

بسم الله الرحمن الرحيم



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

Impact of Implementing ISO 9001: 2015 Quality

Management Systems on Employee's Satisfaction

Case study: Central Trading Company (CTC group)

أثر تطبيق نظام ادارة الجودة ايزو9001:2015 في رضا العاملين دراسة حالة: الشركة التجارية المركزية

Thesis submitted in partial fulfillment of the requirements for the Msc. in Total Quality management and Excellence

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الآيسة

قَالَ تَعَالَىٰ:

﴿ وَسِيقَ ٱلَّذِينَ ٱتَّقَوْاْ رَبَّهُمْ إِلَى ٱلْجَنَّةِ زُمَرًا حَتَّى إِذَا جَآءُوهَا وَفَتِحَتْ أَبُوابُهَا وَقَالَ لَهُمْ خَزَنتُهَا سَلَمُ عَلَيْكُمْ طِبْتُمْ فَأَدْخُلُوهَا خَلِدِينَ ﴿ ﴾ طِبْتُمْ فَأَدْخُلُوهَا خَلِدِينَ ﴿ ﴾

سورة الزمر: الاية (73)

Dedication

Give my best to:

- My mother, ALLAH saves her.
 - The spirit of my father.
- My brothers, ALLAH save them.
 - My kindly friends.
- To everyone who taught me, and who encouraged me all the way long.
 - To those who work for science and knowledge.

Acknowledgement

I am thankful to ALLAH who gave me the courage and strength to complete this research and gave me the grace of knowledge of science which lit my way and I thank the Prophet Muhammad, peace be upon him.

I extend my sincere thanks and appreciation to:

- Sudan University of Since and Technology.
- -Deanship of quality and development, the library and all the staff.
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 - -Many thanks to everyone who contributed to this research from near or far.
- Last but not least, my special gratitude goes to my family, friends, for their prayers, encouragement, care, invaluable support and tolerance during the whole period of study. I could never complete this work without their support.

Abstract

This study aims to identify the impact of implementation ISO 9001: 2015

certification on employee's satisfaction in Central Trading Company, where

researcher used descriptive approach, The study population consisted of the

personal from all department of Central Trading Company, Questionnaire designed

as a tool to collect data which was distributed to (100) employees of Central

Trading Company as no probability convenience sample, The study used

descriptive statistical analysis tools and Chi-square to test the hypothesis, by using

(SPSS) program. The study found that Central Trading Company is committed to

adopting and provides sufficient training programs for its production and

manufacturing employees and established communication process and the working

environment is convenient to perform well which is reflected in the employee's

satisfaction. The study recommend that the Central Trading Company should

concentrate more on review objectives on timely manner by top managers to assess

achievements, communicate of quality policies, take employee enough time for

work tasks.

Key word: ISO 9001: 2015 certification - employee's satisfaction.

IV

المستخلص:

تهدف الدراسة إلي معرفة أثر تطبيق شهادة الايزو 2015: 9001 علي الرضا الوظيفي بالشركة التجارية المركزية، واستخدمت الدراسة المنهج الوصفي التحليلي، حيث يتألف مجتمع الدراسة من جميع العاملين في أقسام الشركة المركزية للتجارة المختلفة،اعتمدت الدراسة الاستبيان كأداة رئيسية لجمع البيانات حيث تم توزيعها علي (100) موظف من العاملين بالشركة المركزية التجارية باستخدام أسلوب العينة غير الاحتمالية الميسرة تم استخدام أدوات الإحصاء الوصفي وChi-square لاختبار فرضيات الدراسة عبر برنامج (SPSS) وجدت الدراسة ان الشركة التجارية المركزية ملتزمة بتبني وتوفير برامج تدريب كافية لموظفي الإنتاج والتصنيع وعملية الاتصال الراسخة وبيئة العمل ملائمة للأداء الجيد وهو ما ينعكس علي رضا الموظفين توصي الدراسة بأن تركز الشركة المركزية للتجارية بشكل اكبر علي مراجعة الأهداف في الوقت المناسب من قبل كبار المدراء لتقييم الإنجازات والتواصل مع سياسات الجودة ومنح الموظفين وقتا كافيا لأداء مهام العمل .

الكلمات المفتاحية: تطبيق شهادة الايزو 2015: 2019 - الرضا الوظيفي.

List of contents

Content	Page
الاية الكريمة	Ι
Dedication	II
Acknowledgement	III
Abstract	IV
مستخلص الدراسة	V
List of Contents	VI
List of Tables	IX
List of Figures	XI
Chapter One: Introduction	
1:1 Chapter over view	1
1:2 Introduction	1
1:3 Research Problem	3
1:4 Research Questions	4
1:5 Research Objectives	4
1:6 Research Model	5
1:7 Research Significance	5
1:8 Hypotheses	6
1:9 Research methodology	6
1.10 Structure of the Study	6
1.11 Operationalization Definition	7
Chapter Two: Literature Review	
2:1 Chapter over view	8
2:2 The concept of ISO 9001-2015	8
2:3 Changes between versions ISO 9001:2008 & ISO 9001:2015:-	9
2:3:1 change in structure	9
2:3:2 change in principle	11
2:3:3 change in clause	11
2:4 Process approach	12
2:5 Relationship with other management system standards	14
2:6 The Employees	14
2:6:1 The concept of Employee Satisfaction	15

2:6:2 Employee Care	16
2:6:3 Employee performance	17
2:6:4 Sources of Employee Dissatisfaction	17
2:6:5 Employer Responsibility	19
2:7 Internal communication	21
2:8 Work environment	22
2:9 Management commitment	22
2:10 The relationship between ISO 9001-2015 and employee	23
satisfaction	
2:11 Importance of ISO 9001 Certification	24
Chapter Three: Materials and Methods	
3:1 Chapter over view	27
3:2 Social exchange theory	27
3:3 Study design	28
3.4 Study methodology	28
3.5 Study population	28
3.6 Study sample	28
3:7 Questionnaire design	28
3.8 Information Sources	29
3:8:1 Primary sources	29
3:8:2 Secondary sources	29
3:9 Case study: Central Trading Company	29
Chapter Four: Analysis and Discussion	
Chapter over view	32
Test the validity of the study hypothesis	33
Frequency Test	34
Chi-square Test (test of hypothesis)	39
Chapter Five: Results and Recommendations	
5:1 Chapter over view	54
5:2 Results	54
5:3 Discussion	55
5.4 Conclusions	55
5:5 General Recommendations	56

5.6 Implications for theory and practice	56
5.7 Implications for future research	57
References	58
Appendix	61

List of Tables

Table	Page
Table No (2.1) the changes in ISO 2008 and ISO 2015 in the structure	10
Table No (2.2) the changes in ISO 2008 and ISO 2015 in the principle	11
Table No (2.3) the changes in ISO 2008 and ISO 2015 in the clause	11
Table (4:1) reliability and validity test	33
Table (4:2) Age	33
Table (4:3) Gender	34
Table (4:4) Education level	35
Table (4:5) Occupation level	36
Table (4:6) Occupation level	37
Table (4:7) how aware are you of ISO 9001-2015 QMS in CTC group?	38
(Round whichever is applicable)	
Table (4:8) Top management commitment	39
Table (4:9) illustrates the result of the chi square test for phrases of first	41
hypothesis	
Table (4:10) Internal communication	44
Table (4:11) illustrates the result of the chi square test for phrases of	45
first hypothesis	
Table (4:12) work environment	47
Table (4:13) illustrates the result of the chi square test for phrases of	48
first hypothesis	
Table (4:14) Employee satisfaction	50
Table (4:15) illustrates the result of the chi square test for phrases of	52
first hypothesis	
Table (5:1) results	54

List of figures

Figure	Page
Figure (1-1) The Relation between the independent variables and	5
dependent variables	
Figure (2.1) representation of the strutuure of ISO 9001-2015	13
standard in the PDCA cycle	
Figure (4:1) the percentage of the respondents of the age	34
Figure (4:2) the percentage of the gender	35
Figure (4:3) the percentage of the respondents of the Education	36
level	
Figure (4:4) the percentage of the respondents of the Occupation	37
level	
Figure (4:5) Experience	38
Figure (4:6) the percentage of the respondents of the how aware are	38
you of ISO 9001-2015 QMS in CTC group	

List of Appendixes

Appendix	PAGE
Appendix 1: Questionnaire design and referees	65
Appendix 2: Questionnaire	67
Appendix 3: Outline of studies	72

Chapter One Introduction

Chapter one

1:1 Chapter over view:-

This chapter contains research proposal, it cover introduction and the problem statement, questions, research objectives, Research Model, significance of research, hypotheses, research methodology, Structure of the Study and Operationalization definition.

1:2 Introduction:-

The efficiency and profit maximization are the core objectives of any organization. Regardless of size, sector or geographical location, all companies are constantly looking to maximize their profits. ISO 9001 was designed as a standard for organizations seeking to optimize their operational excellence, being increasingly important as end users want increasingly more to get high quality products. Also the organizations that implemented quality management system focus on empowerment of employee and satisfied them to get quality products and high profits.

