

Implementation Of ISO 9000 Quality Management System Within The Manufacturing And Service Industry Of Ivory Coast

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Abstract: The objective of this paper was to present the factors that impede the implementation of ISO 9000 QMS within the manufacturing and service Industry of Ivory Coast. It wasn't the intention of the author to provide detailed strategies for the readers to implement ISO 9000. It was an effort to present the relationship, if any, between the lack of ISO 9000 adoption and the perception of Ivoirians business organization leaders. For that purpose, five research questions were associated with this study. The population for this study was all non-ISO certified business organizations, in both public and private sector and was physically located in Ivory Coast. The population sample for this study was the 5044 members of the Chambre de Commerce et d'Industrie de Cote d'Ivoire (CCI) from which the author utilized the sample size of 60 business organizations randomly selected. This study utilized a survey questionnaire of face to face interview as data collection method. The survey questionnaire contained thirty three (33) questions, organized in six parts, and was proposed to 60 business organizations' leaders. The result showed that business organization leaders in Ivory Coast were aware of the ISO 900 QMS but do not have enough knowledge on the ISO 9000 QMS implementation and certification. This could be due to the poor job done by CODIMORM, the local national bureau of standards, as a source of information. However, it was found that business organization leaders in Ivory Coast intended to pursue and obtain ISO 9000 QMS certification. With respect to perceived benefits, they indicated customer satisfaction improvement as the most important benefit that ISO 9000 QMS certification could bring to their general management activities. With respect to perceived improvements, they selected quality of products/services as the most important improvement that ISO 9000 QMS implementation and certification could help to achieve. Overall, business organization leaders in Ivory Coast overall perception indicated that ISO 9000 QMS is a good quality management tool that is applicable to their organization and the country. However, they perceived the ISO 9000 QMS process as being too costly and time consuming to implement, but they are prepared to obtain more information about the ISO 9000 QMS implementation and certification processes as they will consider implementing..

Keywords: Quality management systems, Standardization, Manufacturing Industry, Service Industry, ISO 9000 Implementation.

1 INTRODUCTION

Trade liberalization and globalization have become the new world economic order. With this development, the need for well-developed international and national standards is very evident. Further, this phenomenon dictates that developing economies are expected to compete and become better integrated in the world's economy. However, many of these economies do not have fully developed infrastructures in the areas of standards and related technical regulations, conformity assessment, quality and metrology. This standardization weakness represents a serious handicap for the economic players in the concerned country.

importers, regulators or consumers, developing countries find it more difficult to produce, exchange or consume safe products of good quality because of the absence of standards and other regulations types (1). In order to improve their management system and faces the challenges of liberalization in the global market place, business organizations in developing economies need to change radically their management approach and start using a quality management system based on standardization. A quality management system is a well documented system that ensures consistency and improvement of working practices, including the products and services produced. Quality management system tools are based on standards, which specify a procedure for achieving effective quality management. They need to look for other process management tools like ISO 9000 Quality management System to implement and enforce a necessary discipline required for such environment. ISO 9000 is the most commonly used international standard that provides a framework for a quality management system. ISO 9000 Quality Management System is a structural framework of a business system that specifies, in very broad terms, the necessary components of a quality management system. ISO 9000 was originally published in 1987 by the International Organization for Standardization (ISO), a worldwide federation of national standards bodies, located in Geneva, Switzerland. Founded in 1946, the organization objective is to develop a common set of standards for manufacturing, trade and communications. It is the worldwide federation of national standards bodies in several countries. The main purpose of these standards is to establish a consistent and high level of quality practices, raising the quality of products and services in competitive and expanding markets throughout the world. In other word, ISO 9000 allows organizations to demonstrate their commitment to quality for any products and services they produce. Today, these standards are accepted and adopted at

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over 560,000 locations worldwide (2). There are two types of industry (manufacturing Industry and Service Industry). While manufacturing industry produces tangible goods, service industry in other hand produces intangibles goods. Subjective studies suggest that ISO 9000 can help organizations improve their management practices. Others argue the standard is too generic to create performance improvement in service industry, such as health care, but can be seen as a signal of good management system. Proponents of ISO 9000 generally view the benefits of such registration as having the ability to improve product or service quality, efficiency and productivity, customer confidence, and competitive advantage. However, criticisms of ISO 9000 generally relate to the reliability of the ISO 9000 technology itself and its effectiveness as process management tool, to the high level of paperwork and documentation, to the rigid system that does not support creativity or empowerment, and to the standard that aims for consistency but not continuous quality improvement (3). However, as developed countries have long been attentive to international standards, most developing countries, public and private sectors, as well as in manufacturing and service industry, are not aware of the opportunities provided by the standard at the national and international levels (4). They are not aware that the standardization could help them improve their management practices. Often they do not even realize the existence and the value of their own national standard bodies within international activities. This scenario holds true for all developing economies, and this concern is especially true for the Ivory Coast, where most business or service organizations are not aware of the ISO system (5). This was highlighted by the author research: with more than 5,000 business organizations operating in Ivory Coast, only 60 of them are certified ISO 9000. Most of them are in manufacturing industry. Also, the same author research showed that, in Ivory Coast, the ISO 9000 and other international and national quality standards appear to be non-existent to the public service organizations. Not any of the public services (central government, local governments and other public sector organizations) are certified, are implemented nor starting implementing any quality standards. The objective of this paper is to present the factors that impede the implementation of ISO 9000 Within the Manufacturing and Service Industry of the Ivory Coast. It is not the intention of this paper to provide detailed strategies for the readers to implement ISO 9000. It is an effort to present the relationship, if any, between the perception of Ivorians business organization leaders and the lack of ISO 9000 adoption within the manufacturing and service industry sector of the Ivory Coast. For that purpose, the following research questions have been associated with this study.

1. Were business organizations in Ivory Coast aware of ISO 9000 and its certification process?
2. Why would business organizations in Ivory Coast pursue and obtain the of ISO 9000 certification?
3. What were business organizations in Ivory Coast perceived benefits that may be derived from ISO 9000 certification?
4. What were business organizations in Ivory Coast perceived improvements that may be derived from ISO 9000 certification?
5. What was the overall perception of the ISO 9000 among business organizations in Ivory Coast?

