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FACTOR SAFFECTTING IMPLEMENTATION OF ISO 9001:2015QMS IN CASE OF END GLOBAL SOAPAND DETERGENT MANUFACTURING INDUSTRY

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Addis Ababa, Ethiopia

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

FACTORS AFFECTING IMPLEMENTATION OF ISO 9001:2015 QMS IN CASE OF END GLOBAL SOAP AND DETERGENT MANUFACTURING INDUSTRY

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of my Advisor Dr.Melaku Girma. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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ENDORSMENT

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List of Abbreviation

BPR Business Process Reengineering

DMAIC Define, Measure, Analyze, Improve and Control

END The of the organization

F Frequency

FMEA Failure Mode and Effects Analysis

ISO International Standards Organization (International organization of standards)

PDCA Plan, Do, Check, and Act

QA Quality Assurance

QC Quality Control

QMS Quality Management System

TQM Total Quality Management

SIPOC Suppliers, Inputs, Process, Outputs, customers.

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ABSTRACT

The purpose of this study is to investigate the factor affecting implementation ISO 9001:2015 of quality management systems during implementation in END global soap and detergent manufacturing industry. The main objective of this study is to determined factor affecting implementation of ISO 9001:2015 QMS in case of END global soap and detergent manufacturing industry. The research method utilized in this study is mixed method approach which include both qualitative and qualitative data collection techniques and analysis procedures. Descriptive survey research method applied. The research work has used primary and secondary data for identifying and analyzing barriers using questioner, interviews, personal observations and review of previous research works. The researcher has uses 100 total population size. Of the total population taken 80 respondents are selected using purposive sampling method. This research work has reviewed the factor affecting, strategic plan and the benefit of ISO 9001:2015 Quality Management System in the company. The research also identified poor top management commitment and lack of looking for ISO 9001:2015 rated as extremely high in the organization. Conclusion and recommendation has forwarded that can help forwarded that can help for future improvement the factor affecting implementation of ISO 9001:2015 QMS in soap and detergent manufacturing industry.

Key words: - ISO 9001:2015, Quality management system, factor.

CHAPTER ONE

Introduction

This chapter consists of background of the study, statement of the problem, research questions, general and specific objective of the study, significance of the study, scope of the study, organization of the study and definitions of some terminologies.

1.1. Background

ISO 9001 standard provides the requirements for a quality management system. This particular standard safeguards the customers to get consistent, good quality products and services (Su et al., 2015). This standard is based on seven quality management principles i.e., customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management(Sumaedi and Yarmen, 2015). ISO 9001 can be implemented in all types of organizations such as manufacturing organization and service organization. Poksinska et al(2002) discussed that organizations are implementing ISO 9000 standard due to customer pressure; improved efficiency and productivity; higher-grade products; and marketing advantages. The motivational factors for the implementation of ISO 9001 are product quality improvement, customer pressure/requirements, process improvement and enhanced company image and competitiveness (Georgiev and Georgiev, 2015). The implementation of ISO 9001 is not an easy task due to the fact that certain barriers inhibit the implementation process. Besides this, there also lie a certain category of factor which facilitate the organizations to successfully implement the ISO 9001. An effective Quality Management System focuses on systematically developing and communicating a customer-focused mission, strategies and action plans; listening and responding to the customers' needs and expectations; empowering employees to continuously improve and increase their satisfaction with their work processes and environment; and gathering and analyzing key performance indicators to improve organizational and process results (Daniel Amare, 2010). In today's highly competitive business environment, forward-thinking organizations are more committed than ever to continue refining their processes and procedures to improve their products and services. The development and implementation of a quality management system (QMS) is perhaps the best way to demonstrate this commitment (Rivera, 2017). A quality management system provides organizations with the

opportunity to raise their competitive position by focusing on improvement efforts on those operational areas in the most in need of change. This in turn streamlines operations, increases efficiency and enables organizations to provide quality Products and more effective services to their customers (Rivera 2017). Quality management system (QMS) provides generic guidance and requirements for establishing an appropriate quality management procedure, in order to lower cost, increase productivity, result in customer's satisfaction, and enhance the market share of the organization (Nevestani 2016). Quality in the soap and detergent industry is a matter that has to do with the entire supply chain and all the stakeholders involved from production to consumption. In the global market, companies engaged in soap and detergent production have reached massive sizes, while the competition between them has become very intense. Literature on the soap and detergent industry mainly deals with issues related to production processes and soap and detergent storage and deals less with QMS issues regarding soap and detergent companies. Most successful companies of the industry are those that manage to harmonize productivity with quality, while at the same time they maintain their market share by meeting consumers' demands (Vrellas & Tsiotras, 2013). So, there is a serious factor affecting implementation of ISO 9001:2015 QMS in this industry. Therefore; that is why the researcher decided to see the real factor affecting soap and detergent during the sustainable implementation of QMS.

In the present world of intense competition, one of the primary factors for sustainable competitive advantage lies in delivering the highest quality service that leads to satisfied customers. To identify and implement appropriate product quality improvements, process improvements, variability reduction, innovations, and pharmaceutical quality system enhancements, thereby increasing the ability to fulfill a pharmaceutical manufacturer's own quality needs consistent quality follow up quality risk management can be useful for identifying and prioritizing areas for continual improvement (Shemwell, 1998). The International Organization for Standardization (ISO) standard is one of the quality systems commonly used by most organizations to provide businesses with the capability for their processes and requirements, or to give guidance on good management practice. ISO 9001was adopted as a tool in a grand strategy for achieving competitive advantage and providing a stepping stone on the way to effective quality management practices. ISO 9001 applies to all types of organizations,

irrespective of size or what they do. It can help both product and service oriented organizations achieve standards of quality that are recognized and respected around the world.

The ISO was founded in Geneva in 1947, the original purpose of which was to provide standardization of technical specifications for products traded in the international marketplace. The ISO 9001 family of quality management system standards was first developed in 1987 and revised in 1994, 2000, 2008 and 2015. According to Bansal & Hunter (2003), one of the strategic explanations for why firms get certified to ISO 9001 is because they may seek to 'reinforce' their present strategies thus further enhancing their competitive advantage. Another explanation can be due to marketing motivations or customer pressure (Buttle, 1997).

The effects of obtaining the ISO certification could vary from one company to another. This could be caused by several factors (Heras et al., 2001). Firstly, there are many internal and external drivers that can influence a company's performance. For example, in order to proclaim that a company's higher profitability is only and directly affected by ISO 9000 certification, there needs to be an assurance that no other variables could possibly cause the difference. Secondly, the characteristics of the companies undergoing the ISO implementation might differ in terms of size, economic sectors and types of goods produced (Heras et al., 2011). Thirdly, the implementation of the ISO standards may only be effective in the long run. A study by (Heras et al. 2001) demonstrated that the ISO 9000 standard benefits a company several years after implementation. Many studies disclose that effective implementation of ISO 9001 standard has benefits to the organization such as improvement of management control, efficiency, productivity, and customer service (Nabavi et al., 2014). As a result of the positive perception of the performance of the standard there has been a consistent increase in the number of countries which have adopted ISO 9001 as their national quality standard.

The comparison of the changes between the old and new versions was well explained by (Cochran C, 2015). If ISO 9001:2008 emphasizes on continual improvement and customer satisfaction, ISO 9001:2015 puts more focus on risk-based thinking. Risk-based thinking, as the concept and approach added in the new version, requires organizations to identify and analyze potential risks that could arise both from inside and outside of the organizations. Thus, organizations can formulate strategies to prevent any impact of the risks and they can be expectantly more resilient and sustainable by accommodating the risks. Other changes in the new

version are the consideration of the organizational stakeholders' needs, the importance of knowledge management and less emphasis on documentation (Fonseca et al, 2017).

1.2. Statement of the problem

Preparing comprehensive implementation plan is one of the critical first steps and an essential prerequisite for a successful QMS implementation. In their study showed that factor affecting soap and detergent manufacturing industry is a matter that has to do with the entire operation and all the stakeholders involved from production to consumption (Vrellas& Tsiotras 2013).

On the other hand according to Osman (2016) the most important barriers facing QMS in an organization are insufficient resources allocation, lack of management commitment, lack employee's commitment and factors related to organization's internal systems such as inherited deficiencies in planning and preparatory phase, the nature and complexity of the project, lack of a total change in organizational focus and also lack new strategies that produced improving in operational processes at all levels. Hussein, Abou-Nassif, Aridi, Chamas, & Khachfe (2017) identified seven main challenging factors in the implementation of QMS. The seven identified factors are lack of awareness, the terminology used in ISO 9001, resistance to change, the existence of accreditation, and commitment of top management, time management, and resource availability. Based on the research finding by Ogany (2017) the implementation of QMS is greatly influenced by resource availability, staff training, top management skills, and information technology. Even though developing and implementation of ISO 9001:015 Quality Management System in the END global soap and detergent manufacturing industry started a two years ago, it is not fully implemented at all levels of the company. This was been an area work of researching. It was necessary to navigate through the development and implementation phase in the organization for identifying the factor affecting for implementation of ISO 9001:2015 QMS. A great part of the work was designed to understand which of these factors are confronted for effective QMS implementation.

1.3. Objectives of the study

1.3.1. General Objective

The general objective of this study is to describe the factors affecting implementation of ISO 9001:2015 QMS: In case of END global soap and detergent manufacturing industry.

1.3.2. Specific objective

The specific objective of this research is: -

- ➤ To identifying the factor affecting implementation of ISO 9001:2015 QMS.
- ➤ To identify the challenges of implementing ISO 9001:2015QMS.
- > To propose lesson for the future.

1.4. Research Questions

- ➤ What are the key factors affecting implementation of ISO 9001:205 QMS?
- ➤ What are the benefit of implementation ISO 9001:2015 QMS?
- ➤ What are the reasons that influenced organizations to implement the ISO 9001:2015QMS?

1.5. Significance of the Study

The research was been provided information about the factor affecting implementation of ISO 9001:2015 quality management system in END global soap and detergent manufacturing industry. This study was been contributing to the ISO 9001:2015 quality management in soap and detergent manufacturing industries of the country.

