

STANDARDS:
WHAT ARE THEY
AND
WHY ARE THEY
IMPORTANT?

Standards: What Are They and Why Are They Important?

Standards are documented consensus agreements containing safety or technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics for materials, products, processes and services. In many cases, they provide uniformity which allows worldwide acceptance and application of a product or material. The aim is to facilitate trade, exchange and technology transfer. Standards help to remove technical barriers to trade, leading to new markets and economic growth for the industry.

Standards committees provide a forum where peers and competitors can come together for mutual benefit. Through ANSI, ISO and IEC activities, you and your company can play a leading role in the development of national and international standards that affect our industry, enhancing your technical strength and market position.

Today, companies are facing fundamental changes in the way they must do business. Strategies and business practices are continuously being evaluated to determine how to maintain and increase market share, reduce costs, increase productivity and safety, and achieve and maintain a competitive edge.

Standards have been in existence for many years. At one time they were thought of as being the lowest common denominator, restrictive, and of little importance. That has changed. Today, standards are recognized as being essential to helping companies be innovative, reduce costs, improve quality and maintain competitiveness in an international marketplace.

As we move toward a global economy, standardization issues continue to grow more complex. They are critical to the survival and prosperity of companies marketing internationally. As more international trade agreements are implemented, domestic manufacturers will face growing competition from international concerns. Standardization provides a way to help shrink barriers to trade.

Standards for the printing, publishing, and converting industry will enable processes to run faster, more predictably, more efficiently, and be more cost effective by:

- providing uniform, defined procedures and tools which help users produce quality products for their customers;
- facilitating interconnectivity and process integration among systems, both CEPS and desktop,
- allowing users to communicate with one another easily;
- enhancing product quality and reliability at a reasonable price;
- increasing distribution efficiency and ease of maintenance; and
- improving health, safety and environmental protection, and reduction of waste.

Safety standards provide guidelines for the design of safer equipment and for improved safety programs in the workplace. They provide for greater awareness of safety in the design of equipment, and increased consistency in operating procedures. They also emphasize that safety is the responsibility of everyone, including the equipment manufacturer, the owner, the operator and the maintenance personnel.

Implementation of safety features and procedures, along with advances in personnel training, will result in a decrease of injuries. This, in turn, will result in a safer work environment, less time lost from the job due to injuries, and reductions in workers' compensation costs.

Technical standards describe how to do a particular procedure in a defined way, with the goal of achieving compatibility and interchange of information between equipment, practices and procedures, and producing

output with more predictable results. They help also to characterize various parts of the printing process, resulting in the development of characterization data which can be used by software programs.

Technical standards can make information systems easier to use and less expensive to operate. They allow communication between information users, publishers and other information providers about key methods, practices, procedures and formats reflecting marketplace requirements.

The adoption of technical standards facilitates the expansion of both domestic and international markets. They also provide users with an assurance that products and services from various sources meet a recognized level of quality. To the extent that such products and services are interchangeable, technical standards promote competition among suppliers and offer increased prospects for cost efficiencies.

Many of the standards developed by the U.S. standards committees are now being introduced into the international standards arena, forming the basis for the development of international consensus standards.

Today, standards are no longer just for manufacturing. Whether you are a manufacturer, a reseller, a product user or a print buyer, standardization can be of benefit to you. You are encouraged to familiarize yourself with these industry standards, and to become actively involved in the development of new standards. It takes the cooperation of both the equipment and product vendors and the users to develop standards which will best serve the industry. Even if you are unable to attend meetings, you can become involved by reviewing draft documents under development and providing comments. By familiarizing yourself with the standards for the industry, you can bring them to the attention of others, and encourage their implementation. Standards efforts to strengthen the industry can only be successful through the commitment of the industry to provide the technical personnel resources to develop and implement sound technical and safety standards.

Although company budgets are tight, and personnel resources stretched, it is increasingly important that U.S. manufacturers of equipment and technology, as well as the users of this equipment and technology, not only keep up-to-date on standards activities, but also become active participants in standards development. The time and cost are minimal relative to potential benefit for your business.

If you have questions on how you can become involved in this work, please contact Mary Abbott, Director of Standards Programs at NPES via Tel: 703-264-7200; Fax: 703-620-0994; or E-mail: mabbott@npes.org.