2 ISO 9000 QUALITY MANAGEMENT SYSTEM: AN OVERVIEW

Initially published in 1987 by the International Organization for Standardization (ISO), ISO 9000 (SMQ) Quality Management system is the structural framework of a business system that specifies, in very broad terms, the necessary components of a quality management system. The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies, located in Geneva, Switzerland. It's is a network of the national standards institutes of 165 countries, on the basis of one member per country, with a Central Secretariat in Geneva that coordinates the system. ISO develops voluntary technical standards which add value to all types of business operations. Since its creation in 1947, ISO has published more than 13 000 International Standards. ISO's work program ranges from standards for traditional activities, such as agriculture and construction, through mechanical engineering to the latest information technology developments. ISO refers to "ISO" and not to "I-S-O". This is because "ISO" is not a set of initials, but the international name of the organization. The long name in English is International Organization for Standardization. Because translating this name would have resulted in different acronyms in different languages, it was decided at the outset to use a word derived from the Greek isos, meaning "equal" – which is very appropriate to the organization activities. Therefore, whatever the country, whatever the language, the short form of the organization's name is always ISO. The organization objective is to develop a common set of standards for manufacturing, trade and communications. The main purpose of these standards is to establish a consistent and high level of quality practices, raising the quality of products and services in competitive and expanding markets throughout the world (6). They contribute to making the development, manufacturing and supply of products and services more efficient, safer and cleaner. They make trade between countries easier and fairer. ISO standards also serve to safeguard consumers, and users and general, of products and services, as well as to make their lives simpler. In addition, many of the standards, as those dealing with health, safety and the environment, serve society as a whole (7). The ISO 9000 family of International Standards for quality management is among ISO's most widely known and successful series of standards ever. ISO 9000 has become an international reference for quality requirements in business to business dealings, and has increasingly been taken up by the public sector as part of the wider interest in new management for public administrations. ISO 9000 represents an international consensus on good management practices with the aim of ensuring that the organization can time and time again deliver the product or services that meet the customer's quality requirements, and thereby enhance customer satisfaction. These good practices have been distilled into a set of standardized requirements for a quality management system, regardless of what companies or organizations do, its size, or whether it is in the private, or public sector (6). Working in public sector organizations, the term "customer" may seem too business-oriented to fit the context. However, public sector bodies in many countries have successfully implemented ISO 9000. These organizations are concerned to serve well not only their "customers" in the sense of the public they deal with directly, but also wider groups of stakeholders such as the governments that fund them, regulatory bodies,

their local communities and society in general. The existence of an organization, whether in the public or private sector, without customers, or with dissatisfied customers or stakeholders, is in peril. To keep customers and stakeholders, and to keep them satisfied, product or service needs to meet their requirements. ISO 9000 provides a tried and tested framework for taking a systematic approach to managing business processes, organization's activities, so that they consistently turn out product conforming to the customer/stakeholder expectations (6). ISO 9000 allows organizations to demonstrate their commitment to quality for any products and services. The role of this structural management tool is to allow companies to demonstrate their total commitment to quality for all products and services they provide. The main objective of this management tool is to establish a consistent set of quality practices, to establish a continuous improvement of the quality of products and services in a competitive environment, and to expand markets in the world. The philosophy of this management tool is: "Say what you do" and "Do what you say". This means that with ISO 9000 QMS, companies or organizations are required to "Say what they are going to do, Do it right, then Check that they have done it right. And Document and Keep records so that they can periodically review the system to see if they can do things better." Although usually applied to the manufacturing industry, ISO 9000 is also applicable to the service industry. Today, the same applications and requirements for the quality that exist in other riskiest industries move toward the service industry. ISO 9000 lays down what requirements the quality system of each organization, as sole, must meet, but does not dictate how they should be met in the organization. This leaves great scope and flexibility for implementation in different sectors and cultures. The ISO 9000 certification reflects the recognition by an independent body or organism of the application of the quality system (the referential) to the existing (the reality) from the selected ISO standard (the model). To ensure that ISO standards remain the state of the art, they are reviewed at least every five years to decide whether they need revising. In the case of the ISO 9000 standards, which were first published in 1987, some revisions were made in 1994, 2000, 2008 and the latest this year 2015.

2.1 Misconceptions

One aspect of ISO 9000 that has given rise to misconceptions is the ISO 9000 technology itself (6).

- Misconception n°1 is that organizations are audited by ISO. False. They are not, nor have to be, audited by ISO. An organization that implements ISO 9000 should carry out auditing of its ISO 9000-based quality system itself to verify that it is managing its processes effectively or to check that it is fully in control of its activities. In addition, the organization may invite its clients or those who fund its activities to audit the quality system in order to give them confidence that the organization is capable of delivering products or services that will meet their requirements. Lastly, the organization may engage the services of an independent quality system certification body to obtain an ISO 9000 certificate of conformity. This last option has proved extremely popular in the market-place because of the perceived credibility of an independent assessment. It may thus avoid multiple audits by the organization's clients, or reduce the frequency or duration of client audits.
- Misconception n°2 is that these certificates are issued or

controlled by ISO. False. ISO do not issue nor control these certificates. ISO develop and maintain the standards, but do not audit organizations. ISO 9000 certificates are issued independently of ISO by some 570 certification bodies around the world. ISO do not control their activities, although it has produced voluntary guidelines for them that help ensure good practice and consistency.

- Misconception n°3 is that organizations that implement ISO 9000 have to be certified. False. They do not have to be certified. They can implement ISO 9000 purely for the greater efficiency it brings. The ISO 9000 certification reflects the recognition by an independent body or organism of the application of the quality system (the referential) to the existing (the reality) from the selected ISO standard (the model). If management and stakeholders are happy with that, they can leave things there without going to the expense of an external certification audit. On the other hand, they may decide that the organization needs the pressure of an independent verification of its quality system to concentrate minds and get everyone working towards a common goal. Whether or not organization decides to go for certification, the important thing is not the certificate on the wall, but to ensure that your quality system is actually producing benefits. The revised ISO 9000 QMS is based on eight quality management principles and structured around 20 key elements.

2.1 The 8 Principles of ISO Quality Management System

A principle is a fundamental truth or law and therefore quality management principles are the fundamental truth or laws that form the basis of quality management. These principles have been identified to facilitate the achievement of quality objectives and form the foundation for effective quality management. These eight principles are:

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.

2. Leadership

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

3. Involvement of people

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

4. Process approach

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

5. System approach to management

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

6. Continual improvement

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

7. Factual approach to decision making

Effective decisions are based on the analysis of data and information.

