



**UNIVERSITY OF SUDAN  
FOR SCIENE AND TECHNOLOGY**

**A TEST OF IMPACT OF ISO 9001 ON SUDANESE BANKS**

اثر تطبيق المواصفة ايزو **9001** علي البنوك السـودانية

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENT FOR DEGREE OF MASTER TOTAL QUALITY  
MANAGEMENT AND EXCELLENCE

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## **Dedication**

**I dedicate my dissertation work to soul of my parents and many friends. A special feeling of gratitude to my closed friends whose words of encouragement and push for to complete this dissertation.**

**I also dedicate this dissertation to my many friends and Master family who have supported me throughout the process. I will always appreciate all they have done,**

**I dedicate this work and give special thanks to my Supervisor Dr. Abbas .  
Ibrahim**

## **ACKNOWLEDGEMENTS**

It is a great pleasure for us to thank the many people who in different ways have supported and contributed to the process of writing this thesis. We would first and foremost like to express our sincere gratitude to the Almighty God for His guidance during this program. I would like to thank my family that have encouraged me all along and especially my lovely friends, for their cooperation and understanding during the writing of the thesis. Without their patience we would not have made it through this journey. We owe special gratitude to the management of the banks that gave me their support and the people that helped out during the time of gathering the data used for the thesis. Finally, we would also like to thank our supervisor, Dr. Abbas A, for his time and advice helping me getting started down the right road and also for his constructive advice throughout the project.

## Table of contents

Dedication .....	(a)
Acknowledge .....	(b)
Table of contents .....	(c)
Table of contents .....	(d)
Abstract (eng) .....	(e)
Abstract (Arab) .....	(f)
List of tables .....	(g)
Table of figure .....	(h)
Table of abbreviations .....	(i)

### CHAPTER ONE

1- Introduction .....	1
1.1. Background .....	1
1.2. Research Motivation .....	1
1.3. Research quests .....	2
1.4. Research Hypothesis .....	2
1.5. Objectives of research .....	3

### CHAPTER TWO

<b>2. Literature review .....</b>	<b>4</b>
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### CHAPTER THREE

<b>3. Methodology .....</b>	<b>19</b>
3.1. Research Design .....	19
3.2. Method of data collection.....	19
3.2.1. Secondary Data .....	19
3.2.2. Primary Data .....	19
3.2.3. Questionnaire.....	19
3.2.4. Interview.....	19
3.3. Population and Sample size.....	20
3.4. Data Analysis .....	20
3.4.1. Distribution of respondents by gender .....	21

3.4.2. Statistical test of hypothesis 1 .....	21
3.4.3. Statistical test of hypothesis 2 .....	22
3.4.4. Statistical test of hypothesis 3 .....	23
3.4.5. Summary of Data Analysis .....	24

## **CHAPTER FOUR**

<b>4. Discussion and conclusion .....</b>	<b>25</b>
4.1. Discussion of findings .....	25
4.2. Conclusion .....	25
4.3. Limitation to the study .....	29
4.4. Recommendation .....	29
.References .....	30
. Appendix1( Questionnaire).....	32
Appendix 2 (interview).....	36

## **ABSTRACT**

Regard this study The performance of Certified Bank and Non Certified Banks measured comparing statistically three major performance indicator Customer satisfaction, Employee satisfaction and Operational effectiveness. To establish a link between ISO 9001 implementation and performance and to show the need for the adoption of total quality culture in the local banks in Sudan. The purpose of this thesis is to highlight the benefit of ISO 9001 implementation in the Sudanese Banks by examining the basic principles of ISO 9001 in Banks. The impact of ISO 9001 implementation of the three performance indicator will be assessed and these indicators are Customer satisfaction, Employee satisfaction and Operational effectiveness. Methods I have used in this study are Quantitative and qualitative method. Primary data is collected from the Banks by questionnaires and interview. Secondary data is gotten from articles, journals and online resources. The theory section looks at different concepts of quality as defined and viewed by various authors. Also the benefits and hindrances of ISO 9001 implementation were reviewed. Regard analysis I have used a T-test hypothesis to measure the difference in means of Certified Banks and Non- Certified Banks using the three performance indicator(customer satisfaction, employee satisfaction and operational effectiveness). The research findings confirmed the benefits that ensue from the implementation of ISO 9001. It showed that ISO 9001 is a strategic tool industry can employ in the quest to remain competitive. It was also discovered that for the ISO 9001 to be properly implemented, everybody in the Bank must be involved from the management to the employees and even the customers. It is recommended that a more studies should be carried out, which covers the whole departments of these Banks to establish the effectiveness of the implementation of ISO 9001 in the Sudanese Banks.

## الخلاصة

تتعلق هذه الدراسة بقياس أداء البنوك التي نالت شهادة أليزو والبنوك الغير حائزة علي الايزومن ثم مقارنة إحصائية ثلاثة مؤشرات للأداء هي: رضا العملاء، ورضا الموظفين وفعالية التشغيل: وذلك لإثبات وجود صلة بين تطبيق المواصفة ايزو ٩٠٠١ وأداء هذه البنوك وإظهار الحاجة إلى اعتمادها كثقافة جودة لدى البنوك المحلية في السودان. و الغرض من هذا البحث هو تسليط الضوء على الفائدة من تطبيق المواصفة ايزو ٩٠٠١ في البنوك السودانية من خلال دراسة المبادئ الأساسية للمواصفة ايزو 9001 في البنوك. وسيتم تقييم تأثير التطبيق وفق المؤشرات الثلاثة (رضا العميل, رضا الموظفين و فعالية العملية). الطريقة المتبعة في هذا البحث هي طريقة كمية ونوعية. يتم جمع البيانات الأولية من البنوك عن طريق الاستبيانات والمقابلات. و الحصول علي البيانات الثانوية من المقالات والمجلات و الانترنت. اما الجانب النظري يركز علي المفاهيم المختلفة للجودة كما تم تعريفها وعرضها من قبل من مختلف المؤلفين. كما تم استعراض مزايا ومعيقات تطبيق المواصفة. اما التحليل فقد استخدمت فرضية T-كاختبار لقياس الفرق في متوسط اداء البنوك المعتمدة وغير معتمدة باستخدام مؤشرات الأداء الثلاثة. و أكدت نتائج الأبحاث الفوائد التي تترتب على ذلك من تطبيق المواصفة. وبينت ان المواصفة تعتبر كأداة استراتيجية يمكن أن تستخدم في السعي للمنافسة. واكتشف أيضا أن تطبيقها بشكل صحيح، يؤدي ان يشارك الجميع في الادارة حتى العملاء. فمن المستحسن أن المزيد من الدراسات ينبغي القيام بها، والتي تغطي كل الادارات من هذه البنوك للتأكد من فعالية تطبيق المواصفة ISO 9001 في البنوك السودانية.

