



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF QUALITY AND PRODUCTIVITY MANAGEMENT**

Impact of Ethiopian Quality Award (EQA) on Organizational Performance: The Case of three selected Organizations

By

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DECLARATION

I declare that this work entitled “Impact of Ethiopian Quality Award (EQA) on Organizational Performance: The Case of three selected Organization” is outcome of my own effort and study and that all sources of materials used for the study have been accordingly acknowledged. I have produced it independently except for the guidance and suggestion of my Research Advisor.

Moreover, this study has not been submitted for any degree in this University or any other University.

ZEWDU HAILU

Signature _____

Date _____

ENDORSEMENT

This is to certify that this study work, “Impact of Ethiopian Quality Award (EQA) on Organizational Performance: The Case of three selected Organization” is undertaken by Zewdu Hailu for the partial fulfillment of Master of Science (MSC) in Quality and Productivity Management in St. Mary University, is an original work and not submitted earlier for any degree either at this University or any other University.

Ameha Mulugeta (PhD) _____

Research advisor

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List of Abbreviations/Acronyms

| | |
|-------|---|
| ANOVA | Analysis of Variance |
| AQA | Australian Quality Award |
| ASQ | American Society for Quality |
| BPEP | Baldrige Performance Excellence Program |
| COER | Centre for Organizational Excellence Research |
| EQA | Ethiopian quality Award |
| EQAO | Ethiopian quality Award Organization |
| EQA | European Quality Award |
| EFQM | European Foundation for Quality Management |
| MBQA | Malcolm Baldrige National Quality Award |
| NIST | National Institute of Standard and Technology |
| OP | Organisational Performance |
| PDCA | Plan Do Check Act |
| PLC | Private Limited Company |
| QC | Quality Control |
| QI | Quality Improvement |
| SD | Standard Deviation |
| SPSS | Statistical Package for Social Sciences |
| SIQ | Swedish Institute for Quality |
| TQM | Total Quality Management |

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Abstract

The striving for business improvement and stronger customer orientation causes many organisations to aspire and participate in a quality award process. The purpose of the study is to assess the impact of the participation on organisational performance in the selected three organisations that have participated in the Ethiopian Quality Award process. The organisations were selected in order to clarify how this award process could be used to improve organisational performance. The study focuses primarily on analyses of soft measures such as organisational core values. Descriptive statistics has been employed to assess the self-assessment exercise and their impact on organisational performance. Interview of key personnel's in the organisations, and document review were also conducted. Several cases on how to approach and benefit from a quality award process, and thereby to improve organisational performance, are provided. The studied organisations have been successful in their development and communication of visions and missions of the organisations to their employees as well as stakeholders, and also in their empowerment of employees. Specifically, the core values of customer orientation, process orientation, continuous improvement, Management involvement/commitment and participation by everyone needs to be more strengthened. Findings from the study studies indicate that if the goal is to get lasting results, it is not sufficient to participate in a quality award process, but rather plan and implement the improvement projects proposed by the self-assessment practices. The need to do more on training and awareness on EQA model principles and change management by EQA were also part of the findings of the study. Also, to benefit fully from the participation practice, only one should participate in the process several times, with enough time in between the applications in order to complete as many as possible of the improvement projects resulting from the evaluations. In addition to this the practice has improved their overall organizational performance in terms of customer satisfaction and gaining more business. However, the result also indicates some weaknesses like, lack of leadership commitment and involvement of employees in decision making.

Keywords: *Quality Award Process, Core Values, Organisational Performance, Self-assessment, Quality Award Model*

CHAPTER ONE

INTRODUCTION

The topics covered in this chapter are background of the study, background of the organization/study area, statement of the problem, basic research questions, objective of study including general and specific objectives, significance of the study, and scope of the study, limitation of the study, operational definitions of some terminologies and organization of the research report.

1.1. Background of the Study

In order to succeed in today's more competitive business arena, any business ought to have customer oriented, i.e., quality based marketing, operational and financial strategies. (Brown, 2014; Su et al. (2014). Quality standards can be of significant help in achieving the objectives associated with such strategies since they clearly define the contractual, functional, and technical requirements for all quality activities that will ensure that a product, process, service, or system is fit for its intended purpose.(Bohoris 2012)

Quality award practices began in Japan in the 1950s through the establishment of the Deming Prize. After the successful development in Japan, several other countries also established programs to recognize quality practices taking place in organizations. There are similarities between most national quality awards, regarding, for example, criteria and award processes. Some examples of widespread criteria are the ones used in the Malcolm Baldrige National Quality Award (MBNQA). NIST (2014), and the European Quality Award (EQA). EFQM (2003). The Ethiopian Quality Award (EQA) adopts similar criteria and award process as that of MBNQA and European Quality Award.

There are still a number of questions on the impact of quality award on organisational performance though much important work has been carried out on organizational experiences of quality award processes Results of earlier studies indicate that if the aim is business

improvement, participation in a quality award process is not always the most appropriate methodology. Conti (2001).

A study indicates that many organizations that have participated in Quality Award process do not have enough resources to actually carry out the improvement work that is supposed to be a result of the award process. Chuan (2000). There are evidence of some successful organizations, when considering the improvement work in performance, show major benefits from the process. For example, a large majority of the organizations studied consider the process orientation, customer orientation, and improvement work to have been improved as a result of the participation in the quality award process. Eriksson (2010)

An increase in the use of self-assessment models by organisations have been observed, but there is a lack of published research on the experiences of organisations that have participated in quality award processes. Little is known about how organisations work with and benefit from such processes, and what their critical success factors are. There has not yet been any systematic examination of how organisations should make use of their participation in a quality award process, and what there is to gain from such a process. It has not been fully captured what activities are performed in order to strengthen the organisational performance. Sila & Ebrahimpour (2014).

It has been reported that organizations which have successfully implemented and sustained quality through participating in a quality award have achieved significant improvements in quality, productivity, competitiveness, or financial returns (Brown, 2014; Su et al. (2014); Boulter et al., 2013; Mann et al., 2011; Angell and Corbett, 2009; Grigg and Mann, 2008c; Meers and Samson, 2003; Dahlgaard-Park and Dahlgaard, 2003; Eriksson, 2004; Deming, 1982, 1986). Furthermore, the participation in a quality award will assess organizations to benchmark and compare their quality practices with other organizations as well as to obtain a more comprehensive view of their business processes (Eriksson and Garvare, 2005).

Similarly, no systematic study is there to reveal support organizational performance improvement as a result of participating and winning the Ethiopian Quality Award (EQA). There were sessions facilitated by EQA to assess the impact of participation in the award process.

Success stories of few organizations participated in the award are also published by EQA. However, there are no studies by another party to show the impact. Therefore, the purpose of this study is to describe how organisations have utilized their quality award process participation in order to improve performance. (Brown, 2014; Su et al. (2014).

1.2. Background of EQA

EQAO is established as autonomous public-private partnership institution with a legal personality which emanates from its registrations as a Private Limited Company by the Ethiopian Federal Ministry of Trade and Industry. The organization is established with a primary aim of providing services as defined in its charter mainly on a non-profit basis. (EQA, 2009).

A quality award is designed to support in the development of organizational excellence and to recognize organizations for their achievements in quality and performance. It is also amid at raising awareness about the importance of quality and performance excellence as a global competitive edge. Recognizing the need for implementation and integration of quality concepts in the operations of Ethiopian manufacturing and service industries, the Addis Ababa University (AAU) and Walta Information Center (WIC) had initiated the EQA in 2007. Then after, EQA has developed a self-assessment manual which is carefully designed to accommodate total quality management tenets. The manual is also in parallel with major quality awards such as: Deming Prize (1951) in Japan and the Malcolm Baldrige National Quality Award (1987) in USA. The European Foundation for Quality Management (EFQM) (1988), the Australian Quality Award (1993) and developing countries models are also reviewed. Furthermore, ISO 9000:2000 Quality Management System is used as an input (EQA, 2009). Since all quality award models are derived from the tenets of quality management, they look alike. However, they have some differences in their focus area and weight of criteria.

1.3. Statement of the Problems

The problem under consideration is that organizations which aspire to participate in the EQA program have no clear and consistent evidence or written publications to indicate that Participating in the EQA will improve organizational performance.

Not much is known about how organisations work with and benefit from the award processes, and what their critical success factors are. There has not yet been any systematic examination of how organisations should make use of their participation in a quality award process, and what there is to gain from such a process.

An increase in the use of self-assessment models by organisations have been observed, but there is a lack of published research on the experiences of organisations that have participated in quality award processes. Little is known about how organisations work with and benefit from such processes, and what their critical success factors are. Sila & Ebrahimpour (2014)

This study examines available evidence of the change in performance of firms that have participated in the EQA to explore whether quality initiatives of participation are worth the time and effort. Therefore, the study attempts to explore the impacts of the award.

1.4. Research Questions

In order to gain a greater understanding of the relationship between firm performance and participating in EQA, this study is going to investigate the following research questions:

1. What are the effects on performance of EQA program on organisations who have won or participated in Award Process?
2. What are challenges in participation of the award process which possibly impact organisational performance?

1.5. Objective of the Study

General Objective

The main objective of this study is to describe the impact of participating in EQA on organisational performances in the selected organisations.

Specific Objectives

The specific objectives of the study are:

- To investigate the effect of participation in the award process on the performance of the organisations.
- To assess the challenges in participation of EQA so that organisations aspiring to participate can learn from the process.
- To identify the potential best practices or opportunities for improvement in the organisations under consideration
- To avail information regarding supposed improvement work that should follow participation in a quality award process.

1.6. Significance of the Study

The Ethiopian Quality Award and the impact it brings to an organisation is the focus of the study. The study attempts to add a new information on values which may have been added to organisations that have participated in the EQA. The values added are to be seen in the performance change that may have incurred to the organisations in consideration. The worth of the efforts made, and resources applied in the quality award process are to be evaluated so that it could be an input for organisations who wanted to make decisions in enrolling for the award.

1.7. Delimitation of the Study

The scope of this study is to examine the impact of winning and participating in EQA for three selected organizations. Only three organization were selected for the assessment of the impact. Selection criterion was that those who have won or participated in the award, have been at least two years since the process and organisations from different sectors like manufacturing, health, or service companies. Also, organisations to be selected are those who have not gone through any major organisational changes subsequent to their latest award process participation. Measuring the change of the EQA-winning performance is the key component of the data analysis. The internal performance metrics are the focus of this study.

Also because of time and geographical challenge, organisations in Addis Ababa were the focus of the study.

1.8. Limitation of the Study

This study is limited to assessment of performance changes in the selected three organisations who have participated in EQA Process. The assessment focuses on organisations who have participated in the quality award process and have won or claimed positive experience on the award process. The other limitation is the topic of quality award participation and its impact in an organization has emerged in past recent decades, hence in-depth case studies, journal articles and textbooks pertaining to organizational culture are not sufficient. Therefore, the researcher used available resources to develop lucrative and concrete review of related literature from library and websites.

Also, information deemed sensitive by the company would be skipped while all possible effort should be exerted to obtain key indicators.

1.9. Operational Definition of Terms

CONTINUOUS IMPROVEMENT: A continues effort to find new ways and techniques in producing better quality products and services. Production be more competitive, as well as exceed customer expectations.

CUSTOMER FOCUS: The degree of an organization toward serving its clients' needs and expectations.

PARTICIPATION IN A QUALITY AWARD: similar to self-assessment but the owner of a quality award process is not the evaluated organisation.

ORGANIZATIONAL PERFORMANCE: comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives)

QUALITY AWARD PRIZE: A prize to recognize excellence in organizations for their performance; generally given by government of nor profit organizations after assessing their quality systems.

