Open Standards Definition

The following are the minimal characteristics that a specification and its attendant documents must exhibit in order to be considered an open standard:

1. Its development and management process must be documented and, through a known method, can itself be changed through input from all participants.
2. Participation in its development and management must be accessible to all those who wish to participate and can meet reasonable criteria imposed by the organization under which it is developed and managed.
3. It must be open to extensive public review at least once in its life-cycle.
4. It must be permissible to all to copy, distribute and use it for no fee.
5. It must be possible to all to obtain worldwide, royalty-free, non-exclusive and perpetual licenses to all patent claims essential to make, distribute, sell, offer for sale, have made, import or use embodiments of the specification
6. Said licenses may be conditioned *only* on: 1) reciprocal licenses to any of licensees' patent claims essential to practice that standard, and may be terminated as to any licensee who sues the licensor or any other licensee for infringement of patent claims essential to practice that standard; 2) compatibility requirements that legitimately support the open, interoperable nature of the standard

Open standards provide the following benefits:

- They enable integration across disparate contexts and systems.
- They can be implemented and deployed on a variety of environments.
- They improve the market ecosystem by driving both commoditization and innovation and mitigating adoption risks.
- They enable and enhance interoperability.
- They drive prices down by allowing competing implementations.
- They enable greater substitutability among the products that adhere to them.
- They provide a level of protection against economic uncertainty, as the process by which they're developed is clear about intellectual property rights

Because open standards embody technology specifications that allow and encourage multiple implementations, and drive legal, life-cycle, and implementation homogeneity across all products that adhere to them, they make it easier to choose amongst and switch between products. They also mitigate the cost inherent in switching between two different applications that implement

similar things in very different ways, thus improving flexibility and availability.

Open Standards and Open Source

Open standards are sometimes confused with open source. The confusion probably stems from their similarities: both improve customer choice and flexibility, and both have legal dependencies around intellectual property.

However, they are different and distinct. Open standards are specifications that define a method of doing a particular function and adhere to the characteristics outlined above. Open source is about access to the source code that enables the doing of a particular function and about the licensing needed for that.

There is a false assumption that open source licensing is a guarantee of lowered costs. While this is sometimes true with initial licensing costs and upgrades, open source implementations do not defy the laws of nature: there are still costs, sometimes significant ones, associated with training, support and maintenance.

The particular function driven by open source code is not necessarily defined by an open standard. There is no requirement that open source solutions use open standards.

Therefore, open source is most powerful and useful from a TCO (total cost of operations) perspective when the particular function it meets is defined by an open standard. If all other costs are equal (e.g. training, support), a solution implemented under an open source license can provide the lowest TCO only if it supports open standards.