ISO 9000: Is It Worth It?

ISO 9000: An Ineffective Quality System

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ISO 9000 was created as a family of models in 1987, based on a wartime British manufacturing standard, as the answer to perceived manufacturing problems with quality and safety. The program was originally published in 1987 by the International Organization for Standardization (ISO), which is a specialized international agency that focuses on the standardization of organizational processes. The organization is composed of standards from organizations representing 90 countries. ISO 9000 was quickly adopted as the premier standard to ensure uniform manufacturing and auditing processes. The program went through a major revision in 2000 and now includes ISO 9000:2000 (definitions), ISO 9001:2000 (requirements) and ISO 9004:2000 (continuous improvement).

But even after these major revisions, the program is often criticized as ineffective for a wide variety of reasons. We agree.

Overemphasis on Inspection

First, many researchers believe ISO 9000 is ineffective because it is based on conservatism, overemphasizes inspections and audits, and fails to encourage real improvement. Barnes (2000), for example, said that the current commercial certification process results in a "pursuit of quality certificates, as opposed to a pursuit of quality." Johannsen (1995) also asserted that the ISO concept does not incorporate the advances of Total Quality Management because it is "narrow, static and emphasize[s] conformance to specifications" (p. 234). After overseeing more than 50 ISO registrations, Bill Robinson (cited in Clifford, 2005), argued that ISO is not one of the better systems that can be used for process improvement. Clifford (2005) added that the ISO certification program can assist in raising a company's quality, but because of the stringent regulations and specifications, the processes eventually stifle long-run quality improvement. Quazi, Hong, and Meng (2002) agreed that the focus on standardization reduces creativity and continuous quality improvement efforts.

In other words, a plateau of quality can be reached through certification, but this plateau cannot be surpassed. Karon (1996). Quazi, Hong, and Meng (2002) also supported the premise that the ISO program is not designed as a quality-enhancement program, and has not significantly improved the quality of products and services in firms where it has been implemented.

Questions of Safety

Significant evidence also exists that implementation of ISO 9000 does not maintain quality, or even safety, for the customer. Chinese companies lead the world in ISO 9000 certifications (ISO Survey of Certifications, 2005, cited in Smith, 2007), and held more than three times as many certifications as U.S. firms in 2007. Yet Chinese companies have frequently made headlines due to dangerous pet food, lead-based paint on children's toys, improperly fed fish exported for consumption, poisoned toothpaste, cancer-causing ducks, and tainted cough syrup, to cite only a few examples (Bristow, M, 2007). Chinese companies are also known for producing very cheap,

low-quality products for export throughout the world. The correlation here seems to be pointing in the wrong direction and does not serve the ISO 9000 initiative well.

Another event that casts ISO 9000 in a bad light: the notorious Bridgestone/Firestone tire case, in which tire treads separated from sidewalls, causing rollovers in Ford Explorers (Daniels, Arter, Bajaria, & Ono, 2000). Both Bridgestone and Firestone were ISO and QS 9000 certified. These quality programs failed to prevent these tragedies, ostensibly, because ISO 9000 is focused on being a quality audit program, and doesn't look for field failures or failures in design, which is where many quality issues reside (Daniels et al., 2000). In short, internal audit scopes such as those performed by ISO auditors have limited reach and value, and this results in products passing quality requirements but later failing when used by real-world customers. Many product designs do not factor in human behavior, which leads to many quality problems that ISO 9000 cannot detect or improve (Daniels et al., p. 39).

"Not a True Quality Program"

According to Krajewski and Ritzman (1999), ISO 9000 is a set of standards governing the documentation of a quality program, not a true quality program as many organizations are led to believe. An effective quality program should be able to detect quality issues in products, and ensure the safety of consumers that use the products. Simply put, ISO 9000 does not. These empirical findings are significant because ISO 9000 certification is highly dependent on documentation that focuses on internal and external audits. If an organization's ability to document, monitor, and enforce certification guidelines can be called into question, the entire quality program becomes suspect.