## List of tables

Table 4.1 Distribution of respondents by gender.....	19
Table 4.2 Test of hypothesis for employee 'satisfaction.....	20
Table 4.۳ Group Statistics.....	21
Table 4.۴ Test of hypothesis for customer satisfaction.....	21
Table 4.۵ Group Statistics.....	22
Table 4.۶ T-test result for operational effectiveness .....	22



**Table of figure**

FIGURE: 2.1 Process approach.....6

Figure: 2.2 Chain of decision making.....10

FIGURE2.3: PDCA CYCLE.....13

## **Table of abbreviations**

ATM	Automated Teller Machine
QMS	Quality Management System
TQM	Total Quality Management

# **CHAPTER ONE**

# **Introduction**

# **1. Introduction**

## **1.1. Background**

International organization of standards (ISO), a global federation of 130 national standards bodies, seeks to promote standardization and the development of related activities worldwide in order to facilitate the international exchange of goods and services, and cooperation in the sphere of intellectual, scientific, technological and economic activities. The ISO 9000 standard series is now widely accepted as a Minimum standard for a quality system for companies (Marquardt, 1992) the possession of a certification to ISO 9001 has become a decisive competitiveness factor in the international market. Business Relationships are increasingly influenced by the possession of an ISO 9000 certificate, which proves to have an important advertising effect. Additionally the consequent application of an ISO 9001 system can have a significant cost reduction affect which results in performance improvement (Berry, 1991).

The number of companies with ISO 9001 certification has increased exponentially in the last ten years. However, the issue of what benefits the certified companies are able to derive from the certification is a general concern. As a quality assurance management model, ISO 9001 only prescribes the minimum requirements of certification.

## **1.2 RESEARCH MOTIVATION**

The change in consumer behavior has made most producers of goods and services to tailor their products to meet the requirement of potential customers. Thus, most organizations are concerned about how to satisfy their customers through improved services which is tailored to meet or exceed the expectation of customers. Even as organizations strive to meet customer's expectation, there still exist some flaws in the process involved in service delivery. Rather than take the whole process as a matter of importance, most local Banks in Sudan narrow down their quality approach to few operations in order to cut cost. The emergence of new Banks into the market is now changing the face of competition in this field, as these Banks tend to adopt a total quality management ideology through the implementation of ISO 9001 as first steps. The advantage this brings to them can be viewed in terms of increased patronage over time. If quality approach is not taken seriously by the old banks, they might in no time lose customers which might eventually drive them out of business. Thus there is the need for change in organizational culture and structure to give room for a new approach to service delivery. The implementation of ISO 9001 can be beneficial to the old Banks when the principles are effectively adopted, for effective implementation of ISO 9001 will increase customer satisfaction with the service offerings.

The improvement in quality can result in increased market share and profitability. Implementation of ISO 9001 further ensures that organizations change how they perform activities so as to eliminate inefficiency, improve customer satisfaction and achieve the best practice (Porter, 1996). Porter noted that constant improvement in the effectiveness of operation is essential but not a sufficient factor for organization to be profitable. According to Sila, (2007) TQM helps in improving the quality of products and also reduces the scrap, rework and the need for buffer stock by establishing a stable production process. He argued that TQM will reduce the cost of production and time of production. Many other TQM practices such as training, information system management, relationship with suppliers etc have a positive impact on operational performance.

### **1.3 RESEARCH QUESTION**

In this thesis, we will intend to answer the following questions:

1. What is the stand of the Sudanese local Banks today as regards ISO 9001?
2. What are the quality levels of Sudanese local Banks in Sudan?
3. What are the problems possibly faced in the implementation of ISO 9001 in the Sudanese Banks?
4. Who is likely to the effect of ISO9001 implementation on the Banks industry?
5. What are the compares and contrast in performance of Certified Banks and Non Certified Banks?
6. What will be the benefit of ISO 9001 implementation in Sudanese Banks?
7. What are the basic principles that the local Sudanese Banks industry can adopt to implement ISO 9001?
8. How can the old Sudanese Banks afford quality improvement and who will lead the quality improvement process?
9. Will Sudanese Banks see ISO 9001 a means to improve their services?
10. How does the finding fit with the theory in the field?

### **1.4. Research hypotheses:**

**Hypothesis 1** –Certified bank will have a higher degree of employees’ satisfaction than non– certified bank.

•H0 - There is no difference in employee’s satisfaction in certified bank and non-Certified bank.

•H1 - There is a significant difference in employee satisfaction between certified bank and non-Certified bank.

**Hypothesis 2** – certified banks will have high degree of customer’s satisfaction than non-certified Banks.

**Hypothesis3** – certified Banks will have more effective operation than non certified Banks.

## **1.5 OBJECTIVE OF THE RESEARCH**

The main objectives of this research are to highlight the benefit of ISO 9001 implementation in the Sudanese Banks by examining the basic principles of ISO 9001 in these Banks. It will thus compare and contrast the performance of Certified Banks and Non Certified Banks by measuring statistically three major added values namely:-

- Customer satisfaction
- Employee satisfaction
- Operational effectiveness

The outcome of these comparison if positive, will show the need for benchmarking by the non- Certified Banks, in other to derive the value created by its implementation, if not the researcher will assess the problems associated with the implementation of this ideology by the drawing inferences from the various interviews conducted outside the use of data gathered from the questionnaire.

### **1. Specific Objectives**

More specifically, the study is aimed to achieve the following objectives:

- to study the stand of Sudanese banks today as regards ISO 9001.
- to study the quality levels of local Sudanese banks.

# **CHAPTER TWO**

## **Literature review**

## **2. Literature review**

### **a)History of QMS ISO 9001 Certification**

During World War II, there were quality problems in many British explosive industries, where bombs were exploding in factories during assembly. The solution adopted to address these quality problems required factories to document their manufacturing procedures and to prove by record-keeping that the procedures were being followed. The standard was BS 5750, and it was known as a management standard because it specified not what to manufacture, but how the manufacturing process was to be managed. In 1987, the British Government persuaded the International Organization for Standardization (ISO) having member countries more than 180, to adopt BS 5750 as an international standard. The international standard was named ISO 9000 series. ISO 9000:1987 had the same structure as the British Standard BS 5750, with three models for quality management systems, the selection of which was based on the scope of activities of the organization.

ISO 9000:1994 emphasized quality assurance via preventive actions, instead of just checking final product, and continued to require evidence of compliance with documented procedures. ISO 9001:2000 combined the three standards 9001, 9002, and 9003 into one, called 9001. Design and development procedures are required only if a company engages in the creation of new products. The 2000 version sought to make a radical change in thinking by placing the concept of process management front and centre ("Process management" was the monitoring and optimizing of a company's tasks and activities, instead of just inspecting the final product). The new ISO 9001:2008 was published on 15 November 2008.the ISO 9001:2008 uses the same numbering system as ISO 9001:2000 to organize the standard. As a result, the new ISO 9001:2008 standard looks very much like the 9001:2000. No new requirements have been added. However, some important clarifications and modifications have been made like defining the scope of control on outsourced processes, validation of software, effectiveness of corrective/preventive action, control of external documents, etc.

### **Principles of Quality management system:**

The 8 principles below are not auditable but are fundamental attributes of any quality management system . They have been taken from ISO 9000:2005( Quality Management Systems – Fundamentals and Vocabulary and have served as a basis for the new ISO 9001:2008 standard.. These principles can be used by senior management as a framework to guide their organizations towards improved performance. The principles are derived from the collective experience and knowledge of the international experts who participate in ISO



Technical Committee ISO/TC 176, Quality management and quality assurance, which is responsible for developing and maintaining the ISO 9000 standards.

The eight quality management principles are defined in ISO 9000:2005, Quality management systems – Fundamentals and vocabulary, and in ISO 9004:2009, managing for the sustained success of an organization – A quality management approach.