QUALITY IMPROVEMENT: systematic and continuous process of value adds activity that leads to measurable improvement in products or services.

QUALITY PROBLEMS: problems that faces to process and products.

QUALITY: is product or service which fulfills an aggregate requirement of customers, in all aspects, at present and in the future and which customers can buy it.

SELF-ASSESSMENT: IS a comprehensive, systematic, and regular review of an organization's activities and results referenced against a model of business excellence.

TOTAL QUALITY MANAGEMENT: is the art of managing the whole to achieve excellence.

1.10. Organization of the Study

This research paper consists of five chapters. The content of each chapter is summarized as follows:

Chapter I : presented background of the study, background of the organization, statement of the problem, research questions, research objective, significance of the study, scope of the study, limitation of the study, definition of terms, and organization of the study.

Chapter II: is composed of related literature review on Quality award practices and Models. Review on organisational preperformance and impact of participation on performance are covered.

Chapter III: is about the research methodology that is used, the research design and approach, target population, data type and data sources, data collection instrument and data analysis.

Chapter IV: Presented finding of analysis and interpretation of the study with sub-topics introduction, response rate, demographic presentation, and the interpretation on the relationship of participation quality award and organisational performance.

Chapter V: highlighted the implications based on the results; it also included summary of major findings, conclusions, recommendations and finally suggestion for further research.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

In this section of the study, literature review on impacts of quality awards on organizational performance from different perspective of authors is presented. The impact of National Quality Award in general across firms in the world, models used, and the concept of organizational performance has been reviewed. Then an evaluation of Ethiopian Quality Award (EQA) participants shall be drawn.

2.1. Concepts of Quality

Quality is defined in different ways by several people. But, from the definitions given by most quality can be seen as meeting customer requirements effectively. It includes providing right quality goods and services at the affordable prices and at the committed time.

Some definition of Quality that are defined by different groups/people: -

According to Joseph Juran and Frank Gryna, quality is defined as “Fitness for use” (Juran, 1999). The ISO 9000 defines it as ‘The totality of characteristics of an entity that bear on its ability to satisfy stated or implied needs’(ISO 9000). Armand Feigenbaum explains Quality as “A customer determination based upon a customer’s actual experience with a product or service, measured against his or her requirements – stated or unstated, conscious or merely sensed, technically operational or entirely subjective and always representing a moving target in a competitive market”. American Society for Quality (ASQ) opines that quality denotes an excellence in goods and services, especially to the degree they conform to requirements and satisfy customers.

Any act that does not address human values is not a quality. Therefore, quality can be defined as “Achieving the customer and stakeholder satisfactions while adhering to business ethics, human values and the statutory, legal and regulatory requirements” (Dale,2003 and Evans & Dean,2003).

Quality is important because a successful business means when the organization can produce a higher quality product or service than its competitors. Therefore, when quality is the main

important factor for the company's success, quality management systems allow organizations to keep up with and meet current quality levels, meet the consumer's requirement for quality, retain employees through competitive compensation programs, and keep up with the latest technology.

2.2. History and background of Quality Award

The growth of NQA programs in most part of the world has a history of less than 25 years. Over the last two decades, a number of respected national and regional quality awards have been designed and realized, in both developed and developing countries, to inspire business organizations to assess their quality management. Action Examination Improvement Plans Level Comparisons Scoring and consensus Strengths and extents Scores for improvement Self-assessment Data gathering (Talwar, 2011a). "However, the NQA practice has not happened at equal levels in different regions of the world. While early practice began in Japan, the United States, and Europe, followed by the South East Asian countries; countries in the Middle East have been behind in the quality expedition" (Mann et al., 2011a). Recent study indicated that there are over 100 NQEA programs that have been recognized in developed and developing countries (Talwar, 2011a).

However, according to a more current report published by the Centre for Organizational Excellence Research (COER) at Massey University in New Zealand only about 67 of these awards are known to be functioning in different industries including manufacturing, service, healthcare and education. NQAs have been established as a practical tool to help organizations establish an appropriate management system by measuring where they are on the path to excellence, helping them to comprehend the gaps, and then stimulating solutions' (EFQM 2003). They are considered as holistic models to guide organizations to assess quality actions in their journey towards excellence. Procedures of these award models usually make reference to self-assessment process and benchmarking based on the core elements of Total Quality Management (TQM) Philosophy.

2.3. Overview of Quality Award Models

One of the most useful inclinations in the past decade has been the self-assessment activities of many companies throughout the world. Businesses worldwide are using the criteria of the Malcolm Baldrige National Quality Award, the European Quality Award, the Deming Prize and many other national quality awards to assess their recent performance against a reasonable set of

guidelines for total quality. A very crucial step in this process is to first understand one's own organization's performance level and compare it to the performance level of another organisation.

Quality awards that identify excellent organizational performance have emerged as a significant component of the productivity and quality promotion strategies of many countries. Numerous national and regional quality awards have been established to promote quality and serve as models of total quality management. National quality and business excellence awards have been an encouragement and blueprint for driving a wide variety of organizations to their highest levels of sustainable achievement. (Calingo,2002).

With the growing levels of international competition and the demand of major customers for quality, a variety of quality improvement methods have been proposed as the prime driver to measure of company performance. One of the most common ways and organized reviews of an organization's activities and performance against a quality model, usually built on a National Quality Award (NQA), is self-assessment. Self-assessment through partaking in a NQA program is considered as an effective way for analyzing company performance with reference to quality management. NQA programs around the world have been mainly anticipated as the prime driver for company performance assessment purpose against the existing quality assessment models. These models have spread as a way of growing competitiveness and reducing costs by helping to incorporate and assess quality management principles and practices within establishments (Kim et al., 2009; Al Marri et al., 2007).

They offer guidelines for organizations seeking to introduce quality management. Over the last few years, self-assessment method through participation in a quality award program has been widely adopted by organizations as an essential tool to assess their performance towards excellence (Dimitriadis et al., 2015; Doeleman et al., 2014; Brown, 2013). For many organizations conducting self-assessment against quality award models is strategically and strategically vital for gaining a competitive advantage.

The five topmost quality competitions in the world according to Standing and Vokurka (2003) are:

1. The Malcolm Baldrige National Quality Award from the United States
2. European Foundation for Quality Management (EFQM)
3. The Swedish Quality Award
4. The Australian Quality Award
5. The Deming Prize from Japan

This literature review emphasizes on the top five quality award models. The top five are selected because of their prevalent use by countries so will enable the study to cover the criteria used by many. Also, the EQA uses the top two models as criteria for self-assessment.

2.3.1. The Malcolm Baldrige Quality Award (MBNQA)

The Malcolm Baldrige National Quality Award is one of the topmost programs that aid organizations in the US and other parts of the world to improve their quality and increase their overall performance (Evans & Mai, 2014). The award program was the US retort to the Japanese Deming prize. During the 1970s and 1980s, the US manufacturing firms were lagging their overseas competitors, especially the Japanese companies, this created a major problem for the US economy as clients around the world turned away from American products. The high quality of the Japanese product surprised the American corporations to the point that they had to send representative to Japan to learn their methods. They found out that level of defects was much lesser in the Japanese factories compared to the American factories, sometime staggering 1000 times lower. When the American started exploring the Japanese methods, they discovered that there is no technique, or a tool used to reach this high quality. It was a comprehensive framework of quality management system such as Just-in-time (JIT) and total quality control (TQC) that distinguished the Japanese production and business philosophies from the American counterpart (Loomba & Johannessen, 1997).

The Malcolm Baldrige National Quality Enhancement Act passed by the U.S. Congress in 1987 to enhance the competitiveness of U.S. firms and companies. The purpose of the program is to identify and distinguish role-model organizations that demonstrated significant improvement in their goods and services quality, also help other US establishments who seek to improve the quality of their products and services and increase their performance through establishing criteria for assessing improvement efforts and adopting best practices from award winner organizations. The Baldrige program covers manufacturing, service, none-profit, healthcare, education, government, small and big companies (NIST, 2011) Currently, 44 states in the US have a local Baldrige program (Lee et al., 2003)

“The MBNQA criteria have grown over the years to keep up with the changes in the market and to serve different industries and organizations in the nation. It started with focus on manufacturing quality then in 1999 it was extended to include education and healthcare organizations, then later in 2006 the criteria were restructured to include nonprofit and government organization. The name of the program has also altered in 2010 from Malcolm Baldrige National Quality Award to the Baldrige Performance Excellence Program” (Link, 2011; NIST,2011).

The Baldrige criteria are non-prescriptive, meaning that the criteria do not recommend a specific structure or practice for management, they do not recommend certain tools or benchmarking, and they do not tell establishments which path their business should take. The criteria focus on outcomes not on tools or procedures. They also focus on the method, deployment, learning, and integration of processes. This encourages organization to advance their own innovative methods to meet the requirements of the criteria. The focus on the goal rather than the method fosters communications, sharing, and integrations of ideas that results in ground-breaking solutions. Specific solutions are avoided also to guarantee that the program can help different types, sizes, and level of organization maturity (NIST, 2011).

2.3.2. European Foundation for Quality Management (EFQM)

The EFQM Excellence Model was introduced at the beginning of 1992 as the framework for evaluating organisations for the European Quality Award. It is now the most extensively used organisational framework in Europe (Eskildsen and Dahlgaard, 2000) and has become the basis

for the majority of national and regional Quality Awards. The EFQM Excellence Model is a non-prescriptive framework built on 9 criteria as shown in Figure 1. Five of these are “Enablers’ (leadership, people, policy strategy, partnership & resources, and processes) and four are ‘Results’ (people results, customer results, impact on society outcomes and business results). The ‘Enabler’ criteria cover what an organisation performs. The ‘Results’ criteria cover what an organisation attains. ‘Results’ are fetched about by ‘Enablers’, and ‘Enablers’ are improved by means of feedback from ‘Results’. The Model, which recognizes that there are many approaches to achieving sustainable excellence in all characteristics of performance, is based on the premise that: Excellent results with respect to Performance, Customers, People and Society are attained through Leadership driving Policy and Strategy that is delivered through People, Partnerships and Resources, and Processes (EFQM, 2002).

The EFQM Model is a non-prescriptive framework that acknowledges there are many approaches to achieving sustainable excellence. Within this approach there are some vital concepts which underpin the EFQM model. Though, these concepts are not fixed. It is accepted that they will change overtime as excellent organisations grow and improve. Recent indicative concepts are listed below:

- Results Orientation - Excellence is achieving results that affect all the organization’s stakeholders.
- Customer Focus - Excellence is creating sustainable customer worth.
- Leadership & Constancy of Purpose - Excellence is visionary and inspirational leadership, joined with purpose.
- Management by Processes & Facts - Excellence is managing the organisation through a set of interdependent and interconnected systems, processes and facts.
- People Development & Involvement – Excellence is maximizing the contribution of employees through their development and participation.

- Continuous Learning, Innovation & Improvement - Excellence is challenging the status quo and effecting change by using knowledge to create innovation and improvement opportunities.
- Partnership Development - Excellence is rising and maintaining value-adding partnerships.
- Corporate Social Responsibility - Excellence is exceeding the minimum regulatory framework in which the organisation operates and to strive to comprehend and respond to the expectations of their stakeholders in society

The framework of the EFQM Excellence Model is built on nine criteria. Five of these are Enablers' and four are 'Results'. The 'Enabler' criteria cover what an organisation performs. The 'Results' criteria cover what an organisation attains. Results' are caused by 'Enablers' and feedback from 'Results' aid to improve 'Enablers'. The Model acknowledges there are many approaches to achieving sustainable excellence in all aspects of performance (EFQM, 2002).

