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Sudan University of Science and Technologies

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The Role of Implementing ISO 9001:2008 onperformance of Sudanese Customs

دور تطبيق نظام الايزو 9001-2008 علي اداء الجمارك السودانية

A Dissertation Submitted as partial fulfillment for the Degree M.Sc. in Total Quality Management and Excellence

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إستهلال

بسم الله الرحمن الرحيم

﴿ وَمَا أُوتِيتُم مِّنَ الْعِلْمِ إِلَّا قَلِيلًا ﴾

[الإسراء: 85]

Dedication

To my mother, my father, my brothers, sisters and my wife

To the spirit that inspired me, to my special world

To my friends and colleagues

I dedicate my humble effort

A C K N O W L E D G E M E N T

Abstract

The aim of this study to identify the role of implementing ISO9001/:2008 standards on the performance of the Sudanese Customs Training Administration.

The study population consisted of the personal from all department of SCTA. The researcher useddescriptiveapproach andsystem of statistical analysis and Chi-square to calculate the assumptions of statistical significance in the analysis of the questionnaire, which was distributed to a random sample of members of (SCTA).

The analysis of the results showed that there are statistical significance indicators for implementation of ISO 9001-2008 in the Sudanese Customs Training Administration.

The study found that the service provided **SCTA**ishighquality**,**theawareness and commitment of the top managers of ISO 9001-2008 is good, there is clear quality management system with known responsibilities in side **SCTA** and working environment inside is suitable and helps in correct testing results and provide reliable and high quality output of services.

The study recommend that the **STCA** 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 customer satisfaction.

مستخلص الدراسة

الهدف من هذا البحث هو تحديددورتطبيق نظام الأيزو   9001-2008 ودوره في تحسين أداءإدارة التدريب الجمركي السودانية.

تألفت عينة الدراسة من كل الأشخاص في جميع الأقسام في ادارة التدريب الجمركي السودانية.

استخدم الباحث المنهج الوصفي ونظام التحليل الإحصائي ومربع كاي لحساب الفرضيات ذات الدلالةالإحصائية في تحليل الاستبيان الذي تم توزيعه على عينه عشوائية من أفراد ادارة التدريب الجمركي السودانية.

أظهر تحليل النتائج وجود مؤشرات ذات دلالة إحصائية لتنفيذ نظام الأيزو 2008-9001 في ادارة التدريب الجمركي السودانية.

وقد توصلت الدراسة الي مجموعة من النتائج اهمها ان الخدمات المقدمة بواسطة ادارة التدريب مطابقة للجودة المطلوبة كما يوجد نظام اداري واضح لادارة الجودة داخل ادارة التدريب بالاضافة الي ان بيئة العمل داخل ادارة التدريب مناسبه وتساعد في إعطاء نتائج صحيحه للتدريب وتوفر خدمة موثوقة وعالية الجودة.

اوصت الدراسة بان علي الادارة العامة للتدريب الاهتمام والتركيز علي التحسين المستمر وزيادة مشاركة الموظفين وتنفيذ الاجراءات التصحيحية والمحافظة علي تنفيذ نظام ادارة الجودة للحصول علي اهداف المنظمة ورضا العاملين والمتدربين..

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List of Abbreviation

Abbreviation	Definition
ISO	International Organization for Standardization
SCTA	Sudanese Customs Training Administration

CHAPTER ONE

GENERAL FRAME WORK

Chapter One

General Frame Work

1.1 Introduction

The development and advancement of human resources is one of the essential pillars to achieve the progress and the required objectives because of its primary role in refinement of skills and development of human efficiency in its scientific and professional aspects to comply with customs needs regarding good workers and to enable customs to achieve its strategic objectives to reach the ends under the present situations distinguished by increase of globalization currents and acceleration of technical development levels to add new extension to the concept of competitive merit for countries concerned by human resources and improvement of kind of working power and rising of production efficiency and development of their capacity innovation and creation in the field of modern technology, because it's the only way for apprehension of these changes customs administration that seeking to develop itself and achieve its goals should have to rearrange its priorities and should adopt efficient access for administration of human resources through formation of integrated team work from workers who have the capacity, expertise, skills and efficiency to do this work, and therefore increase the concern by training to be one of the most important jobs of customs authority.

Today the world has become a global village and domestic and export trade is vital to the development of any country's economy. The key to lowering of the barriers to international trade is accreditation, the whole basis of which is to create confidence in the work carried out by certification and inspection bodies.

 The main objective of training directorate is to build the capacity of human resource by technical, administration behavioral and information qualification through integral group of training programs.

1.1.1 Research Problem:

The weakness in quality management system of Training Administration' services reflect in the total quality of products and services in many sectors in Sudan such as the pharmaceutical industry, electricity industry, oil & gas industry, agriculture, real estate industry, ….etc.

1.1.2 Research Questions:

1. Is there isquality management system inside the Sudanese Customs Training Administration?
2. What is the impact of implementation of ISO 9001 on improve the performance of the Sudanese Customs Training Administration?
3. Implementations of ISO 9001 improve the quality of services provided by Sudanese Customs Training Administration?
4. Is work environment inside the training center suitable and helps in correct training results and provide reliable and high quality output of services?

1.1.3Significance of the Research:

Nowadays, quality is important in business and industries world. Many of the customer required high quality product and service. In order to fulfill the requirement of the customer, organizations must have a quality system to ensure that their product or service has high quality to fulfill the customer requirement.

For the Sudanese Customs Training Administration which providetraining to the trainees, the Sudanese Customs Training Administration should have a quality system to ensure that the training result has high quality and fulfill the requirements of the trainees.

ISO9001:2008 is one of the standards which provide guidance on how to develop quality system insidetrainingto increase the quality of services deliver to their trainees.

The Importance of this research is that itreflects the extent ofthe impact ofimplementing **ISO/9001:2008**onthequality of services providedbytheSCTA.

1-2 Research Objectives:

1-2-1 General objective:

- To evaluate the implementation of ISO 9001in theSCTA.

1.2.2 Specific objectives:

1. To study and identify the clauses of ISO9001-2008.

2. To examine if implementing ISO9001-2008can provide high quality working environment.

3. To examine if implementing ISO9001-2008can help the training center to provide reliable and high quality results.

4. To examine if implementation of international standards like QMS ISO 9001 contributed in facilitation of trade and economic growth for the **SCTA**.

1-4 Hypotheses:

- **The first hypotheses**: The awareness and perception of top managers of ISO9001 will helped them in the process of evaluation and measuring the Quality Management System as well achieving intended services.
- **The second hypotheses:** Work environment inside the training center is suitable and helps in correct training results and provide reliable and high quality result.
- **The third hypotheses:** Implementing ISO 9001 Quality Management System enhances the performance and the quality of (STCA).
- **The forth hypotheses:** There is aquality managementsystemtoidentifytrainingneedsandstaff training in (STCA).

1-5 Methodology of the study:
This study is based on **theoretical background** of methodology and the **quantitative design** using **a hypothesis testing approach a**nd **descriptive approach** because they fits with the nature of this study.

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CHAPTER TWO

Literature review and Pervious Studies

Chapter Two

Literature review

2.1 Background

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies

(ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electro technical Commission (IEC) on all matters of electro technical standardization(Richard B.Chase. Nicolas.Prodution and Operation Management edition USA190).

ISO 9001:2008 specifies requirements for a quality management system where an organization:

- Needs to demonstrate its ability to consistently provide product that meets customer and applicable statutory and regulatory requirements, and
- 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.
- The ISO9001 standard is widely used in manufacturing and service organizations to evaluate their system for managing the quality of their product or service. Certification of an organization's quality management system against ISO9001 aims at confirming the compliance of the management system to this standard.

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2.1.1History and status of ISO9001:2008

The UK's very first quality management standard was known as BS 5750.
Driven by the Ministry of Defense, this standard specified how the
manufacturing process should be managed, instead of looking at what was
manufactured. In 1987, It was named ISO 9001 with variants developed to cover
different types of business. Although ISO 9001:1987 followed BS 5750's
structure, it also came with three models for quality management systems. One
looked at quality assurance in design, development, production, installation and
servicing for companies creating new products. The second model focused on
production, installation and servicing, while the third covered final inspection
and testing with no concern for how the product was made (David Hoyle 2001,
page81).

From 1994 to 2008 ISO 9001:1994 placed particular emphasis on product
assurance using preventive actions, instead of just checking the final product. It
also required companies to comply with documented procedures – recognizing
the trend to manage quality by control rather than assurance.

