Open Source in the Knowledge Workplace — Myths and Realities

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Open-source software (OSS) in the knowledge workplace (KW) has reached a critical juncture. Projects are appearing and companies are starting to evaluate products for team collaboration, content management, messaging and scheduling. This trend could dramatically change the KW’s buy list of software, especially as open-source products gain credibility as alternatives to traditional “groupware” products.

There are some problems with OSS’s readiness for the KW. Maturity, scalability, market presence, migration and interoperability services are some areas that make users reluctant to experiment.

This presentation explores the OSS for the KW landscape, and provides a readiness map for messaging, scheduling, collaboration, Web content management and portal products.
### Client Issues

- What are the trends in the development and adoption of open-source software for the knowledge workplace?
- How mature are open-source products for messaging and calendaring, team collaboration, and content management?
- What are the best practices in deploying and managing open-source software for the knowledge workplace?
Many open-source technologies that target the knowledge workplace are about to reach the Peak of Inflated Expectations on Gartner’s Hype Cycle. Dozens of open-source content management, collaboration, search, and portal products compete for developer and user attention. Progress has been rapid overall, but few open-source technologies have reached production maturity.

This is in contrast to conventional offerings in the same areas (content management, collaboration, search and portal products) where the technology is mature and widely used. Although there are some areas where open-source offerings lead the way in terms of innovation (for example, blogging and wiki software), open-source products are less technically mature and carry more business risk than equivalent conventional products. Apart from technical maturity and at least some consolidation of development efforts, inclusion of these products in the portfolios of large service providers is the most important catalyst for their mainstream adoption.

Perhaps the most notable exceptions are open-source standards-based messaging servers. These have been deployed on a large scale for many years, especially by Internet service providers. However, the absence of mature calendaring and scheduling services in popular messaging servers limits their appeal in business environments.
Open Source in the Knowledge Workplace — Myths and Realities

Strategic Planning Assumption: Through 2007, open-source activity on KW technologies will focus on those that are widely needed and better understood (0.8 probability).

How to Predict and Explain Open-Source Activity: Maturity, User Demand, Standards and Personal Value

Client Issue: What are the trends in the development and adoption of OSS for the KW?
To understand what drives open-source activity around KW technologies, consider common characteristics of technology areas with successful open-source products. These characteristics are: 1) Agreement on what must be done, which is achieved via better, deeper understanding (such as with programming languages, application development tools and network security) or accelerated by agreement through standards (such as with messaging, Web or Java standards). 2) Widespread user need (that is, a large potential user base). 3) Value to individuals with technical personal responsibility, which helps to drive the initial “seeding” effort.

The above diagram can be used to predict and explain open-source activity around KW technologies with regard to two of the most important factors motivating open-source development: maturity (resulting from deeper understanding or standards) and user demand. The maturity scores are based on the “Hype Cycle for the Knowledge Workplace, 2004” (G00120934). The user demand scores are based on a 2003 Gartner survey question of 133 “knowledge managers” on current and planned investments in different knowledge management technologies (see “How Companies Will Invest in KM Technology in 2004,” COM-21-5553). Mature and widely needed technologies are attracting open-source developers. Maturity and user demand fail to explain development around wiki or blogging technology, where the motivation is more likely to be influenced by personal value.
Strategic Planning Assumption: Through 2007, open-source KW technologies will require more responsibility from IT departments for deployment and change management than non-OSS products (0.8 probability).

Client Issue: What are the trends in the development and adoption of OSS for the KW?
Open-source technologies for the KW previously were not on the radar of most organizations. Much KW development happened on the fringes of other larger efforts as “me-too” extensions to, for example, add content management, search, or collaboration capabilities to established products such as the Apache Web server or the JBoss and Zope application servers. Some innovation was motivated by personal need for social networking, and technological curiosity is exemplified in open-source wiki and blogging products.