2.3.3. The Swedish Quality Award

As of 1992 the Swedish Quality Award has been organized by the Swedish Institute for Quality (SIQ). The SIQ has created a model, called the SIQ Model for Performance Excellence, which is based on 13 core values and 7 criteria, which are divided into 27 sub criteria SIQ (2002). The criteria of the SIQ Model have been instigated by, and are similar to, the criteria of the Malcolm Baldrige National Quality Award Model, see NIST (2003). This is, for example, illustrated by the fact that both criteria strongly underscore organisational results. There are also differences between the criteria, for example the SIQ Model's greater emphasis on evaluation, improvement, and societal impact. Chuan & Soon (2000). Since the year 2000 it has been likely to use either the SIQ Model, the EFQM Model or the MBNQA Model in an application for the Swedish Quality Award.

2.3.4. Australian Business Excellence Framework

The Australian Business Excellence Framework (ABEF), which previously called the Australian Quality Award framework, is another existing worldwide excellence model established independently in 1988. It was established by the Australian Quality Council (AQC) in order to help Australian organizations, meet the challenges of the global market. The framework provides a useful vehicle for organizations to evaluate their excellence against internationally recognized business principles. ABEF has been the model for excellent organizations across Australia for the last two decades. It evaluates quality performance through seven categories of criteria. The main purpose of the award is to encourage indigenous companies to improve quality of their offerings, raise their performance to world-class level, and offer a benchmark for their achievements (SAI Global, 2014).”Australian Business Excellence Award (ABEA) is Australia’s best business award offered yearly to high performing organizations in four categories namely large organizations, subsidiaries and divisions of large organizations, medium sized enterprises, and small sized enterprises. It is managed by the Standards Australia International Limited (SAI) a s a private organization since 2005” (Grigg and Mann, 2008a).

2.3.5. Deming Prize Model

The Deming Prize (DP), as the greatest quality award model in the world, was established by the board of directors of the Japanese Union of Scientist and Engineers (JUSE) in 1951. DP as the first Japanese national quality award model was established to thank Dr. William Edwards Deming (1900 -1993) for his contribution to the development of industrial quality control in Japan (JUSE, 2014). The main objective of the prize is to increase the knowledge and practice of Total Quality Control (TQC) as a way of driving quality in Japan (Kanji, 2002). The DP is distinctive and provides different focus in comparison with other quality models. The DP is awarded annually to both individuals and group organizations that show outstanding quality by implementing Total Quality Control (TQC) program using statistical control tools. It assesses the operation of an organization against 10 criteria that are centered on the implementation of a set of principles and techniques such as process analysis, statistical methods, and quality circles. The award has four groups include Deming Prize for Individuals, Deming Distinguished Service Award for

Dissemination and Promotion (Overseas), Deming Prize, and Deming Grand Prize (former Japan Quality Medal) (JUSE, 2014).

2.4.Ethiopian Quality Award (EQA) Model and Overview of the Quality Award Process

Since all quality award models are derived from the tenets of quality management, they look alike. However, they have some differences in their focus area and weight of criteria. Customer focus and policy and strategy have been given the highest and the lowest weight in all the awards respectively. Very recent research are focused on: Effective implementation of quality in organizations (Yasin et al., 2011; Srivastav, 2011), the importance of quality concepts (Parast et al, 2011), uses and applications of quality tools and techniques (Parajapati, 2011; Ghosh and Roy, 2011) etc. Root cause analysis has not got attention in the quality improvement effort at national level.

The EQA model's main criteria used to evaluate industries were leadership, policy and strategy, resources management, process management, customer satisfaction, business performance and impact on the society. Under these seven criteria, there are 28 sub-criteria, 65 sub criteria and 361 questions. Overall weight of EQA is 1000 points which is divide into Leadership—150 points, policy, and strategy—80 points resources management—120 points, process management—150 points, business performance—150 points, customer focus—250 points and impact on society—100points. The weight of sub-sub-criteria and questions' scoring system is well-defined and the examiners will conduct a consensus process to agree on a percentage band within which scores will be given in each category in the application. The evaluation process of the EQA starts from application and ends in award winners' selection. It has eight stages. These are: (1) application, (2) self-assessment, (3) submission of self-assessment report, (4) independent and subsequent consensus review by the technical committee, (5) Short-listing, (6) second registration, (7) site visit review, (8) recommendation by technical committee (9) recommendation by judges', and (10) EQA board approve.

Since the self-assessment manual is filled by a team which includes top management of the organizations, the data are reliable. Even if there are unreliable data, they were verified in the site-visit stage of the evaluation process. The technical team is organized from different departments of Addis Ababa University. Every organization is first evaluated individually and there was a consensus review to avoid any bias in evaluation, making the data reliable for analysis. Therefore, since the EQA manual is carefully designed to accommodate different type of industries and it is a way to diagnoses total quality of an organization, it is possible to conclude that EQA model represent all concepts of quality management. It can also review quality management performances of any organization.

2.5. Total Quality Management (TQM)

The criteria of most national quality awards conform with the major elements of Total Quality Management (TQM). Receiving a quality award is also a collective proxy for a successful implementation of TQM. Hendricks & Singhal (1996).

TQM has been outlined in a variety of ways. It is a multidimensional concept that was a reasonable development of total quality control (TQC). TQM is an integrated effort to achieve and sustain a high-quality service based on the maintenance of continuous improvement of process and error prevention at all levels and in all functions of an organization, aiming to meet and even exceed customer needs and expectation.

TQM is a description of the culture, attitude and organization of a company that aims to provide its customers with products and services that meet their needs. The culture necessitates quality in all aspects of the organization's operations, with things being done right the first time, and defects and waste eradicated from operations. TQM is the culture of an organization dedicated to total customer satisfaction through continuous improvement. In such a culture, resources, material, equipment and quality management systems are cost effectively implemented and fully employed (Gunasekaran, 1999; and Youssef et al., 1996).

TQM has become one of the competitive strategies of choice during the 1990s and has been extensively implemented throughout the world. There is a prevalent consensus that TQM is a

way of managing an organization to improve its overall effectiveness to compete globally (Easton, 1993; Handfield, 1993; Hendricks and Singhal, 1997)

The benefits happen in the areas of fewer defects, reduced rework and lead times, lower inventory levels, cost reduction, enhanced business competitiveness, increased market share and profit, higher flexibility and increased employees and customer satisfaction (Gunasekaran, 1999; Youssef et al., 1996).

Total Quality Management Principles

There is a consensus view that businesses should follow a few principles in an integrated way for successful TQM implementation. These principles are mostly in pact with the MBNQA and EFQM models.

The eight TQM principles: - customer focus, leadership, continuous improvement, employee involvement, fact-based management, process management, strategic quality management, and supplier involvement.

2.6. Organizational performance

Organizational performance is the measure of normal or prescribed indicators of effectiveness, efficiency, and environmental responsibility such as, cycle time, productivity, waste reduction, and regulatory compliance. Performance also refers to the metrics linking to how a request is handled, or the act of performing; of doing something successfully; using knowledge as distinguished from simply possessing it. It is the outcome of all the organization's operations and strategies (Aaltonen and Ikavalko, 2002).

Probably the most known of the multi-dimensional performance measurement frameworks is the "balanced scorecard" Kaplan and Norton (1996) identified four components of the balanced scorecard, each of equal importance, and each having related goals and measures.

The four elements are:

- Financial perspective – it emphasizes on financial performance of an organization. It normally covers the revenue and profit target of commercial businesses as well as the budget and cost-saving aims of not profit organizations. the financial health of an organization is a critical perspective for manager to track.
- Customer perspective – the customer outlook addresses the question of how the customer viewed by its customers and how well the firm is serving its targeted customer in order to meet the financial objectives. Generally, customers view the firms in terms of time, quality, performance and cost. Most customer purposes fall into one of those four categories.
- Internal business perspective – internal business process objective addresses the question of which processes are most serious for satisfying customers and shareholders. These are the processes in which the firm must focus its efforts to excel.
- Innovation and learning perspective –innovation and learning in address the question how the firm must learn, improve, and innovate in order to qualify objectives. Much of this perspective is employee positioned.

It is also a management system that allows organizations to clarify their vision & strategy and translate them into action. As a performance management system, it enables an organization to render its vision and strategy into objectives and measurements (Lawson, et.al., 2008). BSC is a communication device, measurement system and strategic management system.

According to Niven (2006) BSC provides the framework for an organization to move from deciding to live its strategy to doing it since it is critical in translating mission into concrete objectives that align all employees. “BSC as a strategic management tool helps to measure, monitor, and communicate strategic tactics and goals throughout the organization in a way that is understood by everyone” (Lawson, et.al., 2008).

BSC is ideally formed through a shared understanding and translation of the organization’s strategy into objectives, measures, targets, and initiatives in each of the four Scorecard perspectives. Under customer perspective the central point is identifying target customers and their expectations. It includes measures with direct effect on customers. In the Internal Process perspective of the Scorecard, key processes the firm must surpass at are identified to continue

adding value for customers and shareholders. It comprises measures reflecting the key business processes. Learning and Growth perspective denotes to the foundation upon which BSC is built. Employee skills, employee satisfaction, availability of information, and alignment could all have a room in this perspective. (Kaplan & Norton, 1996).

2.7. Impacts of Participating in Quality Award Process

Researchers have also deliberated quality awards' effectiveness with more focus on the awards' financial impact. Hendricks and Singhal examined the outcome of winning a quality award on a firm's stock price on the day of the winners' announcement. They found that the stock market reacts positively to the declaration of the award, especially for small business companies (Hendricks and Singhal, 1996). Hendricks and Singhal extended their work and tested the hypothesis that organisations which have won the Malcolm Baldrige National Quality award outperformed other companies during a 10-year period, starting six years before winning and continuing through the three years after winning their first award. They found substantial evidence to support the hypothesis in two parameters: operating income with a mean change of 107% and sales growth with a mean change of 64%, compared to the control sample. They also found a 20% increase in favor of award winners in the ratio of operating income to sales, to assets, and to staffs.

“More recently, in 2013, Boulter, Bendell, and Dahlgaard used the same approach which Hendricks and Singhal used on Malcolm Baldrige Quality award on the European Quality Award. They also found that companies which have won quality awards outperformed other companies in the stock market “(Boulter, Bendell, and Dahlgaard, 2013). Moreover, another study has scrutinized companies that won Spanish quality awards and the European Quality Award and found that winners have higher average profitability in the period before winning the award. The study also showed that the gap between winners and the control sample is higher for firms that have won the European Quality Award compared to regional and national quality awards (Corredor and goni, 2010). “More surely, firms that win quality awards perform significantly better than similar companies of the same size and in the same industry (Jacob, Madu, and Tang, 2004). However, in the case of Deming Prize, winning is not always financially advantageous. In

fact, there is a negative relationship between winning the award and the company's financial performance" (Jaquinto, 1999).

Most studies have studied the effectiveness of quality awards from the perspective of their financial impact. However, the purpose of establishing quality awards is not purely financial as they present other paybacks for the economy. So, the financial impact is to be expected and might have a long-term impact, but it is not the key objective and should not be an indicator for the overall effectiveness of the award. In fact, there are other studies in the literature which showed the benefits of quality awards outside their financial impact. For example, the social benefit-to-cost ratio for the American Society of Quality members is 207:1 due to their implementation of the Malcolm Baldrige Performance Excellence Program (Link and Scott, 2006).

Furthermore, government sectors can take advantage from having regional awards to improve their services. The Malcolm Baldrige Quality model is a reliable valuation tool for Previous studies covered almost all aspects of quality awards, but little research has been done on:

(1) the link between quality awards' effectiveness on the final result for which it has been established, i.e., improving the economy and increasing the country's competitiveness.