8. Mutually beneficial supplier relationships

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

2.2 The 20 Elements of ISO 9000 Quality Management System

ISO 9000 is divided into three quality assurance models: ISO 9001, ISO 9002 and ISO 9003. The difference between these three models is that of scope. ISO 9001 sets out the requirements for an organization whose processes range from design and development, to production, installation and servicing. ISO 9001 has 20 elements. ISO 9002 is meant for organizations, which do not carry out design and development. ISO 9002 does not have the design control requirements of ISO 9001. Thus ISO 9002 has 19 elements. ISO 9003 is appropriate for organizations which basically use inspection and testing to ensure final products and services meet customer requirements and whose processes do not include design control, process control, purchasing or servicing. ISO 9003 has 18 elements. Of these 18 elements 12 are different from those of ISO 9001 and ISO 9002. However, as ISO 9003 is rarely used this publication will concentrate on ISO 9001 and ISO 9002. The twenty elements of ISO 9001 are explained below. The exact text of the twenty elements is contained in ISO 9001: 1994 Quality Systems - Model for Quality Assurance in Design Development, Production, Installation and Servicing.

4.1. Management Responsibility

- Quality Policy – short/concise statement that defines organization's objectives for quality
- Responsibility & Authority – should be defined for all personnel affecting quality
- Management Review – to remain effective (customer feedback, internal audits)

4.2. Quality System

- Establish and maintain documents in QS
- Policies, procedures, work instructions
- Prevents problems (not detection)

4.3. Contract Review

- Reviews contracts/PO's – Are requirements clearly defined?, Are there any unusual quality requirements? Can we meet specs?

4.4. Design control

- Establishes and maintains procedures to control/verify that product design meets specs

4.5. Document and Data Control

- Procedures and a master list is established to control

documents and data that affects quality (blueprints, work instructions, task procedures)

4.6. Purchasing

- To establish and maintain documented procedures to ensure that purchased materials will conform to specs

4.7. Control of Customer-Supplied Products

- Organization does not own item
- Segregate so only used for that customer

4.8. Product Identification/Traceability

- Identify product throughout all stages of production, delivery, and installation

4.9. Process Control

- Controlling processes – best way to prevent problems
- Monitoring systems/documented instructions

4.10. Inspection/Testing

- Receiving – purchased items comply?
- WIP – Early detection/Nonconformity
- Final Inspection – final product meets specs?

4.11. Control of Inspection, Measuring, and Test Equipment

- Requires control, calibration, and maintenance of all equipment

4.12. Inspection and Test Status

- Look at product's condition throughout production
- Conforming to quality plan?

4.13. Control of Nonconforming Product

- Identify, remove, and segregate

4.14. Corrective & Preventive Action

- Should have documented procedures to detect nonconformity
- Be able to identify and fix problem

4.15. Handling, Storage, Packaging, Delivery

- Incoming material/Finished goods handled to ensure protection from damage
- Easily identify
- Storage area secure

4.16. Control of Quality Records

- Demonstrate achievement of required quality and verify the effective and economical operation of the quality system
- Should be made available to customer

4.17. Internal Quality Audits

- To ensure that quality system is working according to plan

4.18. Training

- Plant safety, technical skills, and basic statistical concepts.
- Document that training requirements have been fulfilled

4.19. Servicing

- After-delivery service

- Does service meet spec requirements?

4.20. Statistical Techniques

- Implement where suitable for improvement/control of quality.

2.3 Fundamental Elements Necessary for Successful Implementation of ISO 9000 QMS

1. Senior Management Commitment
 - TOP management/CEO support
 - Committing necessary resources
2. Appointing Management Representative
 - Coordinates implementation
 - Contact person for everyone
3. Awareness
 - Everyone should understand the system
 - Training sessions
4. Appoint Implementation Team
 - Should be from all levels
5. Training
 - Should involve everyone (Teams, supervisors)
6. Time Schedule
 - Schedule for implementation/registration
 - Should take less than 1.5 years
7. Select Element Owners
 - Owners for each of system elements
8. Review Present System
 - Should be first step in process
9. Write Documents
 - Written quality policy and procedure manuals
 - Everyone should be involved
10. Install New System
 - Integrate policies/procedures, work instructions
11. Internal Audit
 - Conduct audit of system – working effectively?
12. Management Review
 - To see if the system is achieving quality goals
13. Registration
 - Submit application
 - Choose registrar
 - Registrar audit

2.4 Fundamental Elements Necessary for Successful Documentation of ISO 9000 QMS

1. Policy
 - Defines what will be done and why
 - Should be clear and easy to understand
2. Procedure
 - Describes methods that will be used to implement and perform stated policies
 - Who, When, Where
3. Work Instructions
 - Department, machine, task – spells out how to do job
 - Very detailed
4. Records
 - Documents that policies, procedures, and work instructions have been followed.

3 IMPLEMENTING ISO 9000 QUALITY MANAGEMENT SYSTEM

As stated earlier acquiring ISO 9000 certification is not a requirement. It is just a part of implementing ISO 9000. The key benefits of ISO 9000 are derived from using the standards to improve the functioning of the organization. All ISO 9000 guidelines and publications are available from ISO headquarters in Geneva or from the national standard institute in any country member. Most organizations and firms in both the public and private sector seek the assistance of private companies to guide them through the process of implementation and certification. According to (8) to implement ISO 9000, organization leadership needs to undertake the following steps.

Identifying goals

Identification of goals is primarily the task of senior management. However, it is recommended that at least professional levels of staff are involved in the process of identifying goals. Typical goals may be:

- Be more efficient and effective
- Produce better products and services
- Achieve customer satisfaction
- Improve communication and morale in the organization
- Reduce costs and increase productivity

Several methodologies can be used to identify goals. These include strategic planning approach, focus group discussions, brainstorming etc.

Identifying expectations

The next step in implementation is identifying the expectations of the stakeholders or those interested or affected by the functioning of your organization. Among others, these include:

- Customers and end users
- Suppliers and sub-contractors
- Employees

Identification of expectations can be carried out by questionnaire surveys, focus group discussions or interviews.

Identification of core activities

After analyzing the expectations of the stakeholders the goals need to be revised and refined. At this stage in the process core activities of the organization need to be identified, and measurable objectives need to be determined. This can be done through brainstorming, focus group discussions or through using the strategic planning approach.

Assessment of current status

Once the core activities and measurable objectives of the organization have been determined, the organization needs to identify what resources, changes in management or working style, etc. are needed to achieve the objectives. This can be done through the gap-analysis approach either internally or by engaging the services of an outside expert or organization.

