*Review*

# A study on ISO 9001 quality management system (QMS) certifications – reasons behind the failure of ISO certified organizations

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**The purpose of this study was to highlight the basic facts about the ISO certification and why considerable proportion of organizations failed even after getting certified to International system standards such as ISO 9001 Quality Management System (QMS).This study investigated the practical problems faced by the certified organizations represented by a sample group of 100 contractors from the UAE (30 Mechanical Contractors, 40 Electrical Contractors and 30 Civil contractors with a stratified random sample of 40 organizations with 1-50 staff,40 organizations with 51-100 staff and 20 organizations with more than 100 staff) and classified them through 25 variables, evaluated the effectiveness of the organizations and highlighted the major areas of system gaps. This study revealed that there were certain system gaps in majority of the ISO 9001 QMS certified organizations. The gaps were classified into 4 basic categories such as a) Leadership related issues b) Strategy related issues c) Quality system related issues and d) Social responsibility related issues. This study can be used as a basis to verify the effectiveness of management system in any organization and also to identify the barriers which hinder the business benefits. This study remains a basis for further research to develop and customize a model for organizations to achieve business excellence.**

**Keywords:** ISO**,** ISO 9001, Quality, QMS, certification.

## INTRODUCTION

International Organization for Standardization (ISO) is the world's largest non-profit organization to develop and publish international management system standards on various subjects such as ISO 9001:2008 (Requirements for a QMS), ISO 14001:2004 (Requirements for an Environment Management System), Food safety standard ISO 22000:2005, Information Security Management Standard (ISO 27001:2005), etc. ISO is

having a network of more than 160 member countries all over the world. The national standards institutions of countries represent their country for governing the accreditation framework. Representatives from all these countries work as a team to generate the concept, draft it, brainstorm and finalize it as an international standard. Theses standards are generically defined to suit any organization in the world regardless of their size, scope and location.

It is optional for the organizations to select the individual standards for implementation as well as, certification by third party competent organizations called typically as "Certification Bodies". Since the early 2001, bigger companies started demanding the ISO certification for their suppliers, with a view to unify the systems of multiple suppliers. This demand, in one way added attraction to ISO standards, but on the other hand,

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**Abbreviation and Expansion**

ISO, International Organization for standardization; QMS, Quality Management System; KPI, Key performance indicator; PDCA, Plan Do Check and Act.

**Figure 1**. Showing the number of organizations certified to ISO 9001 certified worldwide.Source for figure 1. ISO survey 2009 http://www.iso.org/iso/survey2009.pdf

caused these standards turn more theoretical and commercial, thus turning the credibility of certification a question mark.

As depicted in Figure 1, the number of organizations certified to ISO management system standards all over the world is hiking absolutely and it has crossed a million organizations by 2009. But the striking fact admitted by the interested parties is that in a considerable proportion of the organizations, ISO System certification is used as a marketing tool to participate in tender and beyond this level no value addition by these certifications to the business.

As the certification bodies also have to be more and more competitive, a considerable portion of such organizations were not aware of the real benefits of implementing systems were achieved fully or not.

After the main certification assessment for ISO, organizations are supposed to be visited periodically say at least once every year, but many of such assessments revealed the system performance was shocking and even for attaining a level of "minimum compliance" was a big deal for those so called "Certified" organizations.

Colin Carnall, (2007) defined an excellent or high performing company shall demonstrate the concern for future, human resource development, quality, excellence, reward system and have focus on customers and all stakeholders.

Any ISO 9001certified organization is supposed to have an effective Quality System and achieve maximum customer satisfaction, profit, employee motivation, improvements and minimum rejections, reworks, customer complaints and problems. As the ground reality was questioning this theory, this study was initiated to evaluate how effective were the ISO certified organizations.

**Significance or Motivation for this Research**

Factor1 – Certification Vs World class: According to the recent statistics from ISO web-page, now there are more than a million worldwide organizations certified to the ISO 9001 standard. As the drive for certification has grown drastically and a large population of organizations got certified, it makes the ISO field subjected to a ray of query, as have all those certified organizations become world-class and how far these quality systems have been effective and value adding.

Factor2 – Conformance Vs Excellence: This QMS 9001 standard, by virtue of its basic principles shall support the organization to progress from the stage of "minimum compliance" to "Consistent performance", so as to reach its ultimate aim of "Business Excellence", through QMS.