1.6. Scope of the Study

The research study was been conducted in order to provide information about the factor affecting the implementation of ISO 9001:2015 Quality Management System in END global soap and detergent manufacturing industry. The study could contribute to the Quality Management System in soap and detergent manufacturing industry in the country.

1.7. Terms and Definition

Factors: - influence the contribution of quality management system.

Quality management system (QMS): -The organizational structure, procedures, processes, and resources needed to implement quality management.

ISO 9001:2015: is the requirement for Quality Management System.

1.8. Organization of the research

This study is divided into five chapters. The first chapter provides the background about the study problem, objectives research question, significance of the study, scope of the study, terms and definition and limitation of study. The second chapter discusses on relevant literature review on the topic to gain understanding of the fundamental requirements, practices, benefits and challenges in the development and implementation quality management system. Chapter three gives an account of the research methodology description and justification of the design and research procedure followed in this study. Chapter four presents and analyses data to find out results which could answer the research questions. Chapter five focuses on drawing conclusions based on the findings, and making pertinent recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The literature review incorporated some of the basic quality management system principles with purpose of identifying from where the points of factor affecting implementation ISO 9001:2015QMScould arise in the organization of manufacturing industry.

2.2. Quality concept

In order to understand the sources of the challenges, definition and concepts need to be clear at the very start. So, the literature review scans through this concept. Broadly, definitions of quality fall into two categories (Nanda, 2005).

- I. Quality is about satisfying applicable specifications. Quality is a simple matter of producing products or delivering services whose measurable characteristics satisfy a fixed set of specifications that usually are numerically defined.
- II. Quality is about satisfying the customer. Independent of any of their measurable characteristics, quality products simply are those that satisfy customer expectations for their use or consumption.

Different writers have tried to explicate quality. For instance, according to Hoy (2008), he said that, Quality can be defined by means of identifying longer-term aspire, which helps to define medium term goals and lead to the immediate short-term objectives. By closely specifying objective and determined to achieve them, we find ourselves led towards the achievement of related goods and pursuit of the ultimate aims.

2.3. Quality Improvement Model

According to Osman 2016 said that, many organizations are using different Models for quality Improvement that cover product, process and/or people-based improvement, such as: -

- I. Kaizen: -Japanese for change for the better; the common term is continual improvement
- II. Business process Reengineering (BPR): a management approach aiming at 'clean slate' improvements (abandon existing practices) several of these approaches have evolved as principal quality systems since they address the whole business and thus are more widely

- used. Some organizations also engaged a blend of quality philosophies and implementation methodologies to best align with their business goals and strategies.
- III. SIPOC: -It is used to define a business process from beginning to end before work begins
- IV. Six Sigma: combines established methods such as statistical process control, the design of experiments and failure mode and effects analysis (FMEA) in an overall framework. Six Sigma's DMAIC method (Define, Measure, Analyze, Improve and Control) may be viewed as a derivation of this.
- V. Quality Function Deployment (QFAD): -also known as the House of Quality approach that focuses on customer wants or needs in the redesign of a product or service.
- VI. Toyota Production System: The system is a major precursor of the more generic "lean manufacturing".
- VII. RACI: -is a powerful tool that clarifies individual or group roles for each task in a project or business process, and it creates a simple language to discuss roles and responsibilities within an organization.
 - In the modern business environment increasingly cross-functional and project-based. It is a lifesaver to have a simple way to negotiate across departments and project boundaries.
- VIII. 5S: -is an organization method that helps identify how a workspace should be organized to improve efficiency and effectiveness.
 - The 5s are foundational to Kaizen (continuous improvement) and a manufacturing strategy based "Lean Manufacturing "(waste removing) concepts.
 - IX. Value Stream mapping: -This process looks at the design and flow of processes within a company to see where value is being added.
 - A good value stream map will be very detailed and formatted like a flow chart. It is utilized to help isolate each of the steps in a process to see where value is being added & where it is not.
 - X. Taguchi method: statistical oriented methods including quality robustness, quality loss function, and target specifications
 - XI. Benchmarking: is the practice of comparing business processes and performance metrics to industry bests and best practices from other companies.

- XII. Poka Yoke: -is any mechanism in any process that helps an equipment operator avoids mistakes. Its purpose is to eliminate product defects by preventing, correcting, or drawing attention to human errors as they occur.
- XIII. PDCA: Shewhart /Deming's plan, do, check, act cycle for quality control purposes.
- XIV. Quality Circles (QC): -It implies the development of skills, capabilities, confidence and creativity of the people through cumulative process of education, training, work experience and participation. Teams of workers and supervisors that meet regularly to address work-related problems involving quality and productivity.
- XV. TQM: Total Quality Management is a strategy aimed at embedding awareness of quality in all organizational processes. First promoted in Japan with the Deming prize, it has been adopted in the U.S. as the Malcolm Baldrige National Quality Award and in Europe as the European Foundation for Quality Management award (each with their own variations).

2.4. Overview of Quality Management System

The world is changing and accordingly, the expectations of human beings are also changing. People want assurance of the quality and safety of the materials they procure. They need true quality which means that the product and services should not only meet the expectations of the customers but should also be safe and produced by ethical means. A view on quality is changing, from the period before the year 1980 to today and Quality management is changing, too. (Sikora & Nowicki, 2012). According to Davis & Stanley (2014), a quality management system is defined as a management system to direct and control an organization with regard to quality. Quality is a dynamic state associated with products, services, people, processes, and environments that meets or exceeds expectations and helps produce superior value. The purpose of a quality management system is to establish a framework of reference points to ensure that every time a process is performed the same information, methods, skills, and controls are used and applied in a consistent manner. In this way, it helps to define clear requirements, communicate policies and procedures, monitor how work is performed and improve teamwork. (DALE, 2003). Quality management comprises all activities that are required to plan for quality in an organization and all activities that are required to satisfy quality objectives. Quality management comprises four elements i.e. Quality Planning, Quality Control, Quality Assurance, and Quality Improvement. (Nanda, 2005). Quality management system should define and cover all facets of an organization's operation, from identifying and meeting the needs and requirements of customers to design, planning, purchasing, manufacturing, packaging, storage, delivery, installation, and service, together with all relevant activities carried out within these functions (DALE, 2003). A quality management system consists of the organizational structure, procedures, processes, and resources needed to implement quality management (Nanda, 2005).

2.5. Quality Management Principle

The International Organization for Standardization (ISO) has classified the principles which guarantee a successful implementation of any quality management system into seven quality management principles:

- Customer focus: Organizations depend on their customers and therefore should understand current and future customer needs, meet customer requirements, and strive to exceed customer expectations.
- 2. Leadership: Leaders establish unity of purpose and the direction of the organization. They should create and maintain an internal environment in which employees can become fully involved in achieving the organization's objectives.
- 3. Involvement of people: People at all levels are the essence of an organization, and their full involvement enables their abilities to be utilized for the organization's benefit.
- 4. Process approach: A desired result is achieved more efficiently when activities and related resources are managed as a process.
- 5. Systems approach to management: Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.
- 6. Factual approach to decision making: Effective decisions are based on analysis of data and information.
- 7. Mutually beneficial supplier relationships: An organization and its suppliers are interdependent, and a mutually beneficial relationship enhances the ability of both to create value.

2.6. Quality Management System ISO 9001 Standards

ISO 9001 is defined as a set of international standards on quality management and quality assurance developed to help companies effectively document the quality system elements needed to maintain an efficient quality system. They are not specific to any one industry and can be applied to organizations of any size (ASQ, 2019). ISO 9000 can help a company satisfy its customers, meet regulatory requirements, and achieve continual improvement. It should be considered to be a first step or the base level of a quality system (Neyestani, 2016). The ISO 9001:2015 standard is based on seven quality management principles that senior management can apply to promote organizational improvement. Those are customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making and relationship management (ASQ, 2019). Once again, these are areas for implementing potential challenging areas.

2.7. Implementation of Quality Management System

The primary motivation or reason for implementing a QMS for most organizations is either management need or customer demand. Management's motivation for implementing a QMS usually originates from its need to improve productivity, improve product quality, and reduce time-to-market, thus gaining a competitive advantage. Sometimes, management's motivation for implementing a QMS is driven by competitive pressure, where the organization's competitors have established (or are in the process of establishing) a formal QMS with the goal of registration to a recognized QMS standard, such as ISO 9000. In such cases, registration to a quality management system standard is perceived to be a valuable asset for marketing and soliciting new customers. Customer demands on an existing supplier (or a potential supplier) to implement a QMS is driven by the customer's need for an assurance that the supplier is capable of meeting the customer's quality requirements. Often, such a demand may be made in response to continued subpar performance of an existing supplier, or prior to approving a new supplier. In certain industries, customers (including government agencies) also go to the extent of inviting bids only from suppliers who have attained a particular quality registration (Nanda, 2005).

Inspection Body for Medicine and Food has announced the scheme for treating food enterprise quality system implementation with star marking. One star indicates that the enterprises has been trained and implement the food safety principle; Two stars indicate that enterprise has implemented Good Practice for food processing; Three stars indicate that enterprise has implemented HACCP standard; Four stars indicate that enterprise has implemented Quality Management System standard (ISO 9000) (Tulu, 2011).

In general, the food safety management system is needed for the companies that engaged in such businesses. Thus, beverage companies, including brewery companies, should comply with the international quality standards that certify their products are safe for human use. As the companies are operating in accordance with this standard their customers consume that product (Tulu, 2011).

The quality management system contains four main chapters which are management's responsibility, resource management, product realization, and management analysis and improvements (LÖFGREN, 2012).

The number of ISO 9000 Quality Management System (QMS) certifications in developing countries is increasing, particularly, in Africa. Most of the organizations are certified because of either internal motives or external pressure from international trade. Internally motivated companies are those that demand continuous organizational improvement. However, there is still a debate on whether QMS increases organizational performance or not. In some cases, since organizations or nations may put certification as a prerequisite to their purchasing decision, those companies engaged in the certification process to fulfill the buyer's requirement are known as externally motivated (Beshah, Kitaw, & Alemu, January 2013).