Today, early adopter organizations are experimenting with KW open-source technology. The main factors driving this technology are better alignment with technologies used in many organizations — such as part of a general open-source development and runtime “stack” for Web applications; support from software vendors such as IBM or Novell, which are including open-source products in their overall solutions; and some software vendors’ release of products with open-source licenses. From the user perspective, the main attraction is flexibility and low acquisition costs. This makes open-source products for the KW appropriate only for organizations with technical skills resources to adapt the products to fit their requirements and to counter the risk emerging from the absence of a trusted entity behind the product. General acceptance is predicated on the technical and business environment maturity to reduce the risk to a level acceptable to mainstream organizations.
Strategic Planning Assumption: An open-source technology stack will emerge as an alternative to proprietary smart enterprise suites by the end of 2006 (0.6 probability).

The Open-Source Stacks: Growing Up

<table>
<thead>
<tr>
<th>Stack Modules</th>
<th>Products</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Applications</td>
<td>Compiere, Ohioedge</td>
<td></td>
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<tr>
<td>Collaboration</td>
<td>Zope, phpBB, Nukes, PostNuke</td>
<td></td>
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<tr>
<td>Content Management</td>
<td>Midgard, OpenCMS, Lenya, Typo3, Red Hat</td>
<td></td>
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<tr>
<td>Presentation</td>
<td>Jetspeed, Gluecode, Zope, uPortal, Liferay</td>
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<tr>
<td>Search</td>
<td>Lucene, ht://Dig</td>
<td></td>
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<tr>
<td>Process Management</td>
<td>Openflow</td>
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<tr>
<td>Development Tools</td>
<td>Eclipse, NetBeans</td>
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<tr>
<td>Application Servers</td>
<td>JBoss, JonAS</td>
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<tr>
<td>App. Integration</td>
<td>Openadaptor</td>
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<tr>
<td>Directory Services</td>
<td>OpenLDAP</td>
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<tr>
<td>RDBMS</td>
<td>MySQL, PostgreSQL</td>
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<tr>
<td>Operating System</td>
<td>Linux, FreeBSD</td>
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</tbody>
</table>

Client Issue: What are the trends in the development and adoption of OSS for the KW?

The success or failure of a product depends to a large extent on its “alignment” with successful — or otherwise — products and technologies that together are available as a coherent platform or solution. This is an important differentiator for mainstream KW products that are aligned with the solution strategies of successful platform vendors, such as IBM, Oracle, Microsoft or SAP.

The technology aggregation trend, which caused the rise of mainstream application platform suites and smart enterprise suite offerings, is also operating on open-source products. Many open-source products for the KW highlighted above depend on, and even include, other open-source infrastructure servers and development tools as part of their distributions. As other open-source infrastructure pieces become mature and dependable, they serve as building blocks on which to base more-user-focused technology and services (typically relevant to the KW). There is evidence that the cross-fertilization of different development efforts is accelerating overall development.
Client Issue: How mature are open-source products for messaging and calendaring, team collaboration, and content management?

Assessment Criteria: Product Maturity and Market Presence

**Product Maturity**
- Ease of use; breadth of functionality
- Ease of deployment and management
- Stability
- Governance
- Architecture
- Product road maps

**Market Presence**
- Number of users
- Size, commitment and organization of development team
- Availability of trusted distribution, support, certification, training, indemnification and other services
- Presence and vitality of a commercial “ecosystem”

You can use the same framework to evaluate the readiness of different open-source products in the KW areas of messaging, calendaring and scheduling, team collaboration, and Web content management.

The **product maturity** assessment criteria include technical stability — for example, based on the availability of production releases, the number and criticality of outstanding issues and the time taken in resolving previous issues; ease of use; manageability; the community’s governance structures, which impact quality control; functionality coverage; and the clarity of product road maps. The results are presented in terms of suitability in three deployment scenarios — experimental, departmental deployments of up to 2,000 users and companywide.