1. This study gives the standardized descriptions of the principles as they appear in ISO 9000:2005 and ISO 9004:2009. In addition, it provides examples of the benefits derived from their use and of actions that managers typically take in applying the principles to improve their organizations' performance. International Organization for Standardization. ISO 9001-2008: Quality Management System Requirements. 4th edition. Geneva. Switzerland: ISO, 2008. Print.

#### Principle 1 – Customer focus

Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.

- Increased revenue and market share obtained through flexible and fast responses to market opportunities
- Increased effectiveness in the use of the organization's resources to enhance customer satisfaction
- Improved customer loyalty leading to repeat business.
- Researching and understanding customer needs and expectations
- Ensuring that the objectives of the organization are linked to customer needs and expectations
- Communicating customer needs and expectations throughout the organization
- Measuring customer satisfaction and acting on the results

- Systematically managing customer relationships
- Ensuring a balanced approach between satisfying customers and other interested parties (such as owners, employees, suppliers, financiers, local communities and society as a whole).

Key benefits:

Applying the principle of customer focus typically leads to :

Key benefits:

### Principle 2 – Leadership

Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.

Applying the principle of leadership typically leads to :

- People will understand and be motivated towards the organization's goals and objectives
- Activities are evaluated, aligned and implemented in a unified way
- Miscommunication between levels of an organization will be minimized.
- Considering the needs of all interested parties including customers, owners, employees, suppliers, financiers, local communities and society as a whole
- Establishing a clear vision of the organization's future
- Setting challenging goals and targets
- Creating and sustaining shared values, fairness and ethical role models at all levels of the organization
- Establishing trust and eliminating fear
- Providing people with the required resources, training and freedom to act with responsibility and accountability

- Inspiring, encouraging and recognizing people's contributions.

### Principle 3 – Involvement of people

People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.

Key benefits:

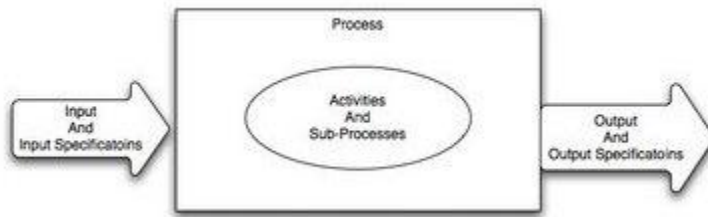
Applying the principle of involvement of people typically leads to :

- Motivated, committed and involved people within the organization
- Innovation and creativity in furthering the organization's objectives
- People being accountable for their own performance
- People eager to participate in and contribute to continual improvement.
- People understanding the importance of their contribution and role in the organization
- People identifying constraints to their performance
- People accepting ownership of problems and their responsibility for solving them
- People evaluating their performance against their personal goals and objectives
- People actively seeking opportunities to enhance their competence, knowledge and experience
- People freely sharing knowledge and experience
- People openly discussing problems and issues.

### Principle 4 – Process approach

A desired result is achieved more efficiently when activities and related resources are managed as a process figure ().

FIGURE: 2.1 Process approach



Key benefits:

Applying the principle of process approach typically leads to :

- Lower costs and shorter cycle times through effective use of resources
- Improved, consistent and predictable results
- Focused and prioritized improvement opportunities.
- Systematically defining the activities necessary to obtain a desired result
- Establishing clear responsibility and accountability for managing key activities
- Analyzing and measuring of the capability of key activities
- Identifying the interfaces of key activities within and between the functions of the organization
- Focusing on the factors – such as resources, methods, and materials – that will improve key activities of the organization
- Evaluating risks, consequences and impacts of activities on customers, suppliers and other interested parties.

Principle 5 – System approach to management

Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.

Key benefits:

- Integration and alignment of the processes that will best achieve the desired results
- Ability to focus effort on the key processes
- Providing confidence to interested parties as to the consistency, effectiveness and efficiency of the organization.
- Structuring a system to achieve the organization's objectives in the most effective and efficient way
- Understanding the interdependencies between the processes of the system
- Structured approaches that harmonize and integrate processes
- Providing a better understanding of the roles and responsibilities necessary for achieving common objectives and thereby reducing cross-functional barriers
- Understanding organizational capabilities and establishing resource constraints prior to action
- Targeting and defining how specific activities within a system should operate
- Continually improving the system through measurement and evaluation.

Applying the principle of system approach to management typically leads to :

Principle 6 – Continual improvement

Continual improvement of the organization's overall performance should be a permanent objective of the organization.

Applying the principle of continual improvement typically leads to :

Key benefits:

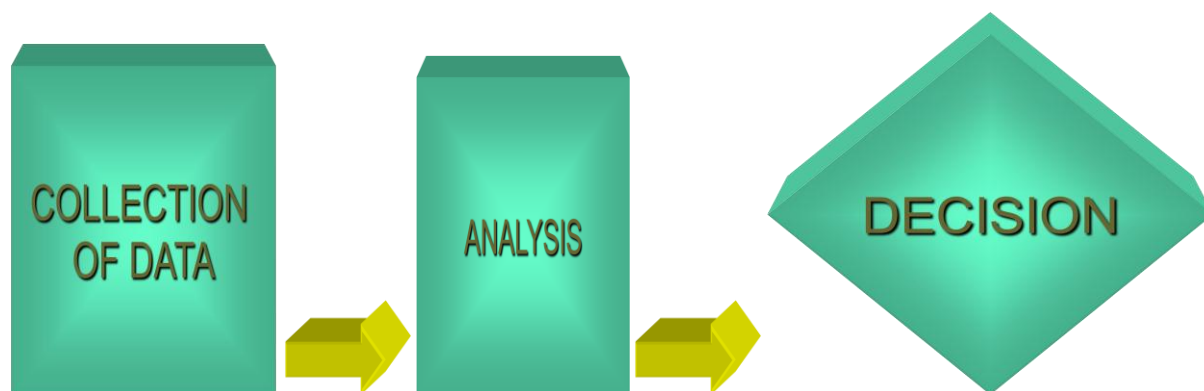
- Performance advantage through improved organizational capabilities

- Alignment of improvement activities at all levels to an organization's strategic intent
- Flexibility to react quickly to opportunities.
- Employing a consistent organization-wide approach to continual improvement of the organization's performance
- Providing people with training in the methods and tools of continual improvement
- Making continual improvement of products, processes and systems an objective for every individual in the organization
- Establishing goals to guide, and measures to track, continual improvement
- Recognizing and acknowledging improvements.

Principle 7 – Factual approach to decision making

Effective decisions are based on the analysis of data and information Figure ()

Figure :2.2 Chain of decision making



Key benefits:

Applying the principle of factual approach to decision making typically leads to :

- Informed decisions
- An increased ability to demonstrate the effectiveness of past decisions through reference to factual records
- Increased ability to review, challenge and change opinions and decisions.
- Ensuring that data and information are sufficiently accurate and reliable
- Making data accessible to those who need it
- Analyzing data and information using valid methods
- Making decisions and taking action based on factual analysis, balanced with experience and intuition.

Principle 8 – Mutually beneficial supplier relationships

An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value

Key benefits:

Applying the principles of mutually beneficial supplier relationships typically leads to:

- Increased ability to create value for both parties
- Flexibility and speed of joint responses to changing market or customer needs and expectations
- Optimization of costs and resources.
- Establishing relationships that balance short-term gains with long-term considerations
- Pooling of expertise and resources with partners

- Identifying and selecting key suppliers
- Clear and open communication
- Sharing information and future plans
- Establishing joint development and improvement activities
- Inspiring, encouraging and recognizing improvements and achievements by suppliers.