Information collection on ISO 9000

At this stage information on ISO 9000 needs to be gathered and studied carefully. The organization should appoint a team that will eventually serve as its quality auditors under a senior manager, to take the lead in studying the materials and identifying their implications for the changes in the way the organization operates. A one or two -day exposure seminar on

ISO 9000 should also be organized for the staff either by the senior manager and his team or an outside expert familiar with ISO 9000. The key publications that need to be reviewed at this stage are: ISO 9000-1, Quality management and quality assurance standards—Part 1: Guidelines for selection and use. This document establishes a starting point for understanding and selecting the appropriate standards that the organization needs to apply. ISO 8402, quality management and quality assurance - Vocabulary. As stated earlier ISO 9000 defines certain terms differently than their common usage. This document defines the fundamental terms used in the ISO 9000 family, which the organization will need to know to avoid misunderstandings both internally and externally.

Application of ISO 9000

After a preliminary understanding of the scope of changes and work needed in applying ISO 9000, the organization needs to decide whether it will apply ISO 9000 itself or engage the services of consultants to help it in applying the standards. ISO 9004-1, Quality management and Quality system elements Part1: Guidelines and ISO 9004-2, Quality management and quality systems elements - Part 2: Guidelines for services should be used. ISO 9004-1 provides guidelines to implement a quality system to satisfy the customers as well as the organization's own needs. ISO 9004-2 guidelines are similar to ISO 9004-1 but are designed with special regards to organizations providing services. The organization will also need to decide whether it will use ISO 9001, ISO 9002 or ISO 9003. As stated earlier ISO 9001 are used if product or service design is part of the organization's work. ISO 9002 is used if the organization does not design its products or services. ISO 9003 is used for organizations that are only involved in testing or final inspection of products. Most public sector organizations use ISO 9001 or ISO 9002. If the organization is relatively small, then ISO 9000 for small businesses can also be used as guidelines. In addition to the above the organization will also need to use ISO 9000-4, Quality management and quality assurance standards - Part 4: Guide to dependability program management. This publication provides guidance on how to plan, organize and control resources to produce reliable and maintainable products and services. Once the organization initiates the development of a quality management system, topic-specific standards would be needed. These are:

- ISO 10005, Quality management - Guidelines for quality plans. These guidelines will assist in preparing quality plans for control of specific products, projects or contracts.
- ISO 10006, Guidelines to quality in project management. These will assist in ensuring the quality of project processes and the project product.
- ISO 10011-1, Guidelines for auditing quality systems - Part 1: Auditing. This publication provides guidelines for auditing a quality system and for verifying the system's ability to achieve defined quality objectives. These guidelines can be used both internally and for auditing the organization's suppliers or contractors.
- ISO 10011-2, Guidelines for auditing quality systems - Part 2: Qualification criteria for quality systems auditors. The organization would have to train some of its staff to carry out both internal audits and audits of its suppliers and subcontractors. This publication provides guidance on the capabilities needed to carry out quality audits.

- ISO 10012-1, Quality assurance requirements for measuring equipment -Part 1: Metrological confirmation system for measuring equipment. These standards provide guidelines on the main features of a calibration system to ensure that measurements are made with intended accuracy.

- ISO 10012-2, Quality assurance for measuring equipment Part 2: Guidelines for control of measurement processes. This publication provides supplementary guidance on the application of statistical process control when this is appropriate for achieving objectives of part 1.

- ISO 10013, Guidance for developing quality manuals. This publication provides guidelines for the development, preparation and control of quality manuals tailored to the organization's needs.

Demonstration of conformance

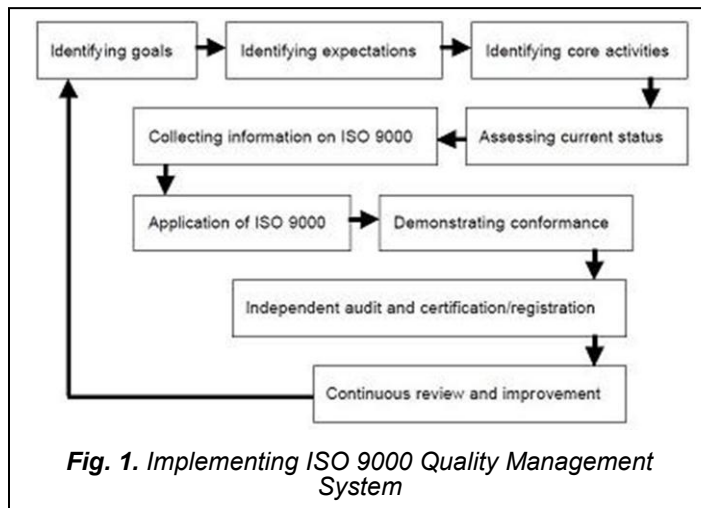
After the ISO 9000 quality system has been implemented the senior management needs to decide whether it needs to show conformance and apply for certification. There could be several reasons for applying for certification including contractual reasons, to compete in the market, regulatory reasons, and last but not least to continue improving quality of the organization's product and increasing efficiency and transparency within the organization, as well as, a means to build staff morale and pride in their work environment.

Independent audit and certification/registration

Once the decision has been taken to apply for ISO 9000 certification/registration the organization will need to engage the services of an independent auditor. ISO 9000 certification/registration is provided by independent firms that specialize in this field. A list of selected firms and organizations is annexed for easy reference. Certification is normally provided for three years. However, the organization would be required to undergo independent audits either annually or biennially. The purpose of these audits is to identify areas for improvement. Failure to take actions on improvements may result in revocation of certificate.

Continuous review and improvement

ISO 9000 requires organizations to continuously improve their management and operation systems. ISO 9004-4, Quality management and quality system elements - Part 4: Guidelines for quality improvement provide guidelines for implementing continuous quality improvement within the organization using tools and techniques based on data collection and analysis. Organizations implementing ISO 9000 are expected to continue the process of self-assessment, reviewing their goals, objectives and management and production processes and learn from past experience. In short ISO 9000 expects organizations to transform themselves into "learning organizations." Once a quality system has been put in place and starts functioning, organizations are encouraged to use "benchmarking" to improve their products and services. Benchmarking involves identifying industry leaders, studying how they operate, comparing their processes with the organization's own processes and learning and adapting these "best-practices" to the specific needs of the organization.



4 METHODOLOGY

As stated earlier, as December 2nd 2014, with more than 5000 business organizations, only 60 of them gained ISO 9000 certification in Ivory Coast. This meant that most business organizations in Ivory Coast were non-ISO 9000 certified. Consequently, the purpose of this study was to identify factors that influenced the non-implementation of the ISO 9000 Quality Management System among business organizations in Ivory Coast.

4.1 Research Questions

This study provided answers to the following research questions:

1. Were Ivorian business organizations aware of ISO 9000 and its certification process?
2. Why would Ivorian business organizations pursue and obtain the of ISO 9000 certification?
3. What were Ivorian businesses organizations perceived benefits that may be derived from ISO 9000 certification?
4. What were Ivorian businesses organizations perceived improvements that may be derived from ISO 9000 certification?
5. What was the overall perception of the ISO 9000 among Ivorian business organizations?