Most studies found that the application of quality management system has positive effects on the performance of the organization as a whole by management, employees and customers through improving Profitability and low cost, improve current performance and staff relations, high levels of customer satisfaction.

Therefore, all service organizations have worked to satisfy the needs of customers and employees in order to achieve their satisfaction, they recognize that customer satisfaction is the key to their success, creating loyalty to customers and employees. Creating strong competition to win and retain customers.

Employees reward and increment salaries had influenced some employees to come to work early, stay longer to work, serve customers with great joy. This reduced absenteeism and ensures that the daily activities of the company are discharged with ease employees reward and increment salaries is strongly correlated with

Employee performance improving performance of employees can significantly improve the quality and efficiency of company.

ISO 9001: 2015 has become the leading industry standard for eliminating waste, improving productivity and efficiency, providing greater customer satisfaction and streamlining daily organizational routines, Organizations are motivated to seek ISO 9001 certification because its potential benefits span all internal and external aspects of their operations. An effective implementation results in benefits exceeding costs, mainly due to improved operational performance (Aba et al., 2016), increased process effectiveness (Allur et al., 2014), process standardization (Boiral and Heras-Saizarbitoria, 2015), reduced operational costs (Dwyer, 2002), increased market share (Arauz and Suzuki, 2004), improved customer confidence, reduced customer complaints (Dwyer, 2002) and sustained competitiveness (Augustyn and Pheby, 2000). Organizations that work toward adopting ISO 9001 with the aim of making quality products and services develop an effective quality management system (QMS) in the process (Gotzamani et al., 2007).

Personnel and organizations can experience the benefits of ISO 9001. The participation of all personnel is required to meet certification demands such as improvements in product design and product flow management (Huo et al., 2014). The resultant training improves their skills in developing and delivering new products, enables employees to communicate with each other and serves as a foundation for the systematic improvement of company routines. Employee training also includes clarifying strategic directions and business goals for employees, which enhances individual clarity and involvement. Information flow between personnel is enhanced by way of documentation and internal auditing process requirements, which provide the means for collecting and storing frequently used knowledge and information. ISO 9001 improves decision flow

management by directly improving the policies, procedures and mechanisms of corporate governance.

1:3 Research Problem:-

Despite its numerous successes, ISO 9001 implementations can be susceptible to short or long-term failure. In the absence of effective implementation, the introduction of a QMS may fail to provide the desired results. Studies have shown that organizations which deploy the standard merely as a marketing or promotional strategy without internalizing the process of ISO 9001 implementation and sustenance (Allur et al., 2014) do not enjoy the benefits of ISO 9001, which assumes a complete understanding of the standard. There is a need for the certification and its accompanying continuous improvement culture to be implemented in a manner, which creates differentiation or heterogeneity between companies (Huo et al., 2014). Zeng et al. (2007) indicated that management often has exaggerated expectations about implementation results. Organizations in which ISO 9001 often fails tend to focus on meeting external certification requirements without adequate and pervasive organizational changes (Boiral and Heras-Saizarbitoria, 2015).

Factors that affect the success or failure of ISO 9001 implementation, and QMSs as a corollary have been studied in the literature. The focus on implementation factors is essential because the complete benefits of ISO 9001 can be experienced by an organization only after it has established the appropriate conditions for its implementation and sustenance (Huo et al., 2014). Prior work has focused on the identification of factors influencing effective implementation (Psomas et al., 2010), and evaluation of factors that impact organizations which plan to implement ISO 9001 (Augustyn and Pheby, 2000; Lin and Jang, 2008). Several factors which may lead to implementation roadblocks have been identified (Karipidis et al., 2009),

including: national identity (Huo et al., 2014), employee engagement (Allur et al., 2014), top management commitment (Huo et al., 2014; Allur et al., 2014), training Maekawa et al., 2013; Karipidis et al., 2009) and team commitment (Boiral and Heras-Saizarbitoria, Psomas et al., 2010).

The presented research aims to discuss the relationship between implementation ISO 9001-2015 and employee satisfaction on Central Trading Company.

Other researches focus on the relationship between ISO 1-2008 and performance (Mahmoud, 2016 – Abdulnaby, 2016 – Abdelrhman, 2016) And (Ismail, 2016) studied the impact of implementation ISO 9001-2008 on employee performance but in these study focus on the satisfying the employee under ISO 9001-2015 by awareness and competence and good communication.

1:4 Research Questions:-

- 1-What is the impact of Management commitment on employee satisfaction?
- 2- What is the impact of internal communication employee satisfaction?
- 3- What is the impact of working environment employee satisfaction?

1:5 Research Objectives:

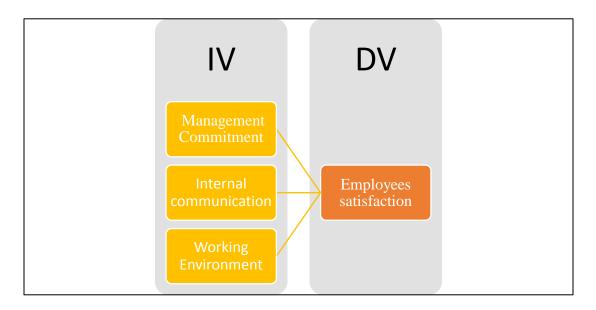
The aims and objective of this research is to clearly identify the impact of implemented ISO 9001-2015 quality management system as independent variable on employee satisfaction in CTC Company as follows:

- 1- To determine whether management commitment has a positive impact on employee satisfaction.
- 2- To determine if internal communication has a positive impact on employee Satisfaction.
- 3- To assess whether working environment has a positive impact on employee satisfaction.

1:6 Research Model:

A model had been constructed to illustrate the relation between the independent variables and dependent variable in the figure below:

Figure (1-1): The Relation between the independent variables and dependent variables.



Source: student, 2019

1:7 Research Significance:-

The importance of the study is to clarify the importance of ISO 9001:2015 in increasing employee satisfaction, enabling an integrated management system to achieve excellence, and also helping the management and employees to share and review the results of this study that will help them to identify improvement opportunities where led to continues improvement in work.

The scientific importance of the study is to identify the importance of ISO 9001-2015 on increasing employee satisfaction to achieve intended results. The practical importance is to help organization to attract the attention of employee and attract

them to doing work under its control that affects the performance and effectiveness of the quality management system.

1:8 Hypotheses:-

Hypotheses 1- there is positive relationship of implementing ISO 9001-2015 on employee satisfaction.

Hypotheses 2- Management commitment has a significant positive relation on employee satisfaction on CTC Company.

Hypotheses 3- Internal communication has a significant positive relation on employee satisfaction.

Hypotheses 4- Working environment has a significant positive relation on employee satisfaction.

1:9 Research methodology:-

The study used the historical method to track previous studies related to the subject of the study, the descriptive method based on the field sources to test hypotheses and the analytical descriptive method using the SPSS program to analyze the results of the field study.

1.10 Structure of the Study:

Chapter one provides an introduction about the research, the problems to be addressed, aims and objectives, significance of the study, and the research methodology.

Chapter two is a review of literature of implementing ISO 9001-2015 and employee satisfaction.

Chapter three will have the model of the study and the procedures of the research.

Chapter Four provides an analysis to the information gathered from the questionnaire conducted.

Chapter Five discusses the findings of this research and provides relevant recommendations for future work.

1.11 Operationalization Definition:

ISO 9001-2015: is a quality management systems-requirements fifth edition 2015.

Employee satisfaction: is quite simply how content or satisfied employees are with their jobs.

Chapter Two Literature Review

Chapter two

Literature review

2:1 Chapter over view:-

This chapter contain Literature review about the study the concept of ISO 9001-2015, Changes between versions ISO 9001:2008 & ISO 9001:2015, Process approach, Relationship with other management system standards, the Employees ,Internal communication ,Work environment, Management commitment, the relationship between ISO 9001-2015 and employee satisfaction and Importance of ISO 9001 Certification.

2:2 the concept of ISO 9001-2015:-

The meaning of quality can be defined as understanding of customer's requirement, expectations and buying behaviors.

Although many researchers have been carried out on quality and its Significant level, quality still remains a term that is not easy to be Understood and, as a result, many definitions of "quality":

- Differences in the quality reflect the differences in the quality of some in gradients or attributes possessed by product. (Abbott, 1955).
- Quality is fitness for use. (Juran, 1974).
- Conforming to requirements. (Crosby, 1979).

If refer to ISO 9000 Quality Management System- Fundamentals and Vocabulary ISO (2000), it has defined quality as a degree to which a set of inherent characteristics fulfills requirements. This definition has gathered the above three definitions of quality. The definition scope is not only covering product but also

management system. (ISO 9001 certification and performance in manufacturing industries (Yeap Hock Cheng 2004).

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.

The adoption of a quality management system is a strategic decision for an organization that can help to improve its overall performance and provide a sound basis for sustainable development initiatives.

The quality management system requirements specified in this International Standard are complementary to requirements for products and services. This International standard employs the process approach, which incorporates the plando-check-act (PDCA) cycle and risk-based thinking.