Factor 3 – Market Inflation: The ISO market has become alarmingly competitive since the recent years, with the growing number of clients, certifying agencies and consultants. This growth started to saturate now a days, with a likelihood that the generic and flexible structure of ISO 9001 might be misused for getting certified quickly without actually deserving it. The certifying agencies all over the world have a pressure to develop or sustain their market. The ISO consultants, who could be hired optionally by the organizations, are under a pressure to survive. Such inflation and pressure become a cause for concern to initiate a study on the effectiveness of certified organizations.

Factor 4 – Blacklisted Certifying agencies:  As an example since 5 years, there were a few certifying agencies which were blacklisted by the Indian accreditation. This situation revealed the certifying agencies were not ideal and beyond suspicion. This might lead to undeserving organizations  certified  by

unprofessional or unethical certifying agencies.

The above factors motivated a research study to be initiated to find out how effective the certified organizations were and what were the reasons for system failure.

Factor 5- Innovation Component: This study gave an opportunity to innovate by modifying the existing Quality Management System and make it more vibrant and customized for all types of business enterprises.

## Study Objective

Hence, this study started with an objective to evaluate how effective was the Quality Management System of those certified organizations and identify the areas for improving the Quality System performance.

## Review of Literature

ISO has published more than 18000 standards, but for this study, ISO 9001 Quality Management System has been focused for its requirements.ISO 9001 Standard has the latest revision by 2008. This has 8 clauses of requirements , as below:-

Clause 1 – Scope
Clause 2 – Normative References
Clause 3 – Terms and Definitions
Clause 4 – Quality Management System Requirements
Clause 5 -  Management Responsibility
Clause 6-  Resource Management
Clause 7 – Product Realization
Clause 8 – Measurement, Analysis and Improvement

Clauses 1 to 3 are for information only. From clause 4 to 8 are for the organizations to comply with, especially the clause 4 being an umbrella clause, includes the requirements in a macro level. All these clauses 4 to 8 have detailed the requirements through multiple sub clauses. If any of such clause requirements not applicable (from the clause 7) shall be addressed in the exclusion section of the quality manual with suitable justification.

The ISO 9001 QMS architecture has been composed of 8 basic principles, as detailed below in Table 1

ISO management systems have gained a chronic importance developed in the field of managing quality since two decades. As remarked by Roger G.Schroeder (2008), "…ISO 9001 Certification has a major impact on worldwide quality practices. Many companies are demanding ISO certification from their suppliers as a condition for doing business". This situation has caused lots of contracting organizations to register for ISO certification. Joseph Juran, (2002) said, "Initially the suppliers resisted the Quality System mandated by their customers;  afterwards, it became a part of life".

The minimum compliance requirements specified in the 9001 shall be implemented consistently, as a basis to facilitate the business reach the real "excellence". Barak Michalle, (2011) 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.

As Juran, (1996) highlighted, "Assumptions about organization's Vision, Mission and 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.

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".

The very purpose of going for ISO could be to streamline the system for sustaining advantage. Markides (2000) brings out 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, and also those advantages 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 Pan (2003), 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 became 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.

Johannsen (1996) summarized these drivers as pressures from existing customers, promotional value

**Table 1.**The ISO 9001 QMS architecture has been composed of 8 basic principles, as detailed

| | | |
|---|---|---|
| 1 | Customer focused organization | Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations |
| 2 | Leadership | Leaders establish unity of purpose and direction. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives |
| 3 | Involvement of people | People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit. |
| 4 | Process approach | A desired result is achieved more efficiently when activities and related resources are managed as a process. |
| 5 | System approach to management | Identifying, understanding and managing a system of interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives. |
| 6 | Continual improvement | Continual improvement of the organization's overall performance should be a permanent objective of the organization. |
| 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. |

and the desire of improving management processes and enhancing customer service.

Francis Buttle (1997) ranked the benefits after conducting a survey on UK businesses and reported the marketing considerations which motivate companies to seek certification and the marketing benefits which accrue from certification. Marketing considerations were secondary in seeking registration, and outcomes related to profitability and process improvement were more highly valued than marketing benefits.

McAdam and Canning (2001) argued the importance of ISO registration in enhancing firm's chances of gaining work.