### **Fundamental Elements of ISO 9001:**

The Plan – Do – Check– Act (PDCA) cycle is the foundation of all ISO managementsystem standards. The cycle ensures development, continuous improvement and control of the management system in question. It is a simple tool that ensures constant monitoring of your organization’s effectiveness (). It consists of the following:

Plan – establishing the architecture of your quality management system is covered in clause 4.1 of the standard where it requires the identification of the processes, their success criteria, the inter-relationship between processes and the system for checking your results

Do – implementing the plans and using the quality management system

Check– reviewing whether the results are satisfactory at appropriate intervals against the ISO 9001 requirements

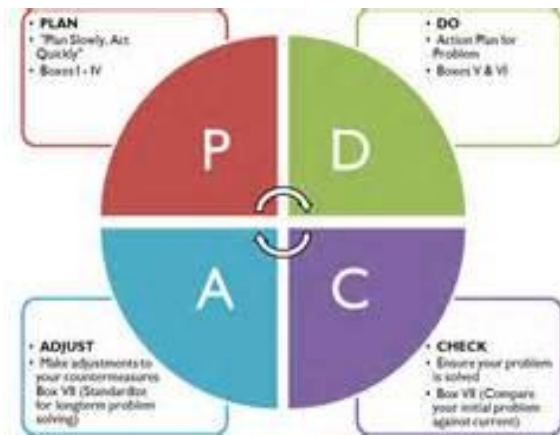
Act – improving the quality managementsystem or acting on the challenges and issues found in the reviews

It is most likely that an organization already has an effective quality management system but it is probably informal and not well documented. ISO 9001 provides a more systematic approach to achieving organization’s objectives. It should not result in excessive bureaucracy or paperwork and lack of flexibility. Nor should it be a financial burden. Quality management systems should be considered an



investment as the return on investment will be in terms of the previously mentioned benefits and improvements.

FIGURE2.3: PDCA CYCLE



#### b) Specifications of ISO 9001:2008 Standard

The overall requirements of ISO 9001:2008 are of 8 clauses in general, as below: -

#### **Clause 1 –Scope**

#### **Clause 2-Normative references**

#### **Clause 3- Terms and definitions**

#### **Clause 4 –Quality Management System:**

This clause requires the intent of documentation required on organizations starting from a Quality Policy, Quality manual and records appropriate for the organization.

#### **Clause 5 Management Responsibility**

This clause specifies the requirements from the top management in terms of top management commitment, appointing a management representative, establishing Quality policy, objectives and conducting management reviews.

#### **Clause 6 Resource Management**

This clause specifies the requirements to plan the resources, training them and maintaining records, including the work infrastructure and work environment.

#### **Clause 7.0 Product Realization**

This is the most important umbrella clause, where the sub-clauses can be excluded from the scope of certification, if such clauses are not applicable to the organization. This clause specifies the quality plan for the products and services (7.1), Customer related processes (7.2) from identifying customer requirements (7.2.1), Contract review (7.2.2), communication with customers (7.2.3), for

managing the Design & Development (7.3) such as planning the design, design inputs, outputs, review, verification, validation and control of changes.

#### **Clause 7.4 Purchasing**

The organization must ensure that purchased product conforms to the requirements. The type and extent of control will depend on the impact of purchased product on the subsequent product realization processes or the final product. The suppliers must be evaluated and selected based on their ability to supply conforming products and criteria for selection, evaluation and re-evaluation must be defined. The results of evaluations and necessary actions must be recorded and records must be maintained.

#### **Clause 7.5 Production and service provision**

This clause specifies the requirements on the production or service set up to plan, schedule, instruct, calibrate, validate and preserve the products to ensure conformity to customer requirement.

#### **Clause 7.6.**

This clause requires the calibration of monitoring and measuring equipments, including the software validation.

### **Clause 8 Measurement, Analysis And Improvement**

The organization must plan and implement measurement, monitoring, analysis and improvement processes needed to

- Monitor the customer satisfaction level.
- Plan and conduct internal audits
- Control of Non-conforming products.
- Manage the corrective and preventive action and estimate their effectiveness.

#### **c) Citations & Related Research works.**

ISO management systems have gained a chronic importance developed in the fielding of managing quality since two decades. As remarked by Shroeder,. Roger G. Operations Management. 4th ed. New York. USA: Mc GrawHill. 2008. Print. "...ISO 9001 Certification has a major impact on worldwide quality practices. Many companies are demanding ISO certification from their suppliers as a condition for doing business". This situation has caused lots of contracting organizations to register for ISO certification. Joseph Juran (2002) said,

"Initially the suppliers resisted the Quality System mandated by their customers; afterwards, it became a part of life".

The minimum compliance requirements specified in the 9001 shall be implemented consistently, to make the business reach the real “excellence”. Michalle,. Barak. *Managing Diversity*. Edition 2. London. UK: Sage Publication. 2011. Print. S Revealed, “...the effective communication with customers, employees and stakeholders has become challenging, even when conducted with same cultural framework...” It is essential to think of that business, if the stakeholder needs are not identified, achieved and communicated to them, the business cannot flourish on long time, regardless of ISO certification. There are certain business elements crucial for the business excellence, which are not explicitly mentioned in the standard 9001.

I.As Juran (1996) highlighted, “Assumptions about organization’s Vision, Mission & Competencies must fit reality”, otherwise the organization’s QMS may exist in the form of a certificate only. CEOs shall take due care before ISO certification, as what do they expect from ISO 9001 certification, in terms of value addition.

II.Translating the so called values into business equivalent is a challenging job, as revealed by John Garder(2004),”Most contemporary organizations and writers are reluctant or embarrassed to write explicitly about values”.

III.The very purpose of going for ISO, to streamline the system for sustaining advantage. Markides *All the right moves first edition* (2000) confided that “...The sustaining advantage is achieved by organizing its various activities into tight systems, which support and reinforce each other. In essence the advantage is sustained because, while imitators may adopt various ideas and techniques, the ability to manage interfaces really well...”. On the contrary, assuming the organization being certified for a mere compliance to the minimum requirements with a loose system, the advantages also will be minimum or one-time, cannot be sustained.

ISO management systems, regardless of their release since 1987, have not been undertaken for any research at India or in the gulf region till 2000. The wide acceptance of the ISO 9001 standard by more than a Million organizations in more than 160 countries and business economies (ISO Survey,2009) came from the generic requirements of the standard and it’s applicability to all organizations, regardless of type, size and product / service provided (ISO 9001). As been highlighted by Corbett, C. J., A. M. Luca, H-N Pan. 2003. *Global perspectives on global standards: A 15-economy survey of ISO 9000 and ISO 14000*. *ISO Management Systems* (Jan-Feb), ISO 9001 standard was initially adopted by firms in Europe and in countries with close relationship with UK such as Australia and

New Zealand. Nowadays is becoming the most popular standard implemented by manufacturing as well as service organizations. The drivers for ISO 9001 certification vary from one company to another and from one country to another, though the basic themes supporting 9001 were the customer satisfaction and continual improvements.

\* Buttle (1997) ranked the benefits after conducting a survey on UK businesses and concluded that the most important benefit sought from certification is profit improvement.

\* McAdam, R. and Canning, N. (2001), "ISO in the service sector: perceptions of small professional firms", *Managing Service Quality*, Vol. 11 No. 2, pp. 80-92. argued the importance of ISO registration in enhancing firm's chances of gaining work.