4.2 Research Design

The population for this study included all non-ISO certified business organizations, in both the public and private sector and was physically located in Ivory Coast. The population sample for this study was the current membership of the Chambre de Commerce et d'Industrie de Cote d'Ivoire (CCI) which had 5044 members at the time of the study. Using the 95% confidence level a $\pm 10\%$ sampling error, and 80/20 split, following (9), the researcher was statistically confident that the sample size of 60 business organizations randomly selected from the current membership of the Chambre de Commerce et d'Industrie de Cote d'Ivoire was adequate for this study. To do this, a survey questionnaire was proposed to business leaders of these organizations.

4.3 Data Collection

This study utilized a survey questionnaire of face to face interview as data collection method. The survey questionnaire contained thirty three (33) questions, organized in six parts,

and was proposed to 60 business organizations' leaders. The nature of this study, the technical content of the questionnaire, the prevailing closed-and non-responsive culture of the Ivorians, and the inexperience of the study population to data solicitation in a research environment dictated that face-to-face mode of data collection was most appropriate. Following (10) and (11), the data collection involved collecting data, converting data to computer readable format, and editing data both manually and by computer. For this study, the following steps were taken

1. Questions were translated from English to French language, which is the national language of the country due to French colonization.
2. Developed ISO 9000 Power Point presentation
3. Obtained membership list of the Chambre de Commerce et d'Industrie de Cote d'Ivoire (CCI). This list included:
 - a. Company Name
 - b. Physical, mailing, telephone and e-mail address
 - c. Contact person
4. A pilot survey test was given to ten business leaders prior to the general administration of questionnaire. Following the pilot test, revisions were made with respect to clarity, consistency, and validity of the questionnaire.
5. Organizations were selected randomly. This included reviewing the membership list, making phone contacts to establish contact and obtaining appointments for interview.
6. Presentation of the developed ISO 9000 Power Point presentation before interviewing leaders
7. Face-to-face interviews with the organizations' leaders
8. Data coding
9. Data entry using MS Excel software
10. The researcher was the sole interviewer.

4.4 Data Analysis

The research analysis was limited to the responses received from the survey questionnaire of thirty three (33) questions, which were divided in six parts. The 1st part of the survey questionnaire (questions 1 through 3) gathered information on the demographics of the organization. This included the type, size and approximate gross annual revenue, and the length of time the organization had been in operation. The 2nd part of the survey questionnaire (questions 4 through 6) addressed Research Question 1 and gathered information as to organizations leader's awareness and knowledge of the ISO 9000 and other quality management standards. Following the completion of the 2nd part, a PowerPoint presentation on the ISO 9000 QMS was made to the respondents by the researcher. The respondents were then asked to complete the questions of the remaining 4 parts, based on the information covered in the presentation and their prior knowledge of the ISO 9000 QMS. The 3rd part of the survey questionnaire (questions 7 through 8) addressed Research Question 2 and gathered information with respect to the respondents' reasons for not pursuing or not the ISO 9000 QMS certification. The 4th part of the survey questionnaire (questions 10 through 16) addressed Research Question 3 and gathered information with respect to the respondents' perceived benefits that ISO 9000 certification would bring to their organization. The 5th

part of the survey questionnaire (questions 17 through 26) addressed Research Question 4 and gathered information with respect to the respondents' perceived improvement that ISO 9000 certification would bring to their organization. The 6th part of the survey questionnaire (questions 27 through 33) addressed Research Question 5 and gathered information with respect to the respondents' overall perception for the ISO 9000 Quality Management Standard. This last question was open-ended that gathered additional information or comments that respondent's wished to make. Data collected were analyzed using Excel software and were interpreted using frequency, percent and cumulative percent. The frequency distribution of each of response type's occurrences per question was created.

5 THE FINDING

The population sample of the data was the membership of the Ivory Coast Chamber of Commerce and Industry. The membership of this organization comprised of the established and legitimate business organizations in Ivory Coast. At the time of the study, the Ivory Coast Chamber of Commerce and Industry had 5044 members. A total of 60 interviews were conducted. Data was analyzed using Excel Statistical software. The responses were coded and entered into a data table. Questions were analyzed by generating Frequency Distribution, Percent and Cumulative Percent tables.

5.1 Organizations Description

Q1. Organizations Type and Number

Business organizations surveyed varied in type and number. *Table 1 shows the most frequent types. It was noted that most organizations were multi typed.*

TABLE 1
ORGANIZATIONS TYPE AND FREQUENCY

Organizations Type	Frequency
Manufacturing	10
Engineering Service	3
Business Service	4
Telecommunication	3
Education	4
Finance/ Banking	4
Government	6
Agro Industry	4
Health Care	4
Hotels	6
Insurance	5
Transportation	3
Utilities	4
Total	60

Q2. Age of Organizations

The business organizations of this study were located most in Abidjan region. In term of age, 125% existed for less than 3 years, 20% had 4 to 10 years of age, and 55% were in operation for more than 10 years (Table 2).

TABLE 2
AGE OF ORGANIZATIONS

	Frequency	Percent	Cumulative Percent
0 to 3 years	15	25.0	25.0
4 to 10 years	12	20.0	45.0
Over 10 years	33	55.0	100.0
Total	60	100.0	

Q3. Organizations Size (# of employees)

With respect to organization size, 35% of the organizations had 9 employees maximum, 25% had 10 to 49 employees, 20% had 50 to 99 employees, and 20% had 100 or more employees (Table 3).

TABLE 3
ORGANIZATIONS TYPE AND FREQUENCY

	Frequency	Percent	Cumulative Percent
1 to 9	21	35.0	35.0
10 to 49	15	25.0	60.0
50 to 99	12	20.0	80.5
100 or more	12	20.0	100.0
Total	60	100.0	

5.2 Research Question 1: Business organizations Awareness and Knowledge of ISO 9000 QMS and its Certification Process

Q4. Heard about ISO 9000 QMS?

With respect to their awareness of the ISO 9000 QMS, while 85% indicated that they have heard about ISO 9000 QMS, only 15% indicated never heard about (Table 4).

TABLE 4
ORGANIZATION AWARENESS OF THE ISO 9000 QMS

	Frequency	Percent	Cumulative Percent
Yes	51	85.0	85.0
No	9	15.0	100.0
Total	60	100	

Q5. How Heard of the ISO 9000 QMS?