The **market presence** assessment focus on measures of the popularity of the product among users, the size and commitment of the development team, and the presence of a commercial service network that offers distribution, support, certification, training or other services.
Open Source in the Knowledge Workplace — Myths and Realities

Strategic Planning Assumption: By 2006, at least one open-source product will provide seamless migration, multiple client support and near-functional parity with established messaging, calendaring and scheduling products (0.6 probability)

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**Messaging Ready, But Calendars and Scheduling Lag Behind**

<table>
<thead>
<tr>
<th>Product</th>
<th>Maturity</th>
<th>Market Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>OpenGroupware</td>
<td>Emerging</td>
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<tr>
<td>Kolab</td>
<td>Emerging</td>
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<tr>
<td>eGroupWare</td>
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<td>phpGroupWare</td>
<td>Emerging</td>
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<tr>
<td>Moregroupware</td>
<td>Emerging</td>
<td></td>
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<tr>
<td>Sherpath</td>
<td>Emerging</td>
<td></td>
</tr>
<tr>
<td>Chandler</td>
<td>Emerging</td>
<td></td>
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<tr>
<td>Horde</td>
<td>Emerging</td>
<td></td>
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<tr>
<td>Mozilla Calendar (P2P mode)</td>
<td>Visible</td>
<td></td>
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<tr>
<td>OpenOffice Glow (P2P mode)</td>
<td>Visible</td>
<td></td>
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<tr>
<td>Evolution (P2P mode)</td>
<td>Visible</td>
<td></td>
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<tr>
<td>KDE-PIM Suite (P2P mode)</td>
<td>Visible</td>
<td></td>
</tr>
<tr>
<td>Openexchange</td>
<td>Visible</td>
<td></td>
</tr>
</tbody>
</table>

**As of January 2004**

**Key Functionality:**
- Messaging standards (SMTP, POP, IMAP, iCAL)
- Calendars
- Group scheduling
- Browser access
- Offline support
- Outlook client support

**Client Issue: How mature are open-source products for messaging and calendaring, team collaboration, and content management?**

The market for messaging, calendaring and scheduling — usually referred to as “groupware” — has been dominated by products such as Microsoft’s Exchange, IBM’s Lotus Notes and Novell’s GroupWise. Other than products such as Sendmail, Postfix or Cyrus, which have a narrow messaging focus, there are no visible open-source alternatives. **Novell** (through the Suse Linux acquisition) offers a hybrid product called Openexchange that combines a number of well-known open-source messaging, directory and file servers with software from other vendors. The **Kolah** server is a pure open-source product initially developed by three German service companies. **OpenGroupware** is based on the proprietary code for the SKYRiX 4.1 Groupware Server, which was “open sourced” in July 2003 by SKYRiX Software. There are other options for peer-to-peer based solutions. Maturity and market presence vary. But even the most-mature products are only “good enough” for departmental or niche deployments of up to 2,000 users. Large-scale deployments will not be realistic until dependable commercial services and support also become available.
Open Source in the Knowledge Workplace — Myths and Realities

Market: Gaps in functionality, unfamiliarity with the technology basis, technology immaturity and patchy commercial support will make open-source team collaboration products inappropriate for companywide deployments until 2006.

Client Issue: How mature are open-source products for messaging and calendaring, team collaboration, and content management?

Although each open-source collaboration product is different, it is possible to identify product clusters. **Groupware-focused** products such as phpGroupWare, Moregroupware, eGroupWare and PHProjekt combine basic messaging, calendars and scheduling with additional collaboration functionality (shared spaces, task management, expertise location, presence management, discussion boards and chat rooms). Of these, few have released a production version. Most do not offer commercial support, and specialist open-source or traditional service providers do not promote them. **Zope** has an active commercial support system (especially in Europe) and a market for additional modules. Some companies will reject Zope because it will introduce its own mix of tools and server technology. Other products focus on **informal and spontaneous collaboration** through conversations, end-user publishing and feedback mechanisms. Examples are online bulletin boards, such as phpBB; blogging tools and online diaries, such as Drupal; wikis (discussion systems that enable users to change documents or comments created by other users) such as TWiki and Tiki/CMS; and template-driven Web sites such as PHP-Nuke, PostNuke and JBoss/Nukes.