2:3 Changes between versions ISO 9001:2008 & ISO 9001:2015:-

2:3:1 Change in Structure:

- The term "product" has been replaced by "goods &services"
- •New language such as 'context of the organization' 'risk based thinking' & 'documented information. Two new clauses related to the context of the organization have been added (4.1 & 4.2).
- •The requirement to use process approach has been made more explicit by adding a new clause (4.4.2).
- Greater emphasis on risk based approach which has replaced preventive action

- Current requirement for six mandated procedures deleted
- -new requirement for organizations to maintain 'documented information'
- •The terms "document" & "records" have been replaced with "documented information"

The term "continual improvement" has been replaced with "improvement".

Table No (2.1) the changes in ISO 2008 and ISO 2015 in the structure

TO 0 0001 401 T
ISO 9001:2015
Products and services
External provider
Documented information
Environment for the operation of processes
Externally provided products and services
Term not used
Leadership
Risk

Source: student, 2019

2:3:2 Change in principle:

Table No (2.2) the changes in ISO 2008 and ISO 2015 in the principle

1.Customer Focus
2.Leadership
3.Engagement of People
4.ProcessApproach
5.Improvement
6.Evidence Based Decision Making
7.Relationship
Management

Source: student, 2019

2:3:3Change in clause:-

Table No (2.3) the changes in ISO 2008 and ISO 2015 in the clause

ISO 9001:2008	ISO 9001:2015
0. Introduction	0. Introduction
1. Scope	1. Scope
2. Normative References	2. Normative References
3. Terms and Definitions	3. Terms and Definitions
4. Quality Management	4. Context of the Organization
System	
5. Management Responsibility	5. Leadership

6. Resource Management	6. Planning
7. Product Realization	7. Support
8. Measurement, Analysis and	8. Operations
Improvement	
	9. Performance Evaluations
	10.Improvement

Source: student, 2019

2:4 Process approach:-

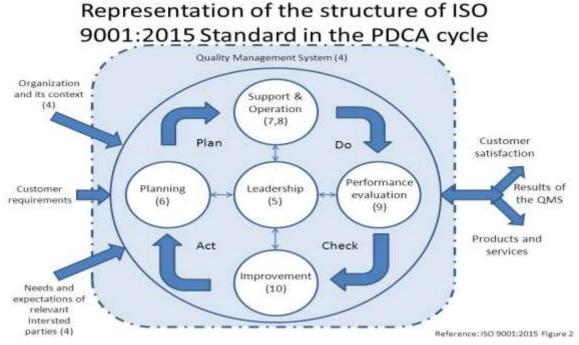
This International standard promotes the adoption of a process approach when developing implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirements.

The process approach enables an organization to plan its processes and their interactions, understanding and managing interrelated process as a system contributes to the organizations effectiveness and efficiency in achieving its intended results.

This approach enables the organization to control the interrelationships and interdependencies among the processes of the system, so that the overall performance of the organization can be enhanced.

Management of the processes and the system as a whole can be achieved using the PDSA cycle with an overall focus on risk-based thinking aimed at taking advantage of opportunities and preventing undesirable results.

Figure (2.1):



Source: - ISO 9001-2015 Quality Management Systems – Requirements fifth edition 2015.

The PDCA cycle can be briefly described as follows:

- Plan: establish the objectives of the system and its processes, and the resources needed to deliver results in accordance with customers' requirements and the organizations policies, and identify and address risks and opportunities.
- DO: implement what was planned.
- Check: monitor and (where applicable) measure processes and resulting products and services against policies, objectives, requirements and planned activities, and report the results.

• Act: take actions to improve performance, as necessary. (ISO 9001-2015)

Quality Management Systems – Requirements fifth edition 2015).

2:5 Relationships with other management system standards:-

This International Standard applies the frame work developed by ISO to improve alignment among its International Standards for management systems. And enables an organization to use the process approach, coupled with the PDCA cycle and risk-based thinking, to align or integrate its quality management system with the requirements of other management system standards.

This International Standard relates to ISO 9000 and ISO 9004 as follows:

- ISO 9000 Quality management systems —Fundamentals and vocabulary provides essential background for the proper understanding and implementation of this International Standard;
- ISO 9004 Managing for the sustained success of an organization —A quality management approach provides guidance for organizations that choose to progress beyond the requirements of this International Standard.

2:6 the Employees:-

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 product or 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).

2:6:1 The concept of Employee Satisfaction:-

Employee is one of the key factors of the organization success. No organization can succeed without a certain level of commitment and effort from its employees. Organizations are increasingly interested in retaining right talents While targeting for new talents; measuring employee's satisfaction provides an indication of how successful the organization is in fostering a conducive environment which nurtures great attitude among employees towards their Job and company. Organizations' often attempt to satisfy its employees to gain their commitment and loyalty. However, it is not easy for the organizations to be successful in making individual satisfied because people work for a wide variety of different reasons, some want material success while others might emphasize job challenging. From an individual standpoint, job satisfaction might be one of the most desirable outcomes that employees could obtain. The employee satisfaction is the orientation of the industry towards his work role, which he is presently playing. The organization will only thrive and survive when its employees are satisfied. This makes person says completely that he is fully satisfied with the job. (Gupta, 2016)

Employee satisfaction is essential to the success of any business. A high rate of employee contentedness is directly related to a lower turnover rate. Thus, keeping employees' satisfied with their careers should be a major priority for every employer. While this is a well-known fact in management practices, economic downturns like the current one seem to cause employers 11 to ignore it. There are numerous reasons why employees can become discouraged with their jobs and resign, including high stress, lack of communication within the company, lack of

recognition, or limited opportunity for growth. Management should actively seek to improve these factors if they hope to lower their turnover rate. Even in an economic downturn, turnover is an expense best avoided. (Timpe, A. D. (1986)).

2:6:2 Employee Care:-

It is important that employers care about the happiness of their Employees. Recent statistics show that throughout their careers, American workers hold an average of eight jobs (Rudman, 2003) the rate of turnover because employees are unhappy is alarming. Even is an economic downturn, employers must spend an enormous amount of money recruiting new employees, going through the hiring process, and finally training new employees. Dissatisfaction has many negative side effects for the company, while satisfaction results in a much better retention rate. The effects of dissatisfaction that results in an employee's withdrawal from job and company can range from mild to severe. Tardiness, in showing Up for work and coming back from breaks, shows a lack of interest by the employee for his or her responsibilities. This may escalate to the employee not showing up to work entirely. Some less obvious signs of withdrawal from the job include: taking care of personal matters while at work, playing games, engaging in non-work related talk, spending time on social networks, and diminishing job performance. These withdrawal behaviors, when evidence of dissatisfaction, may end with an employee leaving the workplace; "the heuristic model posits that thinking of quitting is the most 12 probable outcome of job dissatisfaction" (Koslowsky & Krausz, 2002). Therefore, withdrawal will lead either to the employee voluntarily leaving the organization or being terminated for unprofessional behavior.

2:6:3 Employee performance:-

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. (a hand book for measuring employee performance).

2:6:4 Sources of Employee Dissatisfaction:-

There are numerous reasons why employees can become discouraged with their jobs and resign, including high stress, lack of communication within the company, lack of recognition, or limited opportunity for growth. Management should actively seek to improve these factors if they hope to lower their turnover rate. Even in an economic downturn, turnover is an expense best avoided.

Employers that are deemed unethical by their workers may be viewed as such because they appear to care exclusively about company revenues, rather than the employees that are working for them. This perception of an employer may lead to job dissatisfaction, and raise the company's turnover rate. Dissatisfaction may also arise, with the same result in turnover, when the work environment fails to have any flexibility or any source of amusement for the employees; the tone of the business will become stressful or tedious (Kaye & Jordan-Evans, 1999).Lack of communication in the workforce is major contributor to dissatisfaction. This is usually the result of managerial staff that is isolated and does not know how to relate to their employees on a personal or professional level (Branham, 2005). Bad communication leaves employees feeling disconnected from the organization. This

is detrimental to the wellbeing of the company because when an employee feels neglected, he or she will tend to perform at a lower level. This employee becomes unsure of his or her position within the company, and wonders what his or her purpose is within the workplace. Employees may be unaware of how their performance measures up to that of their co-workers and have no sense of how they can improve. Without communication, it becomes difficult for employees to make any progress in their efficiency. Employees want to know that their employers recognize their achievements in the workplace. They need to feel appreciated, as workers and as people (Branham, 2005). Often companies become more focused on production and revenues, rather than with their own employees, or even their customers. In the case of employees, the employees may rarely be praised for the quality of their performance. If a company does performance appraisals, the results may be given in such a harsh tone that, rather than motivating an employee, it intimidates and an employee may feel uncomfortable in the workplace, rather than encouraged to achieve more.

It may be common for upper management in some workplaces, to take the ideas of lower level employees lightly, which leaves the employees feeling neglected and worthless. It becomes difficult for workers to see a bright future while working for the company. If an employee fails to see a future with the company, why would they work to produce results?

