

Open Business Innovation with Open Source Software

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Abstract

Bit by bit the world around us is changing. The way we use and think of IT products is still evolving and the way we make IT products is becoming more advanced. This paper exams the possibilities for open business innovation using open source software and the power of the communities around open source software.

Keywords: Open Innovation, Open Source, KDE4, Drupal, AMQ, Fosdem2009

1 Fosdem 2009

In our search for new ideas we visited Fosdem 2009. Fosdem is an abbreviation for Free and Open Source Developers European Meeting (Fosdem). Fosdem is an event created for the OSS community by volunteers. This events was organized for the 9th time in 2009. With more than 5000 visiter and roughly 250 lectures it is the place to be to find out what is going on in various OSS communities. The event took place at the University libre de Bruxelles.

2 Insides communities

During the conference some lectures or keynote sessions where given by the heroes of the projects. It is nice to see and hear how some original founders are dealing with their child OSS projects. Interesting because 'open' means that a project can no longer be controlled by one persons or a closed group. Dries Buytaert founder and still lead developer of Drupal still is heavily involved with everything going on into the base system. He still even writes major parts of software. Through some formal procedures every one can commit code or add modules, but the base developement branch is still in hands of a few people. Mister Debian, Bdale Garbee was in Brussels to talk about openness of the Debian design process. And many other lead developers, like Mike Connor, lead developer for Mozilla Firefox where also present to share some thoughts. Being two days in Brussels with a variety of OSS developers is a way to get on new ideas and see the way innovation in the OSS landscape is going on.

3 Drupal growing pains

During this edition of Fosdem a full day of Drupal sessions were planned. Since the founder of Drupal and some of the lead developers of the Drupal core were around lots of people wanted to hear what's coming up in the new versions. The Drupal scene now realizes that they too have to step forward and listen better to their users and community. Best example of this attitude were the words of Dries Buytaert the a WYSIWYG editor will be added to core. Drupal has a very strong core, but all great functionality is coming from contributions. It also is evident that better care must be taken when for backwards compatibility of modules and core changes. Most developers are not involved with core changes. This makes a new core of Drupal useless. Nice presentations were given by users on how they used Drupal for building commercial sites. It seemed to us that content authoring and dealing with no technical users is a global challenge for the future of Drupal. Much work is done on caching and tuning to make Drupal perform better than other php based CMS systems. Main features for the coming version 7 are:

- WYSIWYG editor in core. (If Dries stays to this promise -)
- Performance improvements. From database optimization by improving loading multiple core objects in a single dbquery.
- Features to support semantic web standards.
- The CCK module will be in core.

The way Drupal 7 is being develop is based on a true open innovation model. Every can join and discuss directions and code. Take a look at the site [Drupal7](#).

4 KDE4 The answer?!

KDE is still hot. So of course it was very interesting to see, listen and and talk with KDE community members around. KDE was in a dip. The lead developers and driving forces behind KDE made a shift towards a desktop environment that has the potential to be the best in the world. The very best, with competition miles away. Leaving Microsoft, Google, Apple far far behind. To reach this goals building further with KDE3 was no longer a option. Abstraction of new hardware possibilities needs to be improved significantly. And coding for KDE should even be more fun, produce better and faster applications making use of the new KDE4 framework. With lots of negative publications on the new KDE direction, a buggy 4.0 release in January 2008 , the community and followers lost the good feeling. With monthly releases with catchy names