



ISO Standards – Promoting American Innovation in a Global Economy

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Not all national policy is made in the U.S. Congress or in the state legislatures. Critical economic decisions do not all emanate from US counties or cities, and not even from global capitols. Some very consequential public policy challenges are found in international bodies where few would even think to look. One such body is the International

Organization for Standardization.

The International Organization for Standardization, or ISO, was founded in 1946 as a new international organization “to facilitate the international coordination and unification of industrial standards.” To date it has published tens of thousands of standards covering virtually all parts of manufacturing and technology. Such

standards are generally a good thing, as they help consumers to understand the quality and safety of products and services. Businesses also benefit as these standards help to increase productivity and reduce costs. But understanding how these standards are developed and by whom is critical to understanding the importance of the “right” standards being created, and to understanding the critical debate now underway.

At ISO, the standards are developed by experts from around the world in the particular subject area where the standards will be applied. The benefit is that a great deal of knowledge and expertise pours into the creation of the standard. But the creation of the “wrong” standard, one that does not reflect what is already under way

in industry, can cause industry to have to reimagine their processes and controls, thus costing time and money. The challenge is to develop standards that avoid forcing a remaking of industry to fit into some new model. As a case in point, ISO 9000 forced exactly that result in the US.

Introduced in the later 1980s, the ISO 9000 series of standards created guidelines and requirements for the operation of quality management systems, to define, establish, and maintain an effective quality

assurance system. The standard had its beginnings in World War II. The British Ministry of Defense took measures to reduce the mistakes, and the inevitable accidents, resulting in the manufacturing of munitions. Around the same time, the U.S. Department of Defense, notably the Air Force and the Navy, published procurement standards that required those who were supplying the military to comply with quality assurance requirements focused on the management of procedures rather than the actual manufacturing.

By the 1970s, the need for quality assurance beyond the military was obvious, and a British standards body published the first management systems quality standard. This standard, which greatly resembled the Ministry of Defense standards, replaced various



standards and methods for quality control across all industries in the UK. Meanwhile, the US came to dominate the manufacturing world, so companies were mainly sourcing from each other in the US. More poignantly, the real competition for US companies were other US companies. The need to comply with global standardization became less important, and as a result the US began trailing away from statistical quality assurance.

As global trade and sourcing of materials

and services from around the world boomed in the 1980s, the need for a global standard became obvious. The old British work was burnished and issued as a British, European, and ultimately as the ISO 9000, standard. The globalization of the standard caught the US somewhat flat footed. As Europe unified around the standard, the American National Standards Institute began a long, and losing battle to adjust the standard to fit the way that US companies were already doing business. Once ISO 9000 was approved and became a globally accepted standard, the US had to change how it did business to be able to compete globally, and incur the costs to conforming to a different way of manufacturing and providing services. The US had to catch up with Europe. Even by 1999 the UK still had

twice as many companies that were ISO 9000 certified and Germany had as many as the US, despite both countries and their economies being much smaller.

Why is this important? Why would US industry care if it was certified under this standard or not? As with most standards, the value is in customers understanding what they are receiving, a fundamental quality in both products and services. Moreover, in the case of global standards customers are assured that the same standards are used as a basis of comparison globally, as opposed to trying to understand how various standards from various countries might compare. Specifically, ISO 9000 stood as a proxy for quality in products and services. Hence ISO 9000-compliant companies gained a marketplace advantage.





In what seems a flashback to the ISO 9000 debate, the same challenge is playing out today with ISO 279, ultimately to become the ISO 56000 series, a newly-developing standard that will act as a new proxy for quality. These standards are being developed to provide assurance in the field of innovation management. And, again, the question is what vision of innovation will be the guide.

The ISO 56000 series of standards will provide a means for organizations to share their best practices in innovation management amongst each other in a way

that guarantees that everyone is speaking the same language. Additionally, these standards will enable collaboration and development of innovations. Critically, they will also provide a means for bringing successful innovations to market and providing assurance to the consumer. The goal is to support innovation in organizations. Decisions will be made around intellectual property, audits, assessments, idea management and even definitions and terminology.

Much like those who did not see the international standard for quality

manufacturing coming, there are those who argue that benchmarking and standardizing works against innovation. They lack a fundamental understanding of the value and use of innovation. Sometimes they mistake creativity for innovation. But, more broadly, perhaps 20 percent of an organization's innovative edge is accounted for by something difficult to replicate such as culture or creativity, but the other 80 percent is likely subject to standardization. This 80 percent is where standardization will prove valuable. Regardless, as time moves on industry, military and government broadly will begin to require vendors who have innovation management systems that can interface with other similar systems globally.

Where government entities are concerned, the push will not just be global but also local, as state and municipal governments desire to deliver world-class services, and to make sure that those with whom they work are benchmarked to a global standard. Such benchmarking provides another needed tool to guard against wasting taxpayer money on systems, products or services that do not perform as expected.

The foundations of modern innovation management have already been developed and deployed here in the US. Silicon Valley is one example, but so are places like Austin, Brooklyn, Boston, The Research Triangle in North Carolina or Florida's Space Coast.

But their way of innovation, the processes, approaches and thinking could be devalued if the "wrong" approach to innovation becomes the global standard. Oddly, but following the historic pattern, US company representation at the global standards setting meetings is minimal, with the US in general having the lowest participation of any country. Robust representation at the global standards setting meetings by US companies, government and academia is a minimum requirement for the protection of innovation done the right way.

Some of our global competition is investing heavily in making sure their view of innovation wins as a global standard. Countries like China are aggressively pushing their own interest in the development of innovation standards.

The US must engage fully from across disciplines, from industry to local, and from state and federal government to academia. To miss a beat in the race to greater innovation today will have drastically worse consequences for US industry than it did in the 1990s. As more and more of our nation's wealth and success is grounded in intellectual property and innovation the results could be dire for our economy and for US citizens. Not all national policy is made where we think, and yet the implications can be just as far reaching if not more so.

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