ISO 9001:2000 placed quality and process management at its core, changing the
previous versions radically. It aimed to first understand the client's requirements
before designing processes that would help them to deliver on these. The
standard also looked at how to continuously improve processes and track
customer satisfaction.

Where previous versions focused on quality control, ISO 9001:2000 was built on
quality management.

ISO 9001:2008 only made the existing requirements of the 2000 version
specification clearer. It also incorporated some changes to make it more
consistent with ISO 14001:2004, the environmental management system
standard.(http//www.british-assessment.co.uk/ser/iso-certtifaction/iso9001-history)

2.1.2. ISO 9001:

Understanding ISO 9001

ISO 9001 has been designed to be used by any organization, large or small, whatever its products or services and can be the backbone to creating a more successful business. Here we explain some of the basics and how to start implementing ISO 9001 so you can reap the benefits.

A management system is simply the way an organization manages its processes, people and other resources so that its products or services meet their objectives and customer requirements (http//www.iso.org/iso/iso_9000).

For example, your objective may be to ensure that you produce quality products to your customers or comply with statutory regulations. The system should be both flexible and scalable to your business and helps embed a culture of continual improvement.

ISO has published more than 18000 standards, but for this study, ISO 9001 Quality Management System has been focused for its requirements. 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".

2.1.3 Process approach

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 1.1 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 covers all the requirements of this International Standard, but does not show processes at a detailed level.

Figure 1 .1— Model of a process-based quality management system
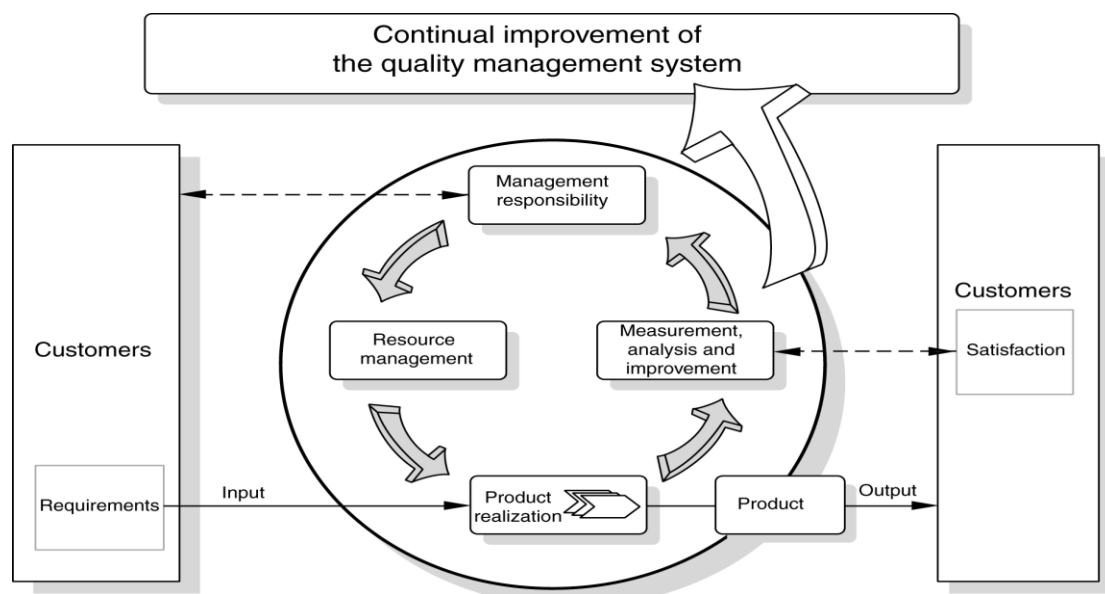
Source(Module 6Quality Management System .Total and Excellence center Sudan Khartoum p43)

Table 1. The ISO 9001 QMS is built upon eight fundamental principles of quality management of, as detailed (ISO, 2005, p. v-vi)

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

2.1.4 Overview of the Content of QMS ISO 9001:2008

TheQuality 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).

1 Scope

1.1 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.

1.2 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 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.

3 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".

4 Quality management systems

4.1 General requirements

The organization shall establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of this International Standard.

4.2 Documentation requirements

4.2.1 General

The quality management system documentation shall include

a) Documented statements of a quality policy and quality objectives,

b) A quality manual,

c) Documented procedures and records required by this International Standard, and

d) Documents, including records, determined by the organization to ensure the effective planning, operation and control of its processes.

4.2.2 Quality Manual

The organization shall establish and maintain a quality manual that includes

a)   The scope of the quality management system, including details of and justification for any exclusion,

b)   The documented procedures established for the quality management system, or reference to them, and

c)   A description of the interaction between the processes of the quality management system.

4.2.3 Control of documents

Documents required by the quality management system shall be controlled. Records are a special type of document and shall be controlled according to the requirements given in 4.2.4.

A documented procedure shall be established to define the controls needed

a) To approve documents for adequacy prior to issue,

b) To review and update as necessary and re-approve documents,

c) To ensure that changes and the current revision status of documents are identified,

d) To ensure that relevant versions of applicable documents are available at points of use,

f) To ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the quality management system are identified and their distribution controlled, and

g) To prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

e) To ensure that documents remain legible and readily identifiable,

4.2.4 Control of records

Records established to provide evidence of conformity to requirements and of the effective operation of the quality management system shall be controlled.

The organization shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records.

Records shall remain legible, readily identifiable and retrievable.

5   Management responsibility

5.1   Management commitment

Top management shall provide evidence of its commitment to the development and implementation of the quality management system and continually improving its effectiveness by

a)   Communicating to the organization the importance of meeting customer as well as statutory and regulatory requirements,

b)   Establishing the quality policy,

c)   Ensuring that quality objectives are established,

d)   Conducting management reviews, and

e)   Ensuring the availability of resources.

5.2 Customer focus

Top management shall ensure that customer requirements are determined and are met with the aim of enhancing customer satisfaction.

5.3 Quality policy

Top management shall ensure that the quality policy

a)   is appropriate to the purpose of the organization,

b)   includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system,

c)   provides a framework for establishing and reviewing quality objectives,

d)   Is communicated and understood within the organization, and

e)   Is reviewed for continuing suitability.

5.4 Planning

5.4.1 Quality objectives

Top management shall ensure that quality objectives, including those needed to meet the requirements for product, are established at relevant functions and levels within the organization. The quality objectives shall be measurable and consistent with the quality policy.

5.4.2 Quality management system planning

Top management shall ensure that

a)   The planning of the quality management system is carried out in order to meet the requirements given in 4.1 as well as the quality objectives, and

b)   The integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

5.5 Responsibility, authority and communication

5.5.1 Responsibility and authority

Top management shall ensure that responsibilities and authorities are defined and communicated within the organization.

5.5.2 Management representative

Top management shall appoint a member of the organization's management who, irrespective of other responsibilities, shall have responsibility and authority that includes

a)   Ensuring that processes needed for the quality management system are established, implemented and maintained,

b)   Reporting to top management on the performance of the quality management system and any need for improvement, and

c) Ensuring the promotion of awareness of customer requirements throughout the organization.

5.5.3 Internal communication

Top management shall ensure that appropriate communication processes are established within the organization and that communication takes place regarding the effectiveness of the quality management system.

5.6 Management review

5.6.1 General

Top management shall review the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

Records from management reviews shall be maintained.

5.6.2 Review input

The input to management review shall include information on:

a)   Results of audits,

b)   Customer feedback,

c)   Process performance and product conformity,

d)   Status of preventive and corrective actions,

e)   Follow-up actions from previous management reviews,

f)   Changes that could affect the quality management system, and

g) Recommendations for improvement.

5.6.3 Review output

The output from the management review shall include any decisions and actions related to:

a)   Improvement of the effectiveness of the quality management system and its processes,

b)   Improvement of product related to customer requirements, and

c)   Resource needs.

6 Resource management

6.1 Provision of resources

The organization shall determine and provide the resources needed

a) To implement and maintain the quality management system and continually improve its effectiveness, and

b) To enhance customer satisfaction by meeting customer requirements.

6.2 Human resources

6.2.1 General

Personnel performing work affecting conformity to product requirements shall be competent on the basis of appropriate education, training, skills and experience.

6.2.2 Competence, training and awareness

The organization shall

a)   determine the necessary competence for personnel performing work affecting conformity to product requirements,

b)   Where applicable provide training or take other actions to achieve the necessary competence.

c)   Evaluate the effectiveness of the actions taken,

d)   Ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives, and

a) Maintain appropriate records of education, training, skills and experience.

