

Sudan University of Science and Technology College of Graduate Studies Total Quality and Excellence Center



The Role of Implementing ISO 9001: 2008 System
On "Enhancing Leadership Commitment"
To Improving Organizational Performance
Case Study (Savola Edible Oils Company, Sudan)

دورتطبيق نظام الايزو 9001:2008 حول تعزيز التزام القادة على تحسين أداء المنظمة دراسة حالة شركة صافولا لزيوت الطعام

A thesis is submitted in the Partial Fulfilment of the Requirements for M.Sc.in Total Quality Management and Excellence

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الإستهالال

قال الله تعالى:

بسم الله الرحمن الرحيم

﴿ وَمَا أُوتِيتُمْ مِنَ الْعِلْمِ إِلَّا قَلِيلًا ﴾

[الإسراء: 85]

Dedication

This thesis is dedicated to my parents, whom encouraged me all the way long.

Acknowledgement

I am thankful to ALLAH who gives me the courage and strength to complete this research and gives me the grace of knowledge of science which lit my way.

I would like to express the deepest appreciation to Sudan

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I also take this opportunity to express a deep sense of gratitude to Savola Edible Oils Company (Sudan) mainly the Department of Researches and Development for providing all required information and data which helped me in completing this research.

I would like to thank all my colleagues in batch eight whom I was in debt for their fruitful support, help and kindness during my thesis.

Family, especially my **parents** for their help and support, and my brothers, and my sisters.

Abstract

The aim of this study was to identify the role of implementing ISO9001:2008 systems onenhancing leadership commitment to improving organizational performance. The study population consisted of the personnel's from different department of Savola edible oils company. The researcher used descriptive approach and system of statistical analysis and Chi-square to test the assumptions of statistical significance in the analysis of the questionnaire, which was distributed to a random sample of 50 employees of (Savola edible oils company). The analysis of the results showed that there are statistical significance indicators for implementation of ISO 9001-2008 in Savola edible oils company. The study found thatthere is significant, positive relationship between Top management (leadership) and organization performance, there is significant, positive relationship between ISO 9001:2008 applying and increasing productivity and revenue, there is a positive relation between ISO 9001:2008 applying and employees performance, the service provided fromSavola edible oils company is high quality, the awareness and commitment of the top managers of ISO 9001-2008 is good. From this research we concluded the following recommendations: the Savola edible oils company should concentrate more on Continuous improvement, development, increase employee involvement, maintain continues review and corrective action of the quality management system to achieve institution objective and customersatisfaction.

المستخلص

الهدف من هذا البحث هو تحديد دور تطبيق نظام الأيزو 9001:2008 حول تعزيز إلتزام القادة على تحسين أداء المنظمة. تألفت العينة من أشخاص في مختلف الأقسام في شركة صافولا لزيوت الطعام.

إستخدم الباحث المنهج الوصفي ونظام التحليل الإحصائي ومربع كاي لإختبار الفرضيات ذات الدلالة الإحصائية في تحليل الإستبيان الذي تم توزيعه علي عينه عشوائية من 50 من أفراد شركة صافولا لزيوت الطعام. أظهر تحليل النتائج وجود مؤشرات ذات دلالة إحصائية لتنفيذ نظام الأيزو 9001:2008 في شركة صافولا لزيوت الطعام. وجدت الدراسة أن هناك علاقة هامة وإيجابية بين أداء الإدارة العليا (القيادة) والأداء التنظيمي. هناك علاقة ايجابية بين تنفيذ الأيرو 9001:2008 وزيادة الإنتاجية والإيرادات، هناك علاقة إيجابية بين تنفيذ الأيرو 9001:2008 وأداء الموظفين، وكذلك أن الخدمة المقدمة من شركة صافولا لزيوت الطعام ذات جودة عالية، كما أن الوعي والتزام الإدارة العليا بتنفيذ الأيزو 9001:2008 أمر جيد.

من هذا البحث خلصنا إلى التوصيات التالية: ينبغي على شركة صافو لا لزيوت الطعام التركيز أكثر على التحسين المستمر والتطوير وزيادة مشاركة الموظفين والحفاظ على المراجعة المستمرة والإجراءات التصحيحية لنظام إدارة الجودة لتحقيق هدف المؤسسة ورضا العملاء.

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Abbreviation	Definition
ISO	International Organization for Standardization
QMS	Quality Management System
QTTs	Quality tools and Techniques
SAZ	Standards Association of Zimbabwe
CS	Customer satisfaction
HR	Human resources

Chapter One

1. Introduction

1.1 Background

The International Organization for Standardization (ISO) published the ISO 9000 series of standards in 1987. This series of standards "provide guidance and tools for companies and organizations who want to ensure products and services consistently meet customer's requirements, and that quality is consistently improved" (ISO, 2014c). These standards have been developed to guide organizations of all types and sizes to implement and operate effective quality management systems (ISO, 2005). Five different versions of ISO 9001 have been published by ISO until now. The 1987 version of the ISO 9000 series of standards included three standards for quality assurance: ISO 9001, ISO 9002 and ISO 9003. ISO 9001:1987 is the Model for quality assurance in design, development, production, installation and servicing. ISO 9002:1987 is the model for quality assurance in production, installation and servicing. It is almost entirely identical to ISO 9001:1987 but it does not cover the creation of new products. ISO 9003:1987 is the model for Quality assurance in only final inspection and testing. The second version of the ISO 9000 series was released in 1994. It stressed the importance of preventive actions. The third version combines ISO 9001, 9002 and 9003 into one standard, ISO 9001:2000. In this version a broader concept of quality management has been introduced. Improving customer satisfaction has become one of the performance measurements. Additionally, it puts more emphasis on the process approach and on active involvement of management. **ISO 9001:2008**, is basically the same as the previous one. It aims to explain the existing requirements in a clearer way. The 2015 version is the last version, its focuses on the identification of risk.

And risk control. Moreover, it requires top management to take a more active role in aligning quality policies with business needs (ISO, 2014d). Generally, ISO 9001 presents the requirements for a Quality Management System that can be used by an organization to address customer satisfaction and regulatory requirements used by other parties to assess the ability to meet customer satisfaction and regulatory requirements. Ensure that its personnel are aware of the relevance and importance of their activities. Top management shall review the organization's quality management system to ensure its continuing suitability, adequacy and effectiveness.

1.2 The Statement of the Problem:

Organizations in Sudan apply the quality management system ISO 9001 and obtain approvals, rewards and certificates, but unfortunately, without actual implementation and effective on the ground. And most of them do not continue in the applying, thus it is reflected on many errors and reduces profits. Where the problem of the study is to identify the role of implementing the quality management system effectively in the Sudanese factories, and its impact on the organization performance.

1.3 Study Questions

Based on research statement, the questions are as follow: What is the role of implementing ISO 9001:2008 on enhancing leadership commitment to improving organizational performance?

The main question is:

- (1) Do the top management aware and committed about the requirement of ISO system?
- (2) Are there an impacts of continuous improvement in accordance with ISO 9001 on the overall performance of the organizations?

(3) To what extent does implementing ISO system leads to increase the company's production and revenue?

1.4 Objectives of the Study

General objective: to identify the role of implementing ISO system on enhancing leadership commitment to improving organizational performance. The specific objectives of this study:

- (1)- To examine the degree of awareness and committed of the top management by ISO system requirements.
- (2)- To investigate the role of employees whose doing work under the organization's control to be aware of quality culture, policies and relevant objectives.
- (3)- To examine the role of implementing the ISO system in increasing productivity and revenues of the companies

1.5 The Study Hypothesis

The study was based on following hypotheses

- (1)- The top management in the organization are well aware and committed about ISO system requirements.
- (2)- Implementation of ISO 9001system will improve performance of employees.
- (3)-ImplementingISO9001systemeffectivelyleadtoincreasing productivity and revenue of the Company.

1.6 Significance Of The study:

The study is significant in a number of ways:

Firstly, to shade light on how Management or decision makers should consider whether to pursue Implementation of QMS ISO 9001 or not especially on the areas of role on Improving Organization Performance.

Secondly, the study will offer a significant contribution to existing theoretical and empirical knowledge regarding roles on implementing QMS

ISO 9001 on Organization Performance.

Finally, the study may serve as a reference and basis for further research on Roles of implementing QMS ISO 9001 on organizations performance in developing countries.

1.7 Limitation Of The study

1.7.1 Spatial Boundaries:

This study conducted at Savola edible oils company.

1.7.2 Temporal Limits:

From June 2017 to May 2018.

1.7.3 Objective Limits:

This study Focus on the role of implementing ISO 9001:2008 systems and how it relates to quality of products, the role of ISO 9001:2008 system on improving organizational performance, also discuss what are the difficulties in the implementation of ISO 9001:2008 system Process.

1.7.4 Human Boundaries:

The study was limited to quality managers, Accountant, Auditor, Administer, and Technician who responsible of applying and monitoring the ISO 9001:2008 system and also employees at the marketing and customer service Department.

1.8 Methodology:

This study is based on theoretical background of methodology and the quantitative design using a hypothesis testing approach and descriptive approach because they fit with the nature of this study.

Chapter Two

Literature Review and Previous Studies

2.1 Introduction:

This chapter discus the literature review on quality management system, definition of quality and explanation of ISO 9001:2008 process.

This chapter overview the study model, case study and focus on previous study on improving organization performance by implementing ISO 9001 system at different business studies.

2.1.1 Theoretical Frame Work of the Study:

In this thesis the theoretical back ground divides into two parts, the first part is general idea about ISO 9001, ISO history, principles, and implementation steps, while second part related to organization performance.

Researcher study the relation between the following variables:

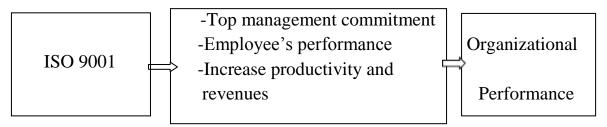


Figure (2-1): shows the study model

Source: prepared by researcher

The figure translate the relation of ISO 9001 implementation and improving organization performance, because proper implementation of ISO 9001 system lead to improving employees performance and this will directly increase productivity andrevenues.