One of the critical first steps and an essential prerequisite for a successful QMS implementation is detailed implementation planning. QMS implementation planning includes activities such as Identification and satisfaction of prerequisites for a successful implementation, Definition of an implementation strategy and process, Preparation of a formal implementation plan and establishment of mechanisms to monitor, control, and report implementation progress (Nanda, 2005).

2.7.1. OMS Implementation Planning

One of the critical first steps and an essential prerequisite for a successful QMS implementation is detailed implementation planning. If an organization embarks upon a QMS implementation with a well-thought-out execution plan, it significantly simplifies the task of implementing a QMS, because the organization is able to tackle the goal of implementing a QMS in a piecemeal manner. Detailed implementation planning facilitates the decomposition of the final objective into smaller and achievable intermediate objectives. Consequently, implementation activities are purposeful and manageable during each phase of the implementation. QMS implementation planning includes activities such as:

- ➤ Identification and satisfaction of prerequisites for a successful implementation
- > Definition of an implementation strategy and process
- > Preparation of a formal implementation plan
- Establishment of mechanisms to monitor, control, and report implementation progress

In order to understand what prerequisites, need to be satisfied for a successful QMS implementation (in addition to the prerequisite of implementation planning), it is important to understand how success in this context may be defined. QMS implementation is successful if the defined QMS is adequate for the organization's needs, well deployed in the organization, effective, and continually improved. Working backwards, one can identify the critical success factors that is, prerequisites for success.

2.7.2. Management Commitment

Management commitment is the extent to which management personnel, especially senior management, sponsor and support implementation and continual improvement of the QMS. Instituting a QMS in an organization is a significant undertaking that calls for significant investments of time, money, and effort from all involved. The need for these resources, coupled with the natural impediment of resistance to change, is significant enough an obstacle to undermine any QMS implementation effort without the full backing of senior management. Therefore, it is critically important that senior management's commitment to quality and to implementing a QMS be secured. Senior management's support during QMS implementation is

also essential for securing the buy-in and cooperation of middle and lower management in the organization.

Senior management must visibly demonstrate its commitment to quality so that management's unwavering commitment to quality is known throughout the organization. Some ways in which senior management can demonstrate its commitment to quality include:

- i. Emphasizing the need to meet and exceed customer expectations at company events and all-hands meetings.
- ii. Establishing an organizational quality policy
- iii. Establishing quality objectives and including them as part of the performance objectives for all employees by tying them to employee (and department) recognition and reward incentives.
- iv. Providing continuous management support to the quality management representative and quality assurance department.
- v. Requiring monitoring of customer satisfaction levels; this includes measurement of customer satisfaction, subsequent corrective action, and establishment of goals for continued customer satisfaction improvement
- vi. Sponsoring quality improvement initiatives.
- vii. Requiring assessment against (or registration to) a recognized quality management system standard, or application for local, state, or national quality awards (such as the Malcolm Baldrige National Quality Award)
 - Management's commitment to quality must not end with the successful implementation of a QMS. Sustained senior management commitment beyond implementation of the QMS is essential for an organization to continually improve itself. Keep in mind that a successful QMS implementation merely provides an organization with an infrastructure that must be utilized to realize benefits in terms of improved quality of product and services. Therefore, in order to reap the true benefits of implementing a QMS, which are long-term in nature, continued management support for the QMS is vital.

2.7.3. Quality Management Representative and Change Agents

The quality management representative (also called the management representative), as the name suggests, is a member of the management team of an organization, and has ultimate responsibility for the definition, deployment, and continuous improvement of the QMS.

Typically, the organization's senior quality officer, such as Vice President of Quality or Director of Quality, fills such a role. During QMS implementation, the management representative leads and directs the QMS implementation team, while after QMS implementation the responsibility pertains to maintenance and continuous improvement of the QMS.

A management representative should have a sound understanding of organizational processes (or knowledge from past experience with equivalent processes at another organization). He should have prior experience from having led QMS implementation successfully in other organizations (within the same industry). He should have expertise in quality, and sound project management and people management skills. The last includes an ability to lead and motivate staff members. He should have demonstrated ability to effect change in an organization by persuading and reasoning with the employees to explain the need for the change (and by explaining deficiencies in the current approach). He also should be able to represent the organization effectively in meetings with customers and other external parties.

2.7.4. Employee Participation

Employee participation is the extent to which employees participate in the implementation, maintenance, and continuous improvement of the QMS. It is essential to secure the participation of employees, because they are the practitioners who execute the processes in the organization and thus are intimately familiar with the processes and their strengths and weaknesses. They are the subject matter experts whose acceptance of the defined QMS is vital for its deployment, use, and continuous improvement.

In overcoming the improvement paradox emphasize that in any improvement program, management push, though essential, has severe limitations and is unable to sustain change over the long term. The ultimate objective is to attain a self-sustaining state in which complex challenges are tackled by competent and intrinsically motivated employees. This state can be attained only when employee pull is the operative sustaining force. In order to promote employee pull, it is necessary to involve employees in the definition of the QMS, as opposed to imposing on them a QMS that was defined in isolation, without eliciting their input. Such a QMS is perceived by employees to be alien and no representative of the actual work processes, thus increasing the odds against its acceptance. Employee participation in QMS implementation helps

secure the buy in of the employees and reduces resistance to change barriers during the deployment phase. By participating in the definition of the QMS, employees are able to review the QMS and offer their input during its definition. A QMS founded on the collective expertise of the employees fosters a sense of ownership and commitment to the defined system, which is essential for its acceptance.

2.8. Barriers of Quality Management System Implementations

According to Fasika Betekitaw (2003) lack of strong quality sense, superficial of quality management activities instead of fundamentality, the focus of quality management is not for customer satisfaction are identified as a limitation of quality management initiatives in Ethiopia. In addition, as the result of poor management commitment in quality, most enterprises don't have their own business culture to support total employees' involvement in quality improvement. When quality conflicts with quantity, quantity is above quality and short-term interest will override long term interest. Some managers have a misconception about ISO 9001. In many manufacturing companies in Ethiopia, because they don't have a systematic quality training program, people in quality and other departments are not familiar with quality tools and thus quality improvement cannot be achieved in a systematic way, and quality efforts in Ethiopia were initiated by the top-down approach. Barriers to implementation of QMS are classified into external, organizational, organizational culture and technical barriers. The external barriers include the impact of government on the implementation of ISO 9001 standards in the country's organizations. The impact of the government represented in issues such as legislation, financial support. The external barriers include also the effect of the certification process fees such as consultancies and certification body fees and cost of training programs. Finally, it contains the role of the national standards body, consultants and the certification body. The organizational barriers, which include the lack of understanding the benefits of ISO 9001 certification, awareness of ISO 9001 standards, lack of top management commitment, leadership and involvement, lack of human resource management and lack of employees' involvement and empowerment. The organizational culture barriers include employee's resistance to change, the bureaucratic culture that is prevalent in organizations, wrong people in wrong positions, promotion of directors, managers and head of departments not based on qualifications and employee absenteeism. The technical barriers include ineffective communication, lack of information, the difficulty of access to test laboratories, controlling the documentation during the

registration process, lack of understanding the requirements and implementing them(Sharif, 2005).

Hussein, Abou-Nassif, Aridi, Chamas, & Khachfe (2017) identified seven main challenging factors to adopt and implementation of QMS ISO 9001. The seven identified factors are lack of awareness, the terminology used in ISO 9001, resistance to change, the existence of accreditation, and commitment of top management, time management, and resource availability. The barriers identified during QMS implementation were lack of human resources Training, inappropriate preparatory phase, lack of top management commitment, to develop and implement of QMS, and lack of employee's commitment, insufficient resources allocation (Lack of financial and human resources), lack of defining responsibilities and authorities to develop and implement of QMS were ranked the major first challenges. Besides to that poor accountability, difficult in co-operation among middle managers over quality problems, inappropriate team working environment in the company, poor cross-functional team communication and prevalence of bureaucratic culture in the company" as a second rank barrier. Finally, "Difficulties to interpret quality related procedures", "Conflict between new QMS processes and the existed company processes" and "In-sufficiency of project time" were considered as low severity barriers (Osman, 2016). Based on the research finding by Ogany (2017) the implementation of QMS is greatly influenced by resource availability, staff training, top management skills, and information technology.

2.9. Benefits of Implementing a Quality Management System

ISO certification does have certain benefits to a given organization. These could be external to the organization or internal to this organization. The internal benefits are related to the process and structure of the organization like improvement in productivity, improvement in efficiency, reduction in cost and waste, better management control and others. Those benefits external to the organizations are: competitive advantage, increase in sale and market share, possible chance of getting into new market, good customer relation and identifying potential customers, increased customer satisfaction and the like. Besides the benefits of ISO certification, there are also certain disadvantages associated with gaining the certificate. Some of the disadvantages are extra cost of obtaining the certificate, increase in paper work load, and no attention for development of personnel. (Tulu, 2011)

Implementation of a QMS in an organization offers near-term and long-term rewards (Nanda 2005). That is

- a) Defined processes and supporting QMS documentation are the basis for repetition, and help reduce variation within process execution. As variation is reduced, it results in improvements in operational efficiency.
- b) With the implementation of corrective and preventive solutions that effectively address the root causes of quality problems, permanent solutions are implemented. This results in improvements in organizational effectiveness.
- c) A QMS enables an organization to focus on how it executes its business processes. Such process focus and awareness are essential in order to be able to monitor and analyze process performance for continual improvement.
- d) A QMS fosters continual improvement in the organization's productivity, rework costs, on-time delivery performance, and within budget project execution. This enables the organization to enhance its bottom-line revenue growth.
- e) A QMS results in higher-quality products and services, as quality management practices are continually improved.
- f) As an organization improves the quality of products and services, it improves customer satisfaction levels, which helps improve customer loyalty and customer retention.
- g) A QMS enables the organization to gain a competitive advantage due to its being perceived as a "best-in-class" supplier by its customers. This enables the organization to retain customers, attract new ones, increase market share, and enhance top-line revenue growth.
- h) A QMS enhances an organization's competitive position by allowing it to present itself as
 a viable supplier in situations where a customer requires its suppliers to have a formal
 QMS in place (although in certain cases customers also seek registration to a QMS
 standard, as discussed previously).
- i) A QMS enhances customer confidence in the ability of a supplier to deliver products and services according to specified quality requirements (quality assurance).
- j) A QMS reduces the organization's reliance on "heroes" to make projects a success because all employees are aware of the required quality management practices. In other words, it enhances an organization's ability to achieve quality requirements because