6.3 Infrastructure

The organization shall determine, provide and maintain the infrastructure needed to achieve conformity to product requirements.

6.4 Work environment

The organization shall determine and manage the work environment needed to achieve conformity to product requirements. Note: The term 'work environment' relates to those conditions under which work is performed including physical environmental and other factors (such as noise, temperature, humidity, lighting or weather).

7 Product realization

7.1 Planning of product realization

The organization shall plan and develop the processes needed for product realization. Planning of product realization shall be consistent with the requirements of the other processes of the quality management system.

In planning product realization, the organization shall determine the following.

7.2 Customer - related processes

7.2.1 Determination of requirements related to the product

7.2.2 Review of requirements related to the product

7.2.3 Customer communication

7.3 Design and development

7.3.1 Design and development planning

7.3.2 Design and development inputs

7.3.3 Design and development outputs

7.3.4 Design and development review

7.3.5 Design and development verification

7.3.6 Design and development validation

7.3.7 Control of design and development changes

7.4 Purchasing

7.4.1 Purchasing process

The organization shall ensure that purchased product conforms to specified purchase requirements. The type and extent of control applied to the supplier and the purchased product shall be dependent upon the effect of the purchased product on subsequent product realization or the final product.

7.4.2 Purchasing information.

7.4.3 Verification of purchased product

7.5 Production and service provision

7.5.1 Control of production and service provision

7.5.2 Validation of processes for production and

Service provision.

7.5.3 Identification and traceability

7.5.4 Customer property

7.5.5 Preservation of product

7.6 Control of monitoring and measuring equipment

8.0 Measurement, analysis and improvement

8.1   General

The organization shall plan and implement the monitoring, analysis and improvement processes needed

a)   To demonstrate conformity to product requirements.

b)   to ensure conformity of the quality management system, and

c)   To continually improve the effectiveness of the quality management system.

This shall include determination of applicable methods, including statistical techniques, and the extent of their use.

8.2   Monitoring and measurement

8.2.1 Customer satisfaction

As one of the measurements of the performance of the quality management system, the organization shall monitor information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information shall be determined**.**

8.2.2 Internal audit

The organization shall conduct internal audits at planned intervals to determine whether the quality management system

a)   Conforms to the planned arrangements , to the requirements of this International Standard and to the quality management system requirements established by the organization, and

b)   Is effectively implemented and maintained.

An audit programmer shall be planned, taking into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods shall be defined. The selection of auditors and conduct of audits shall ensure objectivity and impartiality of the audit process. Auditors shall not audit their own work.

8.2.3 Monitoring and measurement of processes

The organization shall apply suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods shall demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action shall be taken, as appropriate.

8.2.4 Monitoring and measurement of product

The organization shall monitor and measure the characteristics of the product to verify that product requirements have been met. This shall be carried out at appropriate stages of the product realization process in accordance with the planned arrangements. Evidence of conformity with the acceptance criteria shall be maintained.

Records shall indicate the person(s) authorizing release of product for delivery to the customer.

The release of product and delivery of service to the customer shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.3   Control of non-conforming product

The organization shall ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. A documented procedure shall be established to define the controls and related responsibilities and authorities for dealing with nonconforming product.

Analysis of data

The organization shall determine, collect and analyses appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made. This shall include data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data shall provide information relating to

a) Customer satisfaction.

b) Conformity to product requirements

c) Characteristics and trends of processes and products

Including opportunities for preventive action.

8.5 Improvement

 8.5.1 Continual improvement

The organization shall continually improve the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

8.5.2 Corrective action

The organization shall take action to eliminate the causes of nonconformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the nonconformities encountered.

 A documented procedure shall be established to define requirements for

a) Reviewing nonconformities (including customer complaints),

b) Determining the causes of non-conformities,

c) Evaluating the need for action to ensure that non-conformities do not recur,

d) Determining and implementing action needed,

e) Records of the results of action taken and

f) Reviewing the effectiveness of the corrective action taken.

8.5.3 Preventive action

The organization shall determine action to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions shall be appropriate to the effects of the potential problems.

Benefits of ISO 9001

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 to manage.

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,Quality Magazine).

2.1.5The Advantages of getting ISO 9001:2008 certification

To your organization:

- Provides senior management with an efficient management process
- Sets out areas of responsibility across the organization
- Communicates a positive message to staff and customers
- Identifies and encourages more efficient and time saving processes
- Highlights deficiencies
- Reduces your costs
- Provides continuous assessment and improvement
- Marketing opportunities

To your customers:

- Improved quality and service
- Delivery on time
- Right first time attitude
- Fewer returned products and complaints
- Independent audit demonstrates commitment to quality.

2.2 Historical Background

Customs authority is concerned since early times by training aiming at increasing the knowledge and skills of workers and promotes their behavior that is why customs institute was established in 1960 in customs headquarters to qualify and training of customs officers to perform their different duties. Before that training was conducted for the job. The institute was began to hold refreshing course since that time in customs headquarters, 20 officers was selected from different stations for the first refreshment course, these courses was being held every two years. This system was changed to held course annually since 1965 – In 1984 the institute was removed from the headquarters to its present location in Elimarat, Street No. II. First secondary graduates was accepted in 1985 from 72 person. Patch of university graduates was accepted in 1986 from 68 person. After that training of new officers to acquire the knowledge and the required capacity qualifying them to customs work in its different departments (Altahier, 2014, p53).

After the issuance of the decision 1137 transferring customs to be military force. In 2005 the institute name was changed to training administration to supervise on the military training in coordination with the police faculty. Training administration became administration headed by police Brigadier with the following responsibilities:

1. Set up of plans and general policy regarding training and qualifying in customs authority

2. Preparing proposals of training balance and seeks to be adopted with the responsible parties and to implement what is being adopted properly
3. Conducting an annual survey to determine the needs and means of training
4. Strengthening the relations with the relevant training institutes inside and outside Sudan
5. Evaluation of officers, non-commissioned officers and soldiers training performance
6. Supervising on scientific and professional studies in customs authority.

Vision

Distinct and authorized administration in all fields of customs capacity building and skills development of human

Mission

Introducing distinct training and technical, administrative, economic, military, academic and customs services to all stakeholders inside and outside customs authority by using education and information technology and performance management

Values

This strategy has been set up depending on group of values and essential principles that inspire training directorate personal and it's not so mere words to be said but values followed to be an example for the others

1. Country love
   Membership, award, love, sacrifice
2. Customer first
   Satisfying customer is apriority; we know he has essential needs we seek to be achieved
3. Integrity
   Integrity and non-alignment when regarding issuance of rule
4. Transparency
   Clearness in dealing with customers
5. Quality assurance
   Doing the required job correctly and in the meant time
6. Team work
   Doing the job in team spirit to achieve a common vision
7. Professionally

   Doing the job professionally according to the system and regulations without personal tendency

2.3 Previous studies

Study No 1:

Entitled "Impact of Application of ISO 9001:2008 on the performance of Sheikan Insurance and Reinsurance Company (2007-2010)''by TalhaElterafi Ali, Page II

The main objective of this research is to studytheimpact 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 share and the company profitability.
The findings of the study indicate that 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 .

Study No 2:

Entitled "Application of quality, ISO and its impact on the upgrade and improve performance '' by Rehab Eltag Hassan .Page II.

Purpose of the study indicated that lack of effective application of the principle of ISO reflected on the performance of employees and thus may cause the loss of the customer, companies that have brought about positive changrs in the culture of the quality.
The effective application of ISO often resulting from poor perception of employees and believe that the quality is responsibility of the department of quality only.
The result of study this study one of the few studies that link quality culture with specific applications, the study raised the problematic gab between the high levels of understanding and support on the one hand and lack of application in the company of the other hand.
The research recommended that the develop a plan for quality management at the departmental level includes identification mission, vision and values,

activating the system management through development and operations through the development of systematic way and clear for how manage the organization for continues performance improvement and achieving quality policy by ensuring understands all the needs of the parties with interests and provides guidance to fully facility which lead to clear result

CHAPTER THREE
Material and method

Chapter Three
Material and method:

3-1 materials:
3-1-1 study design:
Based on research objective, researcher developed the objective, design and the framework of the research.

Sudanese Customs Training Administration was chosen as a research area because it is the first department implementing ISO9001:2008,

According to objectives of research four hypotheses are assumed to evaluate the implementation of ISO9001:2008 on the quality management system of Sudanese Customs Training Administration services.

Questionnaire survey was conducted and data was analyzed by using SPSS software program.