ØMagd and Curry (2003) analyzed twelve motivations for ISO 9001 certification. A summary of the main reasons of why companies adopt ISO 9001 can be framed as follows:

1. Competitors Registration McAdam, R. and Canning, N. (2001), "ISO in the service sector: perceptions of small professional firms", *Managing Service Quality*, Vol. 11 No. 2, pp. 80-92. 2. To help improve customer service (Douglas et al., 2003).

Many researchers studied the ability of ISO 9001 in achieving its main objectives of adding value to organization's implementing it in different economies in general or by different sectors in particular. For example, Corbett, C. J., A. M. Luca, H-N Pan. 2003. Global perspectives on global standards: A 15-economy survey of ISO 9000 and ISO 14000. *ISO Management Systems* (Jan-Feb) discussed ISO 9001 & ISO 14001 implementation in Far East Countries, namely in Taiwan, Japan, Hong Kong and Korea. The study involved investigating firms' motivation for certification, their implementation experiences and the benefits received. The main conclusion for implementing ISO 9001 in these countries was positive in general with some differences in motivation for and benefits gained after implementing ISO 9001. He concluded that there are common factors between these countries to go for ISO 9001 certification, namely, external pressure, gaining competitive edge, internal and external portions and improvement of public relations. The common benefits of ISO 9000 certification among these countries are improved competitive edge, and improved public relations.

& Naser, K., Karbhari, Y., & Mokhtar, M.Z. (2004). Impact of ISO 9000 registration on company performance. Evidence from Malaysia. *Managerial Auditing Journal*, 14(4), 509-16. Studied the effect of ISO 9001 certification on the performance of 162 public listed companies in Malaysia and they found an association between ISO 9000 registration and performance of companies in

Malaysia. Their study revealed that accredited Malaysian companies out performed the non-accredited ones during the period of their study.

Casadesus M, and Karapetrovic S.(2005), “An empirical study of the benefits and costs of ISO 9001:2000 compared to ISO 9001:1994”, Total Quality Management, Vol.16 No.1, pp 105-20. Print performed a study to evaluate benefits of implementing ISO 9000 by Spanish industries and they concluded that although ISO 9000 has many positive points, but these points must be used in right context to maximize the benefits gained from the standard.

The overall conclusion for the study was: More than 90 percent of Spanish certified industries believed that ISO 9000 had benefited them and it is a good system for quality assurance.

\* While in Canada, Bhuiyan, N. & Alam, N. (2004). ISO9001:2000 implementation-The North American experience. International Journal of Productivity and Performance Management , 53, ABI/INFORME Global: 10-17. studied implementing ISO 9001:2000 and they concluded that there were some difficulties faced by Canadian companies in implementing the new standard and these difficulties are varying based on different companies characteristics like size, and years of operation.

\*In a study for evaluating implementation of ISO 9000 for 104 UK certified companies performed by Douglas, A., Coleman, S. & Oddy, R. (2003), The case for ISO 9000, The TQM Magazine , Vol.15 No. 5, pp. 316-24. They concluded after considering the views of quality professionals participating in the survey that ISO 9001:2000 is very positive and it is less disputing the criticisms of the old revision. They concluded also that the main reason within UK organizations to seek ISO 9001 certification was to allow them to tender for work that otherwise unattainable.

\* Magd, H., & Curry, A. (2003), An Empirical Analysis of Management Attitudes Towards ISO 9001:2000 in Egypt, The TQM Magazine , Vol. 15, No. 6, pp. 381-390. studied ISO 9001 in Egypt and they concluded that the most common reasons for seeking certification in Egypt were to improve the efficiency of the quality system and pressures from competitors/foreign partners.

\* also identifying the impact of the certification, Tzelepis, D., Tsekouras, K., Skuras, D. & Dimara, E. (2006). The effects of ISO 9001 on firms' productive efficiency, *International Journal of Operations Production Management*, 26, 1146-1165.concluded that the overall ISO's effects on managerial inefficiency are negative indicating that the adoption of ISO reduces managerial inefficiency.

\* Quazi, H. & Jacobs, R. (2004), Impact of ISO 9000 certification on training and development activities, International Journal of Quality & Reliability Management

, Vol. 21 No. 5, pp. 497-517 studied the impact of ISO 9000 certification on training and development activities in a sample size from Singapore and they reach to the conclusion of gaining significant improvements in training needs analysis, training design, training delivery, training evaluation, and human resource development activities were reported after implementing ISO 9000 by these organizations. Out of these researches completed in the subject worldwide as cited above, most of them were comparing the specifications of standards one-another or evaluating the impact of 9001 on a specific area such as Staff motivation or market growth. So far there was no study conducted to evaluate the overall effectiveness of QMS and with suitable recommendations. S. Rajaram (2008) mentioned that “ISO 9001 Certification had lot of advantages like Market competitiveness, Consistency in Quality, improved productivity, employee involvement, staff morale and Job satisfaction...”, just similar to Mohamed Zairi and YasarJarrar (2005) remarked “The practical benefits of working towards and achieving the standard are many. They include improved earning, productivity and profitability...”, on the contrary, Zairi reveals a practical situation when the ISO system does not add value to manage the business processes, by mentioning that “ISO 9000 Quality standard is not regarded as a major driver of process performance as the company has a policy on achieving these standards based on commercial needs criteria”. If ISO 9001 is not a certification of choice, organizations, under pressure, might choose the shortest way to get certified, which may dilute the professionalism, make a mere bunch of papers, receiving no value addition, as mentioned by James Highlands, “...This has been a huge effort in the company executives struggled to develop what turned out to be a big dump documented system” The above are the classic examples of how the ISO 9001 standard, in spite of its vast applicability, is being misused by certain organizations. This was the starting point to probe further on the effectiveness of ISO certified Banks in Sudan.

**CHAPTER THREE**

**Methodology and**

**Result**

### **3. METHODOLOGY**

The methodology of this research is broken down into the following framework-

- Research design
- Method of data collection
- \*Population and Sample
- \*Data analysis

#### **3.1. RESEARCH DESIGN**

. This research adopted the deductive approach, specifically hypothesis testing, as it studied an established relationship, the effect of ISO 9001:2008 on Banks performance.

#### **3.2. METHODS OF DATA COLLECTION**

##### **3.2.1. SECONDARY DATA**

For the purpose of this study, the collected secondary data included: textbooks, academic articles and journals related to the implementation of ISO 9001:2008. Also, a number of online resources were used to get information for the literature review, like [www.asq.org](http://www.asq.org), [www.analytictech.com](http://www.analytictech.com), and [www.qualityscotland.co.uk](http://www.qualityscotland.co.uk) among others. This type of data collection was mainly used for the literature review since it was unable to meet the research objectives.

##### **3.2.2. PRIMARY DATA**

For the purposes of this research, primary data were collected by questionnaire and interviews. The essence for this was to weigh the different views of groups in each Bank studied in the research. The main concern of a researcher is to ensure that the results of the research are accurate and applicable.

##### **3.2.3. QUESTIONNAIRES**

A questionnaire was structured for this research () and was administered to the front line staffs of the studied Sudanese banks; which includes department managers, staff, and customer service. The questionnaire consists of four major parts, which focuses on the areas of interest of the research.

- The first part relates to the commitment of management to the implementation of ISO 9001:2008.
- The second part relates to customers satisfaction to the services rendered.
- The third part relates to employees satisfaction, the extent to which employees are motivated and encouraged in the implementation of ISO 9001:2008.
- The fourth and final part relates to factors responsible for effective or ineffectiveness operation.

