eduSource
Open Source Strategy

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eduSource Approach

- eduSource and Open Source
  - Why Open Source?
  - How can it be effective?
  - How is it related to eduSource?
  - How can you participate?
Open Source Software

What is it?

- An IT strategy that draws upon collaborative software development and adherence to standards to maintain integrity, openness and long-term supportability

- A business strategy based upon “giving away the razor” and “selling the blades”
Why Open Source?

- Open Source Software (OSS)
  - Software with its source code available to the public
  - It may be used, copied and distributed with or without modifications, and that may be offered either with or without a fee

- Significance
  - The open source model relies on a network of “committed peers,” programmers who may have differing styles and agendas, but who develop and debug software code in parallel

- Benefits
  - Access to technical expertise
  - Rapid code release rate and code reuse reduces development time

- Risks
  - Unsupported code often results if the project is too small or fails to attract the interest of sufficient users or skilled developers
Open Source Business Models

- The Magic Cauldron
  - Eric S. Raymond (1999)
  - [http://catb.org/~esr/writings/magic-cauldron/](http://catb.org/~esr/writings/magic-cauldron/)

- Open Sources
  - Chris DiBona et al.
  - O'Reilly & Associates (1999)

- The Cathedral and the Bazaar
  - Eric S. Raymond
  - O'Reilly & Associates (2001)
A Major Vendor Recognizes Open Source

- Microsoft Corp. has confirmed that it sees the open source software movement as a threat to its commercial business model, in a quarterly report filed with the U.S. Securities and Exchange Commission (SEC) - February 2003 (Sources: IDG, InfoWeek, etc.)

- Microsoft said it may have to reduce the prices it charges for its products, with a consequent decline in revenue and operating margins, if the open-source movement continues to gain market acceptance.

- "The popularization of the open-source movement continues to pose a significant challenge to the company's business model," Microsoft wrote in its filing. "[This is] including recent efforts by proponents of the open-source model to convince governments worldwide to mandate the use of open-source software in their purchase and deployment of software products."
Open Source Business Models

- **Canada**
  - Open Source Solutions Showcase (2002) put on by Public Works and Government Services Canada (PWGSC)

- **USA**

- **Europe**
  - Free software in government agencies. Avoids "monocultures" in IT departments

- **Others**
  - France, EU, England, Pakistan, Russia, Mexico, Republic of China, Norway, Denmark, New Zealand, Singapore, ... have significant OSS initiatives
Open Source Addresses Market Pain

- Enterprise software is often costly to implement and maintain
- Slow software version release rates
- Tailoring of code and reusability to meet the specific needs of a client is not always possible (not without major costs!)
- Lifetime of proprietary software and cost is not controlled by the client
- Limited access to technical expertise
Benefits of Open Source

- Built on open standards
- Publicly available source code
- Support for interoperability
- Vendor support for standards conformance
- Competition among OSS vendors to provide quality support and service
- Support generally remains while there is customer demand, even when vendors disappear
Four Ways to Win

- **Loss Leader - Market Positioner**
  - In this model, you give away Open Source as a loss-leader and market positioning strategy for your proprietary software or hardware
  - This is what Netscape is doing
  - Apple Darwin Server is another instance

- **Recipe and Restaurant**
  - In this model, you (effectively) give away the software product, but sell distribution, branding, and after-sale service
  - This is what (for example) Red Hat does
  - eduSource
  - www.learningobjectsnetwork.com

- **Widget Frosting**
  - In this model, a hardware company (for which software is a necessary adjunct but strictly a cost rather than profit center) goes Open Source in order to broaden its base of drivers and hardware support
  - Apple Darwin Server

- **Accessorizing**
  - Selling accessories – content, books, compatible hardware, complete systems with open-source software pre-installed.
  - O'Reilly & Associates publishing model
  - Caching server systems
eduSource Product Strategy

- Modular components and a “repository in a box”
  - Tagging
  - Search and retrieval
  - User interface
  - Rights management
  - eduSource communications layer
  - GNU General Public License (GPL)

- Compatibility and interoperability
  - Standards and specifications
  - Communications and web services
  - Facilitation of both open source or proprietary tool strategies

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National and International Standards and Practices

Open Systems Specifications

Tagging Tools

Rights Mgmt.

Modular Software Component

Search Engines

User Interfaces

3rd Party Add-ons
eduSource Open Source Strategy

- Industry software components (CMS, LMS, DRM) can communicate with eduSource components through a communication layer (ECL)
  - eduSource Communications Language (ECL)
  - No need to mix code or co-develop
  - Avoids open source licensing issues for product developers

- Industry can supply content to the system via content management systems
  - This content would act as another repository

- Industry can supply hardware infrastructure
  - Servers
  - Caching solutions
eduSource Communications Layer (ECL)

- A common mechanism is being developed by eduSource to integrate existing projects and software components under the eduSource work packages.

- It will also give commercial vendors a defined API if they want access to connectors and services within eduSource.

- ECL will become a web services approach that will allow adapters to be added so that new communication protocols can be added into the system as people find a need for them.

  - Library communication protocols for harvesting metadata and doing federated searches.
How You Can Participate with eduSource

Participating with the eduSource project partners

- Familiarize yourself with eduSource project and work packages
  - www.edusource.ca

- Familiarize yourself with the GNU General Public License
  - www.gnu.org/copyleft/gpl.html

- Establish your strategy

- Identify yourself to the project management team

- Consult with work package leaders
eduSource Resources

- eduSource web site
  - Project information
  - Project documents
  - Project partners
  - Work packages
  - Repository activities
  - Standards and specification information

- CogniSource Community
  - Self-service, knowledge management environment
  - Interactive community services
  - Topical articles and opinion pieces
  - Discussions
  - Blogs
  - Streaming media
eduSource Contact Information

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