TABLE 5
HOW HEARD OF THE ISO 9000 QMS

	Frequency	Percent	Cumulative Percent
National Media	3	5.0	5.0
International Media	24	40.0	45.0
CODINORM Info	0	0.0	45.0
Business Connection	6	10.0	55.0
The Internet	15	25.0	80.0
College/ University	12	20.0	100.0
Total	60	100	

While 40% of organization leaders heard about ISO 9000 QMS from International media, 25% became aware about it from Internet, 20% from Universities/College, 10% through business connections and 5% through national/local media. However, none of the respondent became aware of the ISO 9000 QMS technology from CODIMORM, the national bureau of standards (Table 5).

Q6. How well know ISO 9000 QMS?

With concern for knowledge about the standard ISO 9000 QMS, only 15% knew the standard Very Well, while 25% knew the standard Moderately Well. On the other hand, 60% responded Not Well at All for their knowledge of the standard (Table 6).

TABLE 6
ORGANIZATION KNOWLEDGE OF ISO 9000 QMS

	Frequency	Percent	Cumulative Percent
Very Well	9	15.0	15.0
Moderately Well	15	25.0	40.0
Not Well at All	36	60.0	100.0
Total	60	100.0	

Q7. Would your organization require information about the ISO 9000 QMS?

However, 85% of the respondents selected that their organization would be interested on requiring information about ISO 9000 QMS, while 10% responded No, and 5% were Not Sure (Table 7).

TABLE 7
ORGANIZATION AND INFORMATION ABOUT ISO 9000 QMS

	Frequency	Percent	Cumulative Percent
Yes	51	85.0	85.0
No	6	10.0	95.0
Not Sure	3	5.0	100.0
Total	60	100.0	

Q8. Is your organization considering pursuing ISO Certification?

With concern for pursuance and obtain ISO 9000 QMS certification, 83.33% of the leaders interviewed indicated that their organization would consider pursuing the ISO certification, while 10% responded No, and 6.67% were Not Sure (Table 8).

TABLE 8
ORGANIZATIONS PURSUANCE OF ISO 9000 QMS

	Frequency	Percent	Cumulative Percent
Yes	50	83.33	85.0
No	6	10.0	93.33
Not Sure	4	6.67	100.0
Total	60	100.0	

Q9. If Yes which standards

In addition, with concern for Standard first Choice, 85% of the leaders considering pursuing ISO Certification would pick ISO 9001 as their standard of choice, while 10% responded Other, and 5% selected Don't Know (Table 9).

TABLE 9
ORGANIZATIONS AND STANDARD CHOICE

	Frequency	Percent	Cumulative Percent
ISO 9001	51	85.0	85.0
Other	6	10.0	95.0
Don't Know	3	5.0	100.0
Total	60	100.0	

5.4 Research Question 3: Business organizations Perceived benefits of ISO 9000 QMS certification

With concern for perceived benefits of ISO 9000 QMS, 90% of business organizations leaders indicated that Improved Customer Satisfaction was the most important benefit of the ISO 9000 certification. Second was Effective Use of data Management Tools (80%). The other choice were Increased management commitment (70%), Increased supplier performance (65%), Improved customer communication (60%), More effective management reviews (58.0%), and Increased supplier communication (55%) (Table 10 to 16).

Q10. Improved Customer Satisfaction

The response to Survey Question 10 revealed that organizations leadership perceived Improved customer satisfaction as the benefit of ISO 90000 QMS: 90% of Yes and 10% of No.

TABLE 10
ORGANIZATIONS AND CUSTOMER SATISFACTION

	Frequency	Percent	Cumulative Percent
Yes	54	90.0	90.0
No	6	10.0	100.0
Total	60	100.0	

Q11. Improved customer Communication

The response to Survey Question 10 revealed that organizations leadership perceived Improved customer communication as the benefit of ISO 90000 QMS as follow: 60% of Yes and 40% of No.

TABLE 11
ORGANIZATIONS AND CUSTOMER COMMUNICATION

	Frequency	Percent	Cumulative Percent
Yes	36	60.0	60.0
No	24	40.0	100.0
Total	60	100.0	

Q12. Increased Management Commitment

TABLE 12
ORGANIZATIONS AND MANAGEMENT COMMITMENT

	Frequency	Percent	Cumulative Percent
Yes	42	70.0	70.0
No	18	30.0	100.0
Total	60	100.0	

The response to Survey Question 10 revealed that organizations leadership perceived Increased management commitment as the benefit of ISO 90000 QMS as follow: 70% of Yes and 30% of No.

Q13. More Effective Management Reviews

The response to Survey Question 10 revealed that organizations leadership perceived More effective management reviews as the benefit of ISO 90000 QMS as follow: 58% of Yes and 42% of No.

TABLE 13
ORGANIZATIONS AND EFFECTIVE MANAGEMENT REVIEWS

	Frequency	Percent	Cumulative Percent
Yes	34.8	58.0	58.0
No	25.2	42.0	100.0
Total	60	100.0	

Q14. Effective use of data as business management tools

The response to Survey Question 10 revealed that organizations leadership perceived Effective use of data as business management tools as the benefit of ISO 90000 QMS: 80% of Yes and 20% of No.

TABLE 14
ORGANIZATIONS AND EFFECTIVE USE OF DATA AS BUSINESS MANAGEMENT TOOLS

	Frequency	Percent	Cumulative Percent
Yes	48	80.0	80.0
No	12	20.0	100.0
Total	60	100.0	

Q15. Increased supplier performance

TABLE 15
ORGANIZATIONS AND SUPPLIER PERFORMANCE

	Frequency	Percent	Cumulative Percent
Yes	39	65.0	65.0
No	21	35.0	100.0
Total	60	100.0	

The response to Survey Question 10 revealed that organizations leadership perceived Increased supplier performance as the benefit of ISO 90000 QMS as follow: 65.0% of Yes and 35% of No.

Q16. Improved supplier communication

The response to Survey Question 16 revealed that organizations leadership perceived Improved supplier communication as the benefit of ISO 90000 QMS as follow: 55% of Yes and 45% of No.

TABLE 16
ORGANIZATIONS AND SUPPLIER COMMUNICATION

	Frequency	Percent	Cumulative Percent
Yes	33	55.0	55.0
No	27	45.0	100.0
Total	60	100.0	

5.5 Research Question 4: Business organizations Perceived improvements of ISO 9000 QMS Certification

With concern for perceived improvements from ISO 9000 QMS, business organizations leaders indicated that Quality of products/services (50%) was the most important perceived improvement from ISO 9000 certification. The other selections are presented (Table 17 to 26).

