Open Source adoption: best practices from European experiences

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• "The Swiss canton Solothurn is reversing its move to a complete open source desktop, Swiss and German media report. Major reason for the failure appears to be a lock-in to proprietary applications. Protest by users added pressure to the project ... According to the Solothurner Zeitung, the canton was unable to connect the open source desktop to a governmental database. ... [users complained] missing special characters and complained about having to switch back and forth between a Linux and a Windows desktop." (source: OSOR, EU open source observatory)

- Enterprises and Public Administrations that performed successfully the migration to OSS tend to experience substantial savings (and improvements in flexibility).
- In the COSPA project, we measured the (true) costs, including intangibles, of several migrations to OSS in Public Administrations, and found that the savings are true.
- ... but many migrations are not successful.
- Some are so disastrous, that the mere mention of Open Source to civil servants causes medical symptoms.

- The problem: looking at things from a purely technical way, when in reality there are always three components:
- Technical: Installing, checking, patching...
- Management: Understanding the procedures that agency heads need to put in place, and how staff must be coordinated
- **Social**: Presenting change to the staff in a positive manner and handling the various forms of resistance they will put up; interacting with the community that developed the software in a productive manner
- The technical part is usually the least important while there is little on Management and Social...

Management guidelines

Be Sure of Management's Commitment to the Transition: This commitment must be guaranteed for a time period sufficient to cover the complete migration!

Prepare a Clear View of What Is Expected, Including Measurable Benchmarks: A worrisome signal: "It should be cheaper. We get it from the Net from free!" ← a phrase actually heard during one of the (failed) migrations.

Make Sure the Timetable Is Realistic: A migration or adoption process is usually as complex as the adoption of a new IT infrastructure or an ERP system. Wrong timing \rightarrow panic mode.

Review and adapt the software, hardware, services procurement process: In particular, the focus may change from acquisition to services, as less software is bought "shrink-wrapped". This change may require further changes in the allocation of the internal IT budget.

OSS should go through the same process used for proprietary software: this will ensure stability of procurement, absence of a-posteriori criticism for the managers and administrators **Seek Out Advice or Search for Information on Similar Transitions:** less than 1 in 5 managers searched information on similar efforts Avoid "Big Switch" Transition, and Favor **Incremental Migrations:** "gentle" migrations are perceived as costly because you get a grace period with both systems. But "big bang" migrations have an higher probability of failing because any criticality not identified in the project will turn into a potential failure point (like the legal database in the opening example) Adopt a structured OSS evaluation **methodology:** there are many available: FLOSSMETRICS, QALOSS, SOS Open Source -

choose one, but at least one! Survey what you have & what you need!!

Evaluate licenses and ancillary conditions: Especially with Open Core projects, make sure that the functionality that you want is in the OSS edition. If not, this becomes a "normal" proprietary adoption process. Also: not all the projects that claim to be OSS are really under an Open license! Identify functionality, not names: Never go for the shortcuts of looking for "something like Exchange". It is nearly impossible to find exact clones; prepare (as part of the inventory) a list of features you need, features you would like to have and use it as a basis for product evaluation

Identify in a proper way your support needs: at least 70% of deployments does not require any additional support – other than the free, community-based one. If you plan to use community support, create a contact point for the communities and projects you use within your structure to avoid losing important information or duplicating effort.

Be pragmatic: As much as throwing all proprietary software out of the window may be satisfying, it is usually something that cannot be done in real world environments. But it can be part of a long-term project.

Social guidelines

Inform your users: Provide background on what is OSS, and why your agency/enterprise is adopting it. Point out the added value of OSS: social, local economy, inclusiveness – not only the monetary ones.

Use the migration as an opportunity to promote new skills: many users are happy to learn something new, if they believe that the skills may be useful and valuable. Use the flexible licensing of OSS to promote wider use of OSS (for example, in the family) Create a migration workbook: an open wiki, a

blog, whatever – allow editing and additions.

Make it easy to experiment: Provide "playgrounds", manuals, guides, videos – give the opportunity to tech and end-users to explore without risks. Some Virtual Machines are all that is needed. Provide a way for users to suggest new things.

Identify local experts: The migration may arouse some resistance from the so-called "local gurus" who could perceive this overall improvement as diminishing their social role as technical leaders: Offer them higher-level training material. Identify local OSS "champions", and offer them additional training opportunities or recognition.

Thanks! Carlo Daffara

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