Skrabec, Jr., Nathan, Rao and Bhatt (1997) demonstrated, based on a Dun and Bradstreet survey, that the only true internal benefits afforded by ISO 9000 were quality awareness, better documentation, and enhanced communications. External benefits – such as improved perceived quality, improved competitive advantage, and reduced quality audits – were not realized in the study (Skrabec Jr., Ragu-Nathan, Rao, & Bhatt, 1997).

Administration and Control

Another major grouping of complaints about ISO 9000 concerns the extensive administration, control, and recording requirements. Johannsen (1995) documented claims that the technically written manufacturing standards "straitjacket" the information sectors, drain creativity and motivation to embrace quality from employees charged with the responsibility, and create an illusion that the standards will "act as a barrier" to the achievement of quality standards and customer satisfaction in these sectors (p. 232). Johannsen said the ISO 9000 standard was better-suited to industrial manufacturing than, for example, to professional services. That because ISO 9000 is focused on routine tasks and programmed activities, as opposed to fields where considerable skill and complex judgment are required.

According to Boiral (2003), conformance with the standard takes on a ceremonial and mythical aspect. This ceremonial aspect, with a goal of projecting a rational and institutionally approved image, was particularly visible during certification audits: The company's motivation often was the ISO certificate, rather than the systematic improvement of company practices. The

documentation required by ISO 9000, the statements, and accompanying publicity were, hence, part of rhetoric and language games, with symbolic than practical value.

What's more, ISO 9000 is not inflexible, and according to Moatazed-Keivani, Ghanbari-Parsa, and Kagaya (1999), the standard can be extensively rewritten, greatly varying the scheduling and detail of audits in order to reduce detail and paperwork. This leads to some concern about the universal applicability of the standard with regards to quality and safety, as a result of this unique customizability. According to Moatazed-Keivani et al. (1999), the greatest potential failure, though, is in the standard's broad nature and potential for misinterpretation.

Required for Basic Survival

Many of the world's largest organizations, including many branches of the U.S. government, require ISO certification (Clifford, 2005; Karon, 1996; Valenti, 1993). Thus, the incentive to conform to the certification process, for many companies, is not increased profitability or long-term, continuous improvement, but rather basic survival. Karapetrovic, Rajamani, and Willborn (1997) documented that the standard is not friendly to small businesses, and that those businesses mostly participated in the standard or adopted portions of the standard because they were coerced by their large corporate customers, or because they needed to move into the global market to remain competitive. The authors also pointed out several additional obstacles confronting small businesses, including inadequate funding available to implement these programs, lack of human resources to administer the programs, lack of knowledge and/or training, too much paperwork, and prohibitive costs that might never be justified.

Tsiotras and Gotsamani (1996) added that selecting a registrar can be challenging; there are numerous certification bodies available, but not all registrars are widely respected or recognized. They added that many companies view the registration as an end in itself: Often companies address the requirements of the standard with only the minimum amount of effort required and never really realize the full benefits. These companies seek registration for "registration's sake," not for the right reasons.

Barnes (2000) stated that certification can be expensive as well. While costs vary depending on the size of the company, the number and types of products and the existing quality management system, the average cost of certification was $245,200. Wayhan, Kirche, and Khumawala (2002) said further that ISO 9000 certification has very little impact on financial performance, and that any financial impact actually dissipates over time.

Employee and Customer Impacts

Despite the major revision to ISO 9000 in 2000, there are still many observations in the literature of continued employee and customer impacts. Mezher, Ajam, and Shehab (2004) researched and verified that the extensive 2000 update to the ISO 9000 standard did result in some improvements for Lebanese firms that had already implemented the 1994 version, for example, but found that employees had even less control or participation in decision-making, adversely impacting organizational learning and employee motivation. They also observed that there were still several customer satisfaction criteria that were not addressed. Boiral (2003) conducted

extensive interviews and found highly contrasting attitudes that were frequently critical of the ISO 9000 system, which was often given only superficial support.