Q17. Quality of products/services

The response to Survey Question 17 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Quality of products/services as follow: 50% of Above Improvement, 41.67% of Improvement, and 8.33% of Least Improvement.

TABLE 17
ORGANIZATIONS AND QUALITY OF PRODUCTS/SERVICES

	Frequency	Percent	Cumulative Percent
Above Improvement	30	50.0	50.0
Improvement	25	41.67	91.67
Least Improvement	5	8.33	100
Total	60	100.0	

Q18. Customer retention

The response to Survey Question 18 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Customer retention as follow: 25% of Above Improvement, 28.33% of Improvement, and 46.67% of Least Improvement.

TABLE 18
ORGANIZATIONS AND CUSTOMER RETENTION

	Frequency	Percent	Cumulative Percent
Above Improvement	15	25.0	25.0
Improvement	17	28.33	53.33
Least Improvement	28	46.67	100.0
Total	60	100.0	

Q19. Supplier retention

The response to Survey Question 19 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Supplier retention as follow: 16.67% of Above Improvement, 30% of Improvement, and 53.33% of Least Improvement.

TABLE 19
ORGANIZATIONS AND SUPPLIER RETENTION

	Frequency	Percent	Cumulative Percent
Above Improvement	10	16.67	16.67
Improvement	18	30.0	46.67
Least Improvement	32	53.33	100.0
Total	60	100.0	

Q20. Customer satisfaction**TABLE 20**
ORGANIZATIONS AND CUSTOMER SATISFACTION

	Frequency	Percent	Cumulative Percent
Above Improvement	22	36.67	36.67
Improvement	30	50.0	86.67
Least Improvement	8	13.33	100.0
Total	60	100.0	

The response to Survey Question 20 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Customer satisfaction as follow: 36.67% of Above Improvement, 50% of Improvement, and 13.33% of Least Improvement.

Q21. Supplier satisfaction

The response to Survey Question 21 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Supplier satisfaction as follow: 30% of Above Improvement, 40% of Improvement, and 30% of Least Improvement.

TABLE 21
ORGANIZATIONS AND SUPPLIER SATISFACTION

	Frequency	Percent	Cumulative Percent
Above Improvement	18	30.0	30.0
Improvement	24	40.0	70.0
Least Improvement	18	30.0	100.0
Total	60	100.0	

Q22. Market share/access

The response to Survey Question 22 revealed that the organizations leadership perceived that ISO 90000 QMS would result in improvement in their Market share/access as follow: 46.67% of Above Improvement, 33.33% of Improvement, and 20% of Least Improvement.

TABLE 22
ORGANIZATIONS AND MARKET SHARE/ACCESS

	Frequency	Percent	Cumulative Percent
Above Improvement	28	46.67	46.67
Improvement	20	33.33	80.0
Least Improvement	12	20.0	100.0
Total	60	100.0	

Q23. Productivity

The response to Survey Question 23 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Productivity as follow: 45% of Above Improvement, 30% of Improvement, and 25% of Least Improvement.

TABLE 23
ORGANIZATIONS AND PRODUCTIVITY

	Frequency	Percent	Cumulative Percent
Above Improvement	27	45.0	45.0
Improvement	18	30.0	75.0
Least Improvement	15	25	100.0
Total	60	100.0	

Q24. Waste reduction

The response to Survey Question 24 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Waste reduction as follow: 40% of Above Improvement, 42% of Improvement, and 18% of Least Improvement.

TABLE 24
ORGANIZATIONS AND WASTE REDUCTION

	Frequency	Percent	Cumulative Percent
Above Improvement	24	40.0	40.0
Improvement	25.2	42.0	82.0
Least Improvement	10.8	18.0	100.0
Total	60	100.0	

Q25. National recognition

The response to Survey Question 25 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their National recognition as follow: 40% of Above Improvement, 35% of Improvement, and 25% of Least Improvement.

TABLE 25
ORGANIZATIONS AND NATIONAL RECOGNITION

	Frequency	Percent	Cumulative Percent
Above Improvement	24	40.0	40.0
Improvement	21	35.0	75.0
Least Improvement	15	25.0	100.0
Total	60	100.0	

Q26. Regional And International Recognition

The response to Survey Question 26 revealed that organizations leadership perceived that ISO 90000 QMS would result in improvement in their Regional and International recognition as follow: 40% of Above Improvement, 35% of Improvement, and 15% of Least Improvement.

TABLE 26
ORGANIZATIONS AND REGIONAL AND INTERNATIONAL RECOGNITION

	Frequency	Percent	Cumulative Percent
Above Improvement	26	43.33	43.33
Improvement	24	40.0	83.33
Least Improvement	10	16.67	100.0
Total	60	100.0	

5.6 Research Question 5: Business organizations overall perception of the ISO 9000 QMS

With concern for overall perception of ISO 9000 QMS, business organization leaders indicated they see ISO 90000 QMS as A good quality management tool as 50% of them selected Strongly Agree. The other selections are presented (Table 27 to 33).

Q27. A good quality management tool

The response to Survey Question 27 revealed that organizations leadership sees ISO 90000 QMS as A good quality management tool: Strongly Agree (50%), Agree (41.67%) and Disagree (8.33%).

TABLE 27
ORGANIZATIONS AND QUALITY MANAGEMENT TOOL

	Frequency	Percent	Cumulative Percent
Strongly Agree	30	50.0	50.0
Agree	25	41.67	91.67
Disagree	5	8.33	100.0
Total	60	100.0	

Q28. Applicable to my organization

The response to Survey Question 28 revealed that organizations leadership see ISO 90000 QMS As Applicable To Their Organization: Strongly Agree (36.67%), Agree (46.67%) and Disagree (16.66%).

TABLE 28
ORGANIZATIONS AND ISO 90000 QMS APPLICABILITY

	Frequency	Percent	Cumulative Percent
Strongly Agree	22	36.67	36.67
Agree	28	46.67	83.34
Disagree	10	16.66	100.0
Total	60	100.0	

Q29. Applicable to the country

TABLE 29
ORGANIZATIONS AND APPLICABILITY TO THE COUNTRY

	Frequency	Percent	Cumulative Percent
Strongly Agree	9	15.0	15.0
Agree	28	46.67	61.67
Disagree	23	38.33	100.0
Total	60	100.0	

The response to Survey Question 29 revealed that organizations leadership see ISO 90000 QMS as Applicable to the country: Strongly Agree (15%), Agree (46.67%) and Disagree (38.33%).