The Economic Benefits of Standardization

The German Institute for Standardization (DIN) commissioned a research study to determine the value of standardization to corporations. The study was developed from questionnaires sent to over 4,000 companies in 10 industry sectors, selected at random, in Germany, Austria and Switzerland.

The final report on that study, entitled “The Economic Benefits of Standardization,” is available in English from the DIN website <http://www.din.de/aktuelles/benefit.html>.

Following are quotes from the report, and from Part A, which focused on both the benefits of standards for business and on the benefits for the economy as a whole.

In comparing both company-developed standards, and industry-wide standards, the report states that “...company standards have the greatest positive effect on businesses, for they help improve processes. When it comes to the relationship with suppliers and customers, however, industry-wide standards are the main instruments used to lower transaction costs and assert market power over suppliers and customers. In fact, industry-wide standards play a vital role in our increasingly globalized world.”

The report further notes that “...it is significant that standards make a greater contribution to economic growth than patents or licences, that export-oriented sectors of industry make use of standards as a strategy in opening up new markets, and that standards help technological change.”

The study concentrated on “the effects of standards on costs in general, on research and development, and safety.”

Strategic significance of standardization

“Companies are generally unaware of the strategic significance of standardization.”

Although the persons involved in the standards development process are aware of the significance of the standards to their company’s success, often this awareness does not extend to the corporate decision-makers. In addition, the decision to participate in the standardization process is often made only on the basis of how time-consuming and costly this will be. The economic payback of participation in standards development is not always obvious, but the survey showed that companies actively involved in the standards process are more likely to see both short- and long-term cost benefits than those that do not participate.

Potential competitive advantage through standards

“Having influence in the content of a standard is an important factor in gaining competitive advantage.”

It is often said that you can be part of the solution, or you can live with the solution developed by others. Being part of the standards development process allows the company to gain “insider knowledge” and to exert greater influence on the substance of the standards.

Cost reduction through standardization

“Standardization can lead to lower transaction costs in the economy as a whole, as well as to savings for individual business.”

The interviews with representatives of major firms as well as small- and medium-sized companies revealed that the costs of developing standards are not easily quantified. However, the businesses interviewed rated the positive effect on transaction costs as positive, noting that transaction costs drop considerably as a result of standards since they make information easily accessible to all interested parties.

Effects of standards on the supplier-client relationship

“Standards have a positive effect on the buying power of companies.”

Standards can encourage competition within the marketplace, and can be used by businesses to exert market pressure on companies further down the value-added chain. Businesses are therefore able to use standard to broaden their potential markets. Companies also have increased confidence in the quality and reliability of suppliers who use standards.

Standards and the formation of strategic alliances

“...it is clear that cooperation between companies in matters of standardization is advantageous, for the resulting synergy can help reduce costs and increase profits.”

In the survey, respondents rated the effect of standardization on cooperation with competitors as positive, indicating that standardization encourages cooperation between businesses who are at the same stage in the value chain.

Standards and research and development

“Businesses not only reduce the economic risk of their R&D activities by participating in standardization, but can also lower their own R&D costs.”

The economic risk of research and development is lowered when a company can influence the content of standards to its advantage. In addition, the expense of R&D can be reduced when participants in standards work make their results generally available, eliminating duplication of research efforts.

Product safety and liability

“Lower accident rates are partly due to standards. Participation in the standardization process increases awareness of product safety.”

The development and implementation of safety standards contributes to the reduction of accident rates, and raises awareness of safety features and practices. Representatives of consumer organizations see their involvement in the standardization process as having increased the industry’s awareness of the importance of product safety.

“Because standards reflect the current state of technology, they can help businesses reduce their liability risk.”

Standards are of great use to states in drawing up legislation, and are often referenced in legal cases.

Benefits for the economy as a whole

“An effective dissemination of innovation via standards is a precondition for economic growth.”

Innovation is an important factor in maintaining competitiveness and economic growth, but is of limited value unless this innovation is effectively disseminated. Standards are one means of disseminating new ideas and technologies, and the study showed that they have a positive influence on innovation potential and on international trade.