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INTRODUCTION

ISO 9000 is becoming an increasingly significant issue for U. S. companies engaged in international business activity. Certification is fast becoming a requirement for companies doing business in Europe and other parts of the world. The purpose of the standard is to harmonize the large number of existing quality standards in an effort to establish consistency, a common language, and minimize the need for multiple assessments. The standards are generic and apply to any type and size of organization. According to Dover (1993), ISO 9000 has been referred to by many people as the second major global quality initiative. Unlike the first quality movement from Japan, the ISO 9000 standard does not focus exclusively on manufacturing processes. It covers twenty functions within an organization that affect the delivery of a quality product or service including purchasing, training, after-sales service and information systems.

As of December 1992, more than six hundred U. S. company sites were registered to an ISO 9000 standard and this number continues to grow. As the importance of the standard is recognized by other companies and the advantages as a competitive marketing tool are realized, pressure to become certified will increase.

THE ISO 9000 SERIES OF STANDARDS

The ISO 9000 series of quality standards were published in 1987 by the International Standards Organization (ISO). The series of standards originated as a component of the European Community's initiatives to become a single market. Member nations wanted assurances that products moving across their borders would meet certain quality standards regardless of the country of origin (Dover, 1993). The standards have been adopted by the European Community and over 56 other countries as their voluntary national quality standard (U. S. Department of Commerce Report on ISO 9000).

Many people assume that the series gets its title, ISO, from the abbreviation of the organization which created it. However, this title has another origin. The origination of the title represents one of the objectives which the organization and the series hope to attain. Derived from Greek, ISO is a prefix meaning equal. "The people who funded ISO chose this name for the organization because they believed the development and use of standards would make all things equal. ISO's goal is a level playing field, as is envisioned for Europe where harmonized standards combined with ISO 9000 certification means equal access to all 12 countries in the EC" (Byrnes, 1992).

The series are broken down into the following five individual standard categories:

ISO 9000: The most basic standard of the series, it serves as an aid in selecting and using the other standards in the series.

ISO 9001: The most comprehensive standard of the series, it encompasses all steps in manufacturing, "from design and production to installation and servicing" (U. S. Chamber of Commerce, pamphlet).

ISO 9002: This standard serves as the model for a quality system which only requires production and installation conformance. "This standard is particularly relevant to process industries where specific requirements for products are stated in terms of an established design or specification. Chemicals, food, and pharmaceutical companies generally seek certification under ISO 9002" (Flister, 1992).

ISO 9003: This standard serves as the model for a quality system which only requires conformance in final inspection and testing.

ISO 9004: "This standard provides guidelines for developing and implementing a quality system" (Flister, 1992). It encompasses all factors affecting the quality of a product or service, including administrative, technical, and human factors.

Of these categories, only ISO 9001, 9002, and 9003 are specific standards. The 9000 and 9004 are only guidelines. Of the three standards, the 9001 is the most stringent and encompassing. Many companies start with 9002 or 9003 registration and later seek the more demanding 9001 certification standards. Companies that already have strong quality systems in place should not find certification requirements to be too difficult.

THE CERTIFICATION DECISION

Several issues come into play as companies evaluate the pros and cons of certification for their particular business. The costs may be substantial up front not only in actual dollars but in time spent educating and convincing employees of the potential benefits of certification. Increased acceptance of the standards by commercial customers will add to the pressure to become one of the ISO certified group. Companies that once regarded stating their compliance with ISO 9000 as sufficient are now beginning to change their position. The standards provide an effective means by which to evaluate and improve the quality of products and services. Customer confidence in the standards will further influence certification trends. Certification may simply become another cost of doing business.

While it is obvious that there are many benefits to be gained from ISO 9000 certification, it should never be considered a panacea for problems which a company might have. In fact, premature registration can cause problems for a company. Therefore, careful consideration and planning must go into every company's decision to seek certification. The assessment is conducted by a third party registrar and the person performing the assessment should be accredited by a national accreditation body. Given the importance of selecting the third-party auditor, a company should be careful in making their decision. One problem, however, that domestic companies are running into is the fact that there is a shortage of accredited auditors in the United States. This shortage has created a backlog of several months. Not only is this causing companies to have to wait for their certification, but it increases problems for those companies that do not pass their initial audits. " . . . approximately 70 percent of applicants flunk on their first try" (Leewenburgh, 1992). Therefore, " . . . if a company fails to be certified on the first try, it may be many months before another audit can take place" (Sateesh, 1992).

Another problem which a company faces relates not to the certification process, but to the desirability of the product or service. Some companies become so centered on obtaining certification that they lose focus on what their customer really wants. ". . . ISO ignores customer input. 'You could make a product nobody wants and still meet ISO requirements,' carps Bernardo De Sousa" (Levine, 1992).

Finally, companies must consider whether they can afford to obtain certification. For smaller companies it may not be practical. "As companies journey through the process toward certification and registration, they will probably spend between $15,000 and $100,000, or more . . . . Before spending all this time and money, a company wants to be assured that the certificate it receives will be recognized in its markets (customers, buyers, etc.)" (Sawin, 1992).