(2) how quality awards are reviewed, and

(3) whether or not quality awards can be used as motivation tools to improve national competitiveness.

The aim of this research is to deliver a general framework on how to answer these questions are addressed in the Ethiopian Quality Award (EQA) participation. Understanding the macro-level picture of quality awards and linking it to the nation's economy and competitiveness will provide a different perspective and added value to quality awards. It will also benefit the overseers of these awards to determine the national competitiveness needs in order to make adjustments on the award criteria that will be aligned with the country's competitiveness objectives.

2.8 The Purpose and Benefits of NQA

The primary purpose of developing NQA is to provide guidance for building organizational performance (Boulter et al., 2013; Dahlgard-Park and Dahlgard, 2003; Eriksson, 2003). NQA

programs guide organizations in their strategy (Brown, 2014; Su et al., 2014) business processes (Mann et al., 2011a; Angell and Corbett, 2009) and quality improvement (Grigg and Mann, 2008a; Meers and Samson, 2003). According to Ghobadian and Woo (1996) the common goal of NQA is to raise quality awareness among industrialist and the general public. Majority of these organizations carry out self-assessment method as a way of finding out where they are now, considering where they want to improve, and then making decisions on how to get there in pursuit of excellence.

The first and immediate aim of NQA is the continuous improvement of performance towards achieving excellence (Brown, 2014; Mann et al., 2011; Porter and Tanner, 2004; Sila and Ebrahimpour, 2002). Research show that NQA programs have been developed in different countries around the world for the following reasons:

- i. To select high performing organizations for national awards and providing feedback on performance for award applicants (Grigg and Mann, 2008c).
- ii. To assess and recognize excellent organizations based on business excellence models throughout the globe (Meers and Samson, 2003).
- iii. To promote and encourage organizational self-assessment, benchmarking and general management education and development (Dahlgaard et al., 1998; Mann and Grigg, 2004; Porter and Tanner, 2004).
- iv. To measure organizations progress to improve their performance and competitive advantage (Bohoris, 1995; Vokurka et al., 2000; Miguel, 2001).
- v. To provide a national focus on quality improvement and competitiveness of the organizations as well as to pursue excellence in an effective way (Dahlgaard et al., 1998).
- vi. To recognize their high commitment level towards quality excellence (Asif and Gouthier, 2014; Lee et al., 2003).
- vii. To assist organizations to improve their performance towards business excellence (Brown, 2014; Miguel, 2001).

It has been reported that organizations which have successfully implemented and sustained quality through participating in a quality award have achieved significant improvements in quality,

productivity, competitiveness, or financial returns (Brown, 2014; Su et al. (2014); Boulter et al., 2013; Mann et al., 2011; Angell and Corbett, 2009; Grigg and Mann, 2008c; Meers and Samson, 2003; Dahlgaard-Park and Dahlgaard, 2003; Eriksson, 2004; Deming, 1982, 1986). Furthermore, the participation in a quality award will assess organizations to benchmark and compare their quality practices with other organizations as well as to obtain a more comprehensive view of their business processes (Eriksson and Garvare, 2005).

2.9. Conceptual Framework of Organisational performance

This model was developed by the researcher based on the literature review conducted. The enablers chosen are mainly the principles in EQA model which are supposed to bring about the necessary impact on organisational performance.

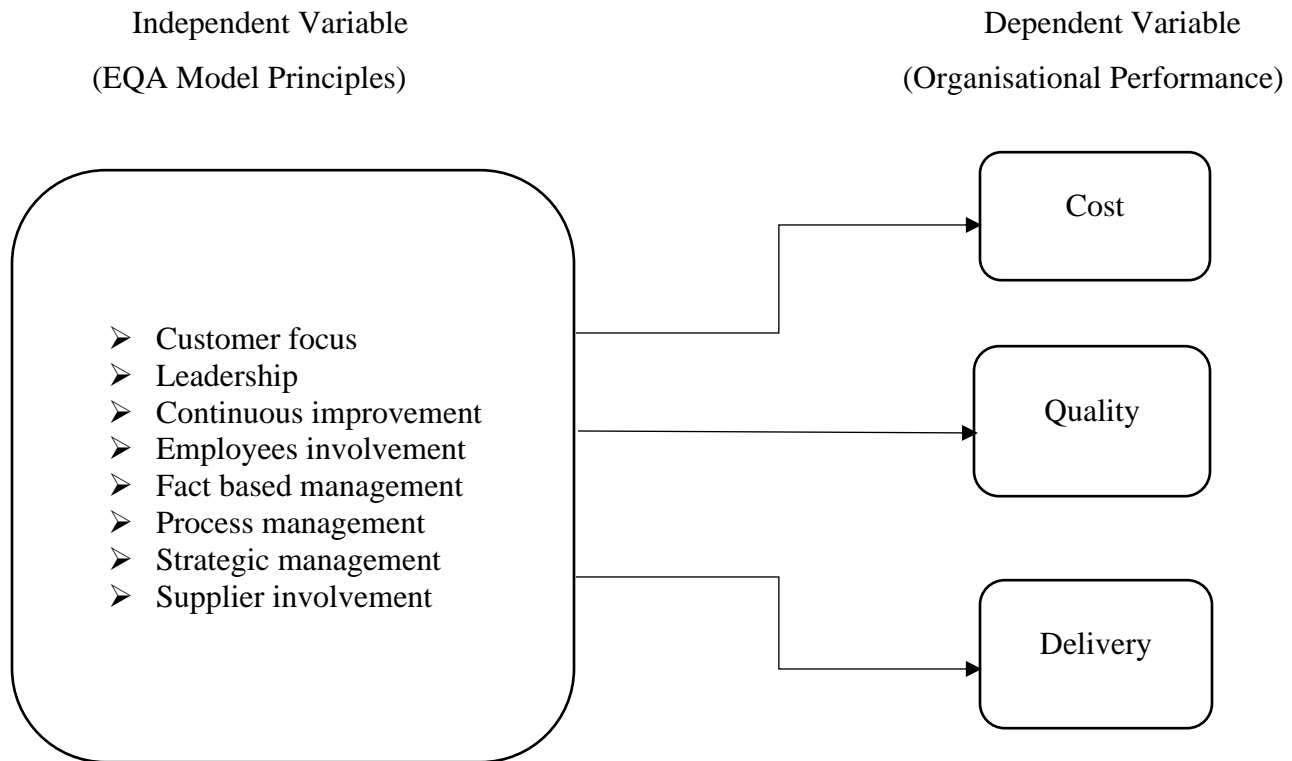


Fig. 2.1. Conceptual framework for Quality Award Participation and Organisational Performance

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This section of the thesis deals with the methodology used in the study, which includes the research design and approach, target population, data types & sources, data collection instruments, ethical considerations, and methods of data analysis.

3.1. Research Design

The design of the research is descriptive since it lets the collection of data through questionnaires on the bases of sample, which helps to find out the opinion of the population. A mixed methods approach both quantitative and qualitative are going to be used in order to attain the main objective of this research. According to Mark et al. (2009:101) mixing qualitative and quantitative approaches provides the potential to cover each method's weaknesses with strengths from the other method. It helps to collect data that could not be obtained by adopting a sole method. Therefore, survey with questionnaires and semi-structured interview was used so as to address the quality award participation process on organizational performance in the selected industries. The semi structured interview is used to collect some information about the views of the Supervisors and managing directors of the three firms.

3.2. Target Population

For the overall success of the organizations every member of the organization should be accountable for the participation of in a QA process therefore, the target populations of the study are the managers, employees, and the clients of the three firms i.e., Horizon Addis Sh. Co., ICL and Harmony Hotel staff; to identify whether they are satisfied with the service they get from the three firms or not.

3.3. Sample and Sampling Technique

The respondents of the study are chosen from the three companies using stratified sampling technique and from the clients of the three firms using purposive sampling method. For the three companies the researcher fixes the sample size by using the Slovin's (1960) formula i.e.,

$$n = \frac{N}{1 + Ne^2}$$

Where:

N is the population size.

E is the margin of error (10%)

1 is constant value.

After the samples of the three firms have been identified, the researcher has used the above sample size determination formula to determine the sample size of the population in the three firms. Therefore, out of the total population size of 1134 according to the above formula the sample size is 115.

Since the number of people in each firm is not similar, the number of samples for each company will be calculated by the following formula:

$$n_1 = nN_1/N$$

Where, n= total number of samples

N= total number of populations

N₁= total number of populations in each company

n₁= number of samples in each company

Table 3.1. Total number of population and proportion of samples taken from each company.

| Company Name | Number of populations | Number of samples |
|---------------------|------------------------------|--------------------------|
| Horizon Addis | 762 | 62 |
| ICL | 185 | 18 |
| Harmony Hotel | 187 | 19 |
| Total | 1134 | 115 |

Using the above samples, the researcher has used purposive sampling technique to select the target employees in the three companies and distribute questionnaires.

3.4. Data Sources

The researcher has used both primary and secondary data sources to obtain data regarding the Participating in Quality Award Program on organizational performance. The primary sources of data is going to be collected through administering questionnaires; by setting self-administered questions and semi-structured interviews to be conducted on the managers of the three companies to grasp important information that may not be fully addressed through questionnaire. In addition, websites, written documents, and books are going to be taken as secondary sources of data.

3.5. Instruments of Data Collection

Questionnaires are administered to get data from the managers, employees of the organization and its customers. To identify or assess the impacts of Participating in a QA process on the organizational performance, the researcher has used an open and close ended question. In the close ended questions, the researcher enquired the respondents to give a score by using a 5-point

Likert Scale ranging from Strongly agree (1), Agree (2), Neutral (3), Disagree (4) and Strongly Disagree (5),

Interview sessions were done with six staff of the organisations. Accordingly, an interview has been done with, 3 Horizon Addis Managers and Quality/RD department heads, 2 supervisors in ICL and 1 department head for Harmony Hotel. Also, researcher's own observation and literature review and document review were part of the data collection instruments.

3.6. Procedures of Data Collection

As soon as the samples are determined, first contact is made with the three organizations General managers and key clients of the organisations to notify, get permission and their support in receiving data and contact the employees. After having the necessary permission, the researcher communicated Department Managers, Technical staffs including staffs in Clerical position. Then in the other round, the questionnaires were distributed to the respondents and also semi-structured interview to be conducted with Managing Directors and Key clients managers/supervisors of the three firms. Lastly, has collected the filled questionnaires.

3.7. Method of Data Analysis

Analysis is a research technique for making replicable and valid references from data to researchers' context. The following procedures and statistical tools were employed based on the data obtained through questionnaires and interviews. After the data is checked for consistency and completeness it was coded, checked, and used for analysis.

Furthermore, to summarize results of the demographic profile of respondents and the response towards the matters included in the questionnaire descriptive statistics was used, analyzed, and synthesized in tables, figures, percentage, and charts with the assistance of Statistical Package for Social Science (SPSS) 24. Scientific package for social science (SPSS) 24 was applied for the purpose of significance study.

3.8. Reliability and Validity Test

Validity and reliability of the measures need to be assessed before using the instrument of data collection (Hair et al., 2003). Validity concerns whether an instrument can accurately measure, while reliability pertains to the consistency in measurement.

Validity of the measuring instrument was checked by first distributing the questionnaires to a selected 3 staff to evaluate the accuracy. Accordingly, what the questions meant in the questionnaires were accurately captured by the respondents.

Due to the nature of the questionnaire construct, as varying ways were applied for measuring the different variables considered. In this research, the researcher used questionnaire that their validity and reliability are checked according to the specific topic. The researcher has tested the reliability using Cronbach's Alpha (α) which is an internal consistency test that measures the degree to which the items or measurements consistently measures the underlying construct, the result of the Cronbach's coefficient of reliability test is indicated in the table below.