3-1-2 Study area:
The study was conducted in Sudanese Customs Training Administration (SCTA) in Khartoum state during 2014 / 2015.

3-1-3 Study population:
Thetarget population of this study including personal from all department of Sudanese Customs Training Administration in Khartoum state.

3-1-3 Sampling:
Random sampling technique is used to select 26 samples from target population.

Table (4-2): Work

(Table of Customers' Classifications-Researcher)

Position	Frequency	Percent (%)
Training staffs	17	65.4
Heads of units	9	34.6
Total	**26**	**100.0**

Table (4-3): Education

Education	Frequency	Percent (%)
Bachelor	18	69.2
Master	8	30.8
Total	**26**	**100.0**

Source :(Customs Training Department- Researcher)

Table (4-4): year of Experience

Experience year	Frequency	Percent (%)
1-3 y	1	3.8
≤5 y	15	57.7
>5 y	10	38.5
Total	**26**	**100.0**

Source :(Customs Training Department-Researcher)

3-1-4 Inclusion criteria:

The participant in this study is chosen according to the following criteria:
1- Top management of Sudanese Customs Training Administration.
2- All heads of department of training center.
3- Professional personal from supporting department.

3-1-5 Ethical consideration:

Participant's opinions were treated honestly, fairly and respectfully. Professional and scientific responsibilities were adhering to sticking to highest scientific and professional standard and accept response.

Information provided by participants were kept confidential and used only for this study.

3-1-6 Data analysis:

After data collection has finished the researcher used SPSS 11.5 software for the analysis of collected data by using cronbach's Alpha (a) test, Chi-square test and frequency test.

26 questionnaires were distributed, four of them were incomplete. Therefore the number of remaining samples to analyze was 26.

3-2 Method:

This study based on theoretical background of methodology and the quantitative design using a hypothesis testing approach.

3-3 Reliability test:

Reliability Analysis – Scale (ALPHA):-

Alpha value is = (0.88), so the Reliability percent is = (88%)

CHAPTER FOUR

Data Analysis

4-1 Frequency Test:

Management system:

Table (4-5): Administration has a mechanism to determine the quality of the potential problems and take action to prevent them:

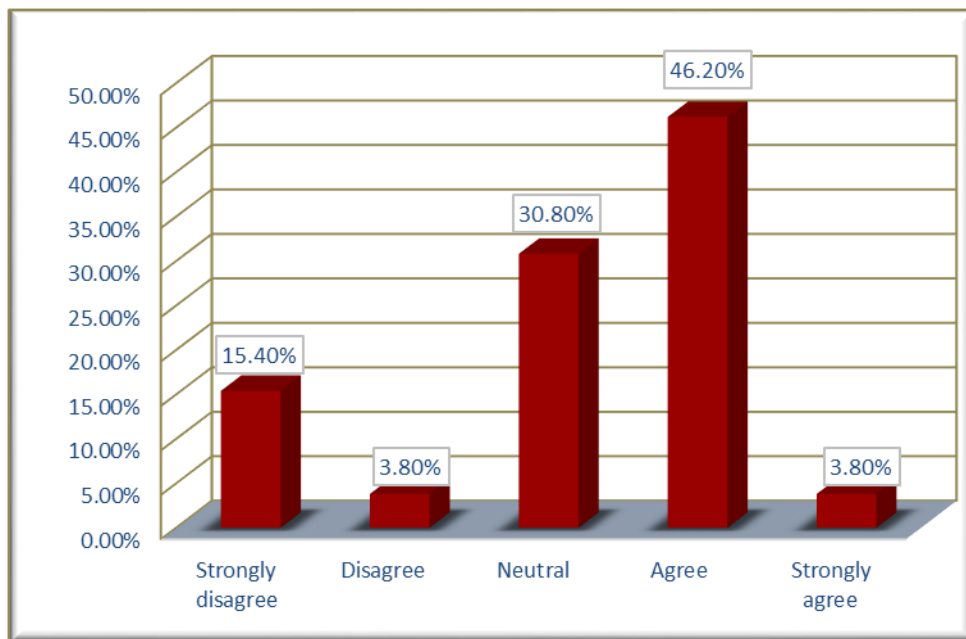|	Frequency	Percent (%)
Strongly disagree	4	15.4
Disagree	1	3.8
Neutral	8	30.8
Agree	12	46.2
Strongly agree	1	3.8
Total	**26**	**100.0**

Source :(Researcher)

Figure (4-1): Administration has a mechanism to determine the quality of the potential problem and take action to prevent them

Table (4-6): There is a mechanism for identifying opportunities to improve the effectiveness of quality system:

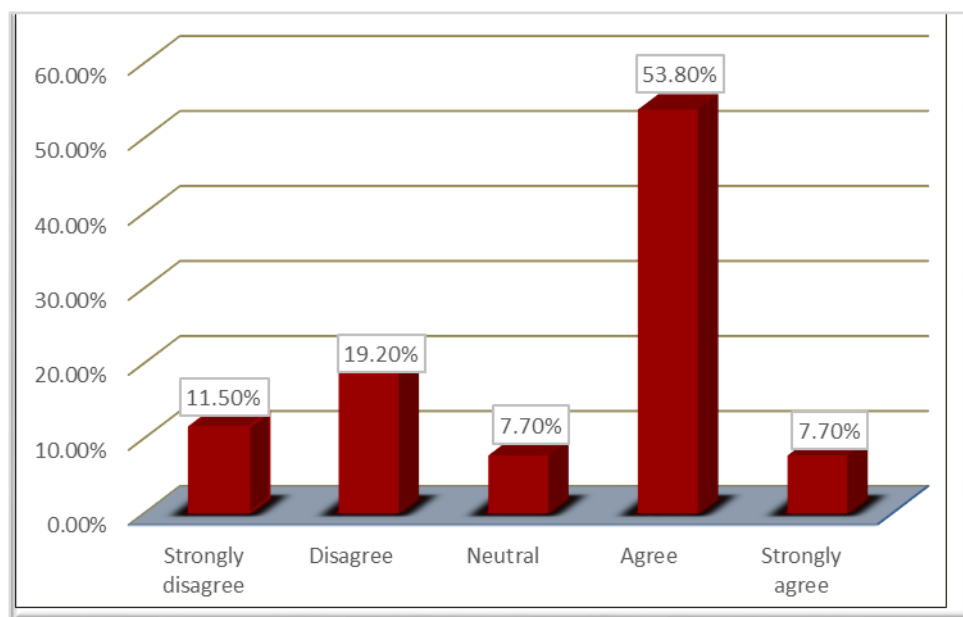|	*Frequency*	*Percent (%)*
Strongly disagree	3	11.5
Disagree	5	19.2
Neutral	2	7.7
Agree	14	53.8
Strongly agree	2	7.7
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-2): There is a mechanism for identifying opportunities to improve the effectiveness ofquality system

Table (4-7): *Implementation of international standards like iso9001 contributed in facilitating trade and economic growth:*

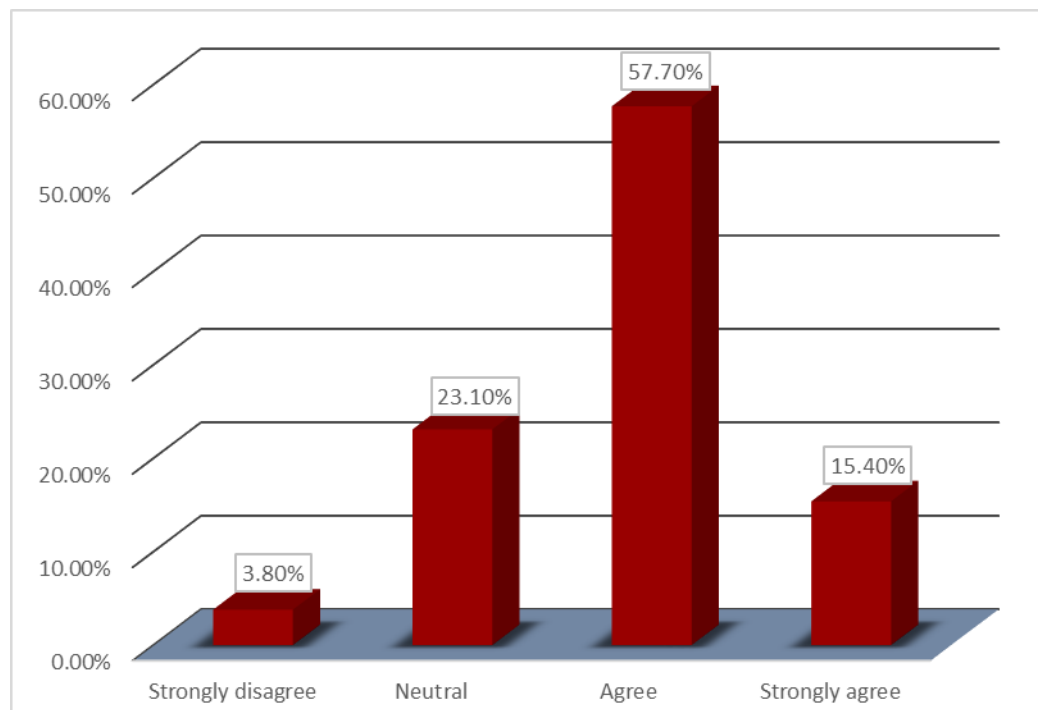|	*Frequency*	*Percent (%)*
Strongly disagree	1	3.8
Neutral	6	23.1
Agree	15	57.7
Strongly agree	4	15.4
Total	***26***	***100.0***