The questionnaire consists of closed ended and open-ended questions.



### **3.2.4. INTERVIEW**

Interviews were also carried out to source for information. According to Patton (1990), interviews could be based on:

- a) Informal conversational interviews - where the questions emerge from the immediate context and are asked in the natural context.
  - b) Interview guide approach - where topics and issues are specified in advance but where the sequence is decided by the interviewer.
  - c) Closed fixed response interview - where questions and response categories are fixed and determined in advance.
  - d) Standard open ended interviews - where the wordings and sequence of questions are determined in advance
- Personal interviews were conducted with the various Banks department manager so as to find out the following:-
1. Their view on ISO 9001 implementation in their organizations.
  2. The effectiveness of their quality approach to their service.
  3. Hindrances to the full implementation of ISO 9001.

The interviews conducted were unstructured so as to enable the researchers obtain clarifications of some variables which needed further in-depth investigation. An informal mode of interview was carried out because of the sensitivity of some of the issues and also for the need to remove bias on the part of the respondents who might present false information in order to put their companies in better light just to earn some credibility.

### **3.3. POPULATION AND SAMPLE SIZE**

The population of study was drawn out of the various Banks in Sudan. Twenty (20) questionnaires were distributed in each of the four Banks under survey. These questionnaires were distributed among employees who deal directly with customers on daily basis. The choice for employees with customer facing role is borne out of the fact that they are believed to know the customers more since they have daily interactions with them and are supposed to know what the customers complain about and what they are happy with. The Departments manager for the four (4) Banks interviewed also gave insight into the operational activities of the Banks and the quality approach to service delivery. Thus, the four Banks under study is equally represented in the study.

### **3.4. DATA ANALYSIS**

The data was analyzed using a parametric test; this determined statistically the significance between two independent samples. Hypothesis testing was adopted to test the differences in the means of the two categories of Banks. This was aided with the use of the SPSS software, which was used in carrying out the T-Test

analysis by comparing the mean score of both Certified Banks and non- Certified Banks to see if there is a significant difference in performance.

### 3.4.1 DISTRIBUTION OF RESPONDENTS BY GENDER

A representation of gender in the population of the 30 respondents in the non-ISO banks and ISO Banks is shown in table 3.1. The percentage of the respondents based on gender for both certified and non-certified is 75% male and 24.1% female. Table 3.1 reveals this figures in a tabular and graphical form respectively.

**Table 3.1 Distribution of respondents by gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	22	73.3	75.	75.
	female	7	23.3	25	100.0
	Total	29	96.7	100.0	
Missing	System	1	3.3		
Total		30	100.0		

### 3.4.2. STATISTICAL TEST OF HYPOTHESIS 1

H0 - There is no difference in employee’s satisfaction in Certified Banks and non-Certified Banks.

H1 – Certified Banks will have a higher degree of employees’ satisfaction than non-certified Banks.

There is a significant difference in employee satisfaction between the Certified Banks and non- Certified Banks. The significance level for the levene’s test is 0.00, this is lower than the cut off of 0.05, thus the assumption of equal variances is violated, therefore the T–value for the second row, leading to the conclusion that the variances are not equal is used (Table 3.2). In assessing the difference between the two categories of Banks, the value of the sig. (2–tailed) column on the second row is 0.00; this is less than 0.5, thus indicating that there is a significant

difference between Certified Banks and non- Certified Banks. Thus the alternate hypothesis (H1) which states that Certified Banks have more satisfied employee is accepted while the null hypothesis is rejected. This indicates that difference in employee ‘satisfaction is significant.

**Table 3.2 Test of hypothesis for employee ‘satisfaction**

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% In
									Lo
Banks	Equal variances assumed	41.181	.000	-6.998	328	.000	-.85315	.12191	-1.0
	Equal variances not assumed			-7.176	325.945	.000	-.85315	.11889	-1.0

### 3.4.3 Statistical test of hypothesis 2

H0 - There is no difference in customer satisfaction in Certified Banks and non-Certified Banks.

H1- There is a significant difference in customer satisfaction between the Certified Banks and non- Certified Banks.

The significance level for the levene’s test is .459 and this is higher than the cut off of 0.05, thus the assumption of equal variances is not violated, therefore the T – value for the first row which assumes that the variances are equal is used. In assessing the difference between the two categories of Banks, the value of the sig. (2–tailed) column on the second row is 0.04; this is less than 0.5, thus indicating that there is a significant difference between the two groups of Banks. Thus the alternate hypothesis which states that Certified Banks have more satisfied customers is accepted while the null hypothesis is rejected (Table 3. 4)

**Table 3.3 Group Statistics**

	Group	N	Mean	Std. Deviation	Std. Error Mean
Bank	Non certified bank customer	70	2.9000	1.34218	.16042
	Certified bank customers	89	3.5393	1.39851	.14824

**Table 3.4 Test of hypothesis for customer satisfaction**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95%
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	L
Bank	Equal variances assumed	.459	.499	-2.913	157	.004	-.63933	.21951	-1
	Equal variances not assumed			-2.927	150.886	.004	-.63933	.21843	-1

### 3.4.4 Statistical test of hypothesis 3

H0 - There are no difference in operational performance of Certified Banks and non- Certified Banks.

H1- Certified Banks are more effective in their operation than non- Certified Banks.

The significance level for the levene's test is .224 and this is higher than the cut off of 0.05, thus the assumption of equal variances is not violated, therefore the T – value for the first row which assumes that the variances are equal is used. In assessing the difference between the two categories of Banks, the value of the sig. (2 –tailed) column on the first row is 0.04; this is less than 0.5, thus indicating that there is a significant difference between Certified Banks and non- Certified Banks. Thus the alternate hypothesis which states that Certified Banks are more effective in operations is accepted while the null hypothesis is rejected. This indicates that difference in operational effectiveness is significant (Table 3.5)

**Table 4.°Group Statistics**

	Group	N	Mean	Std. Deviation	Std. Error Mean
Bank	Non certified bank operation	109	3.0734	1.41883	.13590
	certified bank operation	143	3.6084	1.43417	.11993

**Table 3.5 T-test result for operational effectiveness**

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% L
Bank	Equal variances assumed	1.484	.224	-2.947	250	.004	-.53500	.18152	
	Equal variances not assumed			-2.952	233.850	.003	-.53500	.18125	

### 3.4.5 Summary of analysis

The main objective of this research is to find out if the adoption of TQM principles by the Sudanese local Banks will make them more effective in their operations and increase customer and employee satisfaction. In order to arrive at a logical conclusion for this research objective, a T-test hypothesis was carried out to measure the difference in means of Certified Banks and Non- Certified Banks in the areas of employee satisfaction, customers' satisfaction, and effective operations. The samples were drawn from four different Banks in Sudan consisting of 60 respondents (but only 30 questionnaires have been collected) and from different departments. The three tests carried out shows that ISO certification has a great impact on the organizational performance. This confirms the theory that TQM organizations have competitive advantages in meeting customers and employees needs while also enabling the organization to be effective in their daily operations. The results confirms the true situation of the Sudanese Banks, where the new entrants have had great impact in the business environment, with an effective operations which has increased the satisfaction level of customers and a work process which gives room for involvement of all employees to partake in decision making with a great concern for managing quality.

