

Certification of process, ISO 9001

The **ISO 9000** family of standards is related to quality management systems and designed to help organizations ensure that they meet the needs of customers and other stakeholders while meeting statutory and regulatory requirements related to the product. The standards are published by ISO, the [International Organization for Standardization](#), and available through [National standards bodies](#). ISO 9000 deals with the fundamentals of quality management systems, including the eight management principles on which the family of standards is based. ISO 9001 deals with the requirements that organizations wishing to meet the standard have to fulfill.

Third party certification bodies provide independent confirmation that organizations meet the requirements of ISO 9001. Over a million organizations worldwide are independently certified, making ISO 9001 one of the most widely used management tools in the world today. Despite widespread use, however, the ISO certification process has been criticized as being wasteful and not being useful for all organizations.

Reasons for use

The global adoption of ISO 9001 may be attributable to a number of factors. A number of major purchasers require their suppliers to hold ISO 9001 certification. In addition to several stakeholders' benefits, a number of studies have identified significant financial benefits for organizations certified to ISO 9001, with a 2011 survey from the British Assessment Bureau showing 44% of their certified clients had won new business. Corbett *et al.* showed that certified organizations achieved superior [return on assets](#) compared to otherwise similar organizations without certification.

Background

ISO 9000 was first published in 1987. It was based on the BS 5750 series of standards from [BSI](#) that were proposed to ISO in 1979. However, its history can be traced back some twenty years before that, to the publication of the [United States Department of Defense](#) MIL-Q-9858 standard in 1959. MIL-Q-9858 was revised into the NATO AQAP series of standards in 1969, which in turn were revised into the BS 5179 series of guidance standards published in 1974, and finally revised into the BS 5750 series of requirements standards in 1979 before being submitted to ISO.

BSI has been certifying organizations for their quality management systems since 1978. Its first certification (FM 00001) is still extant and held by [Tarmac Limited](#), a successor to the original company which held this certificate. Today BSI claims to certify organizations at nearly 70,000 sites globally. The development of the ISO 9000 series is shown in the diagram to the right.

Certification

[ISO](#) does not itself certify organizations. Numerous certification bodies exist, which audit organizations and, upon success, issue ISO 9001 compliance certificates. Although commonly referred to as 'ISO 9000' certification, the actual standard to which an organization's quality management system can be certified is ISO 9001:2008. Many countries have formed [accreditation](#) bodies to authorize ("accredit") the certification bodies. Both the accreditation bodies and the certification bodies charge fees for their services. The various accreditation bodies have mutual agreements with each other to ensure that certificates issued by one of the [Accredited Certification Bodies](#) (CB) are accepted worldwide. Certification bodies themselves operate under another quality standard, ISO/IEC 17021, while accreditation bodies operate under ISO/IEC 17011.

An organization applying for ISO 9001 certification is audited based on an extensive sample of its sites, functions, products, services and processes. The auditor presents a list of problems (defined as "nonconformities", "observations" or "opportunities for improvement") to management. If there are no major nonconformities, the certification body will issue a certificate. Where major nonconformities are identified, the organization will present an improvement plan to the certification body (e.g. corrective action reports showing how the problems will be resolved); once the certification body is satisfied that the organisation has carried out sufficient corrective action, it will issue a certificate. The certificate is limited by a certain scope (e.g. production of golf balls) and will display the addresses to which the certificate refers. An ISO 9001 certificate is not a once-and-for-all award, but must be renewed at regular intervals recommended by the certification body, usually once every three years. There are no grades of competence within ISO 9001: either a company is certified (meaning that it is committed to the method and model of quality management described in the standard) or it is not. In this respect, ISO 9001 certification contrasts with measurement-based quality systems.

Effectiveness

Effectiveness of the ISO system being implemented depends on a number of factors, the most significant of which are:

- 1 Commitment of senior management to monitor, control, and improve quality. Organizations that implement an ISO system without this desire and commitment often take the cheapest road to get a certificate on the wall and ignore problem areas uncovered in the audits.
- 2 How well the ISO system integrates into current business practices. Many organizations that implement ISO try to make their system fit into a cookie-cutter quality manual instead of creating a manual that documents existing practices and only adds new processes to meet the ISO standard when necessary.
- 3 How well the ISO system focuses on improving the customer experience. The broadest definition of quality is "Whatever the customer perceives good quality to be." This means that a company doesn't necessarily have to make a product that never fails; some customers will have a higher tolerance for product failures if they always receive shipments on-time or have a positive experience in some

other dimension of customer service. An ISO system should take into account all areas of the customer experience and the industry expectations, and seek to improve them on a continual basis. This means taking into account all processes that deal with the three stakeholders (customers, suppliers, and organization); only then will a company be able to sustain improvements in the customer's experience.

4 How well the auditor finds and communicates areas of improvement. While ISO auditors may not provide consulting to the clients they audit, there is the potential for auditors to point out areas of improvement. Many auditors simply rely on submitting reports that indicate compliance or non-compliance with the appropriate section of the standard; however, to most executives, this is like speaking a foreign language. Auditors that can clearly identify and communicate areas of improvement in language and terms executive management understands facilitate action on improvement initiatives by the companies they audit. When management doesn't understand why they were non-compliant and the business implications associated with non-compliance, they simply ignore the reports and focus on what they do understand.

Advantages

It is widely acknowledged that proper quality management improves business, often having a positive effect on investment, market share, sales growth, sales margins, competitive advantage, and avoidance of litigation. The quality principles in ISO 9000:2000 are also sound, according to Wade and also to Barnes, who says that "ISO 9000 guidelines provide a comprehensive model for quality management systems that can make any company competitive." Implementing ISO often gives the following advantages:

- 1 Creates a more efficient, effective operation
- 2 Increases customer satisfaction and retention
- 3 Reduces audits
- 4 Enhances marketing
- 5 Improves employee motivation, awareness, and morale
- 6 Promotes international trade
- 7 Increases profit
- 8 Reduces waste and increases productivity
- 9 Common tool for standardization.

The eight quality management principles

Principle 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.

Principle 2 Leadership Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.

Principle 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.

Principle 4 Process approach A desired result is achieved more efficiently when activities and related resources are managed as a process.

Principle 5 System approach to management Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.

Principle 6 Continual improvement Continual improvement of the organization's overall performance should be a permanent objective of the organization.

Principle 7 Factual approach to decision making Effective decisions are based on the analysis of data and information.

Principle 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.