Those employees who do work well to support the company may not be compensated for their efforts. Employers that choose to under-compensate know that these employees will work hard for minimal pay, and these employers will compensate accordingly (Timpe, 1986). At the same time, the same employers will pay more to other employees who are not willing to work for minimal compensation. This compensation disparity leads to dissatisfaction because eventually the hard worker will notice that he or she is not being compensated

fairly for the amount of work they are doing, and will begin searching for another company that will appreciate his or her labor.

Finally, failure to provide employees with opportunities to grow within the company results in employee frustration. Barriers within the company may prevent some employees from reaching their full potential (Branham, 2005). Such barriers may include favoritism of certain employees or company policies requiring hiring from outside the company. Glass ceilings for minority employees may also cause difficulty in advancement. Organizations that do not provide sufficient training opportunities for employees are also doing themselves a disservice . These organizations are missing out on employees that are dedicated to their companies and knowledgeable in their fields, and with sufficient training, have the potential to do well in higher positions.

2:6:5 Employer Responsibility:-

The employer has a responsibility to ensure the satisfaction of all of its employees. There are many precautions that managers can take to make certain that they are meeting the working needs of their employees. Employers also should be more cautious during the hiring process. Having multiple people interviewing final candidates will help ensure that the employee will work well with the company.

During interviews, employers should ask questions relating to the type of work that the potential employee enjoys doing. It is imperative to match the personal characteristics and values of the employee with the organization. Employers should prepare for the interview by doing a job assessment to see what skills are necessary for the position, then testing applicants to see if they have the ability to be trained to the position and have the skills and knowledge that correspond with the job description (Kaye & Jordan-Evans, 1999). It is critical that during this phase, the

employer give an accurate description of the job to candidates so they can prepare for the challenges ahead. Managers must learn to communicate better with lower level employees. Connection to the company gives staff a better feeling of belonging and worth. Supervisors should set an example by promoting friendly relationships with the staff so the work environment is healthier (Kaye & Jordan-Evans, 1999). They need to learn to listen to the employees when they have a concern or a question about the work that they are doing or the direction that the company is taking. It is imperative that managers show respect for all employees, their opinions, and their work. Managers need to convey a good understanding of the mission and goals that the company is trying to attain so that the staff recognizes what the organization is working toward. Clarification, of the expectations associated with different positions, assists employees comprehending their direct relationship with the company and how their work affects that of others. Performance reviews are a good managerial tool because they give administrators an idea of those employees that are contributing to the organization's success and those who need to work harder (Branham, 2005). It also offers employees the ability to gauge their performance. Often, employees will think that they are performing better or worse than their managers perceive their work to be. The performance review presents the perfect time to bring together these different perspectives, to correct negative behavior, and to reward productivity. Providing employees with the opportunity for growth is also amajor contributor to satisfaction. Because performing the same job becomes uninteresting, it is important to challenge employees with work that they can accomplish but stretches their abilities (Timpe, 1986). It is a good opportunity to see the abilities of lower level employees. Giving employees new projects or goals allows them to become creative and skilled in new areas. This broadens their

Knowledge while they become a more valuable asset to the company. Lateral movement does not change the status of the employee, but helps them learn more about different aspects of the company. Doing another job entirely gives the employee a change of pace and direction. The employee may find that they enjoy a different branch of the workforce better than the one previously held. Recognition of an employee's hard work is essential to his or her satisfaction in the workplace (Kaye & Jordan-Evans, 1999). Letting employees in on the decision making processes gives those employees a feeling that their opinions are respected and that they hold a place of importance within the company. Pay is a huge motivator for many employees. Making the connection between money and performance motivates employees to be more productive and to go the extra mile (Timpe, 1986). Caring about employees on a personal level is important as well. Let them know that the work that they do, the lives that they lead, also are of benefit to the Company. The employer can make sure that employees are aware of their achievements. These employers can show appreciation for those achievements. Conversely, employers should take notice when employees become overwhelmed and attempt to alleviate the daily burden by adding more help when it is obviously needed.

2:7 Internal communications:-

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.

Theorganizationshalldeterminetheinternalandexternalcommunicationsrelevanttothe quality management system, including:

- On what it will communicate;
- When to communicate;
- With whom to communicate;

- How to communicate;
- Who communicates?

2:8 Work environment:-

The organization shall determine, provide and maintain the environment necessary for the operation of its processes and to achieve conformity of products and services.

A suitable environment can be a combination of human and physical factors, such as:

- Social (e.g. non-discriminatory, calm, non-confrontational);
- Psychological (e.g. stress-reducing, burnout prevention, emotionally protective);
- Physical (e.g. temperature, heat, humidity, light, airflow, hygiene, noise).

2:9 Management commitment:-

Management commitment is not a gift. It is earned and maintained through hard work, loyalty, communication and good staff work. Commitment from top management may be the most critical factor in the success of any programs.

Top management 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.

Top management shall demonstrate leadership and commitment with respect to the quality management system by:

• Taking accountability forth effectiveness of the quality management system;

- Ensuring that the quality policy and quality objectives are established for the quality management system and are compatible with the context and strategic direction of the organization;
- Ensuring the integration of the quality management system requirements into the organization's business processes;
- Promoting the use of the process approach and risk based thinking;
- Ensuring that there sources needed for the quality management system are available;
- Communicating the importance of effective quality management and of conforming to the quality management system requirements;
- Ensuring that the quality management system achieves its intended results;
- Engaging, directing and supporting persons to contribute to the effectiveness of the quality management system;
- promoting improvement;
- Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

2:10 the relationship between ISO 9001-2015 and employee satisfaction:-

The implementation of this quality management system provide products and services that meet customer requirements by empowerment, training, competence and awareness of employee and satisfy them to get intended results

2:11 Importance of ISO 9001 Certification:-

• Meet Customer Requirements:

Many companies want ISO 9001 certification just to satisfy Customer's requirements. The customer states that it will only do business with vendors that are certified as ISO 9001 compliant, so to get (or keep) the business they need that certification. The problem with these companies is that they're looking for a short-

term payoff. These one benefit "we need money "and ignore the long-term benefits, like "if we keep the customer well satisfied, they will want to come back again and again". They don't embrace the concept of quality through continual improvement. They don't understand that continued customer satisfaction is the ultimate goal of a QMS. You may obtain a piece of paper (that ISO certificate) that claims ISO 9001 certification without seeing much actual quality or improvement. Focusing only on that one benefit without putting the customer in front will end up costing you much more in the long run.

• Get More Revenue and Business from New Customers:

Once you earn your ISO 9001 certification, you can advertise your quality certification and respond to requests for quotes (RFQ) from companies. ISO 9001 certification can open up new markets you were virtually unable to do business with, before your certification.

• Improve Company and Product Quality:

A quality management system standard all about quality (really!) so, of course, one result of adopting a QMS should be an improved level of quality for the entire organization every process and every product. A well designed and effectively implemented ISO 9001 Quality Management System will put your company on the Road to Quality.

• Increase Customer Satisfaction with your Products:

Quality means whatever you produce will be as your customers expect. You will meet not only their stated requirements but you will meet more of their implied requirements. Quality also means fewer complaints and doing a better job of resolving those you do. If your quality management system is working correctly, you should know what your customers expect and you should be providing it, resulting in increased customer satisfaction.

• Describe, Understand, and Communicate Your Company Processes:

The ISO 9001standard requires that you identify and describe your processes using business metrics, the purpose of which is to better manage and control your business processes. Quality objectives form the center of your system. Metrics are used to understand and communicate your system's performance relative to your quality objectives. If you make an honest attempt to conform to the requirements of getting ISO 9001 certification, you'll learn more about your business.

• Develop a Professional Culture and Better Employee Morale:

Implementing an ISO 9001can empower employees. Your QMS will provide them with clear expectations (quality objectives and job descriptions), the tools to do their job (procedures and work instructions) and prompt actionable feedback on their performance (process metrics). The result? An improved company culture and a more professional staff.

• Improve the Consistency of Your Operations:

What is consistency? One way to think of it is "decreased variation". Reducing the variation in your processes is the definition of consistency. Is your customer better served by you supplying them with a consistent product, same dimensions, same weight, same tolerances, same output every time?

Of course, they won't accept variation. How do you decrease variation? By increase control of your processes! Control comes from having a clear target to shoot for (objective), collecting data on the process (metrics), and understanding how to adjust the process (procedures and work instructions) to maintain the target output.

• Focus Management and Employees:

Management and employees should be able to focus better on what's important, the right objectives, metrics, and procedures because it's easy to lose focus over a period of time.

The ISO 9001 has a way to ensure the company stays focused by quality auditing. Internal audits, registration (and surveillance) audits, and self-process audits. ISO 9001 certification requires that the company periodically audit its quality processes. Regular process audits and as-needed audits.

• Improve Efficiency, Reduce Waste, and Save Money:

ISO 9001 isn't perfect; no process and no one is perfect that why the standard devote a clause to "continual improvement". A well-run QMS does enable your processes improve, become more consistent, and you achieve your target objectives regularly, you will see tangible results. Your process waste will decrease.