Magd 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- Pressure from existing customers (Johannes, 1996; Buttle, 1997).
2- Pressure from parent organization (Johannes, 1996).
3- Promotional benefit (Johannes, 1996).
4- Competitors Registration (McAdam and Canning, 2001).
5- To improve internal efficiency (McAdam and Canning, 2001).
6- To maintain/increase market share (Magd and Curry, 2003).
7- 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, Pan (2003) discussed ISO 9001 and 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.

Yahiya and Goh (2001) did a study for a sample of certified organization from Singapore, Japan, Korea, Taiwan, Europe, and USA. They concluded that implementing ISO 9000 led to the following internal benefits among certified companies: better documentation, greater quality awareness, and improved measurement system. Meanwhile, the certified Malaysian organization gained also the following external benefits: improved customer satisfaction, higher perceived quality, and competitive edge. Moreover, they noticed that companies exporting to Europe had more pressure to get ISO certified than others.

Naser et al., (2004) studied the effect of ISO 9001 certification on the performance of 162 public listed companies in Malaysia and they found an impact between ISO 9000 registration and performance of companies in Malaysia. Their study revealed that certified Malaysian companies outperformed the non-certified ones during the period of their study.

Casadesus et al., (2005) performed a study to evaluate benefits of implementing ISO 9000 by Spanish industries and they concluded that although ISO 9000 had many positive points, 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 and Alam (2004) 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 et al. (2003). 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 and Curry (2003) 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 et al., (2006) concluded that the overall ISO's effects on managerial inefficiency are negative indicating that the adoption of ISO reduces managerial inefficiency.

Quazi and Padibjo (1998) 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.

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 Yasar Jarrar (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 organizations in the contracting organizations of UAE, who are mostly mandated by their customers to go for it.

## MATERIALS AND METHODS

### Rationale Behind the selection of contractors as target group

In UAE, like any other part of the world, principal organizations choose to implement ISO 9001 standard, unlike the case of contractors, who are forced to get ISO 9001 certified by an accredited third party certifying agency, as a mandatory requirement to do business with them. As the QMS was not optional, the curiosity rose to check how effective was their QMS, regardless of getting certified.

Out of the 800 ISO certified Contracting organizations, a sampling frame of 100 contractors were selected as a stratified random sample, the stratification was to balance the basic three types of contractors (Mechanical, Electrical and Civil).104 responses were received from a throw of 125 (Gross response rate 83.2%), upon further sorting, 100 surveys were found adequate and appropriate for study. (Net response rate 80%). The survey included objective type questions seeking the perception of respondents on the subjects of  Customer satisfaction, Continual improvements, Brand image, Internal audit, Business Strategy, Documentation management, Management commitment, motivation, internal communication, bureaucracy, Customer complaints, Organizational learning, Stakeholder management, Supplier development, In-process efficiency, Strategy Management, Corporate Social Responsibility, Key Performance Indicators, etc, on a three point scale (Yes / No / Neutral).