Q30. Too costly to implement

TABLE 30 ORGANIZATIONS AND COST OF ISO 9000 IMPLEMENTATION			
	Frequency	Percent	Cumulative Percent
Strongly Agree	24	40.0	40.0
Agree	33	55.0	95.0
Disagree	3	5.0	100.0
Total	60	100.0	

The response to Survey Question 30 revealed that organizations leadership see ISO 90000 QMS as too costly to implement: Strongly Agree (40%), Agree (55%) and Disagree (5%).

Q31. Takes too much time to implement

The response to Survey Question 31 revealed that organizations leadership thinks that ISO 90000 QMS takes too much time to implement: Strongly Agree (53.33%), Agree (41.67%) and Disagree (5%).

TABLE 31 ORGANIZATIONS AND TIME TO IMPLEMENT ISO 9000			
	Frequency	Percent	Cumulative Percent
Strongly Agree	32	53.33	53.33
Agree	25	41.67	95.0
Disagree	3	5.0	100.0
Total	60	100.0	

Q32. Will consider implementing

The response to Survey Question 32 revealed that organizations leadership will consider implementing ISO 90000 QMS: Strongly Agree (41.67%), Agree (41.67%) and Disagree (16.66%).

TABLE 32
ORGANIZATIONS AND ISO 9000 IMPLEMENTATION CONSIDERATION

	Frequency	Percent	Cumulative Percent
Strongly Agree	25	41.67	41.67
Agree	25	41.67	83.34
Disagree	10	16.66	100
Total	60	100.0	

Q33. Require more information

The response to Survey Question 33 revealed that organizations leadership will require more information of ISO 90000 QMS: Strongly Agree (36.67%), Agree (46.67%) and Disagree (16.66%).

TABLE 33
ORGANIZATIONS AND INFORMATION ON ISO 9000

	Frequency	Percent	Cumulative Percent
Strongly Agree	22	36.67	36.67
Agree	28	46.67	83.34
Disagree	10	16.66	100
Total	60	100.0	

6 ANALYZING

6.1 Research Question 1: Business organizations Awareness and Knowledge of ISO 9000 QMS and its certification process

Based on the data collected, analyzed and presented, it was found that business organizations in Ivory Coast were aware of the ISO 900 QMS as 85% indicated that they have heard about ISO 9000 QMS. However, most of them were unaware of ISO 9000 QMS implementation and certification process as 60% responded Not Well at All to the on How well know ISO 9000 QMS and 85% indicated they would requires more information about the ISO 9000 QMS. Also, to the question with respect to How Heard of the ISO 9000 QMS, 40% of the business organization leaders responded the International Media. However, none of them cited CODIMORM, the local national bureau of standards, as a source of information. This situation needs to be addressed and fixed.

6.2 Research Question 2: Business organizations Pursuance and Obtaining ISO 9000 QMS certification

Following the ISO 9000 QMS PowerPoint presentation and discussion, the respondents completed the questionnaire based on their understanding and perception Tool. Based on the data collected, analyzed and presented, it was found that business organization leaders in Ivory Coast intended to pursue and obtain ISO 9000 QMS certification as 83.33% indicated that their organization is considering pursuing ISO Certification.

6.3 Research Question 3: Business organizations Perceived benefits of ISO 9000 QMS certification

Based on the data collected, analyzed and presented, it was found that business organization leaders in Ivory Coast perceived Customer Satisfaction Improvement 90% as the most important benefit in their general management activities that would result from the ISO 9000 QMS implementation and certification. They also perceived that benefits would be gained respectively from Effective Use of data Management Tools (80%). The other choices were increased management commitment (70%), increased supplier performance (65%), improved customer communication (60%), more effective management reviews (58.0%), and increased supplier communication (55%) (Table 10 to 16).

6.4 Research Question 4: Business organizations Perceived improvements of ISO 9000 QMS Certification

Based on the data collected, analyzed and presented, it was found that business organization leaders in Ivory Coast perceived that ISO 9000 QMS implementation and certification would bring improvements in their general management activities. Business organizations leaders indicated that Quality of products/services (50%) was the most important perceived improvement from ISO 9000 certification. They also perceived that ISO 9000 QMS would bring improvements respectively to market share/access (46.67%), productivity (45%), waste reduction (40%), national recognition (40%), regional and international recognition (40%), customer satisfaction (36.67%), supplier satisfaction (30%), customer retention (25%), and supplier retention (16.67%) (Table 17 to 26).

6.5 Research Question 5: Business organizations overall perception of the ISO 9000 QMS

Based on the data collected, analyzed and presented, it was found that business organization leaders in Ivory Coast overall perception indicated that ISO 9000 QMS is a good quality management tool that is applicable to their organization and the country. However, they perceived the ISO 9000 QMS process as being too costly and taking too much time to implement. However, they are prepared to obtain more information about the ISO 9000 QMS implementation and certification processes as they will consider implementing.

7 CONCLUSION

The objective of this paper was to present the factors that impede the implementation of ISO 9000 QMS within the manufacturing and service Industry of Ivory Coast. It wasn't the intention of the author to provide detailed strategies for the readers to implement ISO 9000. It was an effort to present the relationship, if any, between the lack of ISO 9000 adoption and the perception of Ivorians business organization leaders. For that purpose, five research questions were associated with

this study. The population for this study was all non-ISO certified business organizations, in both public and private sector and was physically located in Ivory Coast. The population sample for this study was the 5044 members of the Chambre de Commerce et d'Industrie de Cote d'Ivoire (CCI) from which the author utilized the sample size of 60 business organizations randomly selected. This study utilized a survey questionnaire of face to face interview as data collection method. The survey questionnaire contained thirty three (33) questions, organized in six parts, and was proposed to 60 business organizations' leaders. The result showed that business organization leaders in Ivory Coast were aware of the ISO 9000 QMS but do not have enough knowledge on the ISO 9000 QMS implementation and certification. This could be due to the poor job done by CODIMORM, the local national bureau of standards, as a source of information. However, it was found that business organization leaders in Ivory Coast intended to pursue and obtain ISO 9000 QMS certification. With respect to perceived benefits, they indicated customer satisfaction improvement as the most important benefit that ISO 9000 QMS certification could bring to their general management activities. With respect to perceived improvements, they selected quality of products/services as the most important improvement that ISO 9000 QMS implementation and certification could help to achieve. Overall, business organization leaders in Ivory Coast overall perception indicated that ISO 9000 QMS is a good quality management tool that is applicable to their organization and the country. However, they perceived the ISO 9000 QMS process as being too costly and time consuming to implement, but they are prepared to obtain more information about the ISO 9000 QMS implementation and certification processes as they will consider implementing.

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