Source :(Researcher)

Figure (4-3): *Implementation of international standards like iso9001 contributed in facilitating trade and economic growth*

Table (4-8): There is an increase in the volume of business due to the high level of customer confidence and satisfy them:

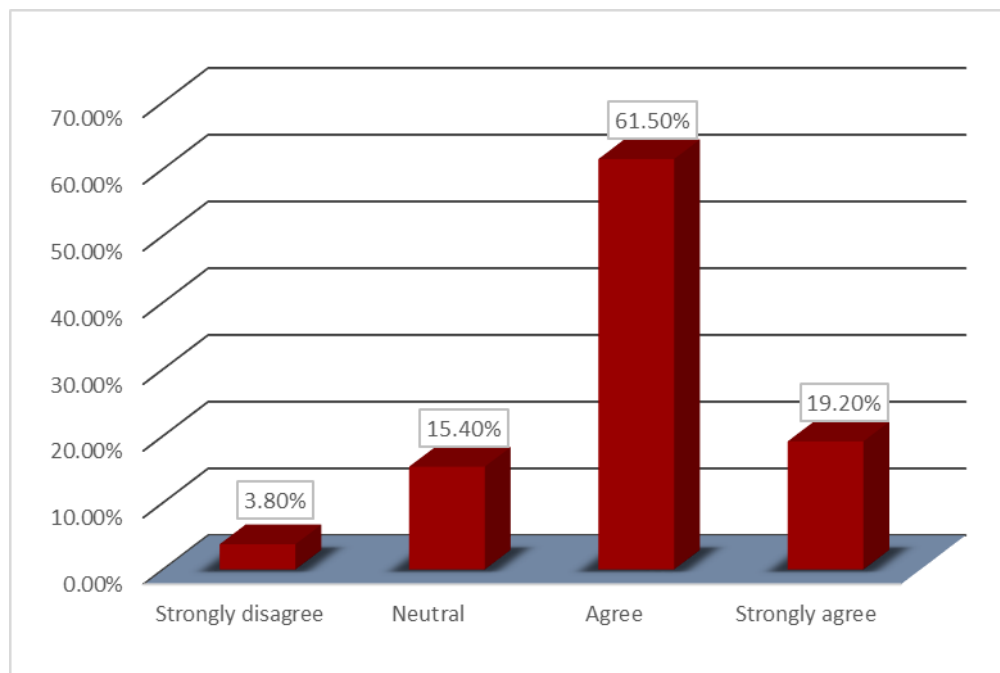|	*Frequency*	*Percent (%)*
Strongly disagree	1	3.8
Neutral	4	15.4
Agree	16	61.5
Strongly agree	5	19.2
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-4): There is an increase in the volume of business due to the high level of customer confidence and satisfy them

Work environment:

Table (4-9): There are access controls to areas which may influence the quality of services

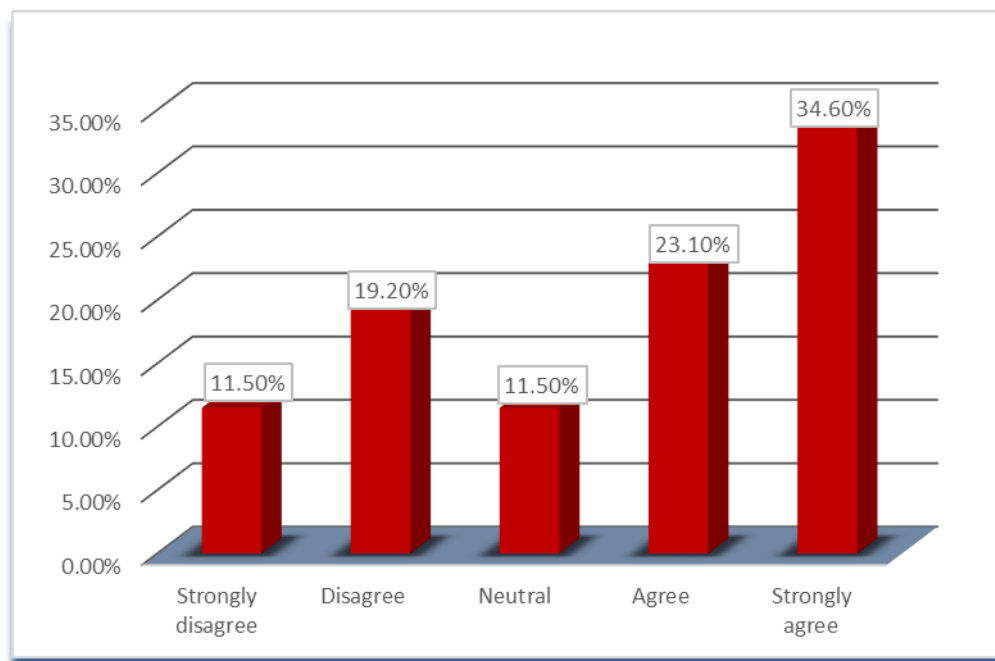|	Frequency	Percent (%)
Strongly disagree	3	11.5
Disagree	5	19.2
Neutral	3	11.5
Agree	6	23.1
Strongly agree	9	34.6
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-5): There are access controls to areas which may influence the quality of services

Table (4-10): *When in compatible activities are carried out in different areas of the training center there is an effective separation which avoids failure*

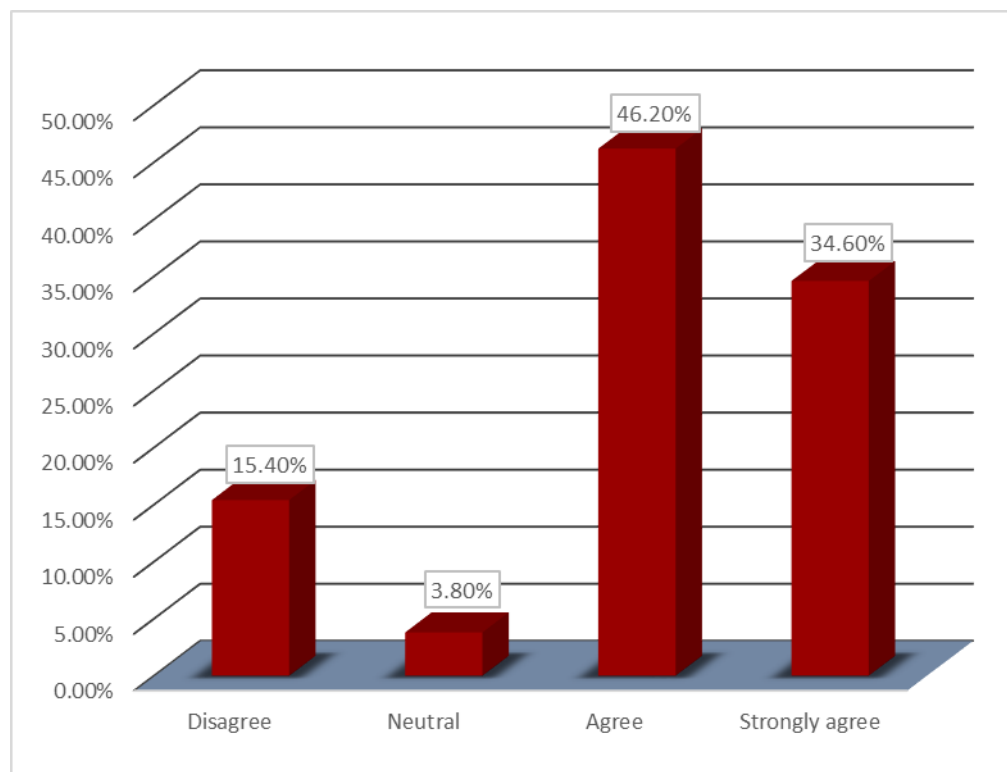|	*Frequency*	*Percent (%)*
Disagree	4	15.4
Neutral	1	3.8
Agree	12	46.2
Strongly agree	9	34.6
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-6): *When in compatible activities are carried out in different areas of the training center there is an effective separation which avoids failure*

