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An ISO 9001:2000-based framework for realizing quality in small businesses

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Abstract

The purpose of ISO 9001:2000 Quality Management System (QMS) is to provide businesses with a model to grow systematically while assuring the quality of their products. The validity of ISO 9001:2000 QMS stems, largely, from the fact that the best minds worldwide have contributed to its development and maintenance, and the fact that many companies have reported real business gains because of its implementation. Unfortunately, many small businesses fail to survive due to the absence or lack of adequate system for managing quality. An obvious recommendation would be to implement ISO 9001:2000 QMS. Nevertheless, small businesses often cite lack of resources and time as the main reasons for not implementing ISO 9001:2000 QMS.

This article proposes a framework for an effective and economical implementation of the ISO 9001:2000 QMS in small businesses. Unlike the traditional one-shot approach to ISO 9001:2000 implementation, the proposed framework is built on four premises, utilizing an incremental approach that considers the specific characteristics of small businesses.
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1. ISO 9001 and small businesses

Historically, ISO 9001 Quality Management System (QMS) has enjoyed more acceptances from larger organizations that belong mainly to the manufacturing sector. Over time and with the release of the more generic ISO 9001 version late in the year 2000, the number of non-manufacturing organizations seeking ISO 9001 certification gradually but slowly grew.

It is a fact that the majority of organizations worldwide are non-manufacturing and belong to the category of small businesses (small businesses, in this paper, is defined as those that employ less than 100 people). These businesses have generally resisted voluntary adoption of ISO 9001 for intrinsic and interdependent reasons, such as lack of sufficient personnel and capital resources, lack of time and skills.

Simply, many small businesses cannot afford to dedicate or qualify a good number of their employees during and after the ISO 9001 realization project, nor can they finance the cost of preparation, development and registration. Efforts to convince these businesses to buy into ISO 9001 have focused on underlining the benefits of registration and finding ways to reduce the cost of consultation/registration [1]. The focus on reducing the consultation/registration cost has ironically jeopardized the quality of many of the developed ISO 9001 systems. To reduce cost, some consultants would cut on development time, force the use of pre-prepared

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documentation templates, minimize employees' involvement and training, and suggest registrars who are document auditors rather than quality auditors. The outcome is an affordable ISO 9001 certification at the expense of quality.

2. Premises for the proposed framework

Small businesses are different from large businesses in many fundamental ways [2]:

1. Top management of small businesses typically enjoy greater control, are more involved in daily operations, know all employees and their capabilities, know the whole company operations end-to-end, have high contact and knowledge of customer requirements, and have good knowledge of the firm's working environment of customers, competitors and suppliers.
2. The scope of small businesses is usually limited in terms of products/services, geographic location, market/customer base, and technology.
3. Every employee, especially at the supervisory/managerial level, counts. Their departure often causes a great deal of disruption.
4. There are typically no employees or departments with the exclusive responsibility for quality activities. Therefore, quality responsibilities are included among other responsibilities in the job description of selected employees.

Watson and Gryna [3] and Rhey and Gryna [4] point out that small businesses typically lack the resources, time, and skills to assess quality culture and conduct extensive market research. The same shortcomings impede small businesses from developing, implementing, and maintaining QMS.

In this paper, a framework for realizing quality in small businesses through ISO 9001:2000 QMS is proposed. The success of the framework depends largely on four complementary premises:

1. *Do-it-yourself* in order to reduce the total cost (preparation, development, implementation, maintenance, improvement), to assure the attainment of quality, and to assure the continual improvement of the QMS. The apparent savings in doing-it-yourself come from eliminating the consultancy costs incurred during preparation, development, and implementation. However, the hidden and more significant savings come at later stages where the business relies on its own people to fine-tune and improve the system. A major shortcoming of the many ISO 9001 quality systems is that they are developed by consultants without real involvement from the people in the organization. Often, lack of understanding of the system components and the involved development and improvement tools turns these systems into meaningless documentation and records keeping practices that stand as barriers to business improvement.

2. *Assign the top operational manager to be also the quality representative* in order to secure and maintain management commitment, to assure complete alignment of quality performance with business performance, to avoid making new appointments or creating departments, and to assure total integration of the QMS with the business management system. The choice of the top operational managers is due to the sweeping span of control and authority they usually enjoy in many small businesses, and to their extensive business knowledge and experience. To handle the additional responsibilities, however, they may very well need to rely on the support of their office staff especially in performing the activities of document development, implementation follow-up, and records keeping.

3. *Take your time* in order to acquire the necessary knowledge and skills in quality and ISO 9001:2000 QMS. The top operational manager needs experience and in-depth training in quality concepts and tools, ISO 9001:2000 requirements, and auditing techniques. The office staff needs to have a general training in ISO 9001:2000 QMS and in-depth training in documentation and documents and records control. Undoubtedly, there will be more sweat, longer learning curve, more errors and frequent updates to the system. It is important, however, that the top management stays the course and maintains persistence to make it work.

4. *Do not certify* unless it is economically justifiable; this often results from customer and/or competitor pressures. Systems developed under the pressures for certification sometimes lead to registrar satisfaction rather than customer satisfaction. Some consultants develop ISO 9001 systems with the registrar, and some times specific registrar, in mind. The objective of achieving quality rather than certification helps to minimize the risk of bias that characterizes self-assessment.

3. Proposed framework

Unlike the traditional *one-shot* approach to ISO 9001 realization which is typically used by organizations seeking certification, a framework that is based on an *incremental* approach is recommended for small businesses. It is believed that the incremental approach, born from the above premises, simplifies implementation and supports the learning process. Figs. 1 and 2 show the one-shot and incremental approaches to ISO 9001 realization, respectively.
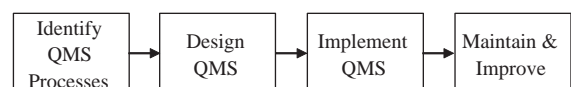

Fig. 1. One-shot approach to ISO 9001 realization.