2.2 Background and History of the ISO 9001Standard

Basically ISO is a Greek word meaning "Equal". Unfortunately, many people even today misunderstand the word ISO, thinking it is an abbreviated term for some three long words. However, there is a word with a semi-similar abbreviation, International Organization for Standardization, which cannot logically be equivalently abbreviated to "ISO". It is best close to an IOS abbreviation. International organization for standardization (IOS) is the international authority body responsible for issuing various quality standards, one of which is the ISO 9001 standard for the quality management system. Quality management system (QMS) is a set of interconnected processes designed and executed for the purpose of meeting customer requirements. From the QMS definition, it is explicitly understood that quality is nothing more than an initial compliance with customer requirements. Initial compliance with customer needs is the pathway toward quality achievements. Some quality professionals define QMS as the system to manage customer requirements. International organization for the standardization has authorized a technical committee, called TC176, comprising of 113 members from different countries to be responsible for preparing, establishing, documenting, and maintaining the ISO 9001 standard document. ISO 9000 standard document has undergone several changes and amendments for last two decades. The first standard was published in 1987. From 1987 until today the standard has been revised three times. The latest one which is being used worldwide is the ISO 9001:2008. The 9001 reflects the code of the standard for the quality management system and the 2008 reflects the publishing year of the standard. The changes in the standards were necessary since they reflected the new needs of customers by removal of ambiguities or re-editing of written text in the previous standards.

2.2.1 ProcessApproach

This International Standard promotes the adoption of a process approach when developing, implementing and improving the effectiveness of a quality Management system, to enhance customer satisfaction by meeting customer requirements.

The model of a process-based quality management system shown in (Figure.2.2) illustrates the process linkages presented in Clauses 4 to 8. This illustration shows that customers play a significant role in defining requirements as inputs. Monitoring of customer satisfaction requires the evaluation of information relating to customer perception as to whether the organization has met the customer requirements. The model shown in (Figure.1)

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all

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Requirements of this International Standard, but does not show processes at

Requirements of this International Standard, but does not show processes at a detailed level.

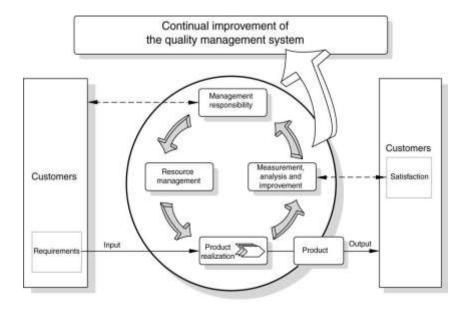


Figure 2.2: Model of process based quality management systems

Source: Module 6Quality Management System. Total and Excellence center Sudan Khartoum p43.

Table 2.1: The ISO 9001 QMS is built upon eight fundamental principles of quality Management (ISO, 2005, p. v-vi)

Principle	Description
1.Customer	Organizations depend on their customers and
focused	therefore should understand current and future
organization	customer needs, should meet customer
	requirements and strive to exceedcustomer
	Expectations
2. Leadership	Leaders establish unity of purpose and direction.
	They should create and maintain the internal
	environment in which people can become fully
	involved in achieving theorganization's objectives
3. Involvement	People at all levels are the essence of an
of people	organization and their full involvement enables
	their abilities to be used for the organization's
	benefit.
4.Process	A desired result is achieved more efficiently when
approach	activities and related resources are managed as a
	process.
5.System	Identifying, understanding and managing a system
approach to	of interrelated processes as a system contributes to
management	the organization's effectiveness and efficiency in
	achieving its Objectives.
6.Continual	Continual improvement of
improvement	the organization's overall
	performance should be a permanent objective of
	the Organization. Always aim to do better.
7.Factual	Effective decisions are based on the analysis of
approach to	data and information.
decision making	
8.Mutually	An organization and its suppliers are
beneficial	interdependent and a mutually beneficial
supplier	relationship enhances the ability of both to create
relationships	value

2.2.2 Overview of the Content of QMS ISO9001:2008

The Quality management system ISO 9001:2008 standard is comprised of 8clauses:

Clause 1: Scope Clause

Clause 2: Normative References Clause 3: Terms and Definitions

Clause 4: Quality Management System Requirements Clause 5: Management Responsibility

Clause 6: Resource Management Clause 7: Product Realization

Clause 8: Measurement, Analysis and Improvement

Clauses 1 to 3 are for information only. From clause 4 to 8 are for the organizations to comply with, especially the clause 4 being an umbrella clause, includes the requirements in a macro level. All these clauses 4 to 8 have detailed the requirements through multiple sub clauses. If any of such clause requirements not applicable (from the clause 7) shall be addressed in the exclusion section of the quality manual with suitable justification. The ISO 9001 QMS architecture has been composed of 8 basic principles, as detailed below in Table 1 ISO management systems have gained a chronic importance developed in the field of managing quality since two decades. As remarked by Roger Schroeder (2008). ISO 9001 Certification has a major impact on worldwide quality practices. Many companies are demanding ISO certification from their suppliers as a condition for doing business". This situation has caused lots of contracting organizations to register for ISO certification. Joseph Juran, (2002) said, "Initially the suppliers resisted the Quality System mandated by their customers; afterwards, it became a part of life".

The overview details of management requirement technical requirement are show in below (ISO 9001:2008).

2.2.3 Scope Clause

2.2.3.1 General

This International Standard specifies requirements for a quality management system where an organization:

- (a) Needs to demonstrate its ability to consistently provide product that meets customer and applicable statutory and regulatory requirements, and
- (b) Aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

2.2.3.2 Application

All requirement of this international Standard are generic and are intended to be applicable to all organizations, regardless of type, size and product provided.

2.2.3.3 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

ISO 9000:2005, Quality Management Systems- Fundamentals and vocabulary.

2.2.3.4 Terms and Definitions

For the purpose of this document, the terms and definitions given in ISO 9000 apply.

Throughout the text of this International Standard, wherever term "product" occurs, it can also mean "service".

2.2.3.5 Quality Management Systems

This section deals with general requirements for a QMS, as well as all documentation requirements. It also includes the requirements for the necessary Quality Manual, Control of Documents, and Control of Records.

2.2.3.6 Management Responsibility

The section on Management Responsibility outlines the requirements for customer commitment and focus, and the important Quality Policy and Quality Objectives. The elements of planning in the QMS are covered, along with the need to define responsibility, authority and communication in the company. Finally, the requirements of the management review, including the mandatory inputs and outputs for the review, are included.

2.2.3.7 Resource management

The short section on resources covers the requirements for management to provide resources, including infrastructure, work environment and human resources. The importance of competence, awareness and training for human resources is emphasized.

2.2.3.8 Product Realization

This section is the only part of the structure where a company can choose to exclude sections of the requirements (such as excluding the design requirements if your company does not do design work). The requirements deal with planning for product (or service), starting with determining and reviewing the product requirements, design and development and purchasing, which leads to the provision to create and supply the product or service. The final requirements deal with the control of any equipment used to monitor or measure the product or service.

2.2.3.9 Measurement, Analysis and Improvement

The last section deals with how you know your QMS is working and improving. The Monitoring and Measurement section outlines requirements for assessing customer satisfaction, Internal Audit, and

monitoring the product and processes. The section deals with how to control non-conforming product, since this will happen in any business, and how you will analyze and improve, including corrective and preventiveactions.

2.3 Organization Performance

What is Performance? This question seems simple to address at first glance but it is in fact, quite complex. Part of the problem defining "performance" is that you will come across a number of words with similar meanings in the literature. The word "effectiveness" is one of the main similes of performance found in the literature. Boyne (2003) when looking at public sector improvement ran into the problem of academics and practitioners using different words to describe the same phenomenon. In his work he identified that:

"A central message of prior research in this area is that universal criterion of effectiveness... does not exist" and "Although effectiveness can be defined broadly as 'producing the intended result' there is no agreement on what the intended result of organizations is or should be."

He studied a number of organizational models including the multiple stakeholder model that:

"Assumes that the performance of all organizations is judged by a variety of internal and external groups... Each of these groups uses different criteria to assess effectiveness. Even if all stakeholders use similar criteria, the relative weight that they attach to each one is likely to vary. Furthermore, the criteria and the weights shift over time as preferences change and as the balance of power alters between groups. An organization is effective, then, to the extent that its multiple constituencies perceive it as effective."

It is easy to view these points as only applying to public sector organizations that have obscure organizational goals and bureaucratic

make-ups. However, Lebas and Euske identify performance as a "suitcase word" into which people place concepts that suit them and hope that the context takes care of the definition. They eventually develop a working definition of performance as: "Doing today what will lead to measured value outcomes tomorrow".

This working definition takes in the process of producing results and the results themselves and is a common concept when people define organizational performance.

This definition can be analyzed by considering a simple system view of an organization's activities and results, like that in Figure 2.3.

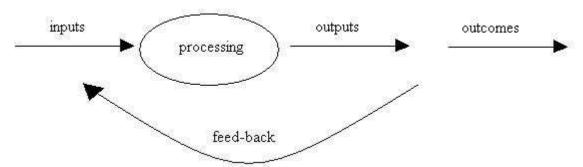


Fig 2.3 Simple systems view of an organization

Source: Holistic Performance Measurement and the Balanced Scorecard In the systems view, the organization takes inputs today and processes them into valuable and measurable outputs that then have impact on outcomes tomorrow. The organization simply needs to identify: its desired outcomes; the outputs that will positively impact upon them; the processes producing the outputs; and the inputs feeding the processes. In other words, the organization needs to trace the cause and effect links between the elements of the system. The causal links need to be identified by using data on causation or informed speculation to arrive at a model that can then be used to make sense of this definition of performance.

An implication of this systems-based definition of performance is the fact

that a change in one part of the system may affect another part or parts of the system. So, a change in inputs may impact on outcomes and a change in outcomes feeds back to affect inputs. This means that performance information about one part of the system may be useful in making inferences about other parts of the system. However, the accuracy of the inference in a particular organizational system will depend on the accuracy of the cause and effect model. If the organization's model:

Inputs > processes > outputs > outcomes;

Is well understood then, a measure of the performance of inputs may give an indication of the level of performance of eventual outcomes (SUST, 2005, 4). The business results' category in all quality award models looks at key measures of organizational performance as multiple dimensions, including product and service outcomes, financial and market outcomes, customer-focused outcomes, process effectiveness outcomes, workforce-focused outcomes, and leadership outcomes.

For measurement performance, many scholars used financial as well as non-financial performance (Powell, 1995; Choi &Eboch, 1998; Flynn et al., 1995; Forza & Filippini, 1998). And others have considered customer satisfaction measures to capture performance benefits accrued from QM practices (Choi &Eboch, 1998; Forza & Flippini, 1998; Anderson et al., 1995; Wilson & Collier, 2000; Terziovski& Samson, 1999).