# **CHAPTER FOUR**

## **Discussion and conclusion**

## **4 DISCUSSION, AND CONCLUSIONS**

### **4.1. DISCUSSION OF FINDINGS**

The arguments of this research are focused on the need for local Banks in Sudan to adopt the ISO: 9001, due to the benefit derived from it in terms of customer satisfaction, operational effectiveness and employee satisfaction. The results of this research attest to this fact. Local Sudanese Bank must take quality issues rather seriously as it is a major determinant of their continuous existence. In the Banks, the main essence of ISO 9001 is to provide services which will make customers satisfied, this in turn bring about repeat dealing thus increasing profitability of the Bank. The findings of this research discussed first on the basis of individual hypothesis before giving a summary of the three hypothesis tested. The independent t-test result on the first hypothesis, which states that Certified Banks have a higher degree of employee satisfaction than non- Certified Banks shows that the assertion is significant These study findings are consistent with the findings of Quazi, H. & Jacobs, R. (2004), Impact of ISO 9000 certification on training and development activities, *International Journal of Quality & Reliability Management*, Vol. 21 No. 5, pp. 497-517. This shows that there is a higher employee satisfaction in Certified Banks than in non- Certified Banks and it confirms the European quality model. Employee satisfaction in the TQM companies could be seen to have been derived from the combination of both intrinsic and extrinsic factors, Intrinsic factors such as involvement in decision making regular training and devolvement of authority. From the descriptive statistics, it is observed that the Certified Banks had higher means in all these factors, thus indicating that their approach to management has paid off when compared to that of the non- Certified Banks Certified Banks. The principle of total involvement, with the aim of meeting customer's need through delegation of authority and empowerment of employees have contributed greatly to the success of these organizations in their quest to make customers satisfied. This research to an extent shows that the satisfaction of customers is dependent on how well the employees are satisfied.

The non- Certified Banks' employees on the other hand are less involved in the day to day decision making of the organization as the Banks are bureaucratic in structure, and only permit decisions from management and these study findings are opposite of Quazi, H. & Jacobs, R. (2004), Impact of ISO 9000 certification on training and development activities, *International Journal of Quality & Reliability Management* , Vol. 21 No. 5, pp. 497-517, This has a psychological effect on employees in terms of motivation, as it limits them from taking necessary action as at when due, and also removes the feeling of intrinsic reward as employees do not

feel responsible and accountable, thus reducing their satisfaction level. Motivation for employees in non- Certified Banks basically is based on the recognition of individual effort, which appears to be higher when compared to the Certified Banks. The implication of this is to encourage team work which is a major motivator of employees in the quest to deliver quality service in their daily operations and to prevent internal competition amongst employee. Empowerment of employees involves the organizations providing regular training to the employees, for without regular training, there is a limit to what employees can contribute as they lack the necessary skills and techniques for quality improvement and so cannot be trusted to deliver quality service as required. In summary, ISO certification and TQM adoption bring about satisfaction to employees through the devolvement of authority, and the holistic approach to management, which involves everybody in the organization being responsible for the management of quality. This is achieved with a culture which allows for continuous improvement through constant training and retraining of employees. The second hypothesis which states that Certified Banks will register a greater amount of customer satisfaction than non- Certified Banks was also confirmed in this research through the t–test analysis conducted These study findings are consistent with the findings of McAdam, R. and Canning, N. (2001), “ISO in the service sector: perceptions of small professional firms”, *Managing Service Quality*, Vol. 11 No. 2, pp. 80-92. 2.. The objective behind the implementation of ISO 9001 is to create an environment which is focused on fulfilling the desires of customers while meeting objectives of the company in terms of profitability. In the creation of this environment, the organization becomes sensitive to changes in customers desires and tailor her product offerings to meet or exceed customers need. From the variables assessed for customer satisfaction, it is observed that the Certified Banks had higher means in all except the variables which accessed the degree of customer complaints. This is expected as the non- Certified Banks are less sensitive to the demands of customers, and this amounts to the provisions of services which does not meet customers’ expectations. Although, the ISO firms also had a relative high degree of customer complaints, they have been able to address this by putting up measures through which these complaints are managed. One of this is the empowerment of employees which was earlier mentioned. The effect of non-empowerment might have accounted for slow response to customers’ needs in the case of non- Certified Banks and thus a provision of a service which is slow to react to emergencies. Customers are only willing to use a service again if the features of this service consistently meet or exceed their expectations. Comparing the two categories of Banks, it is observed that a relatively high number of customers are willing to make use of the services of the Certified Banks again, as these services have in one way or the other met their expectations. On the other hand, the non- Certified



Banks witnessed relatively low repeat customers when compared; rather they experienced a higher amount of customer defection. This confirms the assertion that dissatisfied customers will defect when their needs are not met to another where they expect to get quality services. This shows clearly that quality is a universal phenomenon for customers in their choice of service. Hence, quality is seen here as a major criteria for winning customers over. The idea behind the implementation of ISO 9001 is to ensure that adequate attention is given to quality so as to give room for an error free transactional process and less room for customer complaints while maximizing customer satisfaction. It is proven that satisfied customers are more willing to recommend quality service to others as shown in this research. This has some cost reduction implication on the Banks in term of advertisement which is good for the business as they will be able to compete more effectively in terms of operating cost. Again, this was proved in this research, as the Certified Banks' customers are more willing to refer people to their services as against the non- Certified Banks. In summary, quality is defined in the eyes of consumers, thus a customer focus approach ISO 9001 TQM emphasizes, keeps a company abreast of how customers define it from time to time. The third hypothesis tested is that Certified Banks are more effective in their operations and these study findings are consistent with the findings of Corbett, C. J., A. M. Luca, H-N Pan. 2003. Global perspectives on global standards: A 15-economy survey of ISO 9000 and ISO 14000. ISO Management Systems (Jan-Feb). For an organization to be effective in terms of operations there is the need for every member of the organization to be involved and committed to this objective as the essence is to have a functional work environment which is efficient and focused on meeting customers' demands. ISO 9001 implementation is holistic in nature; its success depends on how well each unit of the organization is able to work interdependently towards achieving the objectives of the firm. Thus measure such as management and employees' commitment, decision making process, involvement of suppliers and service delays and cancellation were used to test the efficiency in operations of the Banks. As it expected that the commitment of management and employees will aid the efficiency in operations of the organization. The findings confirmed that the Certified Banks are more efficient, this is due to the commitment of management, employees and the involvement of suppliers to the quality drive of the organizations. This Bank has a customer focused approach, thus has made his services more accessible to customers through numerous means. The researcher in the quest of this research observed that, unlike the non- Certified Banks, the Certified Banks have taken their services to the door steps of customers, by having several ATM points outside the Bank as well as the use of the online reservation system. This to a great extent must have affected their operations positively as adequate measures are taken in order to contain

eventualities. This also buttresses the point of employee empowerment as observed in the previous test, slow decision have a boomeranging effect on other functional areas of operations. The slow decisions on the part of the non- Certified Banks does not allow for efficiency, although management seem to be committed, the negative impact of it affects the whole operation of the Bank hence the dissatisfaction of customers. As noted in the literature, the Banks operations consist of interrelated activities which in some cases are not in direct control of the organization. The effectiveness of the Banks operation does

Depend on how well they involve their supplier in the quality drive as this could either make or mar their overall operations. From the interviews conducted, it was noted that, the Bank attributed the problems of delays to the suppliers and poor state of infrastructure at the Bank.