THE REGISTRATION PROCESS

Registration involves the assessment of the company's quality system. Certification is granted for a three-year period with less stringent annual audits. The following steps represent the major milestones that can be expected in the process leading to certification:

1. Submission of Application
2. Review of Documents
3. A Pre-assessment by the reviewing body
4. The Initial Assessment
5. Registration
6. Follow-up Assessments

It is important to understand what to expect in this process and the time frame involved. Seeking advice from companies that have succeeded in this quest may prove very beneficial.

INTERVIEW FINDINGS

Data were collected through interviews with twelve companies identified as having extensive experience with ISO 9000 certification procedures. The sample companies also have extensive experience with business operations in the European Community. These findings provide valuable insights into the ISO certification process and its implications for U. S. business.

Company representatives participating in this study described their experiences with the ISO 9000 certification process in a variety of ways. All agree on the importance of top management support and involvement as the key component in the assessment process. Employee awareness and training was a major obstacle for a majority of companies. Although the learning curve for each company was described in different terms, the following series of steps is representative of the general learning process necessary for a company to obtain registration.

Phase I: Employee Awareness of the Standards

Most companies reported a lack of enthusiasm or seriousness by employees when the subject was first presented. Convincing employees that ISO 9000 was not just a fad or something that could take low priority was a major hurdle as expressed by most executives.

Phase II: Establishment of Employee Teams

Once company employees recognize the importance of the initiative to the company and the significance of each person's role in the process, a cross-functional team is typically established and assigned the responsibility of deciding which specific standard is most appropriate initially, a realistic time frame, and developing a company-wide plan for obtaining the certification goal.

Phase III: Appointment of Company-wide Committees

Committees are appointed for the primary purpose of information sharing and providing direction for disseminating information to all levels of employees throughout the organization.

Phase IV: Further Education Process

As information is gathered and disseminated throughout the organization most companies hire consultants to aid in training efforts, document preparation, and audit training.

Phase V: Need for Rejuvenation

Although the exact timing may vary, most companies reported a point at which efforts weaken, employee morale decreases, and the need for recommitment and reassessment become necessary. Competition for resources become fierce and employees begin to resent the additional responsibility and demands placed on their already busy schedules.

Phase VI: The First Registration

Success at one site will usually prompt encouragement for other sites in the organization to continue their efforts to reach a similar goal.

Phase VII: Disappointments

All sites are not likely to receive positive results on the first try. Reassessments will be required at some sites. Differences between auditors, for example, become apparent and may become a cause of concern.

Phase VIII: ISO 9000 Quality Standards Become a Part of Doing Business

When additional plants become certified, confidence is boosted and most plants or business units begin to expect certification. It becomes an ongoing process for the company and its employees.

When evaluating the successes of the process executives described management involvement, trial assessments, participation in internal audits, and the use of consultants as most important in the success of certification. Much can be learned from the experiences of other companies and most company representatives were willing to share their experiences and provide support for smaller companies in the process of evaluating their alternatives.

Registrar selection was cited by the respondents as one of the most important variables in the process. The following factors were described as worthy of attention:

1. Evaluation of registrar experience and references in the product area of interest
2. Registrar's list of suppliers
3. Wait time necessary to obtain audit and certification
4. Registrar's recognition in multiple markets
5. Registrar's accreditation
6. Handling of withdrawals and cancellations
7. Customer acceptability
8. Conflict of interest
9. Cost
10. Cooperative attitude

Respondents tend to agree that ISO 9000 certification no longer affords a company a competitive advantage. Companies that are not certified are experiencing greater pressures to remain competitive and even to survive outside the United States.

Without question, respondents indicated that the greatest obstacle in the certification process involved convincing employees to buy the concept and develop a mind set that the system will work. Employees tended to initially think of ISO certification as just another program. Another significant obstacle for many respondents was the establishment of documentation requirements for processes that had been assumed in the past.

Surprisingly, most respondents would do very little different if they could go through the process again. One respondent indicated that his company would have gone directly to ISO 9001 rather than start with 9002. Others mentioned the importance of obtaining good information up front and visiting registered sites before beginning the process.

For companies just beginning this journey, there are many examples and helpful suggestions from companies experienced in the process. The learning curve should be shorter for U. S. companies although the waiting times may be longer. This issue is clearly one that companies will have no choice but to address as business continues to become more global in nature.

REFERENCES

Byrnes, D. (1992, October). Exploring the world of ISO 9000. *Quality*, 9-31.

Dover, S. E. (1993, June 1). ISO 9000: A standard response. *CIO Magazine*, 64-66.

Flister, J. D. & Jozaitis, J. J. (1992, July). PPG's journey to ISO 9000. *Management Accounting*, 33-38.

Leewenburgh, T. (1992, November). Quality standards that can open doors. *Nation's Business*, 32-33.

Levin, J. B. (1992, October 19). Want EC business? You have two choices. *Business Week*, 58-59.

Sateesh, K. (1992, September). ISO 9000 sets the stage for global competition. *Controls and Systems*, 22-24.

Sawin, S. D. (1992, August). Selecting an ISO 9000 registrar. *Quality*, Q24-Q25.

U. S. Chamber of Commerce, International Division. (1992, July). *ISO 9000: An Introduction for U. S. Business*, pamphlet.

U. S. Chamber of Commerce (1993, April). *ISO 9000: Questions and Answers on Quality, the ISO 9000 Standard Series, Quality System Registration, and Related Issues.*