According to Hair, et al., (2006), if α is greater than 0.7 and smaller than 0.3 it means that it has high reliability and low reliability, respectively. To meet consistent reliability of the instrument, the questionnaire was distributed to a total of 115 employees of the three organisations and Cronbach's Alpha was found to be 0.835; it is above 0.7 therefore, it means it has high reliability.

Table 3.2. Reliability Statistics

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .835 | 115 |

3.9. Ethical Consideration

In order to have permission for the study, and to avoid unnecessary unwillingness, suspicion, and dishonesty the researcher will be ethical and inform the participants about the objective and purpose of the study that it is only for academic purpose and confidentiality of their response will be strictly upheld.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETAION

4.1. Introduction

This chapter deals with the analysis and presentation of the quantitative data collected through questionnaire. An attempt is also made to link the interpretation of the data with the information collected through an interview response from the key personnel's of the selected organizations. The first of part of the data analysis is about the general information of the respondents while the other part focuses on the Quality Award Participation Practices, Operational performance measures and general assessment with a descriptive statistics through SPSS version 24.

In order to have some idea on how the client's (common customer for the three organizations) view on the impact of EQA on the performance of these three organizations, an interview was made with three personnel's of the key clients each from the three organizations, so a qualitative analysis is presented based on the response of the interview.

4.2. General Information (Background of the Respondents)

This section, i.e., the background (personal data) of the respondents which indicates respondents' year of work with the firm. The following tables present the personal data of the respondents in detail.

Work experience in the organizations

Table 4.1. Work Experience assessment of the respondents

| Years | | Frequency | Percent |
|-------|-------------|-----------|---------|
| Valid | 1-5 years | 43 | 37.4 |
| | 6-10 years | 36 | 31.3 |
| | 11-15 years | 21 | 18.3 |
| | 16 + years | 15 | 13.0 |
| | Total | 115 | 100.0 |

Source: Own survey, 2020

From the data in the table, it is evident that 62.6% of the respondents have been in the organizations for more than 6 years hence they are able to respond to questions on the quality award practice and its impact on the respective organizations.

Job position in the organization

Table 4.2. Job position assessment of the respondents

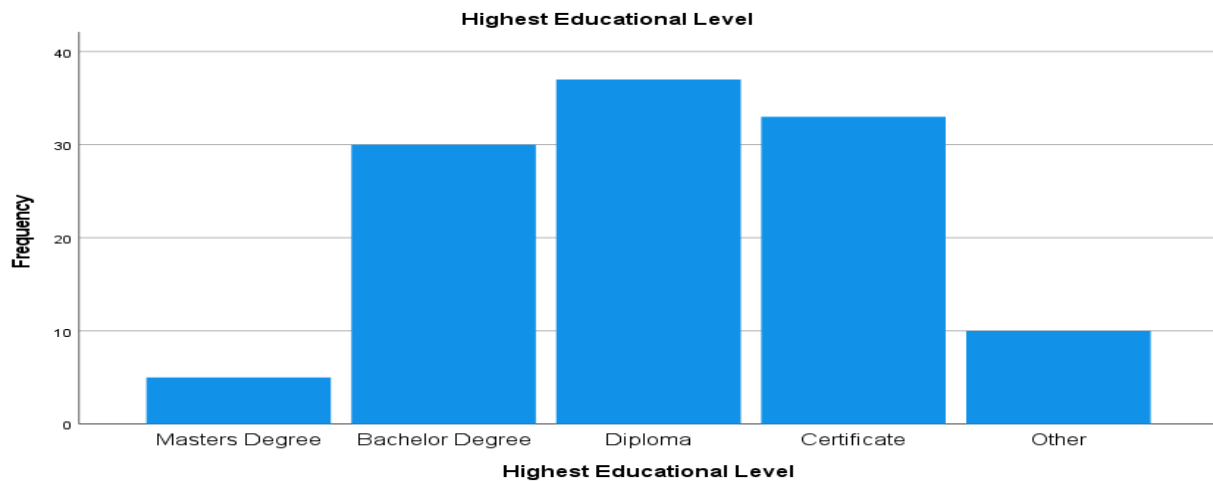
| | | Frequency | Percent |
|-------|--------------------------|-----------|---------|
| Valid | Senior Executive | 3 | 2.6 |
| | Department Head | 6 | 5.2 |
| | Supervisor | 17 | 14.8 |
| | Technician/Expert | 42 | 36.5 |
| | Attendant/Operator/Clerk | 40 | 34.8 |
| | others | 7 | 6.1 |
| | Total | 115 | 100.0 |

Source: Own survey, 2020

From the data in the table, it is evident that most working positions are represented to respond to the questions in the questionnaire.

Educational Level

Figure 4.1. Educational Level assessment of the respondents



From the data in the table, it is evident that 91.3 % of the respondents have educational qualifications greater than certificate holders in the organizations hence they understand the questions in the questionnaire well.

4.3. Descriptive analysis of Quality Award Practices in the organizations

In order to evaluate the practice of the quality award process with respect to the quality award model, the measures stated in the coming tables were analyzed followed by analysis & interpretation and further supplemented by frequency tables and percentage. In order to simplify interpretation of the results, ratings of agree & strongly agree are grouped as agreement and ratings of disagree & strongly disagree are grouped as disagreement.

Table: 4.3 Measures of top Management involvement in the quality award process

| Top Management involvement Measures | Frequency (%) | | | | | Mean | SD |
|---|---------------|------------|------------|--------------|---------------|------|------|
| | 1 | 2 | 3 | 4 | 5 | | |
| Top Management are actively involved in establishing and communicating the organization's vision ,goals, plan, and values relevant to the quality award practices | - | - | 1 (0.8) | 11 (9.8) | 103 (89.4) | 4.89 | 0.33 |
| All Major department heads within our plant accept their responsibility for the quality award participation activities | - | - | 3 (2.5) | 14 (12.2) | 98 (85.3) | 4.86 | 0.37 |
| Top management provides personal leadership for quality award practices | - | - | - | 3 (2.5) | 112 (97.5) | 4.97 | 0.16 |
| Top management is personally involved in quality award self-assessment process | - | - | 1 (0.8) | 65 (56.8) | 49 (42.4) | 4.42 | 0.51 |
| Top management strongly encourages employee involvement in the quality award participation activities | - | 1 (0.8) | 2 (1.7) | 18 (15.8) | 94 (81.7) | 4.81 | 0.42 |
| Top Management is evaluated for their participation in the quality award process | - | - | - | 7 (5.9) | 108 (94.1) | 4.94 | 0.24 |
| Respondents overall mean & SD | | | | | | 4.82 | 0.19 |

Source: Own survey, 2020

From the data in the table, it is evident that most of the respondents agree that there has been involvement of top management in the quality award practice. The overall mean and SD also support this with values of 4.89 and 0.19, respectively.

The mean amount for all measures are almost the same except for top management personal involvement measure regarding to the self-assessment process 4.42, which is relatively less. This implies that there seems to be less personal involvement by the top management team in the self-assessment process. This actually was also mentioned by the respondents of the interview. One informant said, ‘if top managers were personally involved in the self-evaluation of the quality award process, the results on the improvement works could have been better’. In addition, the overall mean amount regarding to the measure of top Management involvement is 4.82, which implies large number of respondents have agreed that there is significant involvement like in giving personal leadership.

Table: 4.4. Measures of Process Management as enabled by participation in the quality award process.

| Process Management Measures | Frequency (%) | | | | | Mean | SD |
|--|---------------|--------------|------------|--------------|--------------|------|------|
| | 1 | 2 | 3 | 4 | 5 | | |
| Minimize the chance of employee error | - | 7 (6.2) | 1 (0.8) | 95 (82.6) | 12 (10.4) | 3.97 | 0.59 |
| Give clear, comprehensive, and standardized documentation about work methods and process instructions to employees | - | 15 (13.2) | 1 (0.8) | 67 (58.4) | 32 (27.6) | 4.00 | 0.90 |
| Make extensive use of statistical techniques to reduce variance in processes | - | 30 (26.4) | 3 (2.5) | 81 (70.4) | 1 (0.8) | 3.49 | 0.91 |
| Continually use internal or external audits to make sure we deliver quality products and services | 2 (1.7) | 48 (42.1) | 1 (0.8) | 63 (54.8) | 1 (0.8) | 3.11 | 1.03 |
| Monitor our processes | - | 26 (21.3) | - | 61 (53.1) | 29 (25.6) | 3.83 | 1.04 |
| Take corrective action immediately when a Product or process quality problem is identified | - | 18 (17.1) | 3 (0.8) | 67 (58.8) | 27 (23.3) | 3.88 | 0.96 |
| Respondents overall mean & SD | | | | | | 3.71 | 0.69 |

Source: Own survey, 2020

From the data in the table, relatively large number of respondents which is 93% of them agreed that following the process focus approach on their operations minimized the chances of employee error. This was also evidenced from the informants of the interview mentioning that after exercising the self-assessment practice, there were declines of service/product error committed by employees.

The process management measure i.e. Continual se of internal or external audits to make sure quality products and services are delivered has got relatively low agreement with a mean of 3.11. This indicates less practice of process audits to deliver quality services or products which implies the need to work on this measure.

Table: 4.5 Measures of Continuous Improvement as enabled by participation in the quality award process

| Measures | Frequency (%) | | | | | Mean | SD |
|--|---------------|--------------|------------|--------------|--------------|------|------|
| | 1 | 2 | 3 | 4 | 5 | | |
| Emphasize on continuous improvement of quality in all work processes | - | 5 (4.8) | 1 (0.8) | 84 (72.8) | 25 (21.6) | 4.11 | 0.64 |
| Frequently measure our product/service quality | 3 (2.5) | 15 (13.2) | - | 80 (69.6) | 17 (14.7) | 3.80 | 0.94 |
| Have effective performance measurement system to track overall organizational performance | 9 (7.9) | 53 (46.1) | - | 42 (36.2) | 11 (9.8) | 2.94 | 1.24 |
| Systematically benchmark other companies to improve a systems or subsystems and implement & monitor programs | - | 24 (21.1) | - | 77 (66.9) | 14 (12.0) | 3.70 | 0.94 |
| Emphasize on continuous improvement of quality in all work processes | 9 (7.9) | 53 (46.1) | - | 42 (36.2) | 11 (9.8) | 2.94 | 1.24 |
| Frequently measure the product/Service quality | - | 24 (21.1) | - | 77 (66.8) | 14 (12.1) | 3.70 | 0.94 |
| Respondents overall mean & SD | | | | | | 3.45 | 0.88 |

Source: Own survey, 2020

The analysis of the data for continuous improvement measure revealed that, most respondents agreed that participation in the quality award process has contributed to make continuous improvement in the organisations with an average mean of 3.45 and SD 0.88.

Relatively larger respondents i.e., 94.4% agreed that Emphasis on continuous improvement of quality in all work processes is impacted more than the others. This was also indicated by informants saying the organisations strived to make the self-assessment practice as a culture and not to be left aside for another opportunity.

However, the measure of effective performance measurement practice has got the lowest mean (2.94) indicating that there is relatively less practice of good performance measurement system in the organisations which needs to be worked on.