- employee competencies are augmented by a process infrastructure that helps achieve the identified requirements.
- k) A QMS reduces (or eliminates) an organization's dependence on a few individuals for information regarding critical processes because such processes are now formally documented. This reduces organizational vulnerability to employee turnover.
- A QMS reduces waste of resources and loss of reputation resulting from rejection and rework of inferior-quality products (referred to as Cost of Poor Quality). This enables the organization to shift from a reactive mode of operation (performing corrective action) to a proactive mode (performing preventive action).
- m) A QMS promotes employee understanding that quality is everyone's responsibility. The realization that each employee contributes to the achievement of quality requirements helps institutionalize quality improvements across the organization, at all levels.
- n) Employee morale and satisfaction improve as employees participate in defining their processes, and are empowered to own, monitor, and continually improve those processes.
- A QMS results in improved communication both internally and externally, which results
 in improvements in efficiency and effectiveness, and improved customer-supplier
 relations.

Implementing QMS have the following benefits according to (Patel 2016)

- > Improve our organization.
- ➤ Bring consistency and definition to processes, which will result in fewer defects and more efficient practices.
- ➤ Meet a global requirement by the customers to fulfill their requirements and to be qualified as a supplier.
- ➤ Solve problems (Section 8 of the ISO 9001 standard).
- ➤ Increase market share by freeing up financial resources.
- Reduce waste, scrap, and rework, and
- ➤ Increase customer confidence in our products and services.

2.10. Company profile

END global soap and detergent manufacturing industry established by privet organization. The organization producing laundry soap, toilet soap, powder detergent and liquid detergent. END

global soap and detergent manufacturing industry located in Dukem town, Oromia regional state, 37 km from Addis Ababa was established in September 2008. Its production capacity with 8832 ton per annual soap and detergent only by finishing line until 2019. After this establishment of second line or saponification line this is producing capacity is 33,120 ton per annual bar soap. Currently it is providing jobs for 150 permanent employees (END soap and detergent, 2021).

CHAPTER THREE

Research Design and Methodology

Research method is the guide of the research to achieve the objectives of the study. Hence, selecting the most fitting research method determines the outcome of a research. Research design is governed by the notion of fitness for purpose. The purposes of the research determine the methodology and design (Cohen, Manion, and Morrison, 2000). This implies that different researchers plan, design and approach a given research problem in different ways in order to achieve the research objective and answer the research question. This chapter describes research design, sources and methods of data collection, sampling design and population and method of data analysis presented as follows.

3.1. Research Design

The study is descriptive survey type of research. This research is designed the factor affecting ISO 9001:2015 of QMS implementation in END soap and detergent manufacturing industry based on descriptive methods. Thus, the literature review was been first be carried out to understand the topic, and the concepts of the study, in order to develop an appropriate survey questionnaire for obtaining data from the soap and detergent companies. It presents an opportunity to fuse both quantitative and qualitative data as a means to reconstruct the 'what is' of a topic. Qualitative research investigates subjective data, and focuses on the experiential state of the participants and their perceptions of a situation (Strauss and Corbin, 1990). The objective of qualitative methods is to collect data and information and gain a better understanding of the research topic. The data gathered may be unstructured, at least in their raw form, but was tend to be detailed, and hence rich in content and scope (Fellows, 1997). One of the disadvantages of the qualitative method is that it is unable to support empirical judgments; the study may therefore not support completely the empirically held notions. However, it can be employed to draw analytical conclusions (Maxwell, 1996). The advantage of this method is that it provides a greater range of insight, which improves the overall validity of the results.

3.2. Population and sampling design

The sample size determination is based on Slovin's formula, which was developed by Robert Slovin, with confidence level 95% and confidence interval (error margin) 5%. The derivations above show that Slovin's formula is applicable only when estimating a population proportion using a confidence coefficient of 95% (Tejada & Punzalan, 2012). From the data gathered target population of the study is 134 from the organization employees. Sample size determined is based on Slovin's formula with confidence level 95 % and confidence interval (error margin) 5%.

```
n = N/(1+N*(e)^2) Where: n = no. of sample N = total population e = error margine n=134/(1+134(0.05)^2)=100
```

The total population size is 134. Out of this total 100 sample sizes have taken based on above formula. 100 questionnaires were distributed and 80 (80%) usable questionnaires were collected.

3.3. Data Sources Collection

The study used both primary and secondary data. Both primary and secondary data collection was undertaken by the researcher. The primary data was comprised of the background, experience, attitude, and perception of respondents. Questionnaire is used to collect the needed information from selected sample members the company of soap and detergent organization. Semi-structured interview was been used to collect information from experts working at the soap and detergent manufacturing industry. The secondary data obtained from review of literatures, recorded documents, published and unpublished, including relevant books, reports, and journals and relevant materials were used for the study.

3.3.1. Questioner

Questionnaire was developed on the basis of basic questions of the study, review of literature, and ISO 9001:2015QMS toolkits. The questionnaires were closed-ended and open-ended; respondents have direct involvement in ISO 9001:2015 QMS application in the factory. The questionnaires help to collect data from large number of respondents in different management position from top to lower employees. Further, the questionnaires can be detailed and help to cover many subjects or issues can be easily and quickly analyzed once the field data gathering work is completed. A rating is a measured judgment of some sort. While opened-ended questionnaires were used for respondents to explain their feeling and understanding freely as

much as possible based on the question rises. The questionnaire was been 5-point Likert scale to measure respondents' attitude about various aspects the industry in each hypothetical determining factors. The respondents were asked to mark their perception about the factor affecting, benefits and strategic relevance of ISO 9001:2015 implementation on a continuous the scale ranged from 1 (strongly disagree) to 5 (strongly agree). The data has collected through distributing the questionnaire to each respondent .Likert type question asks respondents to select one of five responses that are ranked in order of strength. The scale produces ordinal data, i.e., the data that can be ranked and only can say one score is higher than another, not the distance between the points. In the study we are used to measure respondent attitudes to a particular questions or statement. In the scale we cannot use the mean as a measurement of central tendency as it has no meaning i.e., what is the average of strongly agree and disagree? The most appropriate measure is the mode: the most frequent responses or the median to analyze the data we coded the response as follows.

1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree

A higher scale score indicates high extent of practices. Likert scale shall mainly be used in structuring the expected responses in the questionnaire. According to Hill (1995) the Likert scale is commonly found in many types of attitude-measuring research. This scale is easy to complete but does have a considerable disadvantage when bold statements are used to bias respondents' answers. The measurement was adopted from several authors (Barney, 1986).

Therefore, the study was use the mode of the collected data for analysis to indicate the dispersion of the sample for the total inferred population.

The structured questionnaire consists of four sections at (Appendix A)

- 1. Personal information
- 2. Factor affecting implementation of ISO 9001:2015 QMS.
- 3. Relevance strategic of ISO 9001:2015 QMS implementation.
- 4. Benefit of ISO 9001:2015QMS implementation.

3.3.2. Observation

In addition to the interviews, a thorough observation of the factory's operations procedures through plant tours was carried out. Once the ISO processes are fully implemented, the quality department is held reliable for the continuous compliance with the quality standard and for organizing regular audits. Internal audits are performed by internal departments whereby one

department of an organization evaluates another department of the same organization, while external audits are performed by a qualified third-party organization, which in this case will be an Ethiopian ISO standard. Every staff member is pressured to achieve a certain quality level and follow the quality rules. In spite of this, employees in different departments do not experience the same level of pressure. Those who are in the quality and production departments, for example, experience more pressure to follow the strict quality regulations.

3.3.3. Interview

In order to triangulate the data obtained through questionnaire, a semi-structured interview was been conduct with management and supervisors. For this, interview guides (a written list of open items) were prepared by the researcher and present to face to face interaction. This method was select because of provides uniform information, which ensures the comparability of the data (Kumar, 1999). The respondent's result of the interview was found at (Appendix B).

3.4. Methods of Data Analysis

Both qualitative and quantitative data analysis techniques were used in the study for the understanding and find out of the challenges faced and benefits obtained through implementation of ISO 9001:2015 in END global soap and detergent manufacturing industry. With respect to this, (Kumar,1999) stated that employing multiple data collection instruments help the researcher to combine, strengthen and amend some of inadequacies of the data. For quantitative analysis by excel used, and also for qualitative analysis descriptive statistics such as frequency and percentage, was been used to analyze the data obtained from questionnaire and interview by using Excel software. Accordingly, questionnaires was been used as the main data gathering instruments whereas semi-structure interview and document analysis was been used to enrich the data obtained through questionnaire.

