

Why Are We Doing This?

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While driving to work recently in early morning rush hour traffic on US 101 near Menlo Park, I had time to look at the billboards touting the wares of the Silicon Valley's computer manufacturers. Suddenly, I saw a billboard asserting that a major IT provider was *open*, and that this openness was a necessary ingredient in its customer-satisfaction philosophy.

After I regained control of my car—it's hard to perform a victory dance correctly in bumper-to-bumper traffic—I thought of the state of standards when I first began in the field nearly two decades ago. No one would have mentioned standards as a key element of strategy, let alone have advertised this fact on a billboard. A little while later, however, I began to think about what this sign meant and what it implied. The implications of this "new attitude" are both good and bad.

A NEW ATTITUDE

During the more than 20 years that I've been involved with standardization, I've seen the rise and fall of formal standards developing organizations, the growth of multimillion-dollar consortia, and the emergence of open source. All of these activities have been important to standardization, but they don't address a key question: Why are we doing this? We all know that users want standards, and so we provide them. But this cannot be the only reason—there must be more to standardization than simple user interest if we want to explain its staying power in the IT industry.

We might ascribe some of standardization's staying power to the usual suspects:

It reduces costs, decreases time to market, and allows us to build on established practice. These are all valid reasons—or at least everyone uses them as such.

At the same time, it would be nice to have some success stories to use as exemplars for the industry. For example, just how much have the IEEE 802 standards contributed to our industry? Can we claim they made the LAN market possible or viable? If so, can we assert that, absent LANs, personal computers



Standardization provides a consensus-driven path for the IT industry's future growth.

would never have been widely adopted in the major user markets? What other IT devices depend on LANs? Would a single proprietary LAN have served us better? (This is a jibe at critics who inanely argue that the nice thing about standards is that there are so many of them—and who, equally inanely, are also likely to argue that the bad thing about proprietary systems is that there are so few of them.)

In the same vein, can we attribute the Web's growth to standards—from both the Internet Engineering Task Force and the World Wide Web Consortium? Can anyone conceive of the Internet without TCP/IP or the Web without HTML? How much has the economy grown as a result of these two standards?

THE VIEW FROM MARKETING

But these examples only serve to illustrate a much deeper problem. In *Crossing the Chasm* (HarperBusiness, New York, 1991), marketing expert Geoffrey Moore gave companies advice on how to market to a general audience—not just to technology visionaries—by “crossing the chasm.” Although a little long in the tooth today, the book's timing is interesting because it was written just as the World Wide Web was coming into being—and the Web is a phenomenon that even a careful reading of Moore's book cannot explain.

In reality, the Web took off for a single reason: It was standardized. Standardization allowed for its increased use, and it leaped the chasm and quickly went mainstream. The Web isn't a product as such—it is the set of standards upon which products are built. And today XML is a similar phenomenon: It has taken off as a standard and provides a bridge across the chasm to a general market.

Similarly, Clayton M. Christensen describes the fall of major storage systems companies in *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail* (Harvard Business School Publishing, Boston, 1997). Should you be in a bookstore, take a look at this book's index for a mention of standards and, more specifically, the ASC X3's SCSI and IPI standards for storage interfaces that transformed the storage systems market into a commodity market. Surprisingly, or perhaps not so surprisingly, Christensen ignores these standards' impact on the storage systems market. I believe he makes the same assumption held by many marketing people—that “standards just happen.”

MANIACAL DEDICATION

In fact, standards don't just happen. They require hard work, a good deal of political and technical savvy, and a dedication that sometimes verges on the maniacal. A good specification is hard to produce, no matter who writes it. Whether creating a new standard or standardizing an existing proprietary technology, standardization committees spend a great deal of time making the specification clear, logical, and largely unsusceptible to misinterpretation—fool resistant, not idiot proof.

Specifications are subject to the whims of the market. Thus, standardization becomes a speculative venture, since it is basically about market—not marketing—futures. I once said that standardization represented the market's response to its own uncertainty by providing a reasonable, consensus-driven path for future growth. If you look at the central theses of both the *Innovator's Dilemma* and *Crossing the Chasm*, you will find that they are also concerned with the concept

of *risk management*—but risk management for the good of a single company or organization.

Standardization is about more than that: It is about risk management for an industry. It is built on the belief that openness is essential, that many smart people working together can produce a good specification, and that the result will benefit all participants (and the market in general). This set of beliefs is basic to any standards setting organization—a term that encompasses formal standards development organizations such as ISO, consortia such as the IETF and W3C, and the open source movement.

Although standardization represents both an ideal principle and a less pragmatic reality, business writers and theorists often overlook the shared belief in the benefits of standards that have been a driving force in the IT industry's infrastructure for many years. And with our industry's increasing pace of change, it is one of the few stabilizing influences left.

For this reason, I believe that sign on US 101 is symbolic of information technology's future. Standardization—the act of being commonly open—will become even more important in our interconnected world. Our wired society will make standardization a necessary activity for the IT industry, leading to the eventual disappearance of standardization billboards—but only because adherence to standards will have become the technical and business norm, not something that is considered a unique competitive advantage. ★

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