Quality of the service:

Table (4-11):Increase confidence in the training and in the performance of staff and continuing improvement in the quality of the service and the effectiveness of the training center

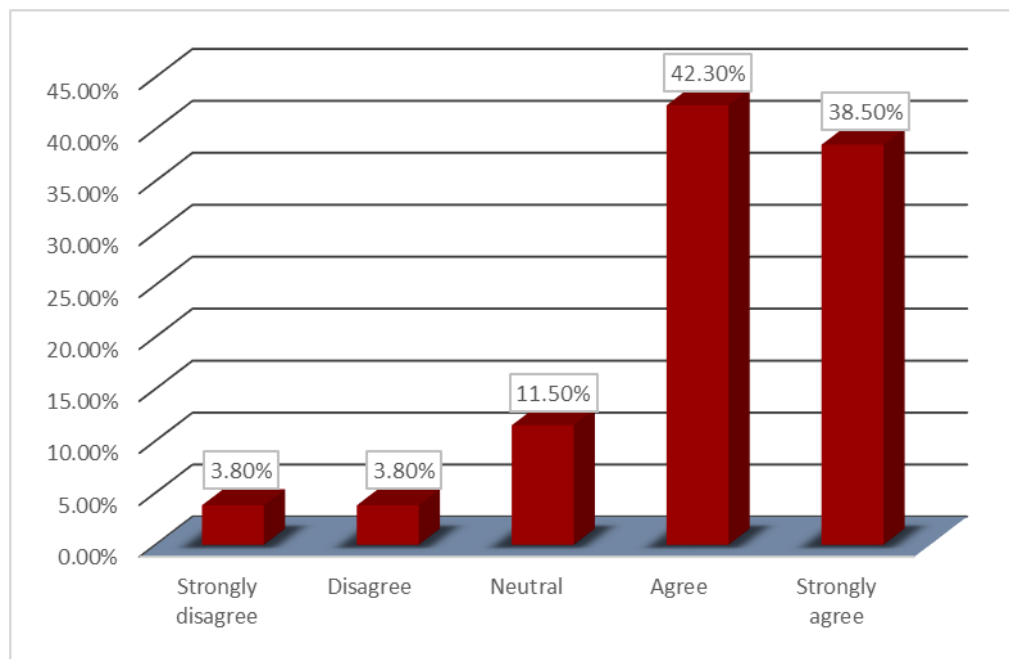|	Frequency	Percent (%)
Strongly disagree	1	3.8
Disagree	1	3.8
Neutral	3	11.5
Agree	11	42.3
Strongly agree	10	38.5
Total	**26**	**100.0**

Source :(Researcher)

Figure (4-7): Increase confidence in the training and in the performance of staff and continuing improvement in the quality of the service and the effectiveness of the training center

Table (4-12): *No need for re-training, leading to save time and money*

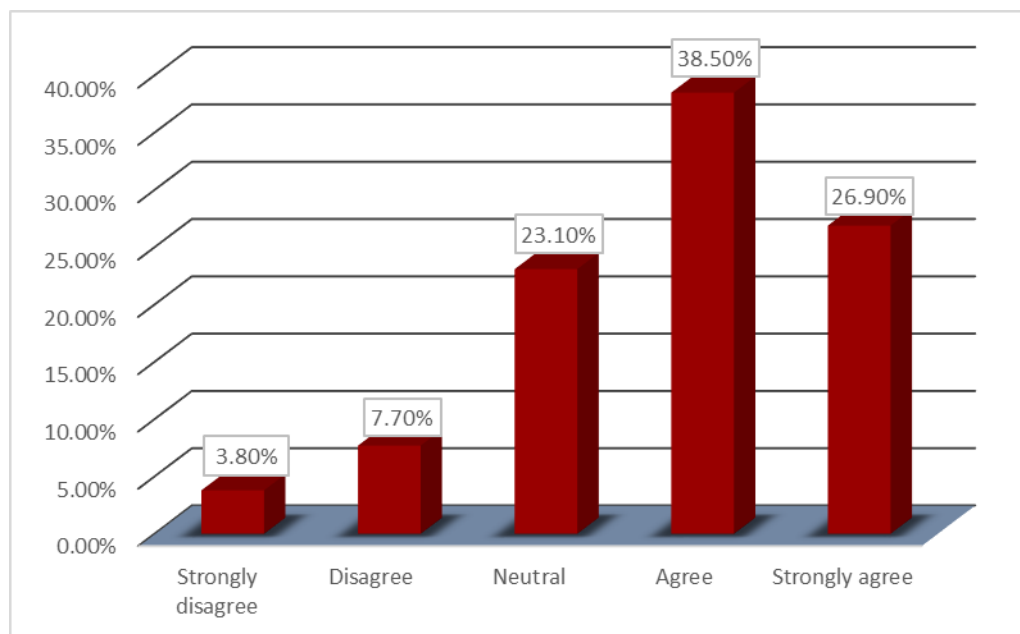|	Frequency	Percent (%)
Strongly disagree	1	3.8
Disagree	2	7.7
Neutral	6	23.1
Agree	10	38.5
Strongly agree	7	26.9
Total	26	100.0

Source :(Researcher)

Figure (4-8): *No need for re-training, leading to save time and money*

Table (4-13): wherever quality problems occur administration has a mechanism for taking corrective action which seeks to develop and improve the quality system so that repetition of the problem is unlikely:

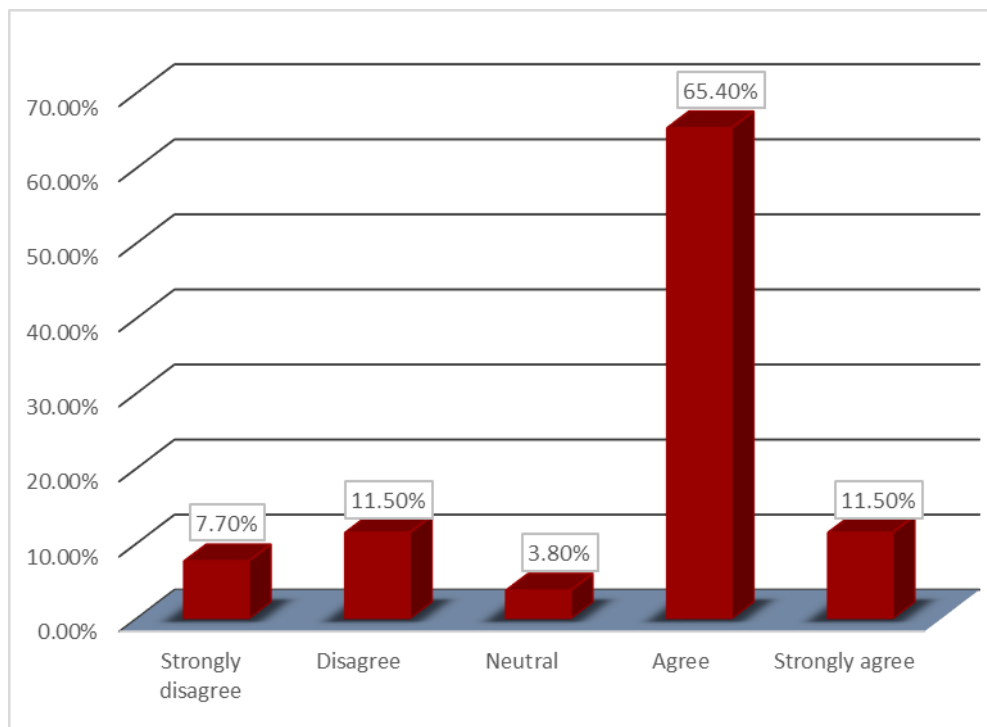|	*Frequency*	*Percent (%)*
Strongly disagree	2	7.7
Disagree	3	11.5
Neutral	1	3.8
Agree	17	65.4
Strongly agree	3	11.5
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-9): wherever quality problems occur administration has a mechanism for taking corrective action which seeks to develop and improve the quality system so that repetition of the problem is unlikely

Table (4-14): There is mechanisms to monitor trends in quality performance so that failures can be anticipated and dealt with before they become critical:

