variable in explaining the outcome variable i.e. business (organizational) performance with beta value of **0.2054** since P-value = **0.001** < 0.01. The result revealed that when the customer focus improved by 1%, business performance also increased by 20.5%. This indicates customer focus has significant positive effect on business performance in Merhabete/Alem ketema small manufacturing enterprise so; the null hypothesis is rejected whereas alternative hypothesis is accepted

Hypothesis 3:

H_1: Human resource focus has positive and significant effect on business performance

The third hypothesis shows the interaction effect of human resource focus with business performance that it has positive and significant effect on business performance implication with a statistically significant value. From the regression result human resource focus has strong positive effect on business performance in Merhabete/Alem Ketema Small Manufacturing Enterprise. The value of beta= **0.1095** and p-value=**0.002 < 0.01**). The result revealed that when the human resource focus improved by 1%, business performance also increased by 10.95%. Therefore null hypothesis null hypothesis is rejected whereas alternative hypothesis is accepted

Hypothesis 4:

H_1: Supplier quality management has positive and significant effect on business performance

The regression coefficient table indicated the existence of strong positive and statistically significant effect supplier quality management on business performance at 1% level of significance since p-value=0.008) with beta=**0.2218**. Similarly, the correlation coefficient table also indicates that there is strong positive effect supplier quality management and business performance. Therefore, based on the above two tests the assumption supplier quality management has positive influence on business performance in SME Merhabete/Alem Ketema. The result revealed that when the supplier quality management improved by 1%, business performance also increased by 22.18%, so null hypothesis null hypothesis is rejected whereas alternative hypothesis is accepted. The results are consistent with the previous studies of Abusa & Gibson, Kaynak and Hartley (2011). Therefore, it is concluded that SQM is an integral element of the TQM to enhance the business performance.

Table 6. Summary of Hypotheses

Hypothesis	Decision

H_1:	Continuous improvement has positive and significant effect on business performance of SME	**Accepted**
H_2:	Customer focus has positive and significant effect on business performance of SME	**Accepted**
H_3:	Human resource focus has positive and significant effect on business performance of SME	**Accepted**
H_4:	Supplier quality management has positive and significant effect on business performance of SME	**Accepted**

Conclusion

The study was conducted to investigate the effect of quality management practice on business performance of SMEs in Merhabete/(Alem Ketema), North Shoa, Ethiopia The main objective of the study was to investigating the effect of quality management practices and business performance in SMEs located in Merhabete/Alem Ketema. The researchers examined the effect of the independent variables (continuous improvement, customer focus, human resource focus, and supplier quality management) on the dependent variable (business performance) in evaluating the quality management practices of SMEs. The results of the research indicate that quality management practice (continuous improvement) exists at a low practice level among the SMEs. The CI also have positive relationship with business performance, and a significant and positive effect on business performance of SMEs operating within the study area.

Based on the findings, the study recommends that, serious attention should be given to continuous follow up and immediate feedback in the process of implementation of TQM practice in SMEs in Merhabete/Alem Ketema. This will ensure a successful implementation of TQM practices in the management of SMEs in the study area. Findings show that one of vital means to the successful practice and integration of quality management practice is continuous improvement. Continuous improvement enables the employees by pushing them directly to the desired organizational goals. The continuous improvement system can be enabled through employee training, system integration and benchmark increase of quality of product, problem solving skills of the employees, absence of defects and the timely delivery of products to customers leads to increase customers and increase in revenues and profitability of the SME.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

References

Abusa, F.M., & Gibson, P. (2011). TQM implementation in developing countries: a case study of the Libyan industrial sector. Benchmarking: An International Journal, 20(5), 693-711.

Ageba, G. & Ameha, W. (2006). Micro and Small Enterprises (MSEs) Finance in Ethiopia: Empirical Evidence. Retrieved from http://www.ossrea.net/publications/eassrr/abstract-3jan06.htm

Ageba, G. & Ameha, W. (2004) Micro and small enterprises development in Ethiopia: Survey report. Ethiopian Development Research Insti tute, Research Report II.

Alchian, A. A., & Demsetz, H. (1972). Production, Information Costs, and Economic Organization. *The American Economic Review*, 62(5), 777–795.

Babbie, E. (1990) Survey Research Methods. 2nd Edition, Wadsworth, Belmont.

Boulter, L. & Bendell, T. (2002). How can ISO 9000:2000 help companies achieve excellence? *Measuring Business Excellence*, 6(2), 37-41.

Chen, R. & Wong, K. A. (2004). The determinants of financial health of Asian Insurance companies. *The Journal of Risk and Insurance*, 71, (3), 469-499.

Combs, J.G., Russell Crook, T., & Shook, C.L. (2005). The dimensionality of organizational performance and its implications for strategic management research. In Ketchen, D.J. and Bergh, D.D. (Ed.) *Research Methodology in Strategy and Management (Research Methodology in Strategy and Management, Vol. 2),* Emerald Group Publishing Limited, Bingley, pp. 259-286. https://doi.org/10.1016/S1479-8387(05)02011-4

Commission on Legal Empowerment of the Poor (CLEP). (2006). Legal empowerment of the poor: Entrepreneurship. Background Issue Paper, Addis Ababa, Ethiopia.

Conca, F., Llopis, F. and Tarı, J. (2004). Development of a measure to assess quality management in certified firms. *European Journal of Operational Research*, 156, 683697.