Waste is money lost forever. Waste results from poor quality and inefficiency. Inefficiency results from variation and inconsistent processes. Reduce variation and improve consistency led to less waste and more money.

• Achieve International Quality Recognition:

ISO 9001 is currently in use by over one million organizations around the world. It is truly a worldwide standard for quality! Obtaining ISO 9001 certification puts your company in a very select group.

Chapter Three Materials and Methods

Chapter three

RESEARCH METHODOLOGY

3:1 Chapter over view:-

This chapter contains description of the materials and methods followed by the researcher for determining the social exchange theory and study design, study methodology, study population, study sample, Questionnaire design, Information Sources and case study.

3:2 Social exchange theory:-

Social exchange theory is an important social psychology concept that concerns social changes as a process of interactive exchanges between different people. This theory is often used within the business world to explain and analyze commercial transactions. Social exchange is one of the so-called economic theories of relationships as a series of exchanges aiming at balancing rewards and costs. Social exchange theory is concept based on the notion that relationship between two people is created through a process of cost-benefit analysis.in other words it is a metric designed to deter mine the effort poured in by an individual in a person-to-person relationship. The measurement of the pluses and minuses of a relationship may produce data that can determine if someone is putting too much effort into a relationship.

The theory is unique in the sense that it does not necessarily measure relationships on emotional metrics. Rather it is systematic processes rely on mathematics and logic to determine balance within a relationship.

3:3 Study design:-

Based on research objective, researcher developed the objective, design and the framework of the research. Central Trading Company was chosen as a research area because it is implementing ISO 9001: 2015; According to objectives of research four hypotheses are assumed to evaluate the implementation of ISO 9001:2015 on the quality management system of Central Trading Company. Questionnaire survey was conducted and data was analyzed by using SPSS software program.

3:4 Study methodology:-

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

3:5 Study population:-

The study population consisted of all employee of Central Trading Company.

3:6 Study sample:-

The study sample consisted of (100) employees from Central Trading Company, were selected as the stratified random method.

3:7 Questionnaire design:-

The aim of the questionnaire design (study tool) is to translate the research objectives into specific questions. The answers of these questions should provide data for answering all or some of the research questions.

The study tool include on the four main parts are (Appendix 2):

- Was devoted to measure the level of Employee satisfaction in Central Trading Company.
- Was devoted to measure the commitment of top management in the Central Trading Company.
- Was devoted to measure the level of internal communication in Central Trading Company.
- Was devoted to measure the Work environment on the Central Trading Company.

3:8 Information Sources:-

3:8:1 Primary sources:

Questionnaire as a key tool to search, designed specifically for this purpose.

3:8:2 Secondary sources:

- Books.
- Researches and academic studies and references.
- Specialized studies in the study field.
- Web sites relevant.

3:9 Case study:-

Central Trading Company (CTC)

Establishment:

Established as Central Trading Company (CTC). The company soon rose to be a leading name in the entire region. Since inception, the company has been actively involved with multinational corporations to acquire and hold their exclusive representation in Sudan. In the decades that followed, CTC gained an enviable

reputation as general merchants, traders, exporters and manufacturers by maintaining the highest standards in international import-export management services.

The company's philosophy of growth is based on fostering great regard for the values and beliefs of its corporate alliances. This has gone a long way in building long lasting concrete relationships beyond business objectives, and shaping a company that keeps human values at the forefront of its developments.

From a private limited company to a multi-faceted conglomerate, the company has witnessed unprecedented growth while making its mark in diverse realms of business. CTC Group is today known for quality products and value added service as well as being a responsible corporate citizen serving society with commercial enterprise as well as charitable support.

For over 50 years, driven by progressive thinking and ambitious entrepreneurial spirit, CTC Group has been touching lives in all walks of life – from agrochemicals to automobiles, electronics to telecommunications, engineering to manufacturing and more.

CTC-Engineering is a solution provider company in the equipment's and machinery markets that believes in adding value by enhancing demand, ensuring availability of equipment, guaranteeing quality, efficient logistics and dedicated customer services.

CTC-Engineering is one of the leading companies in this field in Sudan. The company represents on an exclusive basis a number of large multinational companies dealing in Agricultural Equipment's, Construction Machineries, Automotive Vehicles, Generator Sets, Irrigation Systems and Factory Plants.

CTC Engineering is a leading solution provider in the agricultural sector in Sudan with a strong focus in key areas of agricultural machinery, construction & earth movement, water management systems, handling and transportation as well as sugar industry solutions.

Objective:-

Our goal at CTC Group is simple - achieve complete customer satisfaction through our commitment to provide exemplary services in all aspects of company activities. CTC Group accomplishes this by the implementation of a world-class quality system in line with the requirements of international standard ISO-9001:2015 and the continual improvement of CTC Group's quality management system.

Mission:-

The Group's overriding mission is to build a sales and service organization that is committed to providing quality products and services that deliver customer satisfaction for all clients. CTC Group delivers services that are superior, comprehensive, and trustworthy through the integration of process, people and technology to be a leader in the Sudan market and this underpins all Group company activities.

Vision:-

To maintain a professional approach and carry out operations with integrity. To ensure ethical and fair treatment to all its stakeholders, customers and employees by fostering an atmosphere of trust, respect and dignity. (www.ctcgroupltd).

Chapter Four Analysis and Discussion

Chapter four

Analysis and Discussion

Chapter over view:

provides an analysis to the information gathered from the questionnaire conducted

According to what has been described in the literature framework and after enter the data for the purpose of statistical analysis, using the questionnaire tool to collection data, and to investigation the study led the requested purpose by checking the hypotheses of the study, some statistical methods are used which are as follows:

- Frequency distribution
- Graphs and charts
- Percentage
- Median for the respondent's trends
- Chi-square test

To obtain the results are characterized by a high accuracy as much as possible, it was use the **SPSS** (Statistical Package for Social Sciences) technique.

Test the validity of the study hypothesis:-

To answer the questions of the study and verification of hypotheses, median was calculated for each phrase of the questionnaire, which show views of the study sample, where it was given class (5) as a weight for each answer "Strongly agree", and class (4) as a weight for each answer "agree " and class (3) as a weight for each answer "heutral" and class (2) as a weight for each answer "disagree", and class (1) as a weight for each answer "strongly disagree". To find out the direction

of the responses, firstly making sure that the ferry statistically significant through the Sig value.

According to the requirements of statistical analysis is to convert nominal variables to the amount of variables, as it will use chi-square test to determine significance of differences in the respondents answers to the hypothesis phrases.

Table (4:1) reliability and validity test:-

Test	Reliability	Validity	Interpretation
Value	0.830	0.911	Meaning full

Source: student, 2019

The values of reliability (0.830) and validity (0.911) this implies that the phases in study are more consistency relating to the hypothesis of the study which indicate that a questionnaire is characterized by high validity and high reliability also to achieve the purposes of the study and makes a statistical analysis fit and acceptable.

Personal information:-

Table (4:2): Age:-

Age	Frequency	Percentage%
25-40 years	53	53
40 -55 years	37	37
55-70 years	10	10
Total	100	100

37%

55-70 years

Figure (4:1)

Source: student, 2019

40-55 years

The above table and figure illustrate the percentage of the respondents of the age" (53) of individuals said 25-40 years with percentage (53%) and (37) of individuals said 40-55 years with percentage (37%) and (10) of individuals said 55-70 years with percentage (10%).

Table (4:3): Gender:-

60%

50%

40%

30%

20%

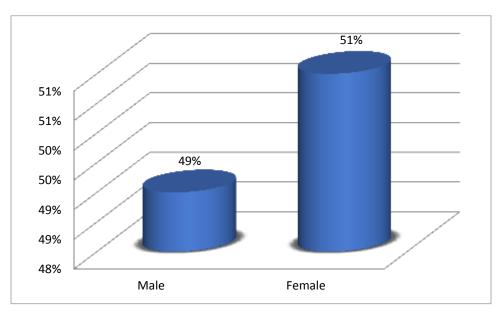
10%

0%

25-40 years

Gender	Frequency	Percentage%
Male	49	49
Female	51	51
Total	100	100

Figure (4:2)

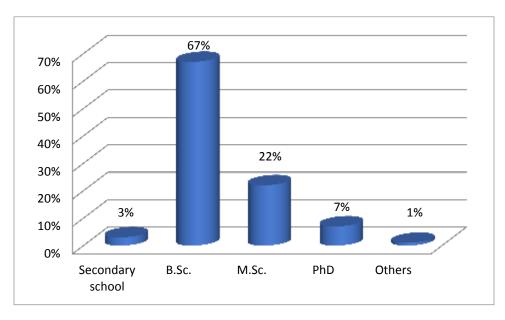


The above table and figure illustrate the percentage of the gender" (49) of individuals said male with percentage (49%) and (51) of individuals said Female with percentage (51%).