3.5. Reliability and Validity of research

The quality of research design determined by different dimensions these are reliability and validity to applied to establish the checked of balanced research so Validity has important factor to identify the relevant of validity. which means the results are true or correct and that can be represent by analysis approach to show the validity of research: (Arbnor and Bjerke (1997),

Mitchell and Jolley (2001), Patton (2002) and Yin (2002). There are many dimensions of measurements these are Construct validity: it is focused the establishment of correct measures for the concept of research, and for the purpose of the study accuracy, to be insure by the instrument measurements. This measurement instruments implement in an appropriate, standard based on the research: and the second is internal validity: these methods use for factor and effect study that needs to become the reality and certain event or input variables for the sack of responsible and the final results. The reliability test checked to minimize the errors and biases in this study. In any study reliability tests are undertaken to ensure that measures used in the study are dependable. Reliability tests certify internal uniformity. For the purpose of this study an alpha value of .70 and above was used to point out reliability (Nunnally& Bernstein, 1994).In order to be assured about the reliability and validity of this study, a pilot test with 15 respondents was undertaken. According to measurement (survey variables) validity, the researcher also asked respondents about the clarity of each statement and whether each statement was easy to understand and reflected the variables in the survey questionnaire. It is very important to check that there are no mistakes or errors in the survey in order to ensure validity. The researcher also reviewed this survey by asking a supervisor to confirm the validity of these measures. In addition to this, internal consistency of this study was checked by Cronbach's alpha. The data obtained were analyzed by using Micro Soft EXCELL to say the reliability and scales of tools and patterns under the questionnaire two items were considered to be disregarded based on their value of item and some of them were improved (wording, clarity, and order).

Table 3.1 presents the reliability coefficient alpha which is 0.87 higher than 0.7. According, the research instrument and the scale used are judged to be reliable.

Table 3.1. Reliability coefficient alpha result

Variables	Cronbach's Alpha
Factor affecting implementation of ISO 9001:2015	0.89
Relevance strategic plan implementation of ISO 9001:2015	0.87
Benefit of implementation ISO 9001:2015 QMS	0.85
Overall Cronbach's Alpha	0.87

Source: - own survey, 2021

3.6. Ethical Consideration

The researcher maintained scientific objectivity throughout the study, recognizing the limitations of competence. Every person involved in the study was entitled to the right of privacy and dignity of treatment, and no personal harm was caused to subjects in the research. Information obtained was held in strict confidentiality by the researcher. All assistance, collaboration of others and sources from which information was drawn is acknowledged.

CHAPTER FOUR

Results and Discussion

4.1. Introduction

In this chapter the findings of the study are analyzed detailed analysis is done in accordance with the research objectives of the factor affecting implementation of ISO9001:2015 QMS in END global soap and detergent manufacturing industry. Data was summarized and presented in the form of table, figures, proportion and percentage.

4.2. Profile about the Respondent

The profile characteristics of management respondents based on gender, age, education and their position are presented.

Table 4.1. Gender of the respondents

Sex Respondets	No. of Respondant	present (%)
Male	46	58%
Female	34	43%

Source: - own survey, 2021

Table 4.1 above shows that the majority of the respondents 46(58%) are male and the remaining 34(43%) are female. This shows that majority of END global soap and detergent manufacturing industry staffs are males and this study is also conducted based on respondents which are largely collected from male.

Table 4.2 Age of respondents

Age of Respondets (in year)	No. of Respondets	Persent (%)
21-30	17.00	21.25%
31-40	50.00	62.50%
41-50	10.00	12.50%
51 and above	3.00	3.75%
	80.00	100.00%

Source: - own survey, 2021

The age distribution of the participants was: 62.50% of the respondents were in the age group of 31-40, 21.25% of the respondents were in the age group of f21-30, 12.50% ware in the age in the age group of 41-50 and 3.75% of respondents were the age group are 51 and above.

Table 4.3:- Educational level of the respondents

Eduction Level	No. of Respondents	Present (%)
High School	3.00	3.75%
preparatory school	4.00	5.00%
Diploma	22.00	27.50%
Bachelor's degree	43.00	53.75%
Master degree	8.00	10.00%
PHD and Above	-	0.00%
	80.00	100.00%

Source: - own survey, 2021

Table 4.3:- concerning the educational background of the respondents show that 3.75% of respondents are High school certificate, 5.00% of respondents are preparatory school certificate, 27.50% of the respondents are diploma holders, 53.75 % of the respondents are BA/BSc holders and 10.00 % of the respondents are MA/MSc holders.

Table 4.4:- Work experience of the respondent

Work Experience (in year)	No. of Respondents	Presents (%)
1 year - 3	2.00	2.50%
4 year -6	23.00	28.75%
7 year - 9	30.00	37.50%
10 and Above	25.00	31.25%
	80.00	100.00%

Source: - own survey, 2021

Regarding the working experience table show that 2.50% have less than three year experience, 28.75 % have from 4 to 6 year experience, 37.50 % have from 7 to 9 year experience and 31.25% of respondents have more than 10 year experience.

4.3. Relating to factor affecting implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry.

To know that opinion of the respondent the research applied five Likert's i.e. that 5 implies for strongly agree with idea, 4 stand for agree, 3 implies for neutral, 2 indicates disagree and 1 implies for strongly disagree.

Table: 4.5. Respondent's perception on Factor affecting implementation of ISO 9001:2015 QMS.

	respondent	r	1								
S. No	Factor affecting	-	rongly agree)	2 (Disagree)		3 (Neutral)		4(Agree)		5(Strongly Agree)	
	ISO 9001:2015	F	%	F	%	F	%	F	%	F	%
	Lack of top										
1	management	-	-	3.0	3.8	9.0	11.3	19.0	23.8	49.0	61.3
2	Lack of training	-	-	8.0	10.0	10.0	12.5	38.0	47.5	24.0	30.0
	Lack of employee										
3	engagement	3.0	3.8	5.0	6.3	15.0	18.8	40.0	50.0	17.0	21.3
	Difficult on										
	changing working										
	culture	1.0	1.3	4.0	5.0	8.0	10.0	17.0	21.3	50.0	62.5
	Short term focus	2.0	2.5	5.0	6.3	6.0	7.5	33.0	41.3	32.0	40.0
6	Lack of leadership	7.0	8.8	10.0	12.5	9.0	11.3	40.0	50.0	14.0	17.5
	The staff do not										
	understand										
_	existing process	45.0	40.0	47.0	-0.0		- 0	400	40.5		- 0
	and procedures Lack of	15.0	18.8	47.0	58.8	4.0	5.0	10.0	12.5	4.0	5.0
	interdependence										
	between										
Q	department	10.0	12.5	27.0	33.8	11.0	13.8	20.0	25.0	12.0	15.0
	Lack of	10.0	12.5	27.0	33.0	11.0	13.0	20.0	25.0	12.0	15.0
9	docomention	_	_	_	_	_	-	33.0	41.3	47.0	58.8
	There is lack of										
	regular review and										
10	follow up	_	-	-	-	-	_	29	36.25	51	63.75
	Lack of system										
11	thinking	4.0	5.0	5.0	6.3	5.0	6.3	30.0	37.5	36.0	45.0
12	Quality trade off	3.0	3.8	11.0	13.8	3.0	3.8	37.0	46.3	26.0	32.5

Source: - own survey, 2021



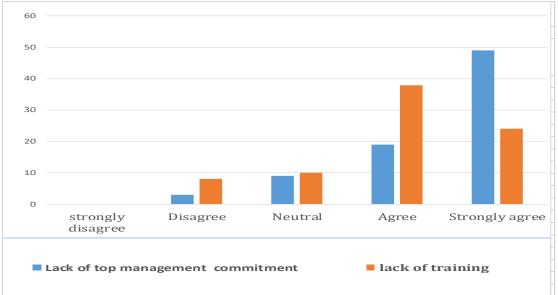


Figure the extent of agreement whether the factor affecting to implement the ISO 9001:2015 quality management system is too difficult lack of top management commitment and lack of training 61.25% and 32.50 % of respondents strongly agreed, 23.75 % and 47.5 of the respondents agreed, 11.25 % and 12.50 % of the respondents are neutral, 3.75 % and 7.5 % of the respondent disagreed and no strongly disagreed respectively. This shows that majority of the respondents 61.25 % strongly agree with the idea of lack top management commitment and 47.50 % are agreed with the idea that implies majority of them believes that is difficult to implement the ISO 9001:2015 quality management system.

Figure 4.3.2:-Respondents perception on lack of employee engagement and difficult on changing working culture for factor affecting implementation of ISO 9001:2015 QMS.

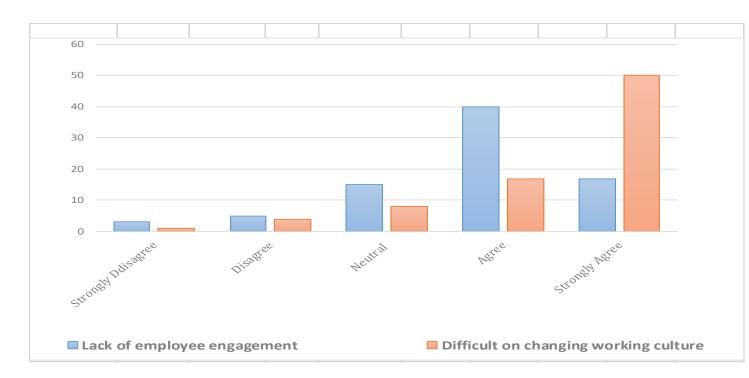


Figure the extent of agreement whether the factor affecting to implement the ISO 9001:2015 quality management system is too difficult lack of employee and lack of difficult on changing working culture 21.3% and 62.50 % of respondents strongly agreed, 50 % and 21.3of the respondents agreed, 18.8 % and 10.0 % of the respondents are neutral, 6.3 % and 5.0 % of the respondent disagreed and 3.8% and 1.3% respondents are strongly disagreed respectively. This shows that majority of the respondents 50 % agree with the idea of lack employee engagement and 62.5 % are strongly agreed with the idea on changing working culture that implies majority of them believes that is difficult to implement the ISO 9001:2015 quality management system.

Figure 4.3.3.Respondent's perception on lack of leadership and short term focus for factor affecting implementation of ISO 9001:2015 QMS.