Through a qualitative analysis of the data, Boiral identifed three types of respondents, grouped according to their opinions and attitudes about the implementation of this standard: ceremonial integrators, quality enthusiasts, and dissidents (p. 720). Ceremonial integrators most closely resembled those individuals and firms coerced by either circumstance or relationship to implement the ISO 9000 standard. Quality enthusiasts' responses reflected management "rhetoric of success" about the implementation of total quality programs, a trait not shared by the other respondent categories. Dissident responses were anti-control, anti-standardization, and against programs that removed employee participation in process. Boiral's research project contributes to a better understanding of how institutional pressures create "isomorphic" organizations, by leading them to adopt identical management models in the name of rationality, control, quality, and safety.

Relationship with Quality Award Programs

The ISO 9000 standard does not relate well to quality awards around the world. Ghobadian and Woo (1996) compared and highlighted four major quality awards: the Deming Application Prize, the European Quality Award, the Malcolm Baldrige National Quality Award, and the Australian Quality Award. Each of these awards provides a framework for evaluating management practice, including the deployment of quality plans. The awards provide a framework for implementing quality programs, an area that has been identified empirically as one of the struggles for some companies that are ISO 9000-certified (Chow-Chua et al., 2003).

However Ghobadian and Woo pointed out that ISO certification and the requirements for the awards were extremely different. The certification process focuses more on audits, whereas the award requirements focus on wider issues, such as leadership and results.

Perhaps the most interesting finding is that both certification and awards are not based on customer satisfaction from the customer's perspective. The customer or a consumer-like committee does not grant certification, nor does the customer nominate organizations to receive quality awards (applicants nominate themselves). The question becomes, then: Does the organization that receives ISO certification, or receives a major award, really have satisfy customers?

Lack of Management Support

Many researchers have emphasized that the success of any quality program depends on the organization's management and culture. Quantitative research on the perceived benefits of ISO 9000, which looked at 146 organizations participated, found that firms acknowledged some advantages of ISO 9000 certification, but that they also noted significant problems (Chow-Chua, Goh, & Wan, 2003). This investigation provided reasonable evidence that even though organizations with ISO certification experienced some benefits, these companies experienced failures in establishing adequate monitoring programs, installing strict compliance systems, and conducting regular management reviews. Other studies previously found that very few

companies ever reap the rewards of the programs, due to unsuccessful implementation (Karon, 1996; Valenti, 1993).

The ISO certification program is rigorous, demanding, complex, and time-consuming (Dale, 2002; Valenti, 1993). Unsuccessful implementation is often the result of a lack of long-term commitment by top management, because managers underestimate the time, resources, finances, and scope required (Bennis, 1977; Chatterjee & Yilmaz, 1993; Geri, 2005). The ISO 9000 program requirements may appear, to a manager, to be manageable in the beginning, but as program implementation progresses, many new factors that were previously unaddressed rise to the surface and impede progress (Rastetter, 1985; Widmer, 1979). Tsiotras and Gotsamani (1996) went so far as to assert that the greatest reason for the failure of ISO 9000 programs is a lack of management commitment throughout the organization.

Conclusion

Though ostensibly proposed and required by many firms as a quality and safety management program, ISO 9000 has failed in many cases to achieve any long-term impact on customer interpretation of quality, or to guarantee safety for either employees or customers. It has similarly failed to achieve quality improvement for many firms, or the increased profitability which has been claimed. It does not support the growing trend for rapid customization, and seems to inhibit adaptability and response to rapid change in professional fields which require less routinized processes and thinking. What's more, management frequently lacks commitment to the program, beyond pursuing because the company is required to do so for business reasons. For these reasons and the others discussed above, we believe ISO 9000 program is largely ineffective as a quality and safety management standard.

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