Based on a pervious review researchers adopted the measurement of organizational performance in term of customer satisfaction, where this Support by Deming (1986) confirmed the focus on quality will lead to outcomes such as employee and customer satisfaction, efficiency, and profitability.

2.4 Employee performance:

Employees may not be interested in the products and services, but are interested in the conditions in which they are required to work.

Employees are stakeholders because they can withdraw their labor.

The internal customer we tend to think of products and services being supplied to customers and in the wake of TQM, we also think of internal and external customers but in reality there is no such thing as an internal customer. A customer is a stakeholder; they have entered into a Commitment in return for some benefits that possession of a productor. Experience of a service may bring. The internal receivers of products are not Stakeholders therefore they are not customers. ISO 9000:2000 defines the Customer as an organization or person that receives a product. It is implied That the organization and person referred to is external to the organization Supplying the product because to interpret the term customer as either Internal or external would make nonsense of requirements in ISO 9001 Where the term customer is used. (Juran, J. M., (1995)). [4].

Employee Performance Management is a process for establishing a shared workforce understanding about what is to be achieved at an organization level. It is about aligning the organizational objectives with the employees' agreed measures, skills, competency requirements, development plans and the delivery of results. The emphasis is on improvement, learning and development in order to achieve the overall business strategy and to create a high performance workforce. (AHANDBOOK FOR MEASURING EMPLOYEE PERFORMANCE.)). [12].

2.5 Top Management Commitment and Leadership

The involvement and commitment of top management provides a life line to any strategy and action in the organization (Douglas et al., 2003). Extensive literature exists to support the imperativeness of top management in the success of strategic imperatives (Lohrke et al., 2004; Nedelea and Paun, 2009; and Savanevicience and Stankeviciute, 2011). Each of these studies established a direct link between participation of top management and the success of primary strategies in the workplace.

The top management has executive roles in addition to being the agents of the wide range of stakeholders. A study carried out by Al-Khadra et al. (2012) on Jordanian firms indicated that the most prominent reason for the failure in the implementation of ISO standards was lack of top management support. The fact that they are answerable to all categories of stakeholders places them slightly higher in the chain of command. In this regard, the top management commitment and involvement in maintenance of QMS are both imperative and obligatory (Marson and Blodget, 2008). Management teams, under the patronage of top management perform the basic functions of planning, organizing, staffing, controlling, directing and communicating (Nedelea and Paun, 2009). In more ways than one, these functions can be attributed to the maintenance of quality in production, especially in the manufacturing setting, as indicated in figure(2.1).

Otto et al. (2007) explain that it is the role of the quality management department, or the specific party to convince the management that registering and complying with the standards will provide the organization with more benefits than what it has to forego.

The cost benefit analysis of the process ought to be specifically designed to appeal to the management (Prajogo, 2011). The type of benefits and costs will depend on the intrinsic aspects of the business. However, improvement in the overall business efficiency cuts across all industries and sectors. It is thus imperative for the custom designed aspects of efficiency to be outlined, in order to get the management on board. When the pressure to comply is from external sources, as is the case for large scale firms, there is a possibility that top management will be driving the change (Ruzevicius et al., 2004). In spite of their executive powers, they are obligated to communicate their intentions to all stakeholders and acquire the necessary approval, in addition to providing the basis for communication of expectations and roles. Ways through which the top management is

involved are included in figure(2.2).

However, it is important to note that executive management plays a distant role in the actuation of these goals (Al-Khadra et al., 2012). Savanevicience, and Stankeviciute (2011) pointed out that the bulk of the responsibilities rests on the QMS department and all other departments involved in the production of goods and services, although they are limited to the internal aspects of the management of quality. As a result, the management provides a link to the external aspects of quality management, thereby creating a viable environment for expansion of productivity.

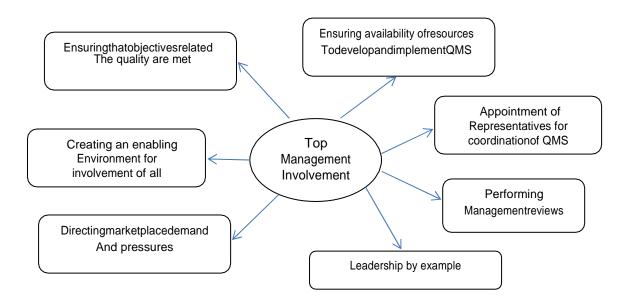


Figure 2.4: Top management Roles

2.6 ISO 9001 and its Relation to TQM

In business field, TQM and ISO 9001 systems are considered to be similar at the level of quality practices. Severalresearchers, Ahire et al. (1996), Dale et al. (1994) and Flynn et al. (1994), Martinez-Lornte et al. (2000), have defined the common eight dimensions that are common in the ISO 9001 standard and TQM practices and these are exactly the same as the eight ISO 9001 principles. This is the reason why many researchers consider ISO 9001 as first step toward TQM practices (Taylor, 1995;

Tummala and Tang, 1996; Skrabec, 1999; Sun, 2000; Escanciano et al., 2001). Though similarities exist between the two quality systems, other researchers also see the differences that exist between them and these are summarized asbelow:

- 1. One of the TQM pillars (Deming, 1982), the continuous improvement, is proactive in TQM, rather than being passive in the ISO 9001 standard requirements (Lee et al., 1999; Zhu and Scheuermann, 1999).
- 2. Customer focus principle in the ISO 9001 standard is an application of procedures focused on the fulfillment of design and production requirements, while it is considered to be the king of TQM work environment (Lee et al., 1999)
- **3.** Workforce and employee participation is paid more attention and focused on the TQM practices than in the ISO 9001 application (Tummala and Tang, 1996; Gotzamani and Tsiotras, 2001).

The above three dissimilarities between the two systems are somehow not convincing enough and may lead ISO 9001 system auditors and implementers and the author to argue that:

- 1. Continuous improvement is fully addressed in clause 8.0 of the standard and the wording in the standard was carefully chosen to make ISO 9001 users develop and implement an effective continual improvement program.
- 2. Documentation and keeping records of customer inquiries, customer contracts, and his or her requirements must be controlled and fully monitored by a process to help prevent any unexpected circumstances. This would be part of enhancing customer focus principle from initial customer inquiry to customer's final product delivery.
- **3.** Clause 5.0 and 6.0 in the standard, require the top management to allocate the competent employees to perform their assigned tasks. Thus, top management must provide the necessary resources in order to

achieve the effectiveness of the organization's QMS.

The arguments, about which QMS system is better than the other, continue to expand in the literature. Some researchers have shown that benefits are gained to the organizations if each system is adopted separately (Martinez-Lorente and Martinez-Costa, 2004) and others see that the benefits are enhanced when the two systems are implemented simultaneously. The author believes that there are barriers that make the differences in perceiving benefits from ISO 9001 QMS.

These barriers could be the cultural factors which may differ from region to region and country to country. Nevertheless, the main issue remains that ISO 9001 standard is just like any other quality management practices that adopt similar TQM principles and may achieve effectiveness and efficiency in the manufacturing and business firms.

However, TQM is a unique and tailor made approach, which has nothing to do with minimum or specific quality standards in any dimension (Pheng and Teo, 2009). As indicated by Lewis et al., (2006a), organizations implementing TQM are not obligated in any manner to develop such strategies. The content of quality management under TQM is thus varied across organizations and any similarities that originate from reasons other than the existence of basic and minimum standards is stipulated by any recognized institution.

Although TQM also targets the entire organizations, it can also be designed to focus on a specific aspect of the organization (Lewis et al., 2005). As a result, this tailor-made strategic imperative can be used for a limited period, under certain circumstances and over limited aspects of the organization. Levine and Toffel (2010) posited the fact that TQM emerges as a result of internal pressures making it a highly volatile and flexible approach to quality management.

Eventually, TQM represents the earliest efforts to establish QMS at the

organizational and international level (Costa et al., 2009). Amuragam et al. (2008) proposed that the aspects of TQM play a major role in the establishment of ISO standards, considering that the successes of the fragmented efforts by organizations resulted in the need to tap into the benefits of the universal standards.

Although numerous factors resulted in the emergence of ISO 9000 standards, customer focus and the need to protect consumers from exploitation remains a primary rationale for the universal standards (Lopes et al., 2011). Eventually, firms implementing QMS have the opportunity to target both approaches, considering that they are synergistic and interoperable.

2.7 Comparative Assessment of ISO Implementation among DifferentNations

Other studies from literature were done based on comparative assessments between two nations at minimum to investigate the differences in implementation and understand the cultural awareness in ISO 9001 QMS related employees. A study was done by Malik et al. (2007) to analyze and compare the continuous improvement practices in the manufacturing sector of Pakistan and China. Their research included ISO certified organizations of which 50 Pakistani and 45 Chinese manufacturing firms of all levels, which were surveyed and the data of which was used to analyze the differences in the implementation of quality systems and the barriers. The results of their study indicated that although these two countries implemented different quality management practices and used different methods to encourage local manufacturers to attain quality certifications, organizations were not successful in meeting their objectives. Other results indicated that both industries (Pakistani and Chinese) were ignoring continuous improvement practices in quality departments which should have been given higher preference. Moreover, it is an essential requirement as stated in the ISO 9001 QMS standard. Another study was done by Craig and Lemon (2008) to examine the ability of quality and environmental management systems in improving the technical capabilities and economic growth of rapidly developing countries such as China and Poland. Their research method comprised of surveying 112 heavy industrial factories in Poland and China and the data from these factories were analyzed for determining the quality and environmental performance of each factory. The results suggested that perceptions of employees are highly influenced by socio-cultural factors in the management chain. It was also concluded that the empirical and perception. Realities in quality and environmental systems were not coherent with each other and varied from organization to organization.

2.8 Benefits of ISO9001

ISO 9001 Certification will provide maximum benefit to your organization if it approaches ISO 9001 implementation in a practical way. This will ensure that the Quality Management Systems that are adopted, work to improve the business and are not just a set of procedures that your employees will find hard tomanage.

By adopting an approach that starts out to implement more efficient working practices and focuses on the business objectives of the organization, you will achieve a system that will help and support your staff, and improve your levels of customer satisfaction (Scott Dalglish, 2005,QualityMagazine).

2.8.1 The Advantages of Getting ISO 9001:2008 certification to your organization

- Provides senior management with an efficient management process
- Sets out areas of responsibility across theorganization
- Communicates a positive message to staff and customers

- Identifies and encourages more efficient and time savingprocesses
- Highlights deficiencies
- Reduces your costs
- Provides continuous assessment and improvement
- Marketing opportunities

To your customers:

- Improved quality andservice
- Delivery ontime
- Right first timeattitude
- Fewer returned products and complaints
- Independent audit demonstrates commitment toquality.