Table: 4.6 Measures of Customer Focus as enabled by participation in the quality award process

| Measures | Frequency (%) | | | | | Mean | SD |
|--|---------------|--------------|---|--------------|--------------|------|------|
| | 1 | 2 | 3 | 4 | 5 | | |
| Products or services to be redesigned to meet the needs of the customer | 4 (3.1) | 18 (16.0) | - | 87 (76.1) | 6 (4.8) | 3.63 | 0.91 |
| Making frequent and close contact with our customers | 14 (12.1) | 37 (32.0) | - | 63 (55.1) | 1 (0.8) | 3.00 | 1.17 |
| Actively and regularly seeking customer inputs to identify their needs and expectations | 9 (8.1) | 57 (49.7) | - | 36 (31.2) | 13 (11.0) | 2.87 | 1.25 |
| Establishing complaints process and guidelines; complaints are properly recorded | 14 (12.1) | 72 (62.6) | - | 29 (25.3) | - | 2.38 | 0.99 |
| Receiving customers feedback on quality and delivery performance | 8 (6.5) | 78 (68.2) | - | 25 (22.2) | 4 (3.1) | 2.47 | 1.00 |
| Using customer complaints as an input to improve our processes | - | 24 (21.1) | - | 77 (66.8) | 14 (12.1) | 3.70 | 0.94 |
| Passing information on customers' current and future needs and expectations to our employees effectively | 23 (20.5) | 79 (68.3) | - | 13 (11.2) | - | 2.02 | 0.81 |
| Respondents overall mean & SD | | | | | | 2.87 | 0.77 |

Source: Own survey, 2020

Customer focus practices as part of the quality award process have received less agreement than all the other measures. This is actually also mentioned by informants during interview. One informant mentioned, 'There is a habit of doing the improvement works for the sake accomplishment while not taking consideration of what that meant for the customer. At the end of the day all the improvement works needs to be reflected in improved customer demands'.

However, from the measures among in customer focus the organisations have got relatively good agreement on using customer complaints as an input to improve processes with a mean of 3.70 and SD 0.94, whereas it is indicated that the organisations need to improve on the measure of Passing information on customers' current and future needs and expectations to employees effectively, which has got the lowest rating of 2.02 mean and 0.81 SD.

4.4. Impact of Participation in the Quality Award on Performance Measures

In order to attest the impact of participation in the quality award process on organizational performance of the organisations, 10 questions were asked in the questioner in this regard. The focus of the impact assessment was with respect to **quality, cost, and delivery**. Accordingly, the following findings in the table are acquired and analyzed.

Table: 4.7. Measures of impact of Participation in EQA on Organizational performance

| Measures | | Frequency (%) | | | | | Mean | SD |
|---|--|---------------|--------------|------------|--------------|---------------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | | |
| Quality | Improve high performance product/service features | 4 (3.1) | 12 (10.7) | - | 63 (55.1) | 36 (31.1) | 4.00 | 1.00 |
| | Offer consistence and reliable product/service quality | 4 (3.1) | 15 (13.2) | - | 89 (77.8) | 7 (5.9) | 3.70 | 0.88 |
| | Improve conformance to product/service specification | 3 (2.5) | 24 (20.5) | - | 56 (49.2) | 32 (27.5) | 3.79 | 1.13 |
| Overall mean and SD for Quality measures | | | | | | | 3.83 | 1.00 |
| Cost | Reduce inventory | 9 (7.9) | 11 (9.8) | - | 42 (36.2) | 53 (46.1) | 2.94 | 1.24 |
| | Increase capacity utilization | 17 (14.6) | - | 1 (0.8) | 80 (70.5) | 17 (14.6) | 3.85 | 0.84 |
| | Reduce production costs | 3 (2.2) | 24 (20.5) | - | 46 (40.4) | 42 (36.9) | 3.40 | 1.24 |
| Overall mean and SD for Cost measures | | | | | | | 3.40 | 1.11 |
| Delivery | Improve fast delivery | - | - | 1 (0.8) | 11 (9.7) | 103 (89.5) | 4.89 | 1.03 |
| | Improve delivery on time | 6 (4.5) | 14 (12.4) | - | 77 (67.5) | 18 (15.6) | 3.79 | 1.06 |
| | Reduce production lead time | 4 (2.5) | 16 (14.2) | - | 64 (55.5) | 31 (27.5) | 3.70 | 0.88 |
| Overall mean and SD for Delivery measures | | | | | | | 4.13 | 1.03 |
| Respondents overall mean & SD | | | | | | | 3.80 | 0.70 |

Source: Own survey, 2020

From the table, it can be seen that all performance measures of quality, cost and delivery are impacted positively because of the participation in the quality award practice with a mean and SD of 3.83,1.00 for quality; 3.40, 1.11 for cost and 4.13, 1.03 for delivery. Delivery measures are more impacted that quality and cost while cost measures are relatively impacted less.

However, from the informants in the interview of the key personnel in the organisations it was mentioned quality performance have been impacted by large than any other performance measures, whereas the data revealed all of the measures in consideration were impacted proportionally.

When the details of the measures are seen, for the quality measure, Improvement of conformance to product/service specification has got relatively lower rate of agreement 76.7% than the higher response for product/quality consistency 86.2%, which implies the organisations needs to review their process of specification analysis to meet customers' requirements. However, as per informants from the interview, product/service quality wise they mention there are gaps with the measures of consistency of product/service quality.

Regarding to cost performance measures, these are the measures which have got relatively lower rate than the other two with a mean of 3.40 and SD 1.11. which implies that cost measures are less impacted by the improvement activities from participation in the quality award program. The same was actually reflected by informants mentioning the cost performance for organisations product/service have not been significantly impacted. Out of these measures capacity utilization has got relatively higher rate of 84.6% whereas reduction of service/product costs got relatively lower rate of 77.3% confirming at the end of the day, the performance improvement work form participation in the quality award program has to be reflected in the unit product/service cost.

When the delivery parameters are considered, the measures have shown relatively higher improvement as per the respondents with a mean of 4.13 and SD 1.03. Out of these measures, fast delivery has got relatively higher response of 99.7% whereas reduction of production lead time got relatively lower response of 83.0% which indicates consistency in the responses that the quality award participation has to be reflected in improving unit service/product cost.

4.5. General Perception of Participation in EQA

The overall perception of the respondents on the impact of participation in the quality award process on the organisational performance was evaluated by forwarding two 'Yes' and 'No' questions. The first question is if the respondents think there is a positive relationship between Quality Award Participation Program Practice and improvement of quality of Service/Product. The table below summarizes the response.

Table 4.8. Assessment of overall perception of participation in the quality award process on organisational performance with respect to improvement of service/product quality

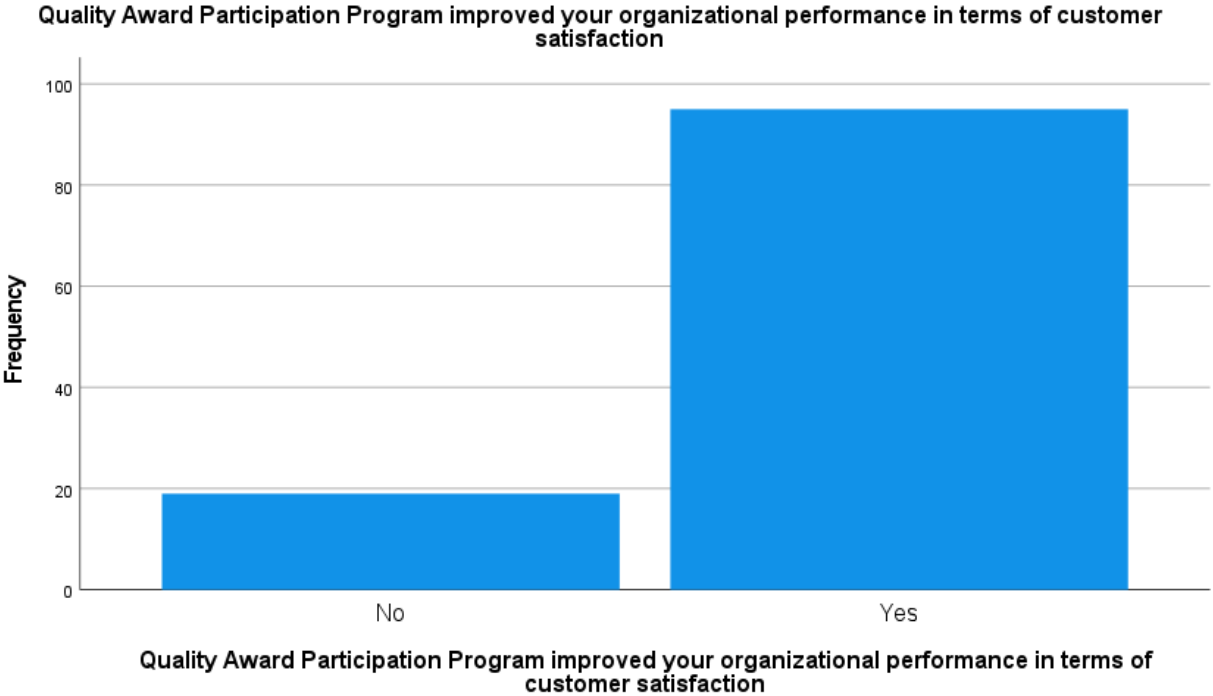
| Relationship between Quality Award Participation Program Practice and Quality of Service/Product | | | |
|--|--------|-----------|---------|
| | | Frequency | Percent |
| | No | 16 | 13.9 |
| | Yes | 98 | 85.2 |
| | Total | 114 | 99.1 |
| Missing | System | 1 | .9 |
| Total | | 115 | 100.0 |

Source: Own survey, 2020

From the data in the table, it is evident that 98% of respondents agreed on improvement of organizational performance in terms of service/product quality through participation in the quality award practice. This indicates there is a positive relationship between organizational performance and participation in the quality award.

The second question is about if the practice of Quality Award Participation Program improved the organizational performance in terms of customer satisfaction. The below figure summarizes the response.

Figure 4.2 : Assessment of overall perception of participation in the quality award process on organisational performance with respect to customer satisfaction



Source: Own survey, 2020

From the chart it is evident that 96% of respondents agreed on improvement of organizational performance in terms of customer satisfaction through participation in the quality award practice. This indicates there is a positive relationship between organizational performance and the participation in the quality award.

4.6. Inferential Analysis of the Respondents

Correlation between the independent variables and the dependent Variable

Using the Pearson's Product Moment Correlation Coefficient (r) the degree of association between the independent variables (Process Management, Continuous Improvement and Customer Focus) and the dependent variable (Organizational performance) were computed to determine the strength, direction, and statistical significance of the relationships as shown in table 4.9

Table 4.9 Pearson Correlation Analysis, Sig. (2-tailed) and N=115

| Pearson Correlation Analysis, Sig. (2-tailed) and N=115 | Process Management | Continuous Improvement | Customer Focus | Organizational Performance |
|---|--------------------|------------------------|----------------|----------------------------|
| Process Management | 1 | | | |
| Continuous Improvement | .767** | 1 | | |
| Customer Focus | .518** | .777** | 1 | |
| Organizational Performance | .561** | .691** | .625** | 1 |
| | .000 | .000 | .000 | |

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

Source: Own survey, 2020

As per Marczyk, Dematteo & Festinger (2005) general procedures, correlations of 0.01 to 0.30 are considered weak, correlations of 0.31 to 0.70 are taken to be moderate, correlations of 0.71 to 0.90 are considered strong, and correlations of 0.91 to 1.00 are taken to be very strong. Depending on this assumptions, all basic constructs were taken into consideration for the correlation analysis. The figures with the symbol ** indicate that each of the variables are significantly correlated with each other at a significance level of $p < 0.01$.

Table 4.9 present the inter-correlations among the variables being analyzed, which means it represents the correlation matrix between the independent variables and the dependent variable.

From the analysis, it can be observed that there exist a positive moderate and statistically significant relationship between Process Focus and Organizational performance ($r=0.561$, $p<0.01$).

