

Leveraging on Standardization to Boost Asia's IT Progress

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March 2008

The demand for standardization across the IT industry has grown as the range of products and solutions expands, and Asia's burgeoning market is no exception. The region's big players are leading the way in efforts to adapt or create technology standards. Interoperability is facilitated through product design, industry collaboration, cross-licensing and the use of translators, among other moves.

Huawei, Lenovo, Samsung and Panasonic, for example, have joined the Digital Living Network Alliance, a cross-industry grouping of 220 companies from 20 countries that aims to provide a network of interoperable consumer electronics, computing, mobile and other devices. The consortium has collaborated to produce a common set of industry design guidelines for manufacturers. These provide technical specifications and reference software for designers, but remain flexible enough to adapt to new technology and standards as they become available.

The above example was highlighted in the *Asia Innovation Policy Study* conducted by the INSEAD international business school and sponsored by the Business Software Alliance. The study notes that the region's companies are also spearheading such standard-setting initiatives, sometimes allying themselves with research universities to promote *de facto* standards.

In China, the leading home connectivity solutions provider, Tsinghua Tongfang, co-founded a home network standard industrialization alliance called iTopHome in 2004. In addition, it collaborated with Tsinghua University to secure patents in broadband communications, network security, home automation, and digital media. Tsinghua Tongfang's main home connectivity application is e-Home, an intelligent home system that integrates automation control, home security, digital multimedia, wireless communications, and home utility functions, built on a platform that runs under Windows as well as Linux.

As Asian technology vendors and entrepreneurs grapple with the challenge of standardization, however, they must also deal with the fact that it can be a shifting target – better products can and often do come along, displacing even previously dominant ones and changing the needs of stakeholders and markets.

The INSEAD research points out that this is especially true of software. As the IT industry

becomes more software intensive, standardization becomes of greater importance in powering Asia's progress. Change and the management of change become critical to standardization efforts. Market acceptance is the acid test for the success of a standard, and correspondingly, government intervention in shaping technology standards does not guarantee their success.

As a case in point, the study highlights Japan and Korea's adoption of CDMA technologies for second-generation mobile communications while the rest of Asia chose GSM. This resulted in Japan and Korea becoming the only places on earth where mobile phone users cannot roam to, until the arrival of third-generation solutions based on internationally-accepted standards. Even phones between Japan and Korea could not roam to each other.

Government mandated standards, however well-intended, often lead to less than desirable consequences. Instead, the flexibility to choose between standards needs to be preserved. Competition between standards, as with products, will often lead to better and more innovative solutions being developed that can better serve market needs. Locking in or preferring a particular standard while the market is not yet mature restricts the options available to consumers and stifles the incentive for industry to further innovate in the standardized area. A single mobile phone today supports multiple communication standards such as 2G (GSM, EDGE, GPRS), 3G (WCDMA, HSDPA), infra-red, Bluetooth, Wi-Fi and even GPS, allowing consumers to use the appropriate standard at the appropriate occasion. There is no need to require a single unifying standard.

Private companies are best placed to balance the needs of interoperability against other important considerations, such as consumer demand, security, competition, time-to-market and innovation. Facilitating a common standard cannot and should not be the one overriding goal, because such standards are ultimately only a means to an end, such as being the enablers of commerce and innovation.

As Asia grows into a global IT powerhouse, the challenge will be for businesses and governments to strike the right balance between collaboration versus competition, as well as control versus openness.