2.9 Quality Management System ISO 9001:2008 inIndustrial

In the manufacturing industry it is commonly stated that "Quality drives productivity." Improved productivity is a source of greater revenues, employment opportunities and technological advances. However, this has not been the case historically, and in the early 19th century it was recognized that some markets, such as those in Asia, preferred cheaper products to those of quality most discussions of quality refer to a finished part, wherever it is in the process. Inspection, which is what, quality insurance usually means, is historical, since the work is done. The best way to think about quality is in process control. If the process is under control, inspection is not necessary (Poksinska et al., 2002).

However, there is one characteristic of modern quality that is universal. In the past, when we tried to improve quality, typically defined as producing fewer defective parts, we did so at the expense of increased cost, increased task time, longer cycle time, etc. We could not get fewer defective parts and lower cost and shorter cycle times, and so on. However, when modern quality techniques are applied correctly to business, engineering, manufacturing or assembly processes, all aspects of quality - customer satisfaction and fewer defects/errors and cycle time and task time/productivity and total cost, etc. - must all improve or, if one of these aspects does not improve, it must at least staystableandnotdecline. So modern quality has the characteristic that it creates AND-based benefits, not OR-based benefits (Chow-Chua and Tan Boon (2003).

Quality, especially in manufacturing and diverse industries, is regulated, tested, and certified. Diverse methods, models and standards are provided to test the quality. For instance, the Fitness for Use (FFU), concept introduced to help test the quality of various types of electrical and electronic equipment, including household appliances and video/audio equipment. All types of equipment are manufactured in accordance to relevant standards, including performance testing requirements. FFU testing means testing products to ensure their 'fitness for Purpose; that is, to certify their quality as well as durability (Crosby and Philip 1979).

2.10 Previous Study:

2.10.1 Localstudies:

The study of Rehab Altaj Hasan Ali (2011) Objective of the study:

To evaluate application of quality, ISO and its impact on the upgrade and improve performance.

Purpose of the study indicated that lack of effective application of the principles of ISO reflected on the performance of employees and thus may cause the loss of customer; companies that have achieved success are those companies that have brought about positive changes in the culture of quality. The effective application of quality problem after resulting from poor perception of employees and believe that quality is the responsibility of the department of quality only.

Results of the study:

- (1) This study is one of the few studies that link quality culture with specific applications
- (2) This study is consistent with the trends of modern management science.
- (3) The study raised the problematic gap between the high levels of understanding and support on the one hand and lack of application in the company of the otherhand.

The study of Omer Abdel Aziz El Tigani (2011) Objective of the study:

The purpose of this research study was to assess the impact of the implementation of the ISO Quality Management System upon the performance of participating workers. Qualitative as well as quantitative research was conducted. Data were collected using a quantitative survey administered to 150 participants from either governmental or private and both sectors in the State of Qatar.

Findings:

Include the implementation of the ISO 9000 QMS has no impact on the performance of the participating organizations' workers. This research study also revealed some important points related to the organizations' workers and their performances under the umbrella of the ISO 9000 Quality Management System, which leads the Researcher to raise some questions to the concerned people in the International Organization for Standardization (ISO).

The study of Talha Elterify Ali (2007) The Objectives of the study:

To evaluate the impact of application of ISO 9001:2008 on the performance of Sheikan Insurance and Reinsurance Company.

The research aims to test the following hypothesis there is positive relation between ISO9001:2008 implementation and the company performance, company market shares and the company profitability.

The findings:

All the hypothesis mentioned above are accepted.

The research recommended that all much effort is to be exerted in order to ensure continuity of application of total quality management through creating conductive working condition, conduct afield research to measure the satisfaction of customers for the service providing by the company, the company must concentrate on the continues process improvement approach.

2.10.2 Arabic studies:

Study of (Hadidi, L., Assaf, S., Aluwfi, K., & Akrawi, H. 2017).

Purpose of this paper is to provide a method of evaluation based on the level of customers' satisfaction over five metrics (reliability, assurance, tangible, empathy, and responsiveness, methodology the methodology enables to benchmark the current level of satisfaction with prior levels of satisfaction before the ISO 9001 certification. The methodology is applied for the QMS pertinent to the design services (DS) for a large public company in Saudi Arabia. Three case studies were undertaken on the DS for large-scale. Construction projects .Findings the results show that the ISO 9001 certificate may not always demonstrate an evidence of improving customers' satisfaction levels and, hence, a gap analysis should be implemented to define possible areas of improvement .Research limitations/implications this work is limited to the construction industry. In specific, it addresses only the customer satisfaction related to the design management services. However, Saudi Arabia is known to host many large scale organizations that are heavily involved in international business trade .Originality/value it is a general perception in the industry that ISO 9000 implementation will mean good quality products. This work provides the argument that the ISO 9000 implementation should be tested on a regular basis to validate this perception. It shows that in some

cases the ISO 9000 did not improve the customers' satisfaction and, hence, the need arises for gap analysis to modify the QMS.

The study of Abbas Al-Refaie (2011) the effects of quality management practices on customer satisfaction and innovation: a perspective from Jordan.

The Objectives of the study:

To examines the structural relationships between nine quality management practices and investigates the impact of these practices on customer satisfaction (CS) and innovation for 130 ISO 9001 certified firms in Jordan.

The findings:

- (1) CS is directly and positively related to customer focus, continuous improvement and human resource (HR) management, while innovation is directly and positively affected by leadership and HRmanagement
- (2) Leadership has an indirect positive impact on CS, while it positively affectsCS.
- (3) Process management (PM) is positively related to supplier management (SM), quality tools and techniques (QTTs) and HR management, while it has an indirect and positive effect on CS.
- (4) HR management is positively related to leadership and it has a direct positive impact on CS, innovation, PM and QTTs and (5) finally, SM has a direct positive effect on PM. In conclusion, the awareness of Jordanian firms of these relationships may guide them to improve their internal performance as well as strengthen their externalcompetition.

The study of AMIRUL ALIFF BIN JAMALUDIN (2009)

The Objectives of the study:

Was mainly carried out by literature study, discussion with supervisor and preparing the letter go along with visit to International Islamic University Malaysia that already get their certification in QMS ISO 9000 Quality Management System. From that visit, there will be surveying process, analysis of the surveying, result and discussion of the implementation QMS ISO 9000.

Study by David McAlister (2009) showed the successful route to ISO 9001 registration of the Hillington based construction company Landscapes and Contracts.

The Challenge:

- 1. Gain certification in 9-monthperiod
- 2. Obtain Grant Assistance
- 3. Reduce resource time required to complete and submit tenders and PQPs 4. Better satisfy the expectations of customers.

The Result:

- 1. ISO 9001 certification awarded in 9months
- 2. Grant assistance secured
- 3. Enhanced management control ofprojects
- 4. Improved customer satisfaction
- 5. Improved operational efficiency

A study by Metal Parts Fabricating Company (2009) recognized the need to demonstrate their capability to produce consistent quality product.

They first used ISO 9000 to develop a plan to create an acceptable QMS. Next, they prepared the quality manual and quality system procedures as required by ISO 9001, excluding the requirements covering product design and development because their products are made to designs prepared by their customers.

2.10.3 Foreign Studies:

Study of (Moturi, C., & Mbithi, P. M. (2015).

The purpose of this paper is to present the experience and impact of implementing the ISO9001: 2008 Standard at the University of Nairobi. Design/methodology/approach the paper adopted a case study design approach based on qualitative analyst is of internal audit reports, internal surveys and feedback, surveillance audits conducted by the certifying body, and rankings by external bodies, over a period of seven years. Findings Significant achievements have been realized with regard institutionalization of quality into the university processes, work environment, documentation and record management, customer satisfaction, infrastructure and facilities, use of ICT as a prime mover of performance improvement, and ranking of the university. Opportunities for improvement as well as critical success factors are presented. Practical implications the paper reports successes that may encourage other institutions of higher learning that are not certified to implement Quality Management Systems (QMSs) according to ISO 9001Standard by focusing on specific factors. Originality/value this paper shows how an ISO 9001 certified QMS can improve internal institutional practices and avoid frequently experienceddrawbacks.

The study of Dr. David Muturi (2015) The Objectives of the study:

To establish the effect of ISO 9001 implementation on the performance of organizations in Kenya. It specifically targeted organizations listed on the Nairobi Securities Exchange (NSE) which is the leading securities exchange in EastAfrica.

Design/methodology/approach

The survey made use of web content analysis to collect data from these organizations' web sites. Data were collected on net profit, turnover and net assets over a four-year period (2010-2013). The research used statistical

data analysis to investigate the association between ISO 9001 implementation and performance.

Findings

Results of the survey reveal that ISO 9001 certification influenced return on net assets of the organizations thereby influencing their performance. There were significant differences in net asset value among organizations with ISO 9001 certification and those that did not possess the certification. On profit and revenue, there were no significant differences between the ISO 9001 certified and non-certified organizations.

The study of Michele Cano, Abdelssamad Kob (2010) The Objectives of the study:

In order to improve production efficiencies and maximize profits.

Methodology:

Organizations in Scotland have been adopting approaches such as Lean Manufacturing, Six Sigma and ISO9001:2008. Studies have been carried out comparing the benefits of these approaches (Kumar and Antony, 2008; Antony 2011; Bend ell, 2006; Naslund, 2008) or reviewing attempts at integrating continuous improvement approaches (Ho,2010).

The Findings:

Using performance indicators as a measure of the impact of these techniques is not well established. This paper presents preliminary results of research, based on interviews with nine Scottish manufacturing companies, to determine the impact of adopting continuous improvement approaches on key manufacturing and financialindicators.

The study of Yeap Hock Cheng (2004) The Objectives of the study:

The trend of implementing the ISO 9001quality system has grown quickly through the world, including in developed countries like US, UK as well as developing countries in South- East Asia. This research will study the impact of ISO 9001certification on manufacturing Industries in Malaysia. It

focuses on the effectiveness of ISO 9001 certification on market performance, operation performance and personnel performance as well as the market strategy as moderating factor. Besides, it also tries to understand the reasons for certification and problems faced by company when implementing The ISO 9001 system and also recommends the solution to overcome these problems.

Methodology:

The research was based on manufacturing companies in Northern Malaysia Questionnaires were used as the main research instrument. The SPSS software was used to analyze the data obtained from the questionnaires and to test the hypothesis put forward.