The table also indicates that there exists a positive moderate statistically positive relationship between continuous improvement and Organizational performance ($r=0.691$, $p<0.01$). Similarly, there is also a positive moderate and statistically significant relationship between Customer focus and Organizational performance ($r=0.625$, $p<0.01$).

The same was reflected by informants on the interview mentioning that these measures i.e., continuous improvement, Customer focus and Process focus have been impacted significantly since participation in EQA by all the organisations.

Regression Analysis of the independent variable on the dependent variable

In order to determine the statistically significance impact of the independent variables on the dependent variable, multiple regression analysis was used. In this study, there are four independent variables and one dependent variable, therefore, Multivariate regression model is applied to determine how Participation in Quality Award process has an effect on organisational performance as the study contains more than one predictor. The following model is used with three predictor variables that is X1, X2 and X3.

Figure 4.3. Multivariate regression model equation

$$\mathbf{Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e}$$

Where: a = the constant (point at which line crosses Y axis)

β_1 = slope (regression coefficient) for variable X1

β_2 = slope for variable X2 Fig. 4.3. Regression Equation for Multivariate Analysis

β_3 = slope for variable X3

e = error (or residual) value

Where Y is the Organisational Performance, a is the regression constant, β_1 to β_3 are regression coefficient, X1 is Process Management, X2 is Continuous improvement and X3 is the Customer Focus, e is the error term.

And the equation used for Analysis of Variance (ANOVA):

Fig. 4.4. Equation for ANOVA

$$\sum(Y - \bar{Y})^2 = \sum(Y_{\text{fit}} - \bar{Y})^2 = \sum(Y - Y_{\text{fit}})^2$$

total sum of quares = sum of squares due to regression + residuals sum of squares
 SStotal = SSreg + SSres

Table 4.10 Regression analysis for the Variables

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | .709a | .503 | .497 | .49478 |

A - Predictors: (Constant), Process Management, Continuous Improvement, and Customer Focus

Table 4:11 Analysis of Variance (ANOVA)

ANOVA ^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 86.932 | 1 | 21.733 | 88.776 | .000 ^b |
| | Residual | 85.928 | 114 | .245 | | |
| | Total | 172.860 | 115 | | | |

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), Management involvement, Process Management, Continuous Improvement, and Customer Focus

Coefficients ^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|--|-----------------------------|------------|---------------------------|-------|-------|-------|
| | | B | Std. Error | Beta | | | |
| 1 | | (Constant) | 1.740 | .669 | 2.599 | .010 | |
| | | Process Management | .124 | .060 | .124 | 2.063 | .040 |
| | | Continuous Improvement | .320 | .064 | .404 | 4.969 | .000 |
| | | Customer Focus | .224 | | .055 | .246 | 4.030 |

a. Dependent Variable: Organizational Performance

Source: Own survey, 2020

Table 4.10 above clearly shows the value of R and R². In this analysis the value of R is 0.709, which is a measure of the correlation between the observed value and the predicted value of the dependent variable (Organizational performance). Whereas R Square (R²) is the square of this measure of correlation and shows the proportion of the variance of organizational performance with the existence of the performance measures.

Hence, R Square = 0.503 implies that only 50.3% of organizational performance is explained by factors of the performance measures (Process Management, Continuous Improvement, and Customer Focus). In essence, this is a measure of how good a prediction of the dependent variable can be made by knowing the independent variables. This implies that 50.3% of the variance in the dependent variable is explained by the independent variables in the model. The model also indicates that, the remaining 49.7% of the variance can be explained by other variables, which are out of this model and indicates that further research might be needed for this.

The F-ratio explains whether the results of the regression model could have occurred by chance. Large F value and a small significance level (typically smaller than 0.05 or 0.01) implies that the results probably are not due to random chance. Accordingly, as can be seen from the table above the F value is 88.78 and is significance at 0.000. Therefore, it can confidently be said that the regression model adopted in this study has not occurred by chance and is considered highly significant.

The beta value is a measure of how strongly predictor variable influences the criterion variable. Likewise, the beta value of this study is as indicated in the table above. To make one a demonstration, Process management has a 0.124 beta value which indicates that a change of one standard deviation in the predictor variable i.e., Process management factors resulted in a change of 12.4 standard deviations in the criterion variable i.e., organizational performance. Hence, there is a higher effect of Process management on organizational performance. As the higher the beta value the greater the effect of the predictor variable on the criterion variable. In the same manner, the factor that has the greatest impact on organizational performance is Continuous improvement, with a coefficient ($\beta=0.320$), next is customer focus ($\beta=0.224$), and finally Process management ($\beta=0.124$).

4.6. Summary and Discussion on the major findings, interview response and Document review focusing on the organisations performance.

To sum up the analysis, there were some differences between the studied cases, regarding which values had been affected by the quality award process participation. All organisations had experienced improvements in the areas of customer orientation, process orientation and continuous improvement. This was reflected in the document review where positive impacts have been observed with respect to performance measures like cost, quality and delivery. Also, informants interviewees have revealed similar opinion except deviations on some improvement gains like with the measure of customer focus. They claimed at the end of the day all improvement initiatives needed to reflect significantly on customer focus but not impacted as compared to the other measures.

As described in the tables and figures there were some differences among the selected organisations, regarding the variables which had been affected most by the quality award participation process. All of the organisations had experienced significant improvements in the areas of customer focus, Management involvement, process focus and continuous improvement which in turn impacted the organisational performance with respect to quality, cost, and delivery. At Horizon Addis and ICL the continuous improvement had also been significantly strengthened. As per the interview with the personnel's in the respective organisations and respondents in the questionnaire these two organisations have also involved almost all of their employees in the quality award process, and also, to a large extent, in their business planning. This was not the case at Harmony Hotel. However, Harmony had got significant impact in Customer focused improvement practices because of the participation in the quality award.

The answers of the interviewees seem to differ systematically depending on the role of the interviewee. For example, managers may believe that the main results of a participation programme affected is the leadership because it is in that area, they mainly see the impact. Employees with no overall responsibility may, on the other hand, see the main impacts on the overall organisational performance visible through customer satisfaction, continuous improvement, and People Management.

In general, the respondents were positive to their organization's participation in the EQA Quality Award process, and they also recommended other organisations to participate in the award process. As per one respondent in Horizon Addis, "It is much better to perform a systematic improvement program with a structured model that covers all aspects of the business, than to have an ad-hoc and unsystematic improvement work". The respondents also stated that it is important to have a long-range perspective in order to fully take advantage of the award process. They argued that the use of the EQA Model had been important for the positive impact on the organisations, but some of the respondents questioned the frequency of quality award participation. Instead of doing the award program every year, every two years was thought to be more appropriate than every year. All organisations key personnel's on the interview also complained that the participation in a quality award process had been very resource demanding. So, it is implied that to participate in a quality award process every year could be too intense for the organisations. For that reason, an application every two year could be more beneficial. By extending the time between applications the organisations can get more time to complete the improvement projects initiated as results of the evaluations.

It is also mentioned by the respondents that one needs to participate once in the process in order to be familiar with the model and the method of working. This would suggest that a second application could give a more beneficial outcome and impact than the first.

The informants of Harmony Hotel argue, for example, that they would train more employees in the EQA Model. Also, they confessed they would also involve more employees in the award process. In the planning phase, ICL argues that one could learn more from others, instead of participating in a quality award process directly.

The document review of the organisations since the year of participation in general revealed proportional improvement with respect to cost, quality, delivery, and significant decline of rejects of product, less rework and efficient services. For Horizon Addis, quality of products and decline in rejects holds the major improvement since participation. As per a yearend report on production department, 12.5% decline of rejects achieved in 5 years since participation whereas 14% decline of tires being recalled because of poor performance and/or the customer returning them for the same reason. For ICL, since participation in 7 years, there were significant improvement in waiting time, an average of 17.5% improvement recorded as per quarterly

newsletter review of the organisation. No recorded quantified performance improvement documents were able to capture for Harmony Hotel. However, as per their guest feedback review and reports in trip advisory, a significant improvement in customer service, cleanliness and facility up-keep was seen through the year of participation.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

This chapter contains conclusion and recommendation of the study.

5.1. Introduction

In this chapter, conclusion is made reviewing the major achievements of the study, what it meant for organisations and EQA and considering interested party to use this study as input for engaging in quality award initiatives. The conclusion focuses on the unique contribution this study has achieved. Based on the conclusion, recommendations are forwarded for the organisations under study, organisations aspiring to participate in EQA and reap the benefits through this practice and as well as for EQA.

5.2. Conclusions

The purpose of this study is to describe how organisations have utilized their quality award process participation in order to improve organisational performance. The studied organisations may serve as good examples of how to take advantage of such initiatives of participation in the EQA to impact organisational change initiatives. In particular, the studied organisations have been successful in reviewing, developing, and communicating their vision, thereby empowering their employees as well as communicating all stakeholders. It is also learnt from the studied organizations that, participating in a quality award process only once seems to be ineffective use of resources against the benefit expected. Often benefits cannot be measured until the second and frequent participations. It is also of great importance to get enough time in between the applications in order to be able to complete as many as possible of the improvement projects planned.

The quality award Participants have experienced a great benefit from participating in the award process. The main conclusion from this study is that the process orientation, customer orientation and improvement work in the organisations have been improved as a result of the participation in

the quality award process. However, there are also gaps to be worked on in order to benefit fully from the process. The two main gaps are difficulties in finding resources within the organization to perform mandatory improvement works and implement identified improvements, and difficulties in applying the circumstantial model used in the quality award process. These results also indicate that the criteria tools used by EQA are too complicated and too comprehensive, at least for the less experienced organizations. Hence, a great deal of job is needed in the familiarization of the models and on how to use the criteria's to have a great impact in the targeted performance of the organisations.

On the whole, the organisations show many good example, both systematic and integrated, of how organisational core values can impacted by utilizing change initiatives such as the EQA. In general, the main improvement potentials were found in the results areas of EQA model. According to the respondents and informants the organisations needed to improve measurement, analyses trends and also to perform bench marking to compare basic performance measures with other leading organisations and competitors. As per the thorough study on the primary and secondary data, none of the studied organisations claimed that they had, in monetary terms, been able to estimate how much they had earned or saved due to the improvement projects made. While the positive impact of participating in the quality award was felt with respect to the different measures evaluated previously, there is a gap in quantifying the impact. In the successive years after participation in EQA, it is evident the organisations experienced great improvements in customer focus, quality service and product as well as in reduction of unit prices of services and products.

5.3. Recommendation

All the three organisations under study have benefited by the participation in the quality award program. However, they still have some gaps and challenges while participation, self-assessment and implementation of the improvement initiatives acquired through the participation. Therefore, in order to satisfy customers, need and to be competitive in the business within the country or globally the following recommendations are forwarded.

First of all, the organisations need to have a long-range perspective on the quality award participation. The first time an organisation participate in the award program, it mainly learns about the methodology of participation. Beginners largely benefit from the introduction of the self-assessment program for participation as it create new culture of thinking which actually positively impact on the performance of the organization. Organisations with frequent experience of participation seems to have benefited from the actual outcome of the quality award process, the improvement work. It is also important to have enough time in between the applications to be able to complete as many improvement projects identified form the process. Hence, a continuous participation every second year might be a suitable recommendation or aggressively work on the improvement works within the year to make the participation every year.

Considering the complexity of EQA models mentioned by respondents and the informants in the interview, EQA needs to seek ways to make the models easy to be understood by every member of the organisations. In addition to the criteria of the models being communicated to participating organisations, it is recommended to have another document detailing on the models as a working document.