Table (4:4) Education level:-

Education	Frequency	Percentage%
Secondary school	3	3
B.Sc.	67	67
M.Sc.	22	22
PhD	7	7
Others	1	1
Total	100	100

Figure (4:3)



The above table and figure illustrate the percentage of the respondents of the Education level" (3) of individuals have Secondary school percentage (3%) and (67) of individuals B.Sc. percentage (67.0%) and (22) of individuals M.Sc. percentage (22.0%) and (7) of individuals have PhD percentage (7%) and one (7) of individuals have others percentage (1.0%).

Table (4:5) Occupation level:-

Occupation	Frequency	Percentage%
Manager	16	16
Accountant	15	15
Technician	10	10
Engineer	31	31
Other	28	28
Total	100	100

31% 35% 28% 30% 25% 16% 15% 20% 10% 15% 10% 5% 0% Other

Figure (4:4)

Engineer

Accountant Technician

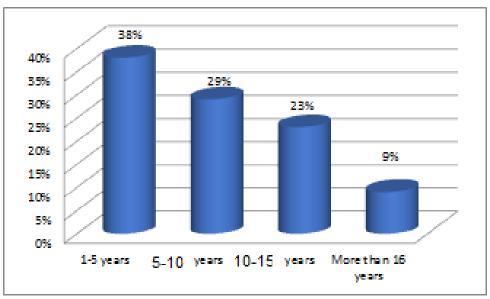
The above table and figure illustrate the percentage of the respondents of the Occupation level" (16) of individuals have Manager Percentage (16%) and (15) of individuals have Accountant percentage (15%) and (10) of individuals have Technician percentage (10%) and (31) of individuals have Engineer percentage (31%) and (28) of individuals have other percentage (28%).

Table (4:6) Experience:-

Manager

Occupation	Frequency	Percentage%
1-5 years	38	38
5-10 years	29	29
10-15 years	23	23
More than 16 years	9	9
Total	1	1

Figure (4:5)

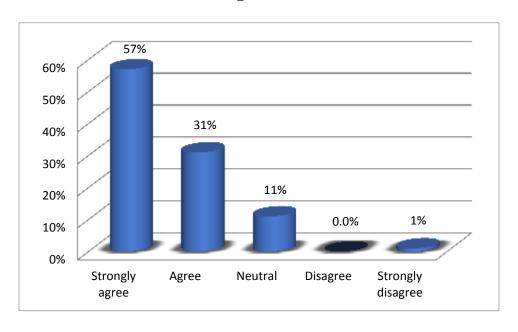


The above table and figure illustrate the percentage of the respondents of the Occupation level" (38) of individuals have 1-5 years Percentage (38%) and (15) of individuals have 5-10 years percentage (29%) and (23) of individuals have 10-15 years percentage (23%) and (9) of individuals have More than 16 years percentage (9%).

Table (4:7) how aware are you of ISO 9001-2015 QMS in CTC group? (Round whichever is applicable):-

	Frequency	Percentage%
Strongly agree	57	57
Agree	31	31
Neutral	11	11
Disagree	0	0.0
Strongly disagree	1	1
Totals	100	100

Figure (4:6)



The above table and figure illustrate the percentage of the respondents of the how aware are you of ISO 9001-2015 QMS in CTC group" (57) of individuals have strongly agree percentage (57%) and (31) of individuals have agree percentage (31%) and (11) of individuals have neutral percentage (11%) and (0) of individuals have disagree percentage (0%) and one of individuals have strongly disagree percentage (1%).

Table (4:8): Top management commitment:-

No	Statement	Strongl	Agree	Neutral	Disagree	Strongly
		y agree				disagree
1	Top managers attend	59	28	9	4	0
	management review meetings	59.0%	28.0%	9.0%	4.0%	0.0%
2	Organization objectives are	41	36	19	4	0
	reviewed on timely manner by	41.0%	36.0%	19.0%	4.0%	0.0%

	top managers to assess					
	achievements					
3	Top managers actively	49	30	18	3	0
	involved in affecting	49.0%	30.0%	18.0%	3.0%	0.0%
	improvement in production					
	planning and execution					
4	Top managers is very much	41	43	11	5	0
	involved and committed in the	41.0%	43.0%	11.0%	5.0%	0.0%
	ISO 9001 implementation					
5	Organization provides	42	43	8	6	1
	Sufficient training programs	42.0%	43.0%	8.0%	6.0%	1.0%
	for its production and					
	manufacturing employees in					
	relation to ISO 9001					
	implementation					

Table (4:8) illustrates the views of respondents about the Top management commitment, where we note the respondent's answers on statements were as follows:

- * Top managers attend management review meetings: you have 59 individuals by 59.0% answered strongly agree, and 28 individuals by 28.0% answered agree, and 9 individuals by 9.0% answered neutral, and 4 individuals by 4% answered disagree, no individual answered strongly disagree.
- * Organization objectives are reviewed on timely manner by top managers to assess achievements: you have 41 individuals by 41.0% answered strongly agree,36 individuals by 36.0% answered agree, and 19 individuals by 19.0%

answered neutral, and 19 individuals 19.0% answered disagree, no individual answered strongly disagree.

- * Top managers actively involved in affecting improvement in production planning and execution: you have 49 individuals by 49.0% answered strongly agree, and 30 individuals by 30.0% answered agree, and 18 individuals by 18.0% answered neutral, 3individuals by 3.0% answered disagree, no individual answered strongly disagree.
- * Top managers is very much involved and committed in the ISO 9001 implementation: which 41 individuals by 41.0% answered strongly agree, and 43 individuals by 43.0% answered agree, and 11 individuals by 11.0% answered neutral individuals by 11.0% answered disagree, and 5 individuals by 5.0% answered neutral, no individual answered strongly disagree.
- * Sufficient training programs for its production and manufacturing employees in relation to ISO 9001 implementation: you have 42 individuals by 42.0% answered strongly agree, and 43 individuals by 43.0% answered agree, and 8 individuals by 8.0% answered neutral, and 6 individuals 6.0% answered disagree ,one individuals by 1.0% answered strongly disagree.

Table (4:9) illustrates the result of the chi square test for phrases of first hypothesis:-

No	Statement	Chi-	Sig	Median	Interpretation
		square			
1	Top managers attend management	74.48	0.000	5	Strongly
	review meetings				agree
2	Organization objectives are	34.16	0.000	4	Agree

	reviewed on timely manner by top				
	managers to assess achievements				
3	Top managers actively involved in	45.36	0.000	4	Agree
	affecting improvement in				
	production planning and execution				
4	Top managers is very much	47.04	0.000	4	Agree
	involved and committed in the ISO				
	9001 implementation				
5	Organization provides sufficient	85.70	0.000	4	Agree
	training programs for its production				
	and manufacturing employees in				
	relation to ISO 9001				
	implementation				

The results of table (4:9) Interpreted as follows:

* The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement: Top managers attend management review meetings was (74.48) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were strongly agree that the Top managers attend management review meetings.

* The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement: Organization objectives are reviewed on timely manner by top managers to assess achievements was (34.16) with P-value (0.000) which is lower than the level of significant value (0.05) These

refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Organization objectives are reviewed on timely manner by top managers to assess achievements.

- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Top managers actively involved in affecting improvement in production planning and execution was (45.36) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Top managers actively involved in affecting improvement in production planning and execution.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Top managers is very much involved and committed in the ISO 9001 implementation was (47.04) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Top managers is very much involved and committed in the ISO 9001 implementation.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Organization provides sufficient training programs for its production and manufacturing employees in relation to ISO 9001 implementation was (85.70) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Organization provides sufficient training programs for its production and manufacturing employees in relation to ISO 9001 implementation.

Table (4:10): Internal communication:-

No	Statement	Strongly	Agree	Neutral	Disagree	Strongly
		agree				disagree
1	The organization established	65	24	6	5	0
	communication process	65.0%	24.0%	6.0%	5.0%	0.0%
2	The organization defined	48	41	6	5	0
	duties and responsibilities	48.0%	41.0%	6.0%	5.0%	0.0%
3	The organization	37	46	11	6	0
	communicated of quality	37.0%	46.0%	11.0%	6.0%	0.0%
	policies					
4	The organization encouraged	41	43	9	6	1
	to work in team work	41.0%	43.0%	9.0%	6.0%	1.0%

Table (4:10) illustrates the views of respondents about the internal communication, where we note the respondent's answers on statements were as follows:

- * The organization established communication process i.e. outlook monthly meeting: you have 65 individuals by 65.0% answered strongly agree,24 individuals by 24.0% answered agree, and 6 individuals by 6.0% answered neutral,5 individuals by 5.0% answered disagree, no individual answered strongly disagree.
- * The organization defined duties and responsibilities: you have 48 individuals by 48.0% answered strongly agree,41 individuals by 41.0% answered agree, and 6 individuals by 6.0% answered neutral,5 individuals 5.0% answered disagree, no individual answered strongly disagree.
- * The organization communicated of quality policies: you have 37 individuals by 37.0% answered strongly agree,46 individuals by 46.0% answered agree,11 and

individuals by 11.0% answered neutral, and 6 individuals by 6.0% answered disagree, no individual answered strongly Disagree.