The findings:

The results of the analysis show that ISO 9001 certification give positive effects on the company's domestic market, operation and personnel performance but no significant difference on export market. Marketing strategy (overall cost leadership) was found to be a moderating variable between the relationship of ISO 9001 certification and export market performance.

The study of Goriwondo et al (2012)

Many manufacturing companies in Zimbabwe have been certified in a quest to improve their quality delivery. The main certification body in Zimbabwe is the Standards Association of Zimbabwe(SAZ).

Methodology:

It assesses the challenges that one certified manufacturing company is facing in a bid to sustain conformance to the ISO 9001: 2008QMS. Questionnaires and Interviews were the main research instruments used in the study. There was also reference to archival records and minutes of important meetings from the organization. Using stratified random sampling, questionnaires were administered to both managers and

employees drawn from different departments. Employees were also interviewed to provide further information to compliment the questionnaire data. The data was analyzed using statistical graphs and charts. This research identified how the organization applies the 8 principles of ISO 9001:2008QMS.

The findings:

The study revealed that the main challenges faced by the firm in maintaining the QMS are lack of top management involvement and support, lack of employee creativity and innovation, lack of focused internal audits, preventive maintenance schedule and data analysis lackpriority.

2.10.4 Comparison between previous study and current study

The current study is an extension of the previous studies but is distinguished from previous studies the following:

Firstly, the studies clearly addressed the role of implementing ISO 9001 on improving organizational performance and identify specific variables. Despite the similarity with David Muturi (2015) study in management patterns, and Omer Abdel Aziz El Tigani (2011) which dealt with the similar quality management system ISO 9000 Where the application of the quality management system, but the study identified specific dimensions including what which was determined by TalhaElterify (2007) and is therefore more comprehensive than all the incoming courses.

Second, addressing the issue that considered important in the current era and try to link it to the quality management system is not dealt by any of the previous studies to the knowledge of the researcher.

Third: Addressing an important sector of the productive economy, namely, the private industrial sector which contributes significantly to the national GDP, and addressed to one of the largest companies in the private sector and the first company in Sudan for edible oils production- Savola edible oil

company. The researcher agrees with all the results received from previous studies on the importance of applying quality management system on the general performance of the institution with different nature of its activity, what distinguishes research Is the impact on the improving an organization performance, unless it is addressed in previous studies.

2.11 CASE STUDY: Savola Edible OilsCompany

2.11.1 History

The Savola Group is a Saudi public listed company and one of the largest diversified conglomerates in MENACA region (Middle East, North Africa and Central Asia) managing a wide portfolio of businesses. The company was established in 1979, Savola's first business was in the edible oil industry in Saudi Arabia. Today, the Group has a work force of more than 16,000 employees, around 160,000 shareholders and ranked number 12 among the top 100 Saudi Companies in 2009 as per (Al-Eqtisadiah Newspaper Report) Savola Edible Oils Company Khartoum- Sudan established in 2005.

Scope of (Savola): Manufacturing of Edible Oils; Sunflowers, Groundnuts and Sesame Oil.

2.11.2 Strategy

"It have a clear vision of success through a balanced approach towards its corporate culture, a set of enhancing support activities and good intentions"

2.11.3 Vision

Give consumers a fair price, while ensuring returns to its investors and all stakeholders. Create a satisfying work experience for all Savolas. Inspire personal responsibility and enthusiasm for opportunity. With a workforce about 320 employees.

2.11.4 Marketing skills

Excel competitively by always looking for ways to create superior offers for its customers-what it calls "offer advantage." Remain responsive and

agile in growing market share through its market research, in-depth analyses and 25 years of experience.

2.11.5 Values

Maintain a commitment to our Savola corporate ethics while delivering value to all its stakeholders. This commitment is defined by The Balanced Way. Ensure world-class transparency in its corporate governance.

2.11.6 SAVOLA products:

The company produces several types of oils

Oil Bottles:

Shams, Altayeb, Sabah, and Zaaki they are available in 1liter, 2liter, 3liter, 4.5liter.

Oil Jerycans:

Altayeb available in 9liter and 18liter.

Oil Pouch:

Altayeb and Sabah they are available in 120ml and 240ml.

Chapter Three

Research Methodology

3.1 Introduction

The author in this chapter, described the method and procedures followed by the implementation of this study, including a description of the study population and how to prepare its tool. The actions taken to ensure truth fullness and reliability, and the way they have followed for the application, and statistical treatments under which analyze the data and extract the results, as section specifically includes a description of the methodology of the study.

3.2 Methodology:

This study based on theoretical background of methodology and thequantities design using a hypothesis testingapproach.

3.3 Population of The study:

The research seeks to circulate the results related to the problem studied. The original study population consists of engineers, internal auditors and external Auditors, technician and accountants.

The study sample was selected at random from the study population, where the researcher has distributed a number (50) questionnaire on the target of some accountants, administrators and responded (50) individuals which represents (100%) almost from the target, where the returned questionnaires filled in all the requiredinformation.

To get out the results as accurate as possible researcher keens on the diversity of the study sample in terms of coverage on the following:

1. Individuals of different age groups (25-40 years, 41-55- years, 56-70 years).

- 2. Gender : (Male and Female)
- 3. Individuals from different qualifications (secondary School, B.Sc., M.Sc., Ph.D.,other).
- 4. Individuals from different professional qualification (Engineering, Management, Accounting and others).
- 5. Individuals in terms of function (Accountant, Auditor, Administer, Technician andOther)
- 6. Individuals in terms of years of experience (1-5 years, 6-10 years, 11-15 years, 16 years and over).

3.4 Question are design

To answer the questions of the study and verification of hypotheses will be calculated median for each phrase of phrases questionnaire showing the views of a sample study of the impact on improving performance in the industrial organization where they were given class (5) as a weight for each answer "strongly agree", and the degree to (4) as a weight for each answer "I agree", and class (3) as a weight for each answer "neutral", and class (2) as a weight for each answer to " Class (1) as a weight for each answer "to strongly ". If all of the above and according to the requirements of the statistical analysis is to convert the nominal variables to the amount of variables, and then it will use the **chi square test** to see significant differences in the answers of the study sample phrases each hypothesis.

3.5 Data Collection:

To types of data will be collected namely; primary and secondary data. The primary data will be collected using questionnaire and the secondary data will be collected from relevant and available published and unpublished literature and documents from Savola Edible Company in which the research will be conducted.

3.6 Procedure:

The data will be analyzed using Statistical Package for Social Science (SPSS) version 24 with the aid of Microsoft Excel version 2016. Descriptive statistical methods will be applied to concerning personal data and **Chi square test** will be applied to test the researchhypothesis.

3.7 Reliability and validity:

Reliability is defining as the extent to which a questionnaire test observation or any measurement produces the same results on repeated trials. The result of reliability test reflects Cranach's alpha (Nunnaly, 1978, p.266).

Spss used Cranach's alpha value of (0.87) which reflects the measuring is highly reliable. **Validity** define as the extent to which the instrument measure what it purports to measure, specific intended domain of content (Nunnally, 1978, p232).

3.7.1 Reliability and consistency of the questionnaire:

Stability means that the questionnaire gives a similar result or the same results if it is re-applied more than once in the same conditions. To verify this, 50 samples were distributed to the sample by means of internal consistency (Cranach's alpha).

The coefficient of alpha Cranach's = (0.87) indicates the stability of the scale and Validity coefficient is the square of the islands so reliability coefficient is (.093), and this shows that there is a high sincerity of the scale and that the benefit of the study, which confirms the accuracy of the questionnaire and enjoy the confidence and acceptance of the results of this study results.

Cranach's alpha method:

Where the stability was calculated using the formula Cranach's alpha described below:

Reliability coefficient
$$= \frac{1 - \text{Total variations questions}}{\text{variation college grades}} * \frac{n}{N-1}$$

$$\text{Validity} = \sqrt{\frac{n}{N-1}} * \frac{1 - \text{Total variations questions}}{\text{variation college grades}} \text{Where n = the}$$

number of existing statements.

3.8 Ethics and Human Subject Issues:

No names or signs will appear in questionnaire, collection will be under full confidentiality, by using only numbers to facilitate analysis process.

Chapter Four

4. Data Analysis and Interpretation of Results

Introduction:

This chapter analyzes the data of the study, the analysis obtained using descriptive and analytical statistics, and the descriptive data helped the researcher to select the appropriate analysis or procedure in hypothesis testing.

4. 1 Statistical methods:

Its numerical statement of facts capable of analysis and interpretation and the science of statistics is the study of principles and the methods applied in collecting, presenting, analysis and interpreting the numerical data in any field of inquiry.

"I like to thinks of statistics as the science of learning from data ..." (Kettering, 1997, p.1229).

A total of 18 referred questions related to three dimensions in the questionnaire (see appendix 1, 2) were asked to the population of the study. The respondents were 50 employees; response was 100%, the dataanalyzed by IPM SPSS 24package.

4.1.1 Statistical tools:

The researcher used many statistical tools include the following:

- 1- Frequency tables
- 2- Percentages
- 3- Graphs
- 4- median
- 5- Chi squaretest

4.2 Step of Analysis:

Quantitative data in this study originated from across sectional survey.

The step for quantitative analysis are summarized in table (4-0)

Step one	Data integrity test	Checking quality, reliability and				
		validity of data				
Step tow	Descriptive analysis	Measures of frequencies for				
		survey				
		items, percentages, chi square				
		testing				
Step three	Data Compression					

Source: prepared by researcher

4.3 Data analysis:

The analysis of data was done for the two parts of the questionnaire as follow:

4.3.1 Demographicdata

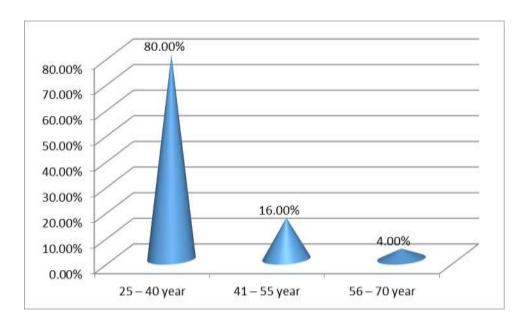
The primary purpose of this section is to describe the participants in this study who completed the survey, with respect to following demographic variables:

(1) Ages, (2) Gender, (3) Qualification, (4) the scientific specialization, (5) Job title, (6) Years of experiences.

1- Age
Table (4-1) illustrates the frequency and percentage for the Age

Gender	Frequencies	Percent age
25 – 40 year	40	80.0%
41 – 55 year	8	16.0%
56 – 70 year	2	4.0%
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of age group.