**Action Item:** Despite shortcomings, open-source team collaboration products can be used for user-initiated knowledge management, to solve a niche problem or to assess the business benefits of more investment.
**Open Source in the Knowledge Workplace — Myths and Realities**

**Strategic Planning Assumption:** By 2006, global external service providers will include open-source content management products in their service offerings (0.7 probability).

### Web Content Management: (Much) Better Than In-House Development

#### Market Presence

- **Visible**
  - Zope/Plone/CPS Content Management Framework
  - Red Hat CMS
    - Apache Lenya
  - MySource
  - Typo3
  - MMBase
  - Midgard
  - OpenCMS
  - Macromedia Spectra

- **Emerging**

#### Product Maturity

- **Experimental Deployments** (up to 2,000 users)
- **Departmental Deployments** (up to 2,000 users)
- **Large Deployments** (2,000+ users)

*As of February 2004*

### Key Functionality:
- Authoring
- Version control
- Editorial workflow
- Templates
- Dynamic publishing
- User management
- Access control
- Search

### Client Issue: How mature are open-source products for messaging and calendaring, team collaboration, and content management?

Companies should view open-source Web content management (WCM) as an unpolished framework between the “build” and “buy” options, not as an off-the-shelf package. Several open-source WCM products offer “good enough” technical capabilities, but maintenance and support challenges mean that these products will suit only those companies that can support them internally as a less-risky, lower-cost and more viable alternative to internally developed solutions, or can work with small, specialized service providers. **Apache Lenya** is benefiting from the Apache brand recognition and the systematic development framework provided by the Apache foundation. Even before reaching maturity, Lenya can be a useful content management framework (with emphasis on XML handling), especially for companies that work with Apache technologies. **MMBase** is a Dutch Java-based effort with a number of high-profile users, mainly in the broadcasting, publishing and public sectors. **MySource Matrix** and **Typo3** are LAMP products that are notable for their ease of use. MySource Matrix is supported by a small Australian service provider, while Typo3 is mainly developed in Europe. **OpenCms** and **Red Hat CMS** are other Java-based products looking to broaden their appeal. **Zope** enjoys an active commercial “ecosystem” around its base product, and in the add-on market with plug-ins for content management, portal, collaboration, e-commerce and other functions.
Strategic Planning Assumption: Through 2005, open-source portal products will drive less than 2 percent of deployed enterprise portals (0.7 probability).

Open-source portal products have existed almost since the beginning of the portal product market. Some have seen adoption in certain scenarios — for example, the use of JA-SIG uPortal in higher-education organizations. However, overall adoption of open-source portal products has been extremely limited among Global 2000 companies.

To be successful, an open-source initiative must have a vibrant community of users. This community drives innovation and new features, and also provides support. This is critical, because open-source technology doesn’t enjoy the support of commercial products. The lack of vibrant communities has been the primary inhibitor of open-source portal products, which generally are driven by a single vendor. This may change as a surge in use of open-source portal products probably will accompany the growth in Linux use. Some open-source initiatives are staying close to their commercial counterparts, as noted by the inclusion of JSR168 support in uPortal only a few months after that support was added to commercial products.

Action Item: Examine open-source portal products, but understand all of the implications of product innovation and support. Ensure that this isn’t an excuse for your developers to cut code.
The Open-Source Value Chain