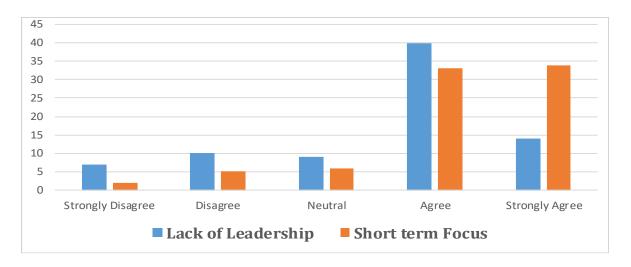
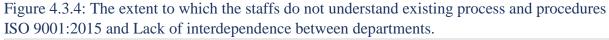


Figure above for the factor affecting on implementation of ISO 9001:2015 quality management system on lack of leadership and short term focus in END global soap and detergent manufacturing industry. 17.5 % and 40.0 % respondents have strongly agree , 50.0% and 41.25 % of respondents have agree , 11.0 % and 7.50% of the respondents are neutral, 12.5 % and 6.25 % of the respondents have rate disagree and 8.8% and 2.5% of the respondents have strongly disagree respectively.



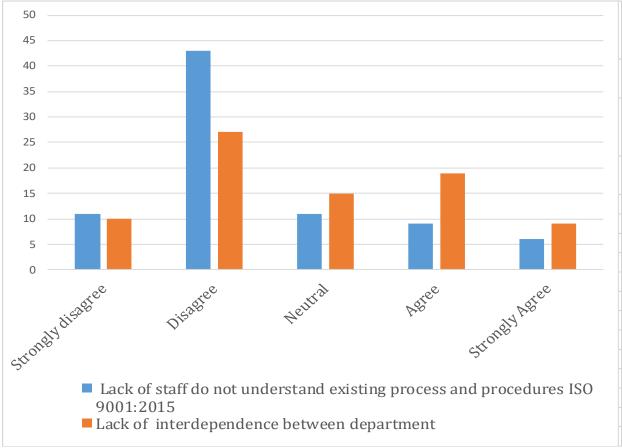


Figure above for the factor affecting on implementation of ISO 9001:2015 quality management system on lack of staff do not understand existing process and producer and lack of interdependence between department in END global soap and detergent manufacturing industry. 5% and 15% respondents have strongly agree, 12.5 % and 25 % of respondents have agree ,5% and 13.8 % of the respondents are neutral, 58.8% and 33.8% of the respondents have rate disagree and 8.8% and 12.5% of the respondents have strongly disagree respectively.

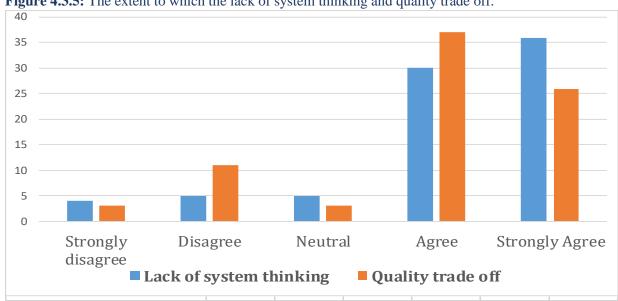


Figure 4.3.5: The extent to which the lack of system thinking and quality trade off.

Figure above for the factor affecting on implementation of ISO 9001:2015 quality management system on lack of system thinking and quality trade off in END global soap and detergent manufacturing industry. 45.0 % and 32.50 % respondents have strongly agree, 46.25% of respondents have agree, 6.25 % and 3.75 % of the respondents are neutral, 6.25 % and 13.75 % of the respondents have rate disagree and 5.0 % and 13.75% of the respondents have strongly disagree respectively.



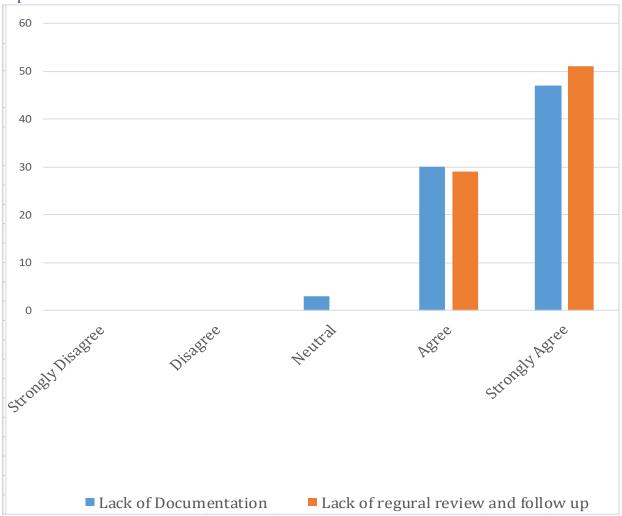


Figure above for the factor affecting on implementation of ISO 9001:2015 quality management system on lack of documentation and lack of regular review and follow up in END global soap and detergent manufacturing industry. 58.75% and 63.75 % respondents have strongly agree, 41.25 % and 36.25 % of respondents have agree respectively.

4.4. Relevance strategic plan for implementation of ISO 9001:2015 QMS

The respondents were asked to rate the extent to which implementation aided in the relating the strategic plan. Finding of the study respondents agreed that implementation of ISO 9001:2015 quality management system enabled the achievement of the company's strategic plan respondents to agree that implementation was relevant to the vision and mission (mean 2.24).

Finding of the study was, the respondents agreed that implementation of ISO 9001:2015 quality management system enabled the achievement of the company's strategic plan respondents to strongly agree that implementation was relevant to the integrating and ethics (mean4.14).

Finding of the study was, the respondents agreed that implementation of ISO 9001:2015 quality management system enabled the achievement of the company's strategic plan respondents to agree that implementation was relevant to the process management (mean 3.88)and customer focus (mean 3.76).

Implementation of ISO 9001:2015 quality management system was also to enhance the management to a great extant (Mean4.14). The strategic implementation planning should be in line with strategic objective, work processed and performance projection.

Compared to other items of the strategic plan, recognition has lowest relevance followed by innovation, measurement analysis and knowledge management. Relevance of strategic pan of implementation of ISO 9001:2015 quality management system to competitive customer focus was ranked equal (mean = 3.76). Implementation ISO 9001:2015 quality management system was observed to be of great importance in achieving the goal of good quality management system.

Table 4.6. Relevance respondents on strategic plan implementation of ISO 9001:2015 QMS

	stragic Relevance			Standard
S.No.	Dimension	N	Mean	Divation
1	Vision	80	2.24	0.97
2	Mission	80	2.24	0.97
3	Value	80	2.40	0.96
4	Leadership	80	2.50	0.87
5	customer focus	80	3.76	0.93
	Measurement analysis and			
6	knowledge managent	80	2.08	0.90
7	Human resourrces focus	80	3.39	0.85
8	Innovation	80	1.97	0.62
9	Process Management	80	3.88	0.77
10	Teamwork	80	3.34	0.78
11	Recognition	80	1.44	0.61
12	Integrity and Ethics	80	4.14	0.96
13	Communication	80	3.73	0.84
	Total		2.85	0.85

Source: - own survey, 2021

The extent to which implementation ISO 9001:2015 quality management system was relevant to strategic plan and core values have been depicted by the above table. From table integrity and ethics and process management improvement seem to be areas of great emphasis to the management system.

4.5. Relating to the benefit of implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry.

It is important to note here that the benefits, both tangible and intangible, are difficult to quantify. However a list of benefits cited in literature (Forgaciu and Rahau 2008, Lundmark and Westlius 2006; Giannopoulos, *et.al*, 2007; ISO 2011; Thilakarathne and Chithrangani 2014), were used for this study and subjected for rating by the respondents. Responses obtained by employing the 15 item benefit questions rated on a Likert scale of 1 to 5 ranging from strongly disagree to strongly agree respectively were used to analyze the benefits of implementing ISO 9001:2015 QMS in the organizations

Table 4.7. Benefit of implementation of ISO 9001:2015 QMS

				rongly		Dis	3 (N	eutral				only
			disa	gree)	agı	ee))	4 (A	gree)	Agr	ee)
S.	Benefit of implementation											
No.	_	N	F	%	F	%	F	%	F	%	F	%
	Improve customer											
1	satisfaction	80	_	-	_		4	5	30	38	46	58
	Reduce rework	80	10	13	15	19	15	19	25	31	15	19
	Improve positive											
3	culture change	80	-		-		_	-	10	13	70	88
	Improve company											
4	competitivenesss	80	-		-		3	4	30	38	47	59
	Priority in the market	80	-				2	3	35	44	43	54
	Increase market share	80	-				4	5	26	33	50	63
	Increase prevention											
7	action	80	-	-	-	-	6	8	21	26	53	66
	Increased employee											
8	motivation	80	-	-	-	-	2	3	28	35	50	63
	Increase efficiency and											
	efectiveness of											
9	organization	80	-	-	-	-	7	9	17	21	56	70
	Improve											
	communication											
	between the top											
	management and low											
10	management	80	-	-	-	-	-	-	30	38	50	63
	Increase the interaction											
	between department of											
11	organization	80					5	6	15	19	60	75
12	Improve consistency	80	-	-	-	-	-	-	15	19	65	81
	To improve acquire and											
13	share knowledge	80	-	-	-	-	5	6	24	30	51	64
	Improve communication	000										
14	in all management	80	-	-	-	-	2.0	2.5	18	22.5	60	75
15	To harmonize and	80					4.0	4 25	2.2	27.5		74.0
15	optimize practices	80	-	-	-	-	1.0	1.25	22	27.5	57	71.3

Source: - own survey, 2021

Table 4.7. Shows that 58.00 % of the respondents strongly agreed regarding to improve customer satisfaction, 38% of respondent have agreed, 5 % respondent have neutral and there is no disagree and strongly disagree. 19 % of the respondents strongly agreed regarding to reduce rework, 31% of respondent have agreed, 19 % of respondent have neutral, 19% of respondent have disagree and 13% of respondent strongly disagree. 87.5% of the respondents strongly agree

regarding to improve positive culture change, 12.5% of respondent have agreed and there is no disagree and strongly disagree on this idea. 58.5% of the respondents strongly agreed to improve company competitiveness, 37.5% of respondent agreed and 4.0% of respondent are neutral. 53.75% of the respondents strongly agreed on benefit of priority in the market, 43.75 % respondent have agreed and 2.5% of respondent have neutral. 62.5% of the respondent strongly agreed on increase the market share of company, 32.5% of respondents have agreed and 5% of them respondent are neutral. 66.25% of the respondent strongly agreed on increase the prevention action of company, 26.5% of respondents have agreed and 7.5% of them respondent are neutral. 62.5% of the respondent strongly agreed on benefit of increase employee motivation of the company, 35% of respondents have agreed and 2.5% of them respondent are neutral. 70.0% of the respondent strongly agreed on benefit of increase efficiency and effectiveness of the organization and 21.25% of respondents have agreed and 8.75% of them respondent are neutral. 62.5% of the respondents strongly agree to improve communication between top management and low management and 37.5% of the respondents are agreed. 81 % of the respondents strongly agree to improve consistency and 19.0% of the respondents are agreed. 75.0% of the respondent strongly agreed on benefit of increase the interaction between departments, 18.75% of respondents have agreed and 6.25% of them respondent are neutral. 63.75% of the respondent strongly agreed to improve acquire and share knowledge, 30.0% of respondents have agreed and 6.25% of them respondent are neutral. 75.0% of the respondent strongly agreed to improve communication on all management, 22.5% of respondents have agreed and 82.5% of them respondent are neutral and 71.25% of the respondent strongly agreed on benefit of harmonize and optimize practices, 217.5% of respondents have agreed and 1.25% of them respondent are neutral.