Figure (4) Prepared by the researcher of the field study, the Excel program, 2016

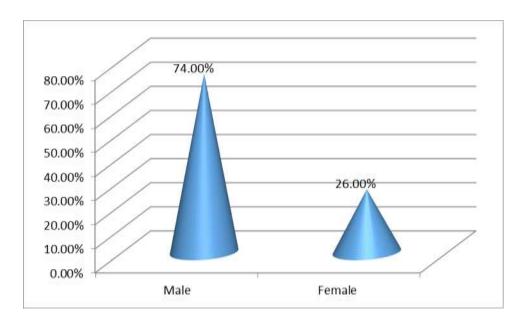
Table (4.1) illustrates the views of the distribution of the age sample by25-40yearby(%80.0)and41-55yearby(%16.0)and56-70 year by (%4.0).

2- Gender

Table (4.2) illustrates the frequency and percentage for the gender

Gender	Frequencies	Percent age
Male	37	74.0%
Female	13	26.0%
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of male and female.

Figure (4.1) Prepared by the researcher of the field study, the Excel program, 2016

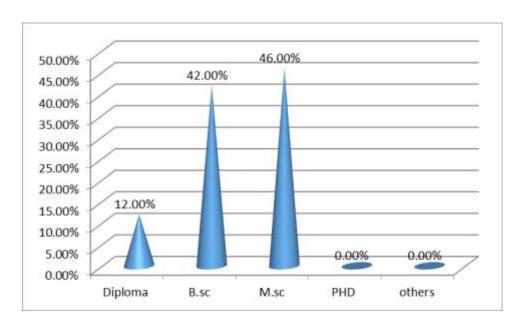
Table (4.2) illustrates the views of the distribution of the gender sample by male by (%74.0) and female by (%26.0).

3- Qualifications

Table (4.3) illustrates the frequency and percentage for the Qualification

Value	Frequencies	Percentage
Diploma	6	12.0%
B.sc	21	42.0%
M.sc	23	46.0%
PHD	0	0.0%
others	0	0.0%
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of qualification

Figure (4.2) Prepared by the researcher of the field study, the Excel program, 2016

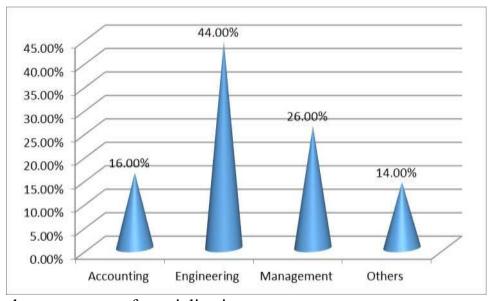
Table (4.3) illustrates the views of the distribution of the Qualification sample by Diploma by (%12.0) and B.sc by (%42.0) and M.sc by (%46.0) and PHD by (%0.0) and others by (%0.0)

4- Specialization

Table (4.4) illustrates the frequency and percentage for the Scientific Specialization

Scientific Specialization	Frequencies	Percentage
Accounting	8	16.0%
Engineering	22	44.0%
Management	13	26.0%
Others	7	14.0%
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of specialization

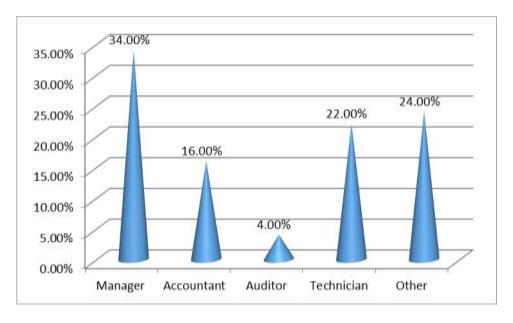
Figure (4.3) Prepared by the researcher of the field study, the Excel program, 2016 Table (4.4) illustrates the views of the distribution of the Scientific Specialization Sample Accounting by (%16.0) and Engineering by (%44.0) and Management by (%626.0) and others by (%14.0).

5- Occupation

Table (4.5) illustrates the frequency and percentage for the Occupation

Occupation	Frequencies	Percentage
Manager	17	34.0%
Accountant	8	16.0%
Auditor	2	4.0%
Technician	11	22.0%
Other	12	24.0%
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of occupation

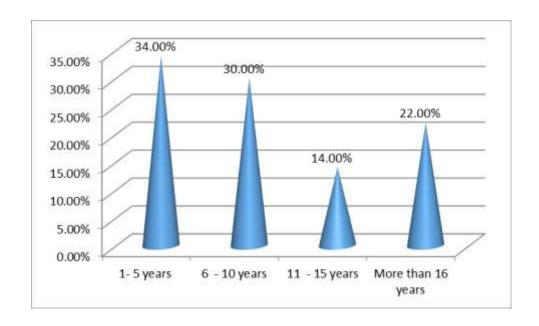
Figure (4.4) Prepared by the researcher of the field study, the Excel program, 2016 Table (4.5) illustrates the views of the distribution of the Scientific Specialization Sample by Manager by (%34.0) and Accountant by (%16.0) and Internal Auditor by (%4.0) and Technician by (%22.0) and other by (%24.0).

6- Experience

Table (4.6) illustrates the frequency and percentage for experience

experience	Frequencies	Percent age
1- 5 years	17	34.0%
6 - 10 years	15	30.0%
11 - 15 years	7	14.0%
More than 16	11	22.0%
years		
Total	50	100.0%

Prepared by the researcher of the field study, 2016



Shows the percentage of experiences

Figure (4.5) Prepared by the researcher of the field study, the Excel program, 2016

Table (4.6) illustrates the views of the distribution of the experience sample by 1- 5 years by (%34.0) and 5 - 10 years by (%30.0) and 11 - 15 years by (%14.0) and More than 16 by (22.0%).

4.4- Reliability and Validity

Cranach's alpha method: -

Where reliability was calculated using Cranach's alpha equation shown below:

Reliability coefficient=
$$\frac{1 - \text{Total variations questions}}{\text{variation college grades}} * \frac{n}{N-1}$$

Validity =
$$\sqrt{\frac{n}{N-1}}$$
 * $\frac{1 - \text{Total variations questions}}{\text{variation college grades}}$

Cranach alpha coefficient = (.087), a reliability coefficient is high and it indicates the stability of the scale and the validity of the study Validity coefficient is the square of the islands so reliability coefficient is (.093), and this shows that there is a high sincerity of the scale and that the benefit of the study.

Table (4.7) Cranach's alpha method

No	Value	reliability	Validity
1	The top management in the organization is	0.68	0.82
	well aware about ISO system requirements.		
2	the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desiredresults	0.74	0.86
3	Implementing ISO 9001 system lead to increasing productivity and revenue of the Company	0.76	0.87
Total		0.87	0.93

Source: IPM SPSS 24 package

4.4.1- Dimension of the questionnaire:

(i) First dimension: Table (4.8) illustrates the frequency and percentage for the top management in the organization are well aware about ISO systemrequirements

No	Items	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Top management requires various	10	25	12	3	0
	administrative levels to apply quality systems	20.0	50.0	24.0	6.0	0.0
2	The management continuously works to	16	26	7	1	0
	fulfill its obligations to customers	32.0	52.0	14.0	2.0	0.0
3	The company uses information and	10	23	16	1	0
	performance measurement in the improvement of its processes	20.0	46.0	32.0	2.0	0.0
4	The company has performance	10	24	13	3	0
	measurement system that evaluate the quality of its processes	20.0	48.0	26.0	6.0	0.0
5	Top management review the ISO system	4	16	21	7	2
	planned in the travels to ensure the effectiveness of the planed	8.0	32.0	42.0	14.0	4.0
6	The company has internal Auditing	5	15	20	8	1
	system use to inspect and monitoring the system and do very active to continue improvement	10.0	32 .0	40.0	16.0	2. 0

Source prepared by researcher using IPM SPSS 24 package

From the above table result shows:

Top management requires various administrative levels to apply quality systems by the strongly agree (%20.0) and agree by (%50.0) and neutral by (%24.0) and disagree by (%6.0) and strongly disagree by (%0.0).

The management continuously works to fulfill its obligations to customers by the strongly agree (%32.0) and agree by (%52.0) and neutral by (%14.0) and disagree by (%2.0) and strongly disagree by (%0.0).

The company uses information and performance measurement in the improvement of its processes by the strongly agree (%20.0) and agree by (%46.0) and neutral by (%32.0) and disagree by (%2.0) and strongly disagree by (%0.0).

The company has performance measurement system that evaluate the quality of its processes by the strongly agree (%20.0) and agree by (%48.0) and neutral by (%26.0) and disagree by (%6.0) and strongly disagree by (%0.0).

Top management review the ISO system planned in the travels to ensure the effectiveness of the planned by the strongly agree (%8.0) and agree by (%32.0) and neutral by (%42.0) and disagree by (%14.0) and strongly disagree by(%4.0).

The company has internal Auditing system use to inspect and monitoring the system and do very active to continue improvement by the strongly agree (%10.0) and agree by (%32.0) and neutral by (%40.0) and disagree by (%16.0) and strongly disagree by(%2.0).

Table (4.9) illustrates chi-square teat results for respondents answer about the top management in the organization are well aware about ISO system requirements

N o	Phrases	Chi- square value	df	Sig.	Median	Interpr etat ion
1	Top management requires various administrative levels to apply quality systems	20.240	3	0.000	4.00	agree
2	The management continuously workstofulfil its obligations to customers	28.560	3	0.000	4.00	agree
3	The company uses information and performance measurement in the improvement of its processes	20.880	3	0.000	4.00	agree
4	The company has performance measurement system that evaluate the quality of its processes	18.320	3	0.000	4.00	agree
5	Top management review the ISO system planned in the travels to ensure the effectiveness of the planed	26.600	4	0.000	3.00	neutral
6	The company has internal Auditing system use to inspect and monitoring the system and do very active to continue improvement	24.600	4	0.000	3.00	neutral

Source: prepared by researcher as result of data analysis

The results of table (4.9) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between the Top management requires various administrative levels to apply quality systems was (20.240) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

- 2. The value of chi square calculated to signify the differences between the management continuously works to fulfill its obligations to customers was (28.560) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 3. The value of chi square calculated to signify the differences between the company uses information and performance measurement in the improvement of its processes was (20.880) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 4. The value of chi square calculated to signify the differences between the company has performance measurement system that evaluate the quality of its processes was (18.320) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 5. The value of chi square calculated to signify the differences between the Top management review the ISO system planned in the travels to ensure the effectiveness of the planed was (26.600) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 6. The value of chi square calculated to signify the differences between the company has internal Auditing system use to inspect and monitoring the system and do very active to continue improvement was (24.600) with P- value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differencesstatistically.