## **4.2. CONCLUSION**

The findings of this research attest to the benefits that accrue from the implementation of ISO 9001. It has shown that it is a strategic tool for an organization to employ in the quest to remain competitive. If adequately deployed, the principle brings about added value to an organization in terms of efficiency in operation, employee satisfaction, customer satisfaction, and even profitability. The finding also revealed that the relentless pursuit of improvement in service delivery bring about added value to customers by making the organization focused on satisfying customers needs, while team work and training empowers employees for the continuous improvement drive of the organization. The implication of managing every facet of the organization was revealed, as each production unit is seen to affect and in turn affected by others. That is, a dysfunction in the process of service delivery has an overall effect on the total production process, thus showing the need for a holistic approach which involves every functional area to be managed effectively. The implication of not managing quality effectively was shown in the case on the non- Certified Banks, which resulted in inefficiency and loss of patronage due to dissatisfaction of customers. The importance of involving the suppliers in the whole value chain was also highlighted, as the effectiveness of an operation depends on how well it manages both the internal and external service delivery process. Also, the findings of this research as well as the one reported in literature supports the idea that the management of the organization has a major role to play in terms of ensuring a culture which permits every member of the organization to be involved and contribute to quality improvement, as the involvement of employees in detecting and monitoring the quality performance requires a decentralized organizational structure. This structure permits for

innovation as it permits everybody in an organization to seek solution to a particular quality problem.

### **4.3. LIMITATIONS TO THE STUDY**

The research was limited due to size of sample as result of refusing of some respondents to deal with us and limited to front line staffs of the Bank due to time limit and difficulty in reaching the management. The front line staffs does not represent the perception of the companies as a whole, and a lot of them deny to fill questionnaire, in addition to there is one bank only certified, thus the overview of this research is limited. Also, the sampling techniques used should have been representative of the sample population by adopting the simple random sampling technique but as a result of time and the cost involved,. The inability to show the financial impact of ISO 9001 implementation also limited this study, in that organizations wanting to adopt the ISO 9001 ideology are mostly concerned about the financial gains from the implementation. The non use of financial data was as a result of firms being reluctant to share such information with the researchers.

The research did not also take into cognizance other factors, outside the implementation of ISO 9001 that affects the performance of the firms. This includes access to funds, brand image, and political factors. These factors go a long way in helping or hindering the performance of organizations. The Certified companies used for comparison are just between two and three years of operation and so, the research did not portray the world class expectation of ISO 9001 implementation.

### **4.4. RECOMMENDATION**

It is recommended that a more studies should be carried out, which covers the whole departments of these Banks to establish the effectiveness of the implementation of ISO 9001 in the Sudanese Banks, while using a representative sampling technique. Also, it will be of great benefit to ascertain the true perception of customers to service quality in Sudan as no prior research has been carried out in that field. This will give a clue to what the customers' desire most in terms of Banks service delivery.

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## APPENDIX 1

### THE QUESTIONNAIRE

The questionnaires consist of four major parts as shown below, which focuses on the areas of interest of the research. The first part relates to the extent to which employees are motivated to implement the ISO 9001 ideology, the second section focuses on customers' satisfaction. The final section focuses on operational effectiveness.

Age: \_\_\_\_\_

Gender: Male [ ] Female [ ]

Section: \_\_\_\_\_

Have you heard of Total Quality Management Yes [ ]  
No [ ]

How will you rate on a scale of 1-5 the following where

(1- Strongly disagree, 2 – Disagree, 3 - Neutral, 4 – Agree, 5 - Strongly agree)

#### Employee satisfaction

On a scale of 1-5 how will you rate your level of satisfaction with the listed variables

- |  |                        |
|--|------------------------|
| 1. You are satisfied with the authority                          | [1] [2] [3]<br>[4] [5] |
| 2. Management encourages and recognise team-work effort          | [1] [2] [3]<br>[4] [5] |
| 3. Management recognises your suggestions                        | [1] [2] [3]<br>[4] [5] |
| 4. Individual effort is recognized in delivering quality service | [1] [2] [3] [4]<br>[5] |

5. You view your job as being flexible [1] [2] [3] [4]  
[5]

6. Salary is a means of motivation in the company [1] [2] [3]  
[4] [5]

7. When was your salary reviewed last? \_\_\_\_ year(s)  
ago

On a scale of 1- 5 how will you rate the following as regards to your organization

8. Regular Training for workers is put in place [1] [2] [3] [4]  
[5]

9. How many times are you trained in a year? \_\_\_\_\_  
times

10. There is continuous improvement in your organization [1] [2] [3]  
[4] [5]

11. Mistakes are seldom made while responding to customer's request [1] [2]  
[3] [4] [5]

12. Quality service delivery is due to workers empowerment [1] [2]  
[3] [4] [5]

13. Employees are involved in decision making [1] [2] [3]  
[4] [5]

14. How many times has your advised been seek in making a decision for your  
organization? \_\_\_\_\_ Times

### **Customer satisfaction**

On a scale of 1- 5 how will you rate how satisfied your customers are to the  
services rendered

15. Customers see high standard of quality in the service you render [1] [2] [3]  
[4] [5]

16. Customers do complain about your services [1] [2] [3]  
[4] [5]

17. In spite of complaint there is the repeat of customers [1] [2] [3]  
[4] [5]

18. Your customers recommend your services to others [1] [2] [3]  
[4] [5]

19. The defection of customers is as a result of poor service [1] [2] [3]  
[4] [5]

20. Your bank respond quickly to customers complain [1] [2] [3] [4] [5]

21. Do your bank honours her commitment and guarantee to all customers?  
Yes [ ] No [ ]

22. What do your customers complain about the most?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

23. How do you help to solve the complaint?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Effective operation**

on a scale of 1- 5 how will you rate the operational effectiveness of your organization

24. Your organization services are readily accessible to your customers [1] [2] [3]  
[4] [5]



25. Does the accessibility of services to customers' aids the efficiency in operation?

Yes [ ] No [ ] 26. Your organisation keeps to its flight schedule  
[1] [2] [3] [4] [5]

27. Your bank handles the properties of customers promptly [1] [2] [3] [4] [5]

28. service delays and cancellation are due to controllable factors [1] [2] [3]  
[4] [5]

29. Slow decision making is liable for service delays and cancellation [1] [2] [3]  
[4] [5]

30. Management commitment to quality encourages effective operation  
[1] [2] [3] [4] [5]

31. Employees' commitment to quality encourages effective operation [1] [2] [3]  
[4] [5]

32. Your job flexibility do contribute to effective operation [1] [2] [3]  
[4] [5]

33. Your suppliers are responsible for service delays  
[1] [2] [3] [4] [5]

34. Does your suppliers operation aid the efficiency in your operations?  
Yes [ ] No [ ]

How do you view the services rendered in your organization both to you as an employee and your customers' at large?

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## APPENDIX 2

### Interview

Personal interviews were conducted with the various Bank manager so as to find out the following:-

- 1 Their view on TQM implementation in their organizations.
- 2 The effectiveness of their quality approach to their service.
- 3 Hindrances to the full implementation of ISO 9001.

The interviews conducted were unstructured so as to enable the researcher obtain clarifications of some variables which needed further in-depth investigation. An informal mode of interview was carried out because of the sensitivity of some of the issues and also for the need to remove bias on the part of the respondents who might present false information in order to put their companies in better light just to earn some credibility.