**Table 2.** Main Survey response and summary of issues faced by the contractors.

| No | Subject | Out of 50 | Agree | Neutral | Dis Agree |
|---|---|---|---|---|---|
| 1 | Since Certification, customer satisfaction level of my organization has improved | No. of org. | 24 | 56 | 20 |
| | | By % | 24% | 56% | 20% |
| 2 | Continual improvements in my organization are accounted and documented well | No. of org. | 28 | 44 | 28 |
| | | By % | 28% | 44% | 28% |
| 3 | Since ISO certification, the brand image hase been improved positively | No. of org. | 60 | 40 | - |
| | | By % | 60% | 40% | - |
| 4 | Internal audit adds value to the systems and business | No. of org. | 32 | 8 | 60 |
| | | By % | 32% | 8% | 60% |
| 5 | There is a clear linkage between company strategy and management systems | No. of org. | 20 | 32 | 48 |
| | | By % | 20% | 32% | 48% |
| 6 | Since ISO certification, the volume of documentation is simplified, reduced and supports the system well. | No. of org. | 12 | 36 | 52 |
| | | By % | 12% | 36% | 52% |
| 7 | Management system culture has been effectively developed in line with business | No. of org. | 16 | 32 | 52 |
| | | By % | 16% | 32% | 52% |
| 8 | Top management's commitment for the Systems is excellent. | No. of org. | 32 | 16 | 52 |
| | | By % | 32% | 16% | 52% |
| 9 | My organization provides excellent incentives / promotions / bonus for the staff who work well for the ISO systems | No. of org. | 24 | 12 | 64 |
| | | By % | 24% | 12% | 64% |
| 10 | My company's ISO system is flexible and not bureaucratic | No. of org. | 24 | 20 | 56 |
| 11 | The management system at my organization has been tailored to suit my industry | No. of org. | 44 | 4 | 52 |
| 12 | Internal communication within our organization is effective | No. of org. | 68 | 12 | 20 |
| | | % | 68% | 12% | 20% |
| 13 | ISO System awareness for our staff is sound, people know the policy, departmental objectives and individual ones | No. of org. | 64 | 16 | 20 |
| | | % | 64% | 16% | 20% |
| 14 | Learning and knowledge sharing are encouraged well in our company | No. of org. | 32 | 12 | 56 |
| | | % | 32% | 12% | 56% |
| 15 | The customer complaints are reduced since certification | No. of org. | 36 | 40 | 24 |
| | | % | 36% | 40% | 24% |
| 16 | Customer feedback is obtained effectively | No. of org. | 28 | 20 | 52 |
| | | % | 28% | 20% | 52% |
| 17 | Job Responsibility, Authority and accountability are well defined | No. of org. | 28 | 36 | 36 |
| | | % | 28% | 36% | 36% |
| 18 | Process Quality and efficiency have been improved since certification | No. of org. | 32 | 20 | 48 |
| | | % | 32% | 20% | 48% |
| 19 | Sub contractor development initiatives are enhanced since certification | No. of org. | 28 | 16 | 56 |
| | | % | 28% | | |
| 20 | My organization has got a tool or system for corporate performance measurement | No. of org. | 32 | 12 | 56 |
| | | % | 32% | 12% | 56% |
| 21 | Staff knowledge and capabilities are developed systematically. | No. of org. | 16 | 24 | 60 |

**Table 2**. (Continues)

| 22 | Stakeholders are met periodically and their perceptions are documented and managed. | No. of org. | 32 | 12 | 56 |
|----|------------|------------|----|----|----|
|    |            | %          | 32% | 12% | 56% |
| 23 | The management review is conducted effectively and adds value. | No. of org. | 24 | 20 | 56 |
|    |            | %          | 24% | 20% | 56% |
| 24 | My organization is aware of its scope of the corporate social responsibility | No. of org. | 28 | 36 | 36 |
|    |            | %          | 28% | 36% | 36% |
| 25 | Overall system in my organization is effective. | No. of org. | 44 | - | 56 |
|    |            | %          | 44% | - | 56% |

## Data Analysis

Table 2 above shows the responses, especially the problems faced by the contracting organizations.

## CONCLUSION

Even though more than a million organizations have been certified to ISO QMS 9001 standard till date, there were certain common problems faced by majority of these certified organizations, which influenced their business performance.

These problems were broadly classified into three categories as
• Leadership related issues (Inadequate Commitment by Top Management, Lack of Motivation, Recognition, Organizational learning , Strategic Planning and  long term focus)
• Strategy Related Issues (Mission, Vision, Values, Strategic Planning, Strategy Mapping, Cascading down the line, KPIs and Initiatives)
• Quality System related issues (Weak PDCA cycle, generic system, internal audit not in depth, non value adding meetings/trainings and excessive paperwork)
• Society oriented gaps (Corporate Social Responsibility, Environmental Management and Sustainability)
When an organization carefully eliminates these above mentioned gaps, it can be sure of the whole business model to be effective with value added processes, methods, systems and efficient resources contributing for continual improvements and towards business excellence.

## Scope for further Research

The study was used to evaluate the level of effectiveness of QMS 9001 systems and classify the broad categories of gaps.

As a matter of logic, when the organizations struggle to demonstrate a minimum compliance to QMS, it may not be possible for these organizations to reach the business excellence, unless a customized model bridges between the minimum compliance to business excellence through a strategic framework, tailored specifically to suit the organization in terms of scope, scale and core competencies.

It was felt that beyond this study, there was a scope for developing a strategic framework to reach business excellence through developing a strategic management system.

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