4.6. Observation of the Research

Based the personal observation documentation was not in good manner, process are identified in all the process, quality policy are prepared, reviewed mechanisms are also not established; responsibilities and authority are not defined. Quality objectives, requirements for products also prepared and new section was established to lead the quality management system development and implementation END global soap and

detergent. On the other side the implementation is coverage all the departments, even the department not implementation effectively, there are gaps in implementation.

4.7. Interview Result

The data collected through the interviews was done with five relevant managers which have the responsibility to ISO 9001:2015 quality management system development and implementation in END global soap and detergent manufacturing industry. Based on the leading question the response is summarizing as follows:

1. What is the factor affecting ISO 9001:2015QMS implementation in END global soap and detergent manufacturing industry and How to develop ISO 9001:2015 QMS in this organization?

The entire respondent agreed the major factor affecting ISO 9001:2015 quality management system in the organization are following:-

The organization not should establish a systematic approach to collect, analyze and review available information. Based on the results, the organization should not use update information and its understanding of quality management system on context, policies, strategy and objectives as needed of organization.

The respondent disagreed to achieve it's the organization should ensure that all its processes are managed proactively, including externally provided processes, to ensure that they are effective and efficient.

Respondent not understanding ISO 9001:2015 quality management system to optimize the balance between the different purposes and specific objectives of the processes of leadership of organization. Analysis of the organization's performance should enable identification of issues, such as insufficient or ineffective resources within the organization, insufficient or ineffective competencies, organizational knowledge and inappropriate behavior, risks and opportunities that are not being sufficiently addressed by the organization's management systems, potential strengths that might need to be fostered with regard to leadership activities, processes and activities showing outstanding performance this ideas affecting the ISO 9001:2015 QMS.

The entire respondent agreed the ISO 9001:2015 QMS development was not covered all department from end to end whereas the necessary preparation done during the

development like identifying the factor, defining the steps for each process, defining the terminology, and documentations. On the other hand, there were problem in provided not enough training to employees and managers. In addition to that the respondent agreed the driver for developing ISO 9001:2015 QMS is to improve process and satisfy the customers. Respondent agree that not reviews should be conducted at planned and periodic intervals, to enable trends to be determined and to evaluate the organization's progress towards achieving its policies, strategy and objectives of ISO 9001:2015 quality management system of standard.

The management coordination activates to direct and control quality management system are low. The policy organization interaction and direction of the organization formally not expressed by top management.

- 2. What is the status of ISO 9001:2015 QMS implementations in END global soap and detergent manufacturing, what resource are ready to implement, what about commitment of top management?
 - The status of ISO 9001:2015 QMS implementation is not full and effective. There was not enough human resource assigned to implement as well as there were financial resource constraint for implementation of ISO 9001:2015 quality management system. In addition, there were resistances from managers, on the other hand, the top management commitment was good but lack of follow up on the implementation of ISO 9001:2015QMS.
- 3. What are the barriers during the implementation of ISO 9001:2015 quality management system in the END global soap and detergent manufacturing industry?

The main barriers mentioned by all respondents are as follows:

- Lack of top management commitment. Majority respondent agreed as one of the key barriers.
- > Insufficient resources allocation. All respondent agreed as one of the barriers.
- ➤ Ineffective cross functional communication and lack cooperation among middle managers over quality problem.
- Improvement activities can range from small-step continual improvements to insignificant improvements of the entire organization.

- ➤ The organization should undefined objectives for improving its products processes, structure and management system, by using the results of the analysis and evaluation of ISO 9001:2015 quality management system of organization.
- 4. Which areas need improvements and what are the appropriate measures that help to have effective ISO 9001:2015 QMS in END global soap and detergent manufacturing industry?

The entire respondent agreed for successful implementation of ISO 9001:2015 quality management systems the following need to be considered.

- ➤ Commitment at all level specially the top management.
- ➤ Top management should demonstrate leadership in the organization by defining and maintaining the organization's objectives based on its policies and strategy, as well as by deploying the objectives at relevant functions, levels and processes.
- The organization should assess its progress in achieving its planned results against its mission, vision, policies, strategy and objectives, at all levels and in all relevant processes and functions. A measurement and analysis process should be used to monitor this progress, to gather and provide the information necessary for performance evaluations and effective decision making.
- Improving processes can lead to increased effectiveness and efficiency, resulting in benefits such as cost, time and energy saving and reduced waste; in turn, this can lead to meeting the needs and expectations of interested parties more effectively.
- ➤ The reviews should be conducted at planned and periodic intervals, to enable trends to be determined and to evaluate the organization's progress towards achieving its policies, strategy and objectives.
- ➤ They should also address the assessment and evaluation of improvement, learning and innovation activities performed previously, including aspects of adaptability, flexibility and responsiveness in relation to the organization's mission, vision, values and culture.
- ➤ Effective communication and cooperation within and outside the organization.

CHAPTER FIVE

Conclusions and Recommendations

5.1. Introduction

In this chapter, summary of the findings and conclusions based on the objectives of the study, namely, factor affecting implementation the relevance of implementation to strategic plan and benefits of implementation ISO 9001:2015QMS through proposed model was discussed.

5.2. Summary of major finding

The major findings of the study were to identify the factor affecting implementation of ISO 9001:2015 QMS in the END global soap and detergent manufacturing industry from the questioner, interview and observation are following.

- ➤ Lack of top management commitment on the implementation of ISO 9001:2015 quality management system in the END global soap and detergent manufacturing industry.
- The majority of the respondent disagreed with idea of understanding vision, mission, value and leadership of the organization
- ➤ Lack of periodic management review of ISO 9001:2015 QMS and the organization have a lack of documentation of management review results rated as strongly agree barrier to ISO 9001:2015 QMS implementation in END global soap and detergent manufacturing industry.
- ➤ Ineffective communication and cooperation within and outside of the organization.
- ➤ The organization not should establish a systematic approach to collect, analyze and review available information on implementation of ISO 9001:015QMS.

Benefits obtained in relation to personal relation with customers and feedback collections, increased employee motivation, improve communication between the top management and low management, reduced cost with objective evidence (supporting table) as these information are sensitive and could not be easily declared by the respondents. The findings in this study identified that the most important barriers to ISO implementation to be lack of top management commitment,

employee resistance, lack of human resources insufficient employee training and insufficient knowledge about quality programs.

5.3. Conclusions

The objectives of this research were achieved through reviewing the literature, carrying out a case study and administering a survey questionnaire at END global soap and detergent manufacturing. In addition, the majority of research objectives were answered by collecting primary data (either survey questionnaire, interviews or observation). Moreover, the objectives were achieved using a mixed methods approach through which both quantitative and qualitative results are gained. This research has concentrated on the evaluation of the factor affecting of ISO 9001:2015 QMS through identification of benefits achieved and strategic plan faced in ISO 9001:2015 QMS implementation in END global soap and detergent manufacturing industry.

5.3.1. Major factor affecting implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry.

- 1. Majority of the respondent strongly agreed with idea lack of top management in the implementation of ISO 9001.
- 2. Majority of the respondent agree with idea of lack training in the organization.
- 3. Majority of the respondent agree with idea of lack of employee engagement in the implementation of ISO 9001:2015 QMS. There are not involvement of employee in the implementation ISO 9001:2015 quality management system affect the organization.
- 4. Majority respondent strongly with idea of difficult on changing working culture. That means employee and management not interest to change working culture to quality management system of the organization.
- 5. Most of the respondent rate as agree ISO 9001:2015 QMS implementation barrier for inadequacy in the understanding of the purposes and benefits of ISO 9001:2015 and also for inadequacy in the awareness of ISO 9000 standards by the employees of the organization. Whereas factor affecting ISO 9001:2015 implementation not as a further Quality improvement in END global soap and detergent was rated as strongly agree barrier to QMS implementation.

- 6. Most of the respondents rate strongly agree barrier for poor top management commitment to develop and implement of QMS in END global soap and detergent manufacturing industry. While most of the respondent's rate as low barrier for lack of employee's commitment towards the QMS in END global soap and detergent manufacturing industry.
- 7. Ineffective communication between departments in END global soap and detergent manufacturing industry and no cross-functional cooperation between departments also rate as high barrier for QMS implementation in END global soap and detergent manufacturing industry.
- 8. Lack of periodic management review of ISO 9001:2015 QMS and the organization have a lack of documentation of management review results rated as strongly agree barrier to ISO 9001:2015 QMS implementation in END global soap and detergent manufacturing industry.
- 9. Majority of the respond strongly agree with idea lack of regular review and follow-up factor affecting implementation of ISO 9001:2015 QMS.
- 10. On the other side no employee's engagement and empowerment in END global soap and detergent manufacturing industry rated as strongly agree barrier to 9001:2015 QMS implementation END global soap and detergent manufacturing industry. While employees did resist change to the existing system in END global soap and detergent were rated as low barrier to ISO 9001:2015 QMS implementation in organization.