* The organization encouraged to work in team work: which 41 individuals by 41.0% answered strongly agree, and 43 individuals by 43.0% answered agree, and 9 individuals by 9.0% answered neutral, 6 individuals by 6.0% answered disagree, and, and one individuals by 1.0% answered strongly disagree.

Table (4:11) illustrates the result of the chi square test for phrases of first hypothesis:-

No	Statement	Chi-	Sig	Median	Interpretation
		square			
1	The organization established	94.48	0.000	5	Strongly
	communication process				agree
2	The organization defined duties and	61.84	0.000	4	Agree
	responsibilities				
3	The organization communicated of	45.68	0.000	4	Agree
	quality policies				
4	The organization encouraged to	82.40	0.000	4	Agree
	work in team work				

Source: student, 2019

The results of table (4:11) Interpreted as follows:

* The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement: The organization established communication process i.e. outlook monthly meeting was (94.48) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the

existence of differences statistically significant between the responses of individuals in study and for those how were strongly agree that the organization established communication process i.e. outlook monthly meeting.

- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: The organization defined duties and responsibilities was (61.84) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the organization defined duties and responsibilities.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: The organization communicated of quality policies was (45.68) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the organization communicated of quality policies.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: The organization encouraged to work in team work was (82.40) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the organization encouraged to work in team work.

Table (4:12): work environment:-

No	Statement	Strongly	Agree	Neutral	Disagree	Strongly
		agree				disagree
1	The working environment is	70	18	9	3	0
	convenient to perform well	70.0%	18.0%	9.0%	3.0%	0.0%
2	Direct managers help me	47	28	21	3	1
	develop my performance and	47.0%	28.0%	21.0%	3.0%	1.0%
	raise my practical experience					
3	Enjoy telling others about	43	29	14	9	5
	place of work	43.0%	29.0%	14.0%	9.0%	5.0%
4	Enough time for work tasks	36	26	26	11	1
		36.0%	26.0%	26.0%	11.0%	1.0%
5	Possibility of learning new	42	32	18	6	2
	things through the work	42.0%	32.0%	18.0%	6.0%	2.0%

Table (4:12) illustrates the views of respondents about the work environment: where we note the respondent's answers on statements were as follows:

- * The working environment is convenient and convenient to perform well: you have 70 individuals by 70.0% answered strongly agree,18 individuals by 18.0% answered agree, and 9 individuals by 9.0% answered neutral,3 individuals by 3.0% answered disagree, no individual answered strongly disagree.
- * Direct managers help me develop my performance and raise my practical experience: you have 47 individuals by 47.0% answered strongly agree,28 individuals by 28.0% answered agree, and 21 individuals by 21.0% answered

neutral, and 3 individuals 3.0% answered disagree ,one individuals by 1.0% answered strongly disagree.

- * Enjoy telling others about place of work: you have 43 individuals by 43.0% answered strongly agree, and 29 individuals by 29.0% answered agree, and 14 individuals by 14.0% answered neutral, 9 individuals by 9.0% answered disagree, 5 individuals by 5.0% answered disagree.
- * Enough time for work tasks: which 36 individuals by 36.0% answered strongly agree,26 individuals by 26.0% answered agree, and 26 individuals by 26.0% answered neutral, and 11 individuals by 11.0% answered disagree, one individuals by 1.0% answered disagree.
- * Possibility of learning new things through the work: you have 42 individuals by 42.0% answered strongly agree,32 individuals by 32.0% answered agree, and 18 individuals by 18.0% answered neutral,6 individuals 6.0% answered disagree ,2 individuals by 2.0% answered strongly disagree.

Table (4:13) illustrates the result of the chi square test for phrases of first hypothesis:-

No	Statement	Chi-	Sig	Median	Interpretation
		square			
1	The working environment is	112.6	0.000	5	Strongly
	convenient to perform well				agree
2	Direct managers help me develop	72.20	0.000	4	Agree
	my performance and raise my				
	practical experience				
3	Enjoy telling others about place of	49.60	0.000	4	Agree
	work				

4	Enough time for work tasks	38.50	0.000	4	Agree
5	Possibility of learning new things	57.60	0.000	4	Agree
	through the work				

The results of table (4:13) Interpreted as follows:

- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: The working environment is convenient and convenient to perform well was (112.6) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were strongly agree that the working environment is convenient and convenient to perform well.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Direct managers help me develop my performance and raise my practical experience was (72.20) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the direct managers help me develop my performance and raise my practical experience.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Enjoy telling others about place of work was (49.60) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Enjoy telling others about place of work.

- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Enough time for work tasks was (38.50) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Enough time for work tasks.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: Possibility of learning new things through the work was (57.60) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the Possibility of learning new things through the work.

Table (4:14): Employee satisfaction:-

No	Statement	Strongly	Agree	Neutral	Disagree	Strongly
		agree				disagree
1	I am satisfied with my job at	65	22	8	5	0
	the organization	65.0%	22.0%	8.0%	5.0%	0.0%
2	I intend to keep working at	36	27	24	12	1
	the organization long into the	36.0%	27.0%	24.0%	12.0%	1.0%
	future					
3	The organization is working	53	24	15	7	1
	to develop my competence	53.0%	24.0%	15.0%	7.0%	1.0%
	my abilities and my practical					
	aspirations					
4	I often think about quitting	16	7	17	38	22

	my job	16.0%	7.0%	17.0%	38.0%	22.0%
5	As soon as I can find another	20	4	15	25	36
	job I am going to leave	20.0%	4.0%	15.0%	25.0%	36.0%

Table (4:14) illustrates the views of respondents about the Employee satisfaction: where we note the respondent's answers on statements were as follows:

- * I am satisfied with my job at the organization: you have 65 individuals by 65.0% answered strongly agree,22 individuals by 22.0% answered agree, and 8 individuals by 8.0% answered neutral,5 individuals by 5.0% answered disagree, no individual answered strongly disagree.
- * I intend to keep working at the organization long into the future: you have 36 individuals by 36.0% answered strongly agree,27 individuals by 27.0% answered agree,24 and individuals by 24.0% answered neutral,12 individuals 12.0% answered disagree, one individuals by 1.0% answered strongly disagree.
- * The organization is working to develop my competence my abilities and my practical aspirations: you have 53 individuals by 53.0% answered strongly agree,24 individuals by 24.0% answered agree, and 15 individuals by 15.0% answered neutral,7 individuals by 7.0% answered disagree, one individuals by 1.0% answered strongly disagree.
- * I often think about quitting my job: which 16 individuals by 16.0% answered strongly agree, and 7 individuals by 7.0% answered agree, and 17 individuals by 17.0% answered neutral, 38 individuals by 38.0% answered disagree, and, 22 individuals by 22.0% answered strongly disagree.
- * As soon as I can find another job I am going to leave: you have 20 individuals by 20.0% answered strongly agree,4 individuals by 4.0% answered agree, and 15 individuals by 15.0% answered neutral, and 25 individuals 25.0% answered disagree

Table (4:15) illustrates the result of the chi square test for phrases of first hypothesis:-

No	Statement	Chi-	Sig	Median	Interpretation
		square			
1s	I am satisfied with my job at the	91.92	0.000	5	Strongly
	organization				agree
2	I intend to keep working at the	37.30	0.000	4	Agree
	organization long into the future				
3	The organization is working to	83.00	0.000	5	Strongly
	develop my competence my				agree
	abilities and my practical				
	aspirations				
4	I often think about quitting my job	26.10	0.000	2	Disagree
5	As soon as I can find another job I	28.10	0.000	2	Disagree
	am going to leave				

The results of table (4:15) Interpreted as follows:

* The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement: I am satisfied with my job at the organization was (91.92) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were strongly agree that the I am satisfied with my job at the organization.

- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: I intend to keep working at the organization long into the future was (37.30) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were agree that the I intend to keep working at the organization long into the future.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: was (83.00) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were strongly agree that the.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: The organization is working to develop my competence my abilities and my practical aspirations was (26.10) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were disagree that the organization is working to develop my competence my abilities and my practical aspirations.
- * The value of chi square calculated to signify the differences between the numbers of individuals of the study for the statement: As soon as I can find another job I am going to leave was (28.10) with P-value (0.000) which is lower than the level of significant value (0.05) These refer to the existence of differences statistically significant between the responses of individuals in study and for those how were disagree that the as soon as I can find another job I am going to leave

Chapter Five Results and Recommendations

Chapter five

Results and Recommendations

5:1 Chapter over view:-

This chapter includes a presentation and discussion of the most important findings of the study and providing the conclusion and a set of recommendations that came out from the study results.

5:2 Results:-

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.

Table (5:1):-

Hypotheses	Result
Organization provides sufficient training programs for its	Supported
production and manufacturing employees in relation to ISO 9001	
implementation.	
The organization established communication process i.e. outlook	Supported
monthly meeting.	
The working environment is convenient and convenient to perform	Supported
well.	
I am satisfied with my job at the organization	Supported

5:3 Discussion:-

After analyzing the results of the questionnaires distributed to Central Trading Company employees this research found that there is appositive relationship of implementing ISO 9001-2015 on employee satisfaction.

