

## What's The Difference Between De Jure And De Facto Standards?

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I looked up “de jure” on dictionary.com and saw a link for “What is soup de jure?” This is quite funny because “de jure” means “according to law.” So soup de jure is “soup of the law.” Actually, I’m sure the person meant to ask, “What is soup de jour?” which is “soup of the day.” Fortunately, though, there are no “standards de jour.” Standards enforce stability, eliminating day-to-day changes. Still, there is a difference between de jure standards and de facto standards.

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### De Jure Versus De Facto

De jure standards, or standards according to law, are endorsed by a formal standards organization. The organization ratifies each standard through its official procedures and gives the standard its stamp of approval.

De facto standards, or standards in actuality, are adopted widely by an industry and its customers. They are also known as market-driven standards. These standards arise when a critical mass simply likes them well enough to collectively use them. Market-driven standards can become de jure standards if they are approved through a formal standards organization.

Formal standards organizations that create de jure standards have well-documented processes that must be followed. The processes can seem complex or even rigid. But they are necessary to ensure things like repeatability, quality, and safety. The standards organizations themselves may undergo periodic audits.

Organizations that develop de jure standards are open for all interested parties to participate. Anyone with a material interest can become a member of a standards committee within these organizations. Consensus is a necessary ingredient. Different organizations have different membership rules and definitions of consensus. For example, most organizations charge membership fees (always remember that standards development is not free), which vary quite a bit. And some organizations consider consensus to be a simple majority while

others require 75% approval for a measure to pass.

Because of the processes involved, de jure standards can be slow to produce. Development and approval cycles can take time as each documented step is followed through the process. Achieving consensus, while important and good, can be a lengthy activity. This is especially apparent when not all members of the committee want the standard to succeed. For various reasons—often competitive business—participants in a committee are there to stall or halt the standard. However, once a de jure standard completes the entire process, the implementers and consumers of the standard gain a high level of confidence that it will serve their needs well.

De facto standards are brought about in a variety of ways. They can be closed or open, controlled or uncontrolled, owned by a few or by many, available to everyone or only to approved users. De facto standards can include proprietary and open standards alike.

### **Proprietary Standards**

Closed proprietary standards are owned by a single company. Only that company's customers and partners are allowed to use them. Competitors are banned from implementing products that use closed proprietary standards. As a result, they greatly reduce interoperability. They can be developed quickly, though, and they're generally well supported. They also can give a big boost to their owner's business. Developing something that customers love and blocking the competition with a closed proprietary standard can bring in revenue galore.

Open proprietary standards also are owned by a single company, yet the company allows anyone to use them. Interoperability is enabled with open proprietary standards. There is usually some kind of license involved and possibly a fee that must be reasonable and non-discriminatory (RAND). The owning company is compelled to keep the standard well maintained and supported, which requires resources. This investment can pay off well because the company can stay one step ahead of its competitors by implementing its own standard first.

### **Open Source/Environment**

The idea that many people working together in an open environment is better than a few people working behind closed doors is known as open source. The resulting product (usually software) is then made available to everyone for free. A single person or entity manages the evolution by gathering the many people's input into a cohesive next version. This concept works for standards as well.

Open-source standards benefit from a general desire to make the standard successful. If individuals purposely try to damage the standard, their input will not be included in future versions. Because open-source standards are readily available with few restrictions, there is a risk of "forking." The standard could diverge if people modify it into different forks to suit their separate products. The managing person or entity oversees the open-source standard's evolution to maintain its integrity.

There are hybrids of these models out there. You can find standards that are licensed for high fees. There are standards that are created by a closed committee and then released to the public after the committee members have gotten a lead on implementing them. Some open-source standards are maintained by a committee instead of a single entity. There is even an organization that only allows new members to join if the existing members approve. The needs of the industry, geopolitical region, and/or the consumer dictate which model is most effective.

In the realm of standards creation, there really isn't a single standard.

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