5.3.2. Strategic plan of implementation of ISO 9001:2015 QMS

On the relevance of ISO 9001:2015 implementation to the strategic plan, respondents were satisfied that implementation was in line with the strategic plan and helped achieve the company's objectives and values. Strategic plan is important in determining the long term goals of the company of being local soap and detergent low market share and providing quality of soap and detergent. The finding is supported by the facts that respondents agree that top management is key in realizing objectives of implementation. Respondents agree that ISO 9001 leads to improve the quality of soap and detergent produced.

1. The majority of the respondent disagreed with idea of understanding vision, mission, value and leadership of the organization.

- 2. The majority of the respondent agrees with idea of human resources focus and process management (production process management) of the organization.
- 3. Majority of the respondent strongly disagree with idea of understanding of recognition in the organization.
- 4. Majority of the respondent agree with idea of understanding customer focus and communication in the organization. The strategic relevance of implementation of ISO 9001:2015 focus on customer satisfaction of internal and external of the organization. Also communication the strategic plan for implantation of ISO 9001:2015 quality management system in the company.

5.3.3. Major finding on benefit of implementation of ISO 9001:2015 QMS.

- 1. Majority of the respondent strongly agreed with idea improve customer satisfaction in implementation of ISO 9001:2015 quality management system in the organization.
- 2. Majority of the respondent agreed with idea of reduce rework in implementation of ISO 9001:2015 quality management system in the organization.
- 3. Majority of the respondent strongly agreed with idea of improve positive culture change in the organization.
- 4. Majority of the respondent strongly agreed with idea of improve company competitiveness in the END global soap and detergent manufacturing industry organization.
- 5. Implementation of ISO 9001:2015 quality management system the majority of the respondent strongly agrees with idea of priority in the market in the local market of the organization.
- Majority of the respondent strongly agreed with idea of increase market share in local market by implementation of ISO 9001:2015 quality management system in the organization.
- 7. Majority of the respondent strongly agreed with idea of increase prevention action in the organization.
- 8. Majority of the respondent strongly agreed with the idea of increased employee motivation in the organization.
- 9. Majority of the respondent strongly agreed with idea of increase efficiency and effectiveness of organization.

- 10. Majority of the respondent strongly agreed with idea of improve communication between the top management and low management, increase the interaction between departments of organization, improve consistency and improve communication in the company.
- 11. Majority of the respondent strongly agreed with idea to acquire and share knowledge and harmonize and optimize practices by implementation of ISO 9001:2015 quality management system.

5.4. Limitation of the study.

This study is limited to the factor affecting implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry. It has not considered other soap and detergent manufacturing company. Addition to this, the study does not included customers and suppliers of this company. Because due to the interaction of Covid 19 to the suppler and customer.

5.5. Recommendation

Based on the findings from different literatures and the primary data gathered by both the questioner and from the researcher's direct observation, the researcher recommended the following to be implemented ISO 9001:2015 QMS by the END global soap and detergent manufacturing industry. The researcher has tried to describe the practices and benefits obtained by the END global soap and detergent manufacturing industry in implementing quality management system. The findings were improvement of customer service, improvement of cost management, improvements on productivity, improvement of quality benefits obtained or perceived to have been obtained by the company's implementing ISO 9001:2015 QMS.

- a. The top management should be focus short and long term and should be clearly understandable. Top management should be quantified and determining the objectives of organization depending implementation of ISO 9001:2015 quality management system.
- b. Awareness creation program should be prepared on the purpose and benefits of ISO 9001:2015 quality management system.
- c. It is also recommended for the company to work on training, employee involvement and communication process in which the respondents agree that those points have great impact for the successful implementation of ISO 9001:2015 QMS.

- d. Top management should be giving focus in improving the communication between departments and cooperation between cross-functional departments
- e. The employee's involvement and empowerment END global soap and detergent manufacturing industry should also need to improvement for effective implementation of QMS.
- f. Reviewing leadership performance measurement, benchmarking, analysis and evaluations, internal audits and self-assessments should be performed by appropriate levels and functions of the organization, as well as by top management.
- g. For implementation ISO 9001:2015 quality management system improvement, learning and innovation are interdependent and key aspects that contribute to the sustained success implementation of ISO in the organization.
- h. The top management awareness to low management and employee about the benefit of implementation of ISO 9001:2015 quality management system.
- i. The organization clear defined the vision, mission and value of the organization.
- j. Effective communication between department in the END global soap and detergent manufacturing industry and cross factional cooperation between departments of organization.

Direction for future research

This study is an exploratory effort which only attempted to provide answers to the research questions that triggered the study. It also contributes some understanding to the body of knowledge by presenting additional experience on ISO 9001:2015 QMS implementations at END global soap and detergent manufacturing industry. However, it could not be complete by itself and further investigations need to be made for better understanding of the situation. An important area that needs the attention of future researchers will be to include: the impact of integrated implementation of ISO9001:2015 quality management systems. The general status of factor affecting implementation of ISO 9001:2015 QMS in services and other manufacturing industries also needs to be investigated.

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APPENDIX A



St. Mary's University School of Graduate Studies Institute of Quality and Productivity Management

QUESTIONNAIRE

A questioner to identify the factor affecting implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry.

Dear respondents, I am a postgraduate student of the above-mentioned institution and currently undertaking a research on "FACTOR AFFECTING IMPLEMENTATION OF ISO 9001:2015 QMS IN SOAP AND DETERGENT MANUFACTURING INDUSTRY" taking END global soap and detergent manufacturing industry as a case study.

The purpose of the questionnaire is to obtain in Personal information, factor affecting of ISO 9001:2015 QMS, Strategic relevance for implementation and benefit of ISO 9001:2015 QMS up on the implementation.

In order for your responses to be useful, all responses to the items contained in this questionnaire must accurately reflect your true opinions. Please take a few minutes to provide your honest opinion about each statement. Your honest opinion is very valuable to the success of this study.

Thank you in advance for your response. Sincerely,

Bamlaku Worku

I. Personal information

1. Please answer the following questions by checking tick or x mark on the appropriate box.
A. Gender
Male Female
B. Age (in year)
21-30 31-40 41-50 51& above
C. Educational level
Higher Diploma Bachelor's degree Master Degree
Other
D. Work experiences the in organization(yrs.)
1-3 4-6 7-9 10 and above

II. Factor affecting implementation of ISO 9001:2015QMS

2. Questions relating to factor affecting implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry. (Tick as appropriate)

		Survey	Scale:								
S.No.	Factor affecting ISO 9001:2015QMS	1=Strongly Disagree 2=Disagree									
		3=Neu	tral 4=A	ral 4=Agree 5=Strongly Agree							
		1	2	3	4	5					
01	Lack of top management commitment										
02	Lack of training										
03	Lack of employee engagement										
04	The staff do not understand existing process and procedures										
	of ISO 9001:2015 QMS										
05	Bulky documentation replaces people involvement in										
	implementation										
06	Difficult on changing working culture										
07	There is lack of regular review and follow up for										
	implementation of ISO 9001:2015										
08	Lack of interdependence between department										
09	Short term Focus										
10	Lack of leadership										
11	Lack of system thinking										
12	Quality trade off										

III. Question on strategic relevance of ISO 9001:2015 implementations.

3. Strategic relevance for implementation ISO 9001:2015QMS To what extent do you agree with the strategic implementation of ISO 9001:2015 QMS achieving the following? (Tick as appropriate)

S.No.		Surve	y Scale:					
	QUESTION	1=Strongly Disagree 2=Disagree 3=Neutral						
		4=Agı	e					
		1	2	3	4	5		
1	Vision							
2	Mission							
3	Value							
4	Leadership							
5	Customer focus							
6	Measurement analysis and knowledge							
	management							
7	Human Resources focus							
8	Process Management							
9	Innovation							
10	Teamwork							
11	Recognition							
12	Integrity and Ethics							
13	Communication							

IV. Benefit of ISO 9001:2015 QMS

4. Question relating to the benefit of implementation of ISO 9001:2015 QMS in END global soap and detergent manufacturing industry. (Tick as appropriate)

		Survey	Scale: 1	=Strong	gly Dis	agree			
S.No.	Benefit of implementation ISO 9001 :2015	2=Disagree 3=Neutral 4=Agree							
		5=Strongly Agree							
		1	2	3	4	5			
01	Improve customer satisfaction								
02	Reduce rework								
03	Improve positive culture change								
04	Improve company competitiveness								
05	Priority in the market								
06	Increase market share								
07	Higher perceived quality								
08	Increase preventive action								
09	Increased employees' motivation								
10	Increase efficiency and effectiveness of organization								
11	Increase employee's motivation								
12	Improve communication between the top management and								
	low management								
13	Increase the interaction between department of organization								
14	Eliminate conflicting responsibilities and relationships								
15	Improve consistency								
16	To improve acquire and share knowledge								
17	Improve communication								
18	to acquire and share knowledge								
19	to harmonize and optimize practices								



St. Mary's University School of Graduate Studies
Institute of Quality and Productivity Management

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In order for your responses to be useful, all responses to the items contained in this questionnaire must accurately reflect your true opinions. Please take a few minutes to provide your honest opinion about each statement. Your honest opinion is very valuable to the success of this study.

Thank you in advance for your response. Sincerely,

Bamlaku Worku

Appendix B

Interview Questions

- **1.** What is the factor affecting ISO 9001 :2015 QMS implementation in END global soap and detergent manufacturing industry and how to develop ISO 9001:2015 QMS in this organization?
- **2.** What is the status of ISO 9001:2015 QMS implementations in END global soap and detergent manufacturing, what resource are ready to implement, what about commitment of top management?
- **3.** What are the barriers during the implementation of ISO 9001:2015 QMS in the END global soap and detergent manufacturing industry?
- **4.** Which areas need improvements and what are the appropriate measures that help to have effective ISO 9001:2015 QMS in END global soap and detergent manufacturing industry?