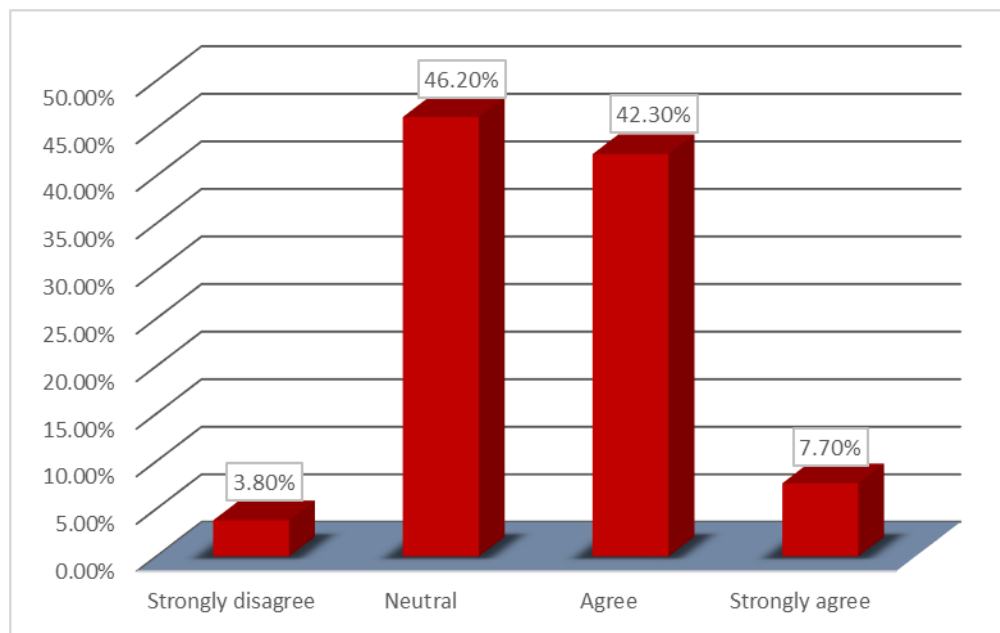|	*Frequency*	*Percent (%)*
Strongly disagree	1	3.8
Neutral	12	46.2
Agree	11	42.3
Strongly agree	2	7.7
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-10): There are mechanisms to monitor trends in quality performance so that failures can be anticipated and dealt with before they become critical

Table (4-15): There are a review on the performance of quality system to determine whether it is deliver the objectives which have identified:

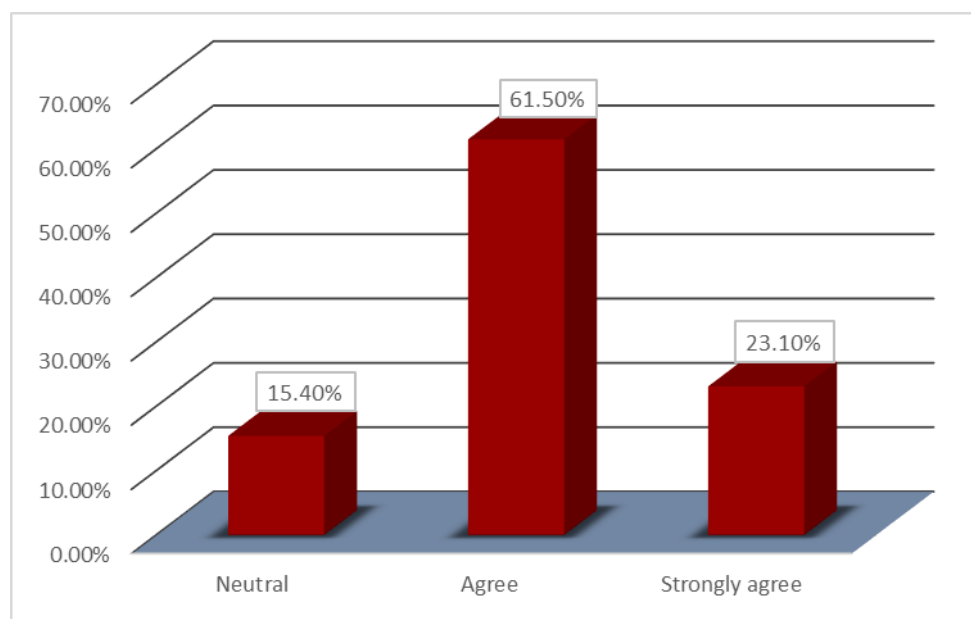|	Frequency	Percent (%)
Neutral	4	15.4
Agree	16	61.5
Strongly agree	6	23.1
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-11): There are a review on the performance of quality system to determine whether it is deliver the objectives which have identified

Human resource:

*Table (**4-16**): The system been established to identify training requirements and to train the staff:*

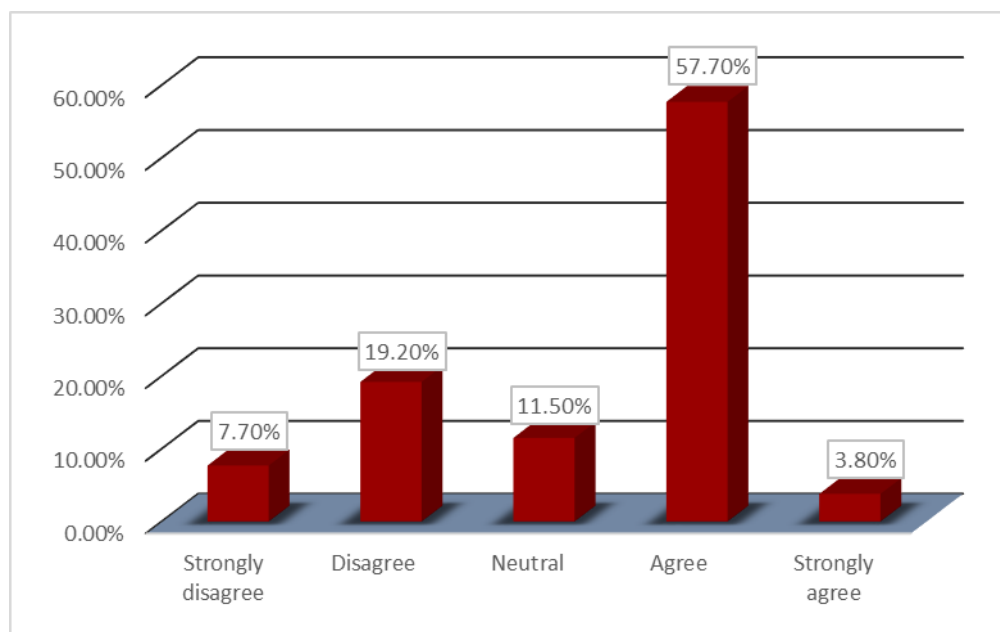|	*Frequency*	*Percent (%)*
Strongly disagree	2	7.7
Disagree	5	19.2
Neutral	3	11.5
Agree	15	57.7
Strongly agree	1	3.8
Total	*26*	*100.0*

Source :(Researcher)

*Figure (**4-12**): The system been established to identify training requirements and to train the staff:*

Table (4-17): There are documented procedure for conducting evaluation of the competence of staff after training and before authorizing them for the procedure in which they were trained:

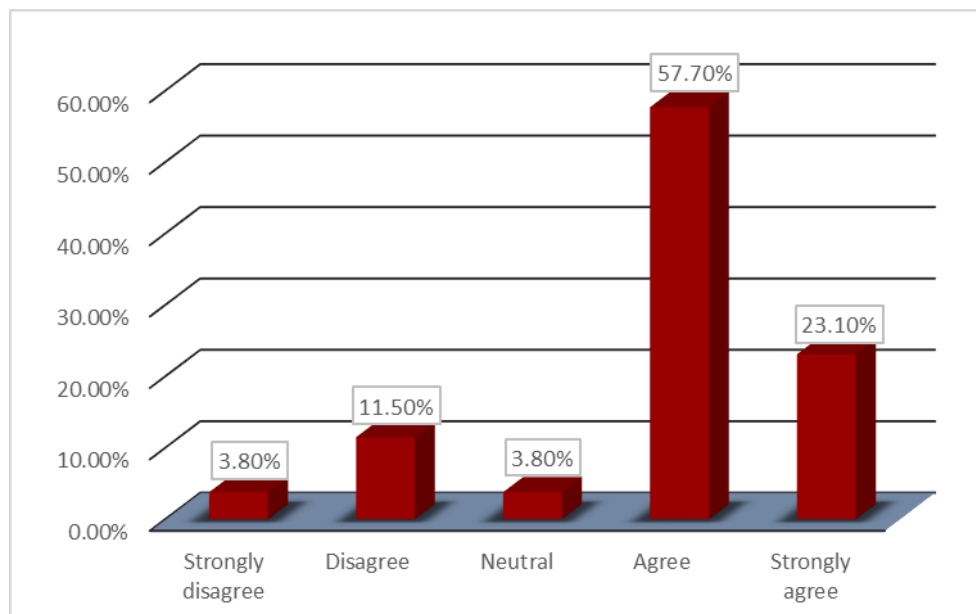|	*Frequency*	*Percent (%)*
Strongly disagree	1	3.8
Disagree	3	11.5
Neutral	1	3.8
Agree	15	57.7
Strongly agree	6	23.1
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-13): There is documented procedure for conducting evaluation of the competence of staff after training and before authorizing them for the procedure in which they were trained

