EDITORIAL

TECHNOLOGY, STANDARDS AND EVOLUTION

Andrew Updegrove

The truism that the only constant is change could scarcely be more applicable than in the world of technology. Of course, change can give rise to as many commercial risks as it does opportunities, for both vendors and consumers alike. Happily, the burgeoning of the consortium movement over the past 16 years, as well as the continuing efforts of the formal standards bodies, have increasingly served to weight the balance towards opportunity, and away from risk.

This issue of the Consortium Standards Bulletin is about evolution - evolution on the part of technology, and evolution on the part of the standards infrastructure that supports the emergence and establishment of new technologies. While the evolution of technology is obsessively addressed by the press, the responsive changes in the standards community receive far less attention. And yet, without concomitant evolution on the part of standard setting and the organizations that support technology, the world of commercial products and services would suffer.

One aspect of the process of evolution is the existence of cycles. In the Trends section of the last issue of the CSB, we noted the increasing prevalence of mergers in the consortium world. Mergers can be the result of pure economic pressures, but they can also result from evolutionary dynamics. For example, Web services are still in the ascendant, hype phase of their commercial introduction. Not surprisingly, they are the source of a number of new consortium efforts, both within existing organizations as well as through newly launched, independent organizations, such as the Web Services Initiative (http://www.ws-i.org/). As time goes on, it is likely that consolidation will set in, as it has in the mobile wireless area. Mobile wireless, of course, was itself a hot topic a few years ago, and (predictably) a number of associations were formed in the early days of that industry. In the second half of 2002, many of these same organizations consolidated into one - the Open Mobile Alliance (http://www.consortiuminfo.org/links/oma2.shtml)

The Trends section of this issue addresses the next step in the standards evolutionary cycle - the one in which one standard will usually prevail over another, if they both address a single niche. Today, Wireless Local Area Network (WLAN) technology is at this stage of the cycle. In our examination below, we point out the important differences between today's world and yesterday's, contrasting the battle between the VHS and Betamax formats with the current jockeying between the BlueTooth and Wi-Fi standards. Twenty-seven years ago, video purchasers were trapped in a contest between proprietary technologies, while today's laptop owners will be buying cards based on competing standards that are each supported by a consortium or SDO process. We predict that the outcome will be more beneficial to vendors and end users alike in consequence.

The last way station in the standards cycle is the maintenance stage. Our lead article in this issue reviews the ten-year history of OASIS - the Organization for the Advancement of Structured Information Systems. OASIS has evolved from its early role as a single purpose entity fostering the adoption of SGML to an organization which today has hundreds of institutional members, a staff of 12, and over 45 supported initiatives. Its mission is broad, yet focused, and many organizations have turned to OASIS to find a home for their continuing work.
In the News Shorts section of this issue, we include not only a number of stories about the wireless world, but also several press releases that demonstrate how quickly the standards world responds to the crises of the non-technological world - by launching initiatives to enable diverse governmental units to manage emergency situations (LINK: OGC Critical Infrastructure Protection Initiative enters Phase 2), and to develop a universal global framework for supporting rapid discovery and sharing of suspected criminal and terrorist evidence by law enforcement agencies (LINK: OASIS Members to Create Framework for Global Sharing of Criminal and Terrorist Evidence). Both of these standards efforts have been launched by existing, experienced, broadly representative consortia. Rarely is it recognized that the standards infrastructure of America is, in its own way, vital to the country’s defense.

This issue of the **CSB** can only hint at the ongoing dynamism that has exemplified the evolution of the standard setting process in the last ten years, and the organizations that carry out that important work. Where a short time ago there were only a handful of official, "de jure" standard setting organizations, today there are worldwide processes, carried out through such bodies as the World Wide Web Consortium (W3C) and the Internet Engineering Task Force (IETF), which support the continuing development of the World Wide Web and the Internet. These organizations sprang into being independent of both the traditional de jure standards bodies, as well as national sponsorship. Similarly, there is now a burgeoning Open Source community, which is providing a new avenue to interoperability.

Within the landscape so described, there are dramatic changes in influence and empowerment as well. Individuals as well as companies can now affect technical outcomes on the Web and in the Open Source movement. Constituencies can form and create new initiatives rapidly, or find an increasing number of established organizations to which they can bring their proposals. The rules and the influence are changing, and the ramifications may well be far-reaching. It would be wise to pay attention, as this evolution continues to unfold.

*Comments? updegrove@consortiuminfo.org*

Copyright 2003 Andrew Updegrove