<table>
<thead>
<tr>
<th>Small projects</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMBase, OpenCMS, Typo3, TWiki, phpBB, Drupal</td>
<td>Ideology</td>
</tr>
<tr>
<td>Open-source organizations</td>
<td>Grants/donations</td>
</tr>
<tr>
<td>Apache, Zope, OSAF, Gnome, Mozilla, Jabber</td>
<td>Problem solving</td>
</tr>
<tr>
<td>Open-source ISVs</td>
<td>Add-ons</td>
</tr>
<tr>
<td>Red Hat, NetLine, Gluecode, JBoss, Sendmail, SKYRX</td>
<td>Support</td>
</tr>
<tr>
<td>ISVs</td>
<td>Dual license</td>
</tr>
<tr>
<td>IBM, Novell, Sun, Computer Associates</td>
<td>Insurance</td>
</tr>
<tr>
<td>Service providers</td>
<td>Certification</td>
</tr>
<tr>
<td>Novell, HP, IBM Global Services, Accenture</td>
<td>Training</td>
</tr>
<tr>
<td></td>
<td>Expand market</td>
</tr>
<tr>
<td></td>
<td>Close gaps</td>
</tr>
<tr>
<td></td>
<td>R&amp;D lab</td>
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<tr>
<td></td>
<td>Enhance image</td>
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<tr>
<td></td>
<td>Solutions</td>
</tr>
</tbody>
</table>

Client Issue: How mature are open-source products for messaging and calendaring, team collaboration, and content management?

Driven by the need to “systematize” the intellectual property management of open-source software production, software foundations present challenges and opportunities to vendors and user organizations. The OSS development model does not preclude the presence of enterprise-tier commercial distribution, value-added resellers or a support network. Commercial activity around open-source software is primarily based on service rather than licensing revenue. Exceptions include those who rely on “dual licensing” strategies, such as those of MySQL AB or Sun Microsystems with respect to OpenOffice/StarOffice, or on organizations such as Covalent that provide proprietary extensions to open-source software such as Apache. The evolution of a peripheral economy around an OSS product is a positive sign of long-term viability. Additional evidence on the state of health of this economy derives from trends in the availability of training centers, conferences, books and dedicated magazines. The absence of commercial activity may be a sign of immaturity, or it may mean that the product is only of niche interest. In such cases, it is important to examine the grass-roots distribution and support mechanisms.

Action Item: Seek evidence of commercial activity or effective community support when embarking on OSS product deployments.
Open Source in the Knowledge Workplace — Myths and Realities

Client Issue: What are the best practices in deploying and managing open-source software for the knowledge workplace?

Strategic Planning Assumption: Through 2006, open-source product deployments driven by low acquisition costs will fail to account for all associated long-term costs (0.8 probability).

Real Benefits, Hidden Costs

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Licenses (Upfront or Upgrade)</td>
<td>Selection, Audit Fees</td>
</tr>
<tr>
<td>No Over-commitment</td>
<td>Migration, Skill Transfer</td>
</tr>
<tr>
<td>No Supplier or License Mgmt.</td>
<td>Internal Support, Maintenance</td>
</tr>
<tr>
<td>No Ongoing Maintenance</td>
<td>Alignment, Integration</td>
</tr>
<tr>
<td>Peer Support Groups</td>
<td>Disposal, Replacement</td>
</tr>
</tbody>
</table>

From a cost perspective, the most visible and immediate benefit of OSS is low (or no) acquisition costs. Less-visible benefits include no overcommitment costs, such as the purchase of excess licenses to take advantage of better terms and bulk discounts. An indirect saving is that there’s no need to track licensing use or adjust budgets if there are unpredictable usage surges. There may also be savings in not having to manage the vendor relationship. On the other hand, potential pitfalls include multiple distributions, leading to administration complexity; vague support contracts that may leave the burden of updates and compatibility; shared/diluted resources where “borrowed” administrators can hurt other systems’ uptime; exclusivity among experts without shared knowledge; wasted productivity on experimental projects with no corporate benefits; and widely disparate application environments.

Action Item: Although OSS has acquisition cost advantages, look at its longer-term total cost of ownership (TCO), which will vary depending on context and circumstances. Licensing costs are a fraction of the TCO of most software products. Additional outlays for maintenance and support may negate licensing cost savings.
Open Source in the Knowledge Workplace — Myths and Realities

Strategic Planning Assumption: By 2006, open-source KW applications such as collaboration and e-learning will be commonplace among early technology adopters with in-house integration expertise and a commitment to application development (0.7 probability).