(ii) Second dimension:

Table (4.10) illustrates the frequency and percentage for the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desired results

No	Items	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Employees know the	1	9	24	12	4
	procedures for					
	implementing the ISO	2.0	18.0	48.0	28.0	4.0
	system in the					
	organization					
2	Employees are	11	20	14	5	0
	convinced that quality					
	is one of their most	22.0	40.0	28.0	10.0	0.0
	important	22.0	10.0	20.0	10.0	0.0
	responsibilities in					
	achieving the					
	company's goals			1.0		
3	The company uses	3	21	18	4	4
	information and					
	performance	6.0	42.0	36.0	8.0	8.0
	measurement					
	in the improvement of					
4	its processes	4	22	1.5		2
4	The company do	4	23	15	6	2
	recourses	8.0	46.0	30.0	12.0	4.0
	to cover the needs of					
5	training of employees Employees participate	6	14	25	5	0
3	in the implementation	0	14	23	3	U
	process of the ISO	12.0	28.0	50.0	10.0	0.0
	system in the	12.0	20.0	30.0	10.0	0.0
	company					
6	The company	1	31	14	4	0
U	supports employees to	2.0	62.0	28.0	8.0	0.0
	meet	2.0	02.0	20.0	0.0	0.0
	customer needs					
	Custoffici ficcus					

Source prepared by researcher using IPM SPSS 24 package

From the above table result shows:

Employees know the procedures for implementing the ISO system in the organization by the strongly agree (%2.0) and agree by (%18.0) and neutral by (%48.0) and disagree by (%28.0) and strongly disagree by (%4.0).

Employees are convinced that quality is one of their most important responsibilities in achieving the company's goals by the strongly agree (%22.0) and agree by (%40.0) and neutral by (%28.0) and disagree by (%10.0) and strongly disagree by (%0.0).

The company uses information and performance measurement in the improvement of its processes by the strongly agree (%6.0) and agree by (%42.0) and neutral by (%36.0) and disagree by (%8.0) and strongly disagree by (%8.0).

The company do recourses to cover the needs of training of employees by the strongly agree (%8.0) and agree by (%46.0) and neutral by (%30.0) and disagree by (%12.0) and strongly disagree by (%4.0).

Employees participate in the implementation process of the ISO system in the company by the strongly agree (%12.0) and agree by (%28.0) and neutral by (%50.0) and disagree by (%10.0) and strongly disagree by (%0.0).

The company supports employees to meet customer needs by the strongly agree (%2.0) and agree by (%62.0) and neutral by (%28.0) and disagree by (%8.0) and strongly disagree by (%0.0).

Table (4.11) illustrates chi-square teat results for respondents answer about the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desired results

No	Phrases	Chi- square value	df	Sig.	Median	Interpret at ion
1	Employees know the procedures for implementing the ISO system in the organization	35.800	4	0.000	3.00	neutral
2	Employees are convinced that quality is one of their mostimportant responsibilities in achievingthe company's goals	9.360	3	0.000	4.00	agree
3	The company uses information and performance measurement in the improvement of its processes	30.600	4	0.000	3.00	neutral
4	The company do recourses to cover the needs of training of employees	31.000	4		4.00	agree
5	Employees participate in the implementation process of the ISO system in the company	20.560	3	0.000	3.00	neutral
6	The company supports employees to meet customer needs	43.920	3	0.000	4.00	agree

Source: prepared by researcher as result of dataanalysis

The results of table (4.11) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between the Employees are convinced that quality is one of their most important responsibilities in achieving the company's goals was (9.360) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

- 2. The value of chi square calculated to signify the differences between the company uses information and performance measurement in the improvement of its processes was(30.600)with P-value(0.000)which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 3. The value of chi square calculated to signify the differences between the company do recourses to cover the needs of training of employees was (31.000) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 4. The value of chi square calculated to signify the differences between the Employees participate in the implementation process of the ISO system in the company was (20.560) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 5. The value of chi square calculated to signify the differences between the company supports employees to meet customer needs was (43.920) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differencesstatistically.

(iii) Third dimension:

Table (4.12) illustrates the frequency and percentage for Implementing ISO 9001 system lead to increasing productivity and revenue of theCompany

No	Items	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Adopting ISO -9001	20	22	7	1	0
	system by the top management will help to increasing productivity and revenue of the companythrough implementation of it	40.0	44.0	14.0	2.0	0.0
2	The factory seeks to	16	29	4	1	0
	distinguish its products from competitors 'products in order to create a competitive advantage	32.0	58.0	8.0	2.0	0.0
3	The factory is keen to	11	30	9	0	0
	continuously on improve the production system and service in order to improve quality	22.0	60.0	18.0	0.0	0.0
4	Top management uses	6	22	18	4	0
	performance to ensure adequate performance and quality improvement system through implementing ISO	12.0	44.0	36.0	8.0	0.0
5	The factory seeks to	9	29	10	2	0
	assume its responsibilities towards the community through continual improvement of the product	18.0	58.0	20.0	4.0	0.0
6	Management considers	13	25	12	0	0
	continuous improvement in work as part of quality requirements	26. 0	50. 0	24.0	0.0	0.0

Source prepared by researcher using IPM SPSS 24 package

From the above table result shows:

Adopting ISO -9001 system by the top management will help to increasing productivity and revenue of the company through implementation of it by the strongly agree (%40.0) and agree by (%44.0) and neutral by (%14.0) and disagree by (%2.0) and strongly disagree by(%0.0).

The factory seeks to distinguish its products from competitors 'products in order to create a competitive advantage by the strongly agree (%32.0) and agree by (%58.0) and neutral by (%8.0) and disagree by (%2.0) and strongly disagree by (%0.0).

The factory is keen to continuously on improve the production system and service in order to improve quality by the strongly agree (%22.0) and agree by (%60.0) and neutral by (%18.0) and disagree by (%0.0) and strongly disagree by (%0.0).

Top management uses performance to ensure adequate performance and quality improvement system through implementing ISO by the strongly agree (%12.0) and agree by (%44.0) and neutral by (%36.0) and disagree by (%8.0) and strongly disagree by (%0.0).

The factory seeks to assume its responsibilities towards the community through continual improvement of the product by the strongly agree (%18.0) and agree by (%58.0) and neutral by (%20.0) and disagree by (%4.0) and strongly disagree by (%0.0).

Management considers continuous improvement in work as part of quality requirements by the strongly agree (%26.0) and agree by (%50.0) and neutral by (%24.0) and disagree by (%0.0) and strongly disagree by (%0.0).

Table (4.13) illustrates chi-square teat results for respondents answer about the Implementing ISO 9001 system lead to increasing productivity and revenue of the Company

No	Phrases	Chi- square value	df	Sig.	Median	Interpr etat ion
1	Adopting ISO -9001 system by the top management will help to increasing productivity and revenue of the company through implementation of it	24.720	3	0.000	4.00	agree
2	The factory seeks to distinguish its products from competitors 'products in order to create a competitive advantage.	39.120	2	0.000	4.00	agree
3	The factory is keen to continuously on improve the production system and service in order to improve quality	16.120	3	0.000	4.00	agree
4	Top management uses performance to ensure adequate performance and quality improvement system through implementing ISO	18.800	3	0.000	4.00	agree
5	The factory seeks to assume its responsibilities towards the community through continual improvement of the product.	32.080	2	0.000	4.00	agree
6	Management considers continuous improvement in work as part of quality requirements.	6.280	3	0.000	4.00	agree

Source: prepared by researcher as result of dataanalysis

The results of table (4.13) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between the Adopting ISO -9001 system by the top management will help to increasing productivity and revenue of the company through

- implementation of it was (24.720) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 2. The value of chi square calculated to signify the differences between the factory seeks to distinguish its products from competitors 'products in order to create a competitive advantage was (39.120) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 3. The value of chi square calculated to signify the differences between the factory is keen to continuously on improve the production system and service in order to improve quality was (16.120) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 4. The value of chi square calculated to signify the differences between the Top management uses performance to ensure adequate performance and quality improvement system through implementing ISO was (18.800) with P- value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differencesstatistically.
- 5. The value of chi square calculated to signify the differences between the factory seeks to assume its responsibilities towards the community through continual improvement of the product was (32.080) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
- 6. The value of chi square calculated to signify the differences between the Management considers continuous improvement in work as part of quality requirements was (6.280) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

4.5 Test of Hypothesis:

4.5.1- the top management in the organization are well aware about ISO system requirements.

Table (4.14) statistical measurements of first hypothesis

No	Chi- square	DF	Sig.	Median	Scale	Statistical significant
50	20.920	2	0.00	4	Agree	Significant

Source: prepared by researcher as result of data analysis

From the above table: The Chi-square test (20.920) by significant value (0.00) it's less than the probability value (0.05) this means that the top management in the organization are well aware about ISO system requirements.

4.5.2- the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desired results.

Table (4.15) statistical measurements of second hypothesis

No	Chi- square	DF	Sig.	Median	Scale	Statistical
						significant
50	38.000	3	0.00	4	Agree	Significant

Source: prepared by researcher as result of data analysis

From the above table: the Chi-square test (38.000) by significant value (0.00) it's less than the probability value (0.05) this means that the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desired results.

4.5.3- Implementing ISO 9001 system lead to increasing productivity and revenue of the Company.

Table (4.16) statistical measurements of third hypothesis

No	Chi- square	DF	Sig.	Median	Scale	Statistical significant
50	21.640	2	0.00	4	Agree	Significant

Source: prepared by researcher as result of data analysis

From the above table: the Chi-square test (21.640) by significant value (0.00) it's less than the probability value (0.05) this means that Implementing ISO 9001 system lead to increasing productivity and revenue of the Company.

4.6. Discussion:

When the implementation of ISO 9001-2008 at Savola Edible Oils Company was evaluation it has been found that they are applying the ISO9001-2008 accurately as there is an existence of a quality management system, provide human resource training and participation and good environment which are main issues in good quality system.

According to Chi-square test result in the previous chapter which result Sig. Value < 0.05 for all hypotheses and which reject the null hypotheses and accept the researcher hypotheses as shown in the following **table** (4.17).

Hypotheses	Result
The top management in the organization is well aware	True
and committed about ISO system requirements.	
The awareness of employees in the ISO system will	True
help them achieve the relevant policies and objectives,	
as well as achieve the desired results.	
Implementing ISO 9001 system lead to increasing	True
productivity and revenue of the Company.	

