



Open Standards & Technologies

OPEN *for Business*

Open computing for an on demand world



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The OPEN Proposition

Conclusion: IT business models must change

Letting Go of Control

Change From “Control”

- Own standard
- Own customer relationship
- Control pace of development
- Control price



To “Sustained Value Add”

- Leverage network effects
- Leverage economy of scale
- Increase availability of skills
- Speed of innovation

OPEN Computing Goals

- Ensure flexibility
- Ensure interoperability
- Promote innovation
- Avoid vendor lock-in
- Drive cost effectiveness
- Ensure future access to information
- Ensure a level playing field for competition
- Maximize freedom of action



Open Standards



- Published without restriction*
- Freely available for adoption by the industry
- Control by an open industry organization
- Implemented by offerings available in the market

Standards evolution

→ **Initiator** → **Core group** → **Standards body**

*As a rule. In some situations there may be reasonable royalties for essential patents

Evolution to an Open Standard

Need



Customer need for technical solution to known problem

Lack of industry accepted technical solution

May be competing technical approaches or single proprietary solution

Lack of interoperability

→ Initiator



A company, individual or group of companies or individuals agree to address issue

Resources devoted to developing best technical solution, often in collaborative fashion

→ Core group



Interested parties publish specifications

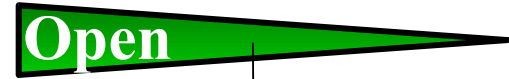
Specifications publicly available sufficient to enable implementation, interoperability

Can be implemented with little or no restrictions; IPR either RAND or Royalty free.

Developers may create reference or commercial implementation

Developers declare intent to have solution accepted as standard

→ Standards body



Standards body reviews technical solution, adopts as standard

Specifications publicly available are sufficient to enable implementation, interoperability

Can be implemented with little or no restrictions; IPR either RAND or royalty-free.

Standards body open to broad participation, open decision making process

Standard implemented in competing IT products by multiple vendors.

Open source can...

- **Drive standards**
- **Provide cost effective access to base componentry**
- **Be a mechanism to allow companies to cooperate in the development of common infrastructure technology as a platform for innovation**
- **Be a mechanism to drive multi-vendor consistency to enhance value to customers**
- **Provide a common and flexible base to support multiple HW platforms and drive and foster the development of a critical mass to SW development**

Open Computing Roadmap

1. Insist on open standards as a matter of policy... be pragmatic about it.
2. Focus on interoperable ICT systems.
3. Avoid procurement of proprietary, non-open standards based solutions.
4. Evaluate open source solutions on equal footing with commercial solutions.
5. Reject mandates or preferences based on development model.
6. Insist on open file formats
7. Investigate SOA based open architectures
8. Adopt open computing as an underlying philosophy.

Insist on openness, but make pragmatic business oriented decisions based on features, training cost, availability of skill, interoperability and value for money.



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