Table (4-18): There are mechanisms for identifying which staff conducted each procedure:

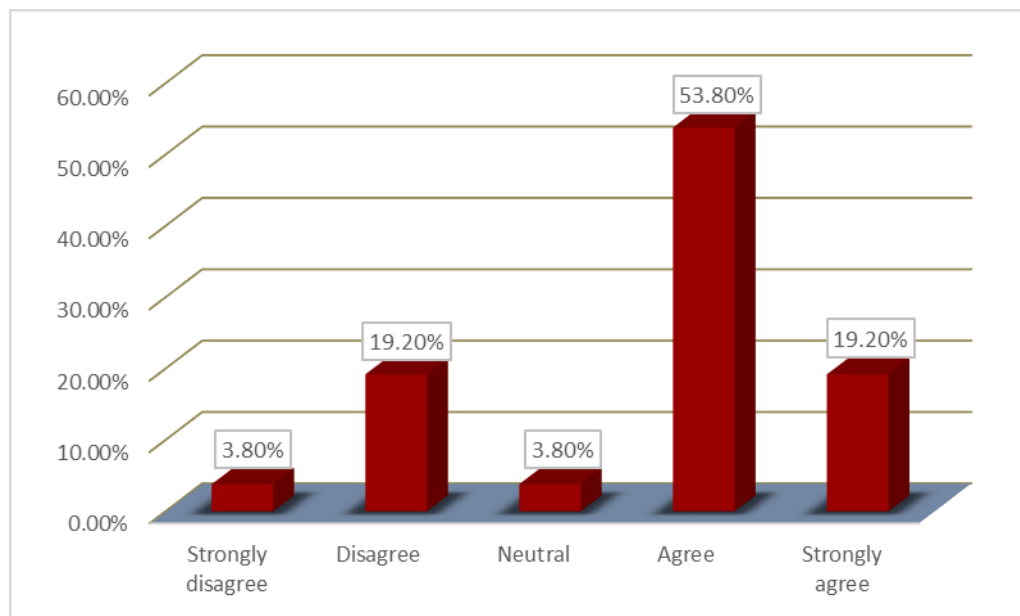|	*Frequency*	*Percent (%)*
Strongly disagree	1	3.8
Disagree	5	19.2
Neutral	1	3.8
Agree	14	53.8
Strongly agree	5	19.2
Total	*26*	*100.0*

Source :(Researcher)

Figure (4-14): There are a mechanisms for identifying which staff conducted each procedure or test:

4-2 Chi-square Test (test of hypothesis):

Table (4-19):

Management system:

No	The questions	Chi-value	P-value	Mode	S.D
1	Administer has a mechanism to determine the quality management system of the potential problems and take action to prevent them	17.462	.002	4	1.13205
2	There is a mechanism for identifying opportunities to improve the effectiveness ofquality system	19.769	.001	4	1.21845
3	Implementation of international standards like iso9001 contributed in facilitating trade and economic growth	16.769	.001	4	.84943
4	There is an increase in the volume of business due to the high level of customer confidence andsatisfy them	19.846	.000	4	.84489

Source :(Researcher)

- The value of chi-square for thefirst phrase is (17.462) with (p-value=.002 <0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for thesecond phrase is (19.769) with (p-value=.001< 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for thethird phrase is (16.769) with (p-value=.001<0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for thefourth phrase is (19.846) with (p-value=.000 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

Table (4-20): Work environment:

No	The questions	Chi-value	P-value	Mode	S.D
1	There are access control to areas which may influence the quality of training	4.769	.312	5	1.44914
2	When in compatible activities are carried out in different areas of the training center there is an effective separation which avoids failure	11.231	.011	4	1.01980

Source :(Researcher)

- The value of chi-square for the first phrase is (4.769) with (p-value=.312 >0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals in this question and this does not different because all the questions have a statistically significant and the mode 5.
- The value of chi-square for the second phrase is (11.231) with (p-value=.011 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study.

Table (4-21): Quality of the service:

No	The question	Chi-value	P-value	Mode	S.D
1	Increase confidence in the training and in the performance of staff and continuing improvement in the quality of the service and the effectiveness of the training center	18.615	.001	4	1.01678
2	No need for re-training, leading to save time and money	10.538	.032	4	1.06987
3	wherever quality problems occur administration has a mechanism for taking corrective action which seeks to develop and improve the quality management system so that repetition of the problem is unlikely	34.000	.000	4	1.09825
4	There is mechanisms to monitor trends in quality performance so that failures can be anticipated and dealt with before they become critical	15.538	.001	3	.81240
5	There are a review on the performance of quality management system to determine whether it delivers the objectives which have been identified	9.538	.008	4	.62757

Source :(Researcher)

- The value of chi-square for the first phrase is (18.615) with (p-value=.001 <0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

- The value of chi-square for the second phrase is (10.538) with (p-value=.032 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the first phrase is (34.000) with (p-value=.000 <0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (15.538) with (p-value=.001 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the second phrase is (9.538) with (p-value=.008 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study.

Table (4-22): Human resource:

No	The questions	Chi-value	P-value	Mode	S.D
1	The system been establish to identify training requirements and to train the staff	24.769	.000	4	1.08699
2	There are documented procedure for conducting evaluation of the competence of staff after training and before authorizing them for the procedure in which they were trained	26.308	.000	4	1.04661
3	There are mechanisms for identifying which staff conducted each procedure	21.692	.000	4	1.12933

Source :(Researcher)

- The value of chi-square for the first phrase is (24.769) with (p-value= .000 <0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (26.308) with (p-value=.000 < 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (21.692) with (p-value=.000 <0.05), this indicates that there is significant differences at the level (5%) between answers of study individual

CHAPTER FIVE

Discussion, Conclusion and Recommendation

Discussion, Conclusion and Recommendation:

5-1 Discussion:

When the implementation of ISO 9001-2008 at the Sudanese Customs Training Administration 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.

As ISO 9001-2008 emphasizes of all these issues and more, application of this standards and other international standards increase the quality of service, the qualification of personal and the suitability of working environment.

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.

Table5-1

Hypotheses	Result
The awareness and commitment of top managers of ISO will helped them in the process of evaluation and measuring the system as well achieving intended result.	True
Work environment inside the training center is suitable and helps in correct service results and provide reliable and high quality result.	True
Implementing ISO system enhances the performance and the quality of the service.	True
There is a system to identify training needs and staff training in SCTA.	True

Source :(Researcher)

5-2 Conclusion:

- The commitment and awareness of top managers of ISO 9001:2008 helped them in the process of evaluation, monitoring and measuring the system as well achieving intended result in good quality system.
- Work environment inside the training centeris acceptable, suitable and helps in correct training results and provide reliable and high quality result.
- Implementing ISO system enhances the performance and improvement the services of the (SCTA).
- There is a system to identify training needs and staff training.

The research was convinced that the (SCTA) 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 of quality.

5-3 Recommendation:

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

- Continuous improvement and development to achieve organization objective and customer satisfaction.
- 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 needsto ensure their suitability and effectiveness.

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9. ISO, 2005. ISO 9000:2005 Quality management systems - Fundamentals and vocabulary, 4th ed. ISO, Geneva, Switzerland.

10. ISO's web site www.iso.org provides general information regarding ISO 9001:2008 and the ISO 9004 revision programme (as well as details of its member National Standards Bodies).

11. http/www.british-assessment.co.uk/service/iso certification/iso-9001-certification-beneft/

Appendix 1:

Questionnaire was designed and revised several times, it was refereed and refined by:

Dr. Abbas Ibrahim.

Dr. AwadiaAlkhateeb.