Daft, R.L. (2000) Organization Theory and Design. 7th Edition, South-Western Publishing, Ohio.

Deming, W. E. (1986). Out of Crisis. Cambridge, M. A: MIT Centre for Advanced Engineering Study.

Dick, G., K. Gallimore & J.C. Brown, 2002. Does ISO 9000 accreditation make a profound difference to the way service quality is perceived and measured? Managing Serv. Qual., 12, 30-42.

Ethiopian Quality Award (EQA) (2009). Self-assessment report evaluation manual. Addis Ababa University Press

Hitt, M. A., Ireland, R. D. &Hoskisson, R. E. (2007) Strategic Management: Concepts of competitiveness and Globalization 11th Edition. Strategic Management Journal, 22, 479-491.

Hubert (2005). Managing Total Quality, Enhancing Personal and Firms value. Tata Me Grawhill, New Delhi, 127-158.

Huarng, Yao- Tzung Chen, (2002). Relationships of TQM philosophy, methods and performance: a survey in Taiwan, Industrial Management & Data Systems, 102(4), 226-234.

Ikay ,M. S. & Aslan, E. (2011). The effects of the ISO quality management system on the performance of SMEs. *International Journal of Quality and Reliability Management*. 29(7), 753-778.

Jing, F. F., & Avery, G. C. (2008). Missing Links In Understanding The Relationship Between Leadership And Organizational Performance. *International Business & Economics Research Journal* (IBER), 7(5). https://doi.org/10.19030/iber.v7i5.3256

Kaziliunas, A. (2010). Success factors for quality management systems: certification benefits, International journal of Quality and Reliability Management, 14(6), 10-17.

Knowles, G. (2011). *Quality management*. Bookboon: London.
Lamport, M., Seetanah, B., Cohhyedass, P., & Sannassee, R. V. (2014).The association between ISO 9000 certification and financial performance.International Research Symposium in Service Management, Mauritius.
Lee, T.Y. & Sandri (2001). The development of ISO 9000 certification and the future of quality management: a survey of certified firms in Hong Kong. International Journal of Quality and Reliability Management, 15(2), 162-77
Li, J., Papadopoulos, C. T., & Zhang, L. (2016). Continuous improvement in manufacturing and service systems. International Journal of Production Research, 54, 6281-6284.
Maletič, D., Maletič, M., & Gomišček, B. (2012). The relationship between continuous improvement andmaintenance performance. Journal of Quality in Maintenance Engineering, 18(1), 30-41.
Naveed, A., Usman, A. & Bushra, F. (2011). Promotion: A Predictor of Job Satisfaction A Study of Glass Industry of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(16), 301-305.
Oakland, J.S. (2004). Total Quality Management.Oxford Butterworth; Heinemann On business performance. International Journal of Quality and Reliability Management, 2, 135-144.
Ozgur, C., Meek, G. and Toker, A. (2002), "The impact of ISO certification on the levels of awareness and usage of quality tools and concepts: a survey of Turkish manufacturing companies, Quality Management Journal, 9(2), 57-69.
Parast, M.M., Adams, S.G., & Jones, E.C. (2011). Improving operational and business performance in the petroleum industry through quality management, *International Journal of Quality & Reliability Management*, 28(4), 426-450.
Psomas, E., Fotopoulos, C. & Kafetzopoulos, D. (2010). Critical factors for effective implementation of ISO in SME service firms, Managing Quality management practices, 20(5) 440-57.
Quazi, H., Hong, C. & Men, C. (2002). Impact of ISO 9000 certification on quality management practices: a comparative study. Total Quality Management, 13(1), 53-67.
Rogers, W. & Wright, M. (1998) Measuring Organizational Performance in Strategic Human Resource Management: Problems, Prospects, and Performance Information Markets. *Human Resource Management Review*, 8, 311-331. http://dx.doi.org/10.1016/S1053-4822(98)90007-9
Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Advances in Decision Sciences*, 24(6), 948-975.
Samson, K.K. (2017). Effects of total quality management (TQM) on firm's operational performance. Retrieved from http://dx.doi.org/10.2139/ssrn.2922208
Saunders, M., Lewis, P. and Thornhill, A. (2009).Research methods for business students, 5th ed. Harlow, Pearson Education.
Sekaran, U. (2006). Research methods for business: A skill building approach. John Wiley & Sons.
Shafiq, M., Lasrado, F., & Hafeez, K. (2017). The effect of TQM on organisational performance: empirical evidence from the textile sector of a developing country using SEM. *Total Quality Management & Business Excellence*, 30(1-2), 31-52.

Shahin, A., & Dabestani, R. (2011). A feasibility study of the implementation of total quality management based on soft factor. Journal of Industrial Engineering and Management, 4(2), 258-280.

Singels, J., Ruel, G. & Henny Van, D. W. H. (2002). ISO 9000 Series: Certification and Performance. International Journal of Quality and Reliability Management. 18(1), 62-75.

Terziovski, M. (2001). The effects of continuous improvement and innovation management practice onsmall to medium enterprise (SME) performance. Faculty of Economics and Commerce, The University of Melbourne, Australia, no date.

Yamane, Taro. (1967). *Statistics: An Introductory Analysis*, 2nd Ed. New York: Harper and Row.

Zaidatol A.L., &Bagheri A. (2009), Entrepreneurship as a center choice: An analysis of entrepreneurial self- efficiency and intention of university student. *European Journal of Social Science*, 9(2), 338-346.