(Sati, 2016) found that There is appositive relation between ISO 9001-2008 implementation and the Zain market share, (Abdulnaby, 2016) found that Certified banks will have higher degree of employee satisfaction than non-certified banks and Certified banks will have more effective operation than non-certified banks, (Abd Elrhman, 2016) found that The awareness and commitment of top managers of ISO will help them in the process of evaluation and measuring the system to achieving results and Implementing ISO system enhance the performance and quality of service, (Ismail,2016) found that There is an impact of implementation ISO 9001-2008 among National Industry Company and employee performance and There is a high level of job satisfaction among the employees in national industry company and There is relationship between ISO 9001-2008 and employee satisfaction improvement.

5.4 Conclusions:

The study demonstrates that top management commitment is the key factor to guarantee an effective ISO 9001 implementation. In its absence, the entire organization will not be motivated to contribute to the quality management process, which can result in the outcome being negative. Top management must communicate the importance of the ISO 9001 implementation and provide due support and leadership to ensure successful completion of all the steps. However, this does not imply that other factors may be neglected. Care and attention needs to be paid to other factors, since they are shown to have a higher importance when

considered as a combination. If neglected, there is a serious risk of an ineffective implementation. Organizations that understand the relative importance of each factor are likely to be successful in ISO 9001 implementation and in ensuring its internalization, moving toward a "quality mindset" as characterized by Boiral and Heras-Saizarbitoria (2015).

5:5 General Recommendations:-

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

- 1- The organization review objectives on timely manner by top managers to assess achievements.
- 2-The organization communicate of quality policies.
- 3- The organization takes employee enough time for work tasks.
- 4- The organization study about why employees often think about quitting their jobs.

5.6 Implications for theory and practice:

On the theoretical side, the present study contributes to the existing literature, enriching the content about ISO 9001 implementation, on the managerial side, the research findings will help to improve the ISO 9001 implementation process. Each factor has a well-understood corresponding implementation cost, which provides managers with a useful guide for prioritization. A highlight is that this research shows that while other factors may not be neglected, they may be addressed at a lower priority. All the factors are relevant for successful implementation.

5.7 Implications for future research:

A future version of this work could analyze factors critical for long-term effectiveness of ISO 9001. Some of the influencing metrics for assessing this could be regular use of quality tools in the day-to-day activities and their continuous effectiveness. Although top management and team commitment (consistent with the literature) appear to be the two most critical factors in ensuring successful ISO 9001:2015 implementation, further research should explore the key factors that determine levels of top management and team commitment. Given the sample size and rigorous approach to ranking of the key factors (using AHP), this study's findings can be considered fairly representative for the Central Trading Company (CTC group). However, future research ought to test the relative importance of the key factors identified in this research, and their applicability in other industrial contexts.

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- 2- WWW.ISO.Org.

Appendix:-

Appendix 1:-

Questionnaire design and referees:

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

Dr. DR. Abdemutalab Ibrahim Abdelrasoul.

Dr. Altaher Ahmed Ali.

بسم لله الرحمن الرحيم

Sudan University of Science and Technology

College of Graduate Studies

Total Quality & Excellence Centre

Questionnaire to measure employee satisfaction

Dear employee on CTC company:-

For the purposes of scientific research and development, please fill out this questionnaire in an explicit and objective manner, which aims to know the impact of the ISO 9001: 2015 certificate on employee satisfaction with work in terms of acceptance and the quality of service provided, knowing that this questionnaire will be treated confidentially and a statistical study will be carried out.

Researcher:

Malaz Abd Elazeem Osman

Appendix 2:-Questionnaire: General Information:-Please put $(\sqrt{})$ in the following expressions which is suitable to you. 1-Age: A) 25-40 years () b) 40-55 years () c) 55 -70 years 2-Gender: () a) Male b) Female () **3-Education level:** a) Secondary School () b) B.Sc. () c) M.Sc. () d) PhD e) Others () **4-Occupation Level:**

a) Manager

b) Accountant

c) Technician

d) Engineer

e) Other

()

()

()

()

()

b) 5–10years	()								
c) 10-15 years	()								
d) More than 16	years ())							
6. How aware whichever is a	-	of I	SO 900	1-201	15 Q	MS in (CTC grou	p? (Round	1
		127		T	D :				
Agree	Strongly	Ne	eutral		Disa	gree	Strongly		
	Agree						Disagree		
7- Top manage	ment comm	itmo	ent:-						
			Agree	Stro	ngly	Neutral	Disagree	Strongly	
				Agr	ee			Disagree	
Top management review meetings		end							
Organization	objectives	are							

5-Experience:

a) 1-5 years ()

reviewed on timely manner by

			, , , , , , , , , , , , , , , , , , , ,
top managers to assess			
achievements			
Top managers actively			
involved in affecting			
improvement in production			
planning and execution.			
Top management is very much			
involved and committed in the			
ISO 9001 implementation			
Organization provides			
sufficient			
training programs for its			
production and manufacturing			
employees in relation to ISO			
9001 implementation			

8- Internal communication:-

	Agree	Strongly	Neutral	Disagree	Strongly
		Agree			Disagree
The organization established					
communication process					
The organization defined					
duties and responsibilities					
The organization					
Communicated of quality					
policies					
The organization encouraged					
to work in team work					

9- Work environment:-

	Agree	Strongly	Neutral	Disagree	Strongly
		Agree			Disagree
The working environment is					
convenient to perform well					
Direct managers help me					
develop my performance and					
raise my practical					
Experience					
Enjoy telling others about					

place of work			
Enough time for work tasks			
Possibility of learning new			
things through the work			

10- Employee satisfaction:-

	Agree	Strongly	Neutral	Disagree	Strongly
		Agree			Disagree
I am satisfied with my job at					
the organization					
I intend to keep working at					
the organization long into the					
future					
The organization is working to					
develop my competence, my					
abilities and my					
practical aspirations					
I often think about quitting my					
job					
As soon as I can find another					
job I am going to leave					

Appendix 3:-Outline of studies:-

Author	The study	Variables		Study outcome-	Methods	Sug. for	limitations	
		Iv:	Dv:	MV:	result		future	
1-Natcha	-Development of quality	-ISO 9001-	-Development		-Component	-		-Joint inspection -
2017	management system under ISO	2015	of quality		compatibilities.	Descriptive		group.
	9001:2015 Joint inspection		management		-QMS			
	group (JIG) for aviation fuelling		system		implementation			
	service.				and development.			
2-Antonia								
Navarro,	-Applying Theoretical	-Theoretical	-		-Implementation of	-		-The study
Aida Huerta	Methodological tools for the	methodolog	Implementation		ISO 9001-2015	Descriptive		implemented in
2017	implementation of ISO 9001-	ical tools	of ISO 9001-		sub requirements.			engineering
	2015		2015					laboratories of the
	Clause 4:- context of the							faculty of higher
	organization.							studies Aragon.
3-Badr Eldin	-Role of Appling ISO 9001-	-ISO 9001-	-Performance of		-There is	-	-	-Recommended to
Sati.	2008 on performance of Zain	2008	Zain company		appositive relation	Descriptive	Recommende	study the role of
2016	company.				between ISO		d to study the	business excellence
					9001-2008		role of	department.

				implementation		business	
				and the Zain		excellence	
				market share.		department.	
					-	-	
4-Attieb	-Test of impact of ISO 9001 on	- ISO 9001-	-Impact on	-Certified banks	Descriptive	Recommende	-Sudanese bank.
Abdurrahman	Sudanese Banks.	2015	Sudanese Banks	will have higher		d that amore	
Abdulnaby.				degree of		studies should	
2016				employee		be carried out	
				satisfaction than		which cover	
				non-certified		the whole	
				banks.		departments	
				-Certified banks		of these banks	
				will have more		to establish	
				effective operation		the	
				than non-certified		effectiveness	
				banks.		of the	

						implementati on of ISO 9001 in the Sudanese Banks.	
5-Mustafa Abd Elrhman 2016	-The role of implementing ISO 9001-2008 on performance of Sudanese customs.	- Implementi ng ISO 9001-2008	-Performance of Sudanese customs	-The awareness and commitment of top managers of ISO will help them in the process of evaluation and	Descriptive	- Recommende d to study continuous improvement and	-Sudanese customs.
				measuring the system to achieving resultsWork environment inside the training center		development to achieve organization objective and customer satisfaction.	

				is suitable and			
				helps in correct			
				service results and			
				provide			
				Reliable and high			
				quality results.			
				-Implementing			
				ISO system			
				enhance the			
				performance and			
				quality of service.			
				-There is a system			
				to identify training			
				needs and staff			
				training in SCTA.			
6-Saria	-Impact of implementation ISO	-	-Employee	-There is an impact		-	-National Industry
Widdat Alla	9001-2008 on employee	Implementa	satisfaction	of implementation	Descriptive	Recommende	Company
Ismail	satisfaction.	tion of ISO		ISO 9001-2008		d to study the	Omdurman-sudan.
2016		9001-2008		among National		impact of	
2016				Industry Company		training	