<table>
<thead>
<tr>
<th>Deployment ‘Sweet Spots’ — Proximity and Repeatability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R&amp;D organization</strong></td>
</tr>
<tr>
<td>Team collaboration support</td>
</tr>
<tr>
<td>Low acquisition costs, in-house expertise, flexibility, instant gratification</td>
</tr>
<tr>
<td><strong>Small business or large department</strong></td>
</tr>
<tr>
<td>Outsourced intranet or Web site</td>
</tr>
<tr>
<td>Low acquisition cost, no in-house expertise, no integration</td>
</tr>
<tr>
<td><strong>Internet-only service business</strong></td>
</tr>
<tr>
<td>Service delivery portal</td>
</tr>
<tr>
<td>No legacy/greenfield site, flexibility, low acquisition cost, economies of scale, custom application development</td>
</tr>
<tr>
<td><strong>Large company</strong></td>
</tr>
<tr>
<td>Components for corporate portal platform</td>
</tr>
<tr>
<td>In-house expertise and commitment to AD, flexibility, economies of scale, part of commercial solution, IT architecture alignment</td>
</tr>
</tbody>
</table>

Client Issue: What are the best practices in deploying and managing OSS for the KW?

Interest in OSS is driven by promises of flexibility and low cost. Perceptions of better security and software quality also play a role, but they are secondary. Flexibility takes several forms — for example, being able to fit the solution to specific and changing requirements, or in terms of vendor neutrality or platform portability. The flexibility implications of OSS use should be factored into an overall “fitness for purpose” assessment. However, what lures mainstream users is the potential for lower costs. Clearly, OSS has lower (or no) acquisition costs. But a a lower-cost case must take into account not only acquisition costs, but also full life cycle costs. A “rule of thumb” for deciding if a lower-cost case can be made is illustrated in the four “sweet spot” scenarios above that are characterized by 1) proximity to open source (in-house skills and expertise, R&D environment, familiarity) that helps to minimize risk and lower the cost of initial development, and 2) repeatability, which helps to spread initial costs across multiple instances of the same solution (for example, to large numbers of users or servers). Repeatability is particularly attractive in public-sector deployments.
Case Study

Softening Investment Risk at the French Atomic Energy Commission

Context
- R&D in nuclear energy, defense, IT, communication and healthcare
- 15,000 employees in nine research centers
- €2.7 billion (~$3.2 billion) budget

Objective
To support project team collaboration

Selection Approach
- Evaluated several products
- Fitness for purpose and value for money
- Local commercial support
- Shift from capital to operations budget
- Familiarity with OSS
- Low incremental costs

Business Case
- Information sharing among R&D groups
- Track project progress
- Record design decisions
- Improve information quality and visibility
- Uncertain returns; low initial investment

Results
- On-demand publishing and collaboration "spaces"
- 1,000 users initial rollout
- Initial average cost of €100 per user
- Two full-time staff

Lessons Learned
- Look for repeatable deployments
- Low acquisition costs enable future options
- Avoid OSS deployments “in search of a problem”
- Beware of ongoing costs

Client Issue: What are the best practices in deploying and managing OSS for the KW?
The French Atomic Energy Commission (CEA) is a nuclear, defense, IT, communications and healthcare R&D organisation, with a budget of about 2.7 billion euro and 15,000 employees. CEA’s main objective with this project was to improve how project teams share information or documents, to track their progress, and to help create a permanent record of intermediate design decisions. It was decided to provide the following as a shared service: document authoring and sharing, version tracking, approval workflow, mailing lists, discussions, issue tracking, and task allocation and tracking. CEA evaluated several products, piloted five, and chose Zope CPS. Fitness for purpose and value for money principles guided the selection process. Also, CEA chose a practical compromise where an initial deployment aims to satisfy some user needs while conducting a large-scale pilot for assessing the business value of content management and collaboration infrastructure. Results: Software costs were about 100 euro per user for the first 1,000 users, and basic collaboration services are available on-demand. A positive aspect of the deployment is that new collaboration “spaces” can be set up within days and with minimal incremental costs.