Chapter Five

5. Conclusion and Recommendation

5.1 Introduction

This Chapter summarizes the findings, highlight area of improvement and provide suggestions for future research.

5.2 Conclusion:

The solution of the problem statement and the achievement of the purpose of the research have been achieved at through the process of finding relevant literature, collecting and analyzing of data as seen in previous stages of the study, according to that results the findings are:

- 1- The top management in the organization are well aware and committed about ISO systemrequirements.
- 2-The awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desiredresults.
- 3-Implementing ISO 9001 system lead to increasing productivity andrevenue of theCompany.

The research was convinced that the (Savola Edible Oils company) is working to educate all employees and their knowledge of procedures for the application of ISO 9001:2008, the Sudanese Standards and Metrology organization is continuous assessment and improvement measurement accuracy and ensuring the consistency of the quality of management system and ensuring that customers' training needs are met in high level ofquality.

5-3 Recommendations:

This research recommends that further research will help the organization to:

- 1. Continuous improvement and development to achieve organization objective and customer satisfaction.
- **2.**Keep improving measurement accuracy, maintain continues review and corrective action of the quality management system and ensure the consistency of the service, to follow the gab by increase employee involvement and Continuous training of staff and finding out their needs to ensure their suitability and effectiveness.
- **3-** Bench marking project between organizations in same fields can help to develop/improve the internal process.
- **4-** More focus on customer complaints help improving products "customer complaints aregifts".

5.4 Suggestion for future researches:

Their work suggests conducting more researchers and future Studies in this field such as:

- **1.** The impact of training methodology on increase organization Performance.
- 2. Evaluation the role of perquisite program in QMS ISO9001:2008
- **3.** The causes of non-implementation QMS ISO9001:2008.

Chapter six

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Appendixes

Appendix 1: Questionnaire in English

Sudan University of Science and Technology

College of Graduate Studies Deanship of Quality and

Development

Research questionnaire

I put in your hands a questionnaire for the purposes of scientific research

on the role of implementing ISO 9001: 2008 system on improving the

organizational performance

I would appreciate your cooperation and cooperation in answering all the

statements contained in the questionnaire.

The information collected through your answers will be kept strictly

confidential and will only be used for scientific research purposes.

The questionnaire contains personal data and three main axes:

The first axis: related to the extent to which Top management understands

the requirements of the ISO system.

The second axis: related to the awareness and understanding of employees

of the ISO system.

The third axis: related to the effectiveness of the implementation of the

ISO system to increase the productivity and profits of the company.

Thank you for your cooperation.....

Researcher: HossameldinAbdelmonem Ali Hommeda

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Personal data Please put $(\sqrt{\ }$:) in the following expressions which is suitable to you.
1- Age	
25-40 years	41-55 years 56- 70 years
2/ Gender	
Male	Female
3-Education le	evel:
Diploma	B.Sc. M.Sc. PhD Others
4-Scientific Sp	pecialization:
Accounting [Engineering Management others
5-Occupation	Level:
Manager	Accountant Auditor Technician Other
6- Experience	:
1- 5 years	☐ 6 – 10 years ☐ 11 -15 years ☐ More than 16 years ☐

First dimension: The top management in the organization are well aware about ISO system requirements.

No	Item	Strongly agree	Agree	Neutral	Dis agree	Strongly dis agree
1	Top management requires various administrative levels to apply quality systems					
2	The management continuously works to fulfill its obligations to customers					
3	The company uses information and performance measurement in the improvement of its processes					
4	The company has performance measurement system that evaluate the quality of its processes					
5	Top management review the ISO system planned in the travels to ensure the effectiveness of the planed					
6	The company has internal Auditing system use to inspect and monitoring the system and do very active to continue improvement					

Second dimension: the awareness of employees in the ISO system will help them achieve the relevant policies and objectives, as well as achieve the desired results.

No	Item	Strongly agree	Agree	Neutral	Dis agree	Strongl y dis agree
1	Employees know the procedures for implementing the ISO system in the organization					
2	Employees are convinced that quality is one of their most important responsibilities in achieving the company's goals					
3	The company uses information and performance measurement in the improvement of its processes					
4	The company do recourses to cover the needs of training of employees					
5	Employees participate in the implementation process of the ISO system in the company					
6	The company supports employees to meet customer needs					

Third dimension:Implementing ISO 9001 system lead to increasing productivity and revenue of the Company.

No	Item	Strongly agree	Agree	Neutral	Dis agree	Strongly dis agree
1	Adopting ISO -9001 system by the top management will help to increasing productivity and revenue of the company through implementation of it					
2	The factory seeks to distinguish its products from competitors 'products in order to create a competitive advantage.					
3	The factory is keen to continuously on improve the production system and service in order to improve quality					
4	Top management uses performance to ensure adequate performance and quality improvement system through implementing ISO					
5	The factory seeks to assume its responsibilities towards the community through continual improvement of the product.					
6	Management considers continuous improvement in work as partof quality requirements.					

Thanks...

Appendix 2: Survey Questionnaire in Arabic

بسم الله الرحمن الرحيم جامعة السودان للعلوم والتكنولوجيا كلية الدراسات العليا عمادة الجودة والتطوير ماجستير إدارة الجودة الشاملة والإمتياز إستبيان لبحث علمى

السادة/

تحية طيبة و بعد.....

أضع بين أيديكم إستبيان لأغراض البحث العلمي لموضوع دور تطبيق نظام الآيزو 9001:2008 على تحسين أداء المنظمة.

أرجو من سيادتكم التفضل والتعاون بالإجابة على جميع العبارات الواردة في الإستبيان وأؤكد بأن

المعلومات التي سيتم جمعها من خلال إجاباتكم ستحاط بالسرية التامة وستستخدم فقط لأغراض البحث العلمي

يحتوي الإستبيان على بيانات شخصية وثلاث محاور أساسية تضم الاتى:

المحور الأول: متعلق بمدي إدراك الإدارة العليا بمتطلبات نظام الآيزو.

المحور الثاني: متعلق بمدى وعي وفهم الموظفين لنظام الآيزو.

المحور الثالث: متعلق بفاعلية تنفيذ نظام الآيزو في زيادة الإنتاجية وأرباح الشركة.

وشكر الحسن تعاونكم الباحث : حسام الدين عبدالمنعم علي حميده ماجستير إدارة الجوده الشاملة والإمتياز جامعة السودان

) في العبارات التالية التي تناسبك 	يرجى وضع (ا
		العمر 1
70-56 سنه	55-41 سنه	40-25ستة
		الجنس 2
	ذكر	أنثي ا
		المؤهل العلمي3
أخري(تذكر)	كالريوس ماجستير كتوراه	دبلوم 🔃 ب
	•	التخصص العلمي4
ىر ي (تْذكر)	إدارة الله الدائد الدائد الدائد	محاسبة

مراجع ___ محاسب ___ أخري(تُذكر) ___

البيانات شخصية:

<u>5 الدرجة الوظيفية</u>

<u>6 الخبره</u>

يرجى وضع (٧) حول الإجابة التي تراها مناسبة على العبارات أدناه.

المحور الأول:

1/ الإدارة العليا في المنظمة تدرك جيدا متطلبات نظام الايزو.

لا أوافق	لا أوافق	محايد	أو افق	أوافق	البنود	الرقم
بشده				بشده		
					تُلزم الإدارة العليا مختلف المستويات الإدارية	1
					بتطبيق أنظمة الجودة	
					تعمل الإدارة بشكل مستمر علي الوفاء	2
					بإلتزاماتها تجاه الزبائن	
					تستخدم الشركة المعلومات وقياس الأداء في	3
					تحسين عملياتها	
					تمتلك الشركة نظام قياس الأداء الذي يقيم جودة	4
					عملياتها	
					تقوم الإدارة العليا بمراجعة نظام ايزو المخطط	5
					له في الرحلات لضمان فعالية الخطة	
					الشركة لديها نظام تدقيق داخلي تستخدمه لفحص	6
					ورصد النظام بصورة نشطه جدا لمواصلة	
					التحسين	

المحور الثاني:

2/ إن وعي الموظفين بنظام ISO سيساعدهم على تحقيق السياسات والأهداف ذات الصلة، وكذلك تحقيق النتائج المرجوة.

لا أوافق	لا أوافق	محايد	أوافق	أوافق	البنود	الرقم
بشده				بشده		
					الموظفين يعرفون إجراءات تنفيذ نظام	1
					الايزو في المنظمة	
					المخلفي على قلحة بأل الجردة من أهم سؤاياتهم	2
					في تخ ق ى أهف الر كة	
					في شركتك يتم أخذ إقتراحات الموظفين في	3
					الحسبان ويتم تنفيذها	
					الشركة تفعل الموارد لتغطية احتياجتدريب	4
					الموظفين	
					يشارك الموظفين في عملية التنفيذ لنظام	5
					الايزو في الشركة	
					تدعم الشركة الموظفين لتلبية إحتياجات	6
					العملاء	

المحور الثالث: 3/ تنفيذ نظام ايزو 9001 بفعالية يؤدي إلى تحسين الأداء وزيادة الإنتاجية والإيرادات للشركة.

لا أوافق	لا أوافق	محايد	أوافق	أوافق	البنود	الرقم
بشده				بشده		
					اعتماد نظام الايزو -9001 من قبل الإدارة	1
					العليا سيساعد على زيادة الإنتاجية	
					والإيرادات للشركة من خلال تنفيذ ذلك	
					يسعي المصنع إلي تمييــز منتجاتــه عــن	2
					منتجات المنافسين بغرض خلق ميزه	
					تنافسية.	
					يحرص المصنع على التحسين المستمر على	3
					نظام الإنتاج والخدمة من أجل تحسين الجودة	
					الإدارة العليا تستخدم الأداء لضمان الأداء	4
					الكافي وتحسين الجودة من خلال تنفيذ نظام	
					الايزو	
					يسعي المصنع الي تحمل مسؤولياته تجاه	5
					المجتمع من خلال التحسين المستمر للمنتج.	
					تنظر الإدارة إلي التحسين المستمر في العمل	6
					على أنه جزءا من متطلبات الجودة.	

Appendix 3: list of Questionnaire Arbitrators

Dr/ ASHRAF HASSAN IDREISS	Dean of statistic and information center Sudan university of science and technology
Dr/ AWADIA ALKHATEEB	Dean of Total Quality and Excellence Center
Dr/ ABDALRAZIG ALBOUNEY	Dean of Deanship of Quality and Development Sudan university of science and technology