Also, participation in the quality award process should not be seen as a separate activity, but rather as an integrated part of the organization's work performed to increase their performance. It is recommended to integrate the participation in the quality award process as part of the organisations process of business and strategic planning. To give an example in this regard, the organisations need to allocate appropriate number of resources in the planning phase of the participation.

The other important recommendation for organisations aspiring to participate in the quality award program is that the Managers of the organisations need to be dedicated to the cause of participation and be familiar with the self-assessment work which is crucial for participation. Similarly, participation of employees in the quality award process needs to be given of great emphasis. The participation of employees needs to include a companywide training and awareness on the objective of the participation and the on the quality award model used.

REFERENCES

- EQA (2009). "Self-Assessment Manual of Ethiopian Quality Award (EQA)", Addis Ababa University Press
- Birhan G (2009). "Continuous Improvement Model Development for Ethiopian Enterprises Implementing Business Process Reengineering", Unpublished M.Sc. thesis, Addis Ababa University, Addis Ababa, Ethiopia
- Chuan (2000). "A detailed trends analysis of national quality awards world-wide", Total Quality Management, Vol 11 No 8, pp. 1065-1088.
- Calingo (2002). "National Quality and Business Excellence Awards", in Asian Productivity organizations, the quest for global competitiveness through National quality and business excellence awards, Tokyo, pp. 3-40.
- Conti, T. (2001). Why most companies do not get the most out of their self -assessments. Proceedings from the 55th annual ASQ Congress, 9-11 May 2001, Charlotte, North Carolina.
- Ebrahimi, M., & Sadeghi, M. (2013). Quality management and performance: An annotated review. International Journal of Production Research, Vol 35 No 7, pp. 234 - 242
- EFQM (2003). EFQM Excellence Model. The European Foundation for Quality Management (EFQM), Brussels.
- Eriksson, H. (2003). "Experiences of working with in-company quality awards", The TQM Magazine, Vol 15 No 6.
- Ethiopian Quality Award Organisation, <http://www.ethiopianqualityaward.org/>
- G.A. Bohoris (2005). School of Manufacturing and Mechanical Engineering, University of Birmingham, Birmingham, UK
- Hendricks, K. B. and Singhal, V. R. (1996). "Quality Awards and the market value of the firm: An empirical investigation", Management Science, Vol 42 No 3, pp. 415 -436.

Messaging A (2008). "Quality Practices in Ethiopian Manufacturing Industries, A case Study on Basic Metal and Engineering Industries", Unpublished M.Sc. Project, Addis Ababa University, Addis Ababa, Ethiopia.

NIST (2003). Criteria for Performance Excellence. National Institute of Standard and Technology, Gaithersburg, MD.

Negating A (2011). "Quality Management Practices: the case of Harar Brewery Share Company", Unpublished M.Sc. thesis, Addis Ababa University, Addis Ababa, Ethiopia.

Parajapati D (2011). "A new approach to monitor the process dispersion", Int. J. Q. Reliability Manage. 28(3): 280-297.

Parast M, Adams S, Jones E (2011). "Improving operational and business performance in the petroleum industry through quality management", Int. J. Q. Reliability Manage. 28(4):426-450

Sila, I. and Ebrahimpour, M. (2002). "An investigation of the total quality management survey-based research published between 1989 and 2002", International Journal of Quality and Reliability Management, Vol 19 No 7, pp. 902-970.

Stanleigh, M. (n.d.). Measuring your organization's performance. Retrieved from <https://bia.ca/measuring-your-organizations-performance>

Vokurka, R. J., Standing, G. L. and Brazil, J. (2000). "A comparative analysis of national and regional quality awards", Quality Progress, Vol 33 No 8, pp. 41-49.

APPENDICES

RESEARCH QUESTIONNAIRE

Dear Respondents,

Thank you for participating in this study.

The purpose of this survey is to determine how Participation in Ethiopian Quality Award (EQA) has an impact on the organisational performance of your company. Your response will help to understand the benefit of using the self-assessment tools of the quality award organisation .

Dear Participants, this study is purely for academic purpose and for partial fulfillment of the requirements for the Degree of Master of Science (MSc) in St. Mary University. All responses will be kept confidential and will not be traceable to individual respondent.

For the successful accomplishment of the research, your genuine response will have an important role and the responses will be used as a valuable and primary input for the study. For this reason, you are kindly requested to spare few minutes of your busy schedule and genuinely fill this questionnaire.

If you have any question or enquiry, please do not hesitate to contact me at any time through the following address:

Zewdu Hailu

Tel: 0911996751

Email: zewhai@gmail.com

I. GENERAL INFORMATION

Please provide us with some basic information about the company and yourself.

1. Please indicate your designation in the company:

- General Manager/ Managing director or above Supervisor
- Quality Assurance/Control Manager Production Manager
- Senior executive Expert/Technician
- Other (please specify):

2. How long have you worked with in the organization:

- Less than 5 years
- Between 5 to 10 years
- More than 10 years

3. Please indicate your highest Educational Level:

- Diploma Bachelor's degree Master Degree PhD Degree
- Other (please specify):

II. Quality Award Participation Practices

Direction:

This section of questionnaire focuses on the **impact of Participation in Ethiopian Quality Award Practices in the organisation**. On the following scale, please tick (√) the appropriate number under the space provided that best represents your opinion.

| Strongly disagree | Disagree | Neutral | Agree | Strongly Agree | | | | | | | |
|--|----------|---------|-------|----------------|---|---|---|---|---|--|--|
| 1 | 2 | 3 | 4 | 5 | | | | | | | |
| Top Management Support | | | | | 1 | 2 | 3 | 4 | 5 | | |
| 1. Top Management are actively involved in establishing and communicating the organization's vision ,goals, plan, and values relevant to the quality award practices | | | | | | | | | | | |
| 2. All Major department heads within our plant accept their responsibility for the quality award participation activities | | | | | | | | | | | |
| 3. Top management provides personal leadership for quality award practices | | | | | | | | | | | |
| 4. Top management is personally involved in quality award self-assessment process | | | | | | | | | | | |
| 5. Top management strongly encourages employee involvement in the quality award participation activities | | | | | | | | | | | |
| 6. Top Management is evaluated for their participation in the quality award process | | | | | | | | | | | |
| Process Management - Participation in the quality award has enabled our process to:- | | | | | 1 | 2 | 3 | 4 | 5 | | |
| 7. Minimize the chance of employee error | | | | | | | | | | | |
| 8. Give clear, comprehensive, and standardized documentation about work methods and process instructions to employees | | | | | | | | | | | |
| 9. Make extensive use of statistical techniques to reduce variance in processes | | | | | | | | | | | |
| 10. Continually use internal or external audits to make sure we deliver quality products and services | | | | | | | | | | | |
| 11. Monitor our processes | | | | | | | | | | | |
| 12. Take corrective action immediately when a Product or process quality problem is identified | | | | | | | | | | | |
| 13. Identify key processes & to systematically improve better product or process quality | | | | | | | | | | | |
| People Management | | | | | | | | | | | |
| 14. We constantly ensure that employees are aware of the quality award program in the company | | | | | | | | | | | |

| | | | | | |
|--|----------|----------|----------|----------|----------|
| 15. Promotions and Career development programs emphasize the quality award program in the organization | | | | | |
| 16. Training programs are developed and implemented in for the quality award program | | | | | |
| 17. Participation in the quality award process has enabled us to make effective open communication in three directions: up ,down & across | | | | | |
| 18. Employees actively participate in the quality award program | | | | | |
| 19. Participation in the quality award has enabled the organization to use a team approach that entails idea generation, alternative evaluation and consensus building to solve problems | | | | | |
| 20. Participation in the quality award has enabled us to measure employee satisfaction formally and regularly | | | | | |
| 21. Employee flexibility, multi-skilling and training are actively used for the quality award participation process | | | | | |
| 22. We have a transparent and effective appraisal system for recognizing and rewarding employees for their efforts in the quality award program | | | | | |
| Continuous Improvement - Participation in the quality award has enabled us to:- | 1 | 2 | 3 | 4 | 5 |
| 23. Emphasize on continuous improvement of quality in all work processes | | | | | |
| 24 Use PDCA (plan-do-check-act) cycle for the self-assessment task in the preparation of the quality award program | | | | | |
| 25. Frequently measure our product/service quality | | | | | |
| 26. Have effective performance measurement system to track overall organizational performance | | | | | |
| 27. Systematically benchmark other companies to improve a systems or subsystems and implement & monitor programs | | | | | |
| 23. Emphasize on continuous improvement of quality in all work processes | | | | | |
| 24. Use PDCA (plan-do-check-act) cycle extensively for assessment of continuous improvement incurred by participation in the quality award program | | | | | |
| 25. Frequently measure the product/Service quality | | | | | |
| 26. Have an effective performance measurement system to track overall organizational performance | | | | | |
| Supplier Quality Management - Participation in the quality award has helped/enabled us to:- | 1 | 2 | 3 | 4 | 5 |
| 28. Establish a long term co-operation with our suppliers | | | | | |
| 29. Regard our product/service quality as the most important factor for selecting suppliers | | | | | |
| 30. Participate in suppliers activities related to quality | | | | | |
| 31. Increase our interest to give feedback on performance of suppliers' products | | | | | |
| 32. Have our key suppliers provide input into our product/service development Program | | | | | |
| 33. Seek certified or qualified suppliers for quality | | | | | |
| 34. Do more supplier quality audit | | | | | |
| 35. Establish a long term co-operation with our suppliers | | | | | |

| Customer Focus - Participation in the Quality award Program has helped for:- | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 35. Products or services to be redesigned to meet the needs of the customer | | | | | |
| 36. Making frequent and close contact with our customers | | | | | |
| 37. Actively and regularly seeking customer inputs to identify their needs and expectations | | | | | |
| 38. Establishing complaints process and guidelines; complaints are properly recorded | | | | | |
| 39. Receiving customers feedback on quality and delivery performance | | | | | |
| 40. Measuring customer satisfaction systematically and regularly | | | | | |
| 41. Using customer complaints as an input to improve our processes | | | | | |
| 42. Passing information on customers' current and future needs and expectations to our employees effectively | | | | | |

III. Operational performance measures

Please tick (✓) the number which indicates your opinion about the level of operational performance in your company in the last 3 years.

| Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |

| Quality - Participation in the Quality award Program has enabled us to:- | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 43. Improve high performance product features | | | | | |
| 44. Offer consistence and reliable product quality | | | | | |
| 45. Improve conformance to product specification | | | | | |
| Cost - Participation in the Quality award Program has enabled us to:- | | | | | |
| 46. Reduce inventory | | | | | |
| 47. Increase capacity utilization | | | | | |
| 48. Reduce production costs | | | | | |
| 49. Increase labor productivity | | | | | |
| Delivery performance - Participation in the Quality award Program has enabled us to: | | | | | |
| 50. Improve fast delivery | | | | | |
| 51. Improve delivery on time | | | | | |
| 52. Reduce production lead time | | | | | |

III. General Assessment on Perception of Performance

1. Do you think the practice of Quality Award Participation Program improved your organizational performance in terms of customer satisfaction?

- Yes No

2. Has the Quality Award Participation practice improved your organization in terms of getting more Business?

- Yes No

Thank you for your participation and the time contribution in answering the survey questionnaire. All responses will be treated with **utmost confidentiality** and no single set of responses will be readily identifiable.

Comments (optional):

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THANKS FOR YOUR PARTICIPATION

Interview Questions Prepared and Conducted with Managers, Supervisors and Technical Staff

1. Are you or the employees well aware of Quality Award Practice?

2. What are the challenges you faced in the quality participation process?

3. What are the benefits you gained because of the participation in the quality award program or self-assessment practice?

4. Do you think the participation in the quality award program has impacted the overall performance of the Organization?

How?