Action Item: Recognize that OSS adds flexibility by shifting investments to operational budgets, but also guard against ill-thought-out deployments and hidden costs.
Case Study

Open Source in a Public-Sector Education Project in Brazil

**Problem:** Limited Resources
- Broaden collaboration on projects
- Discovery and reuse of projects

**Solution:** Integrate Resources
- Link public and Private partners
- Use free educational and administrative software and applications
- Form a virtual school community

**Results:** Access to People’s Knowledge
- Cost: “Participative Budget”
- Savings: approximately $15 million
- Value: educating people, creating jobs …

**Factors**
- Social
- Economical
- Political
- Cultural

**Members Reference Each Other**

Client Issue: What are the best practices in deploying and managing OSS for the KW?
Brazil’s southernmost state, Rio Grande do Sul, has created a network to extend lessons to far-flung schools, enabling them to communicate and collaborate with each other, and to improve overall administration. The *Rede Escolar Livre*, or Free Education Network, provides a model for sharing knowledge — and the experiences that come from linking schools and students to the Internet — using limited resources (in terms of PCs and Internet connections). **Objectives:** Increase access to educational information and resources, as well as better integrate the diverse teaching establishments that comprise the state’s public-school network. The planners expected to install 20,000 computers in 2,100 schools, and to meet the requirements of three different audiences: 1) teachers and students, 2) members of the general community with Internet access, and 3) the Secretary of Education, who can obtain statistical data about projects developed in schools. **Results:** By the end of 2004, the Free School Network is expected to benefit approximately 2,000 schools. Also, the Rede Escolar Livre program has received recognition from Unesco as a recommended solution for school administration. The general community showed its support via the “Participative Budget,” a local political mechanism for defining the priorities of the state administration. Although the project’s results are difficult to quantify, participants expect the network probably will provide economic and social benefits by educating people, creating jobs and generating revenue, which can be reinvested in the project or used for new social programs.
By 2008, Open-Source Software for the Knowledge Workplace Will ...

... Demand more responsibility for deployment and change management than from non-OSS products  

... Be included in the solution and skill portfolios of large service providers  

... Be used by early technology adopters for mission-critical tasks  

... Be included in broader non-OSS software bundles  

... Be available as a supported, pre-integrated, alternative smart enterprise suite  

... Handle greater than 50 percent of KW services  

... Cause all non-OSS products to disappear

Client Issue: What are the best practices in deploying and managing OSS for the KW?

By 2008, OSS for the KW will ... demand more responsibility for deployment, and change management than non-OSS products. Not all open-source projects will enjoy dependable services around them — although it will be less of a problem for the best known ones. ... will be included in the solution and skill portfolios of large service providers. Large service providers will support leading open-source products as well as leading non-OSS products. Smaller service providers specializing in open source will also emerge. ... be used by early technology adopters for mission-critical tasks. Early adopters with in-house integration and application development skills will still be in a better position to control the initial costs associated with a commitment to open source and, more importantly, to mitigate associated risks. ... be included in broader non-OSS software bundles. Unless there are casualties from a failed bundling strategy, more vendors will pursue this model to increase their market presence, close functionality gaps and lower solutions costs. ... be available as a supported, pre-integrated, alternative smart enterprise suite — probably at least in terms of a good-enough alternative. ... handle greater than 50 percent of KW services, which is unlikely given our expectations for adoption among mainstream users. ... cause all non-OSS products to disappear. This is not likely.
Recommendations

✔ Learn to recognize real opportunities and hype; use OSS products in the KW when and where they make sense.

✔ Establish criteria for evaluating OSS products, as well as procedures to adopt and maintain them.

✔ Understand that OSS products are most appropriate for companies with the technical skills to reduce initial costs and risks, and for those with repeatable solutions.

✔ Expect mainstream readiness by 2006, with supported, pre-integrated bundles often as part of non-OSS solutions.

✔ Guard against deployments in search of a problem, and against hidden costs.
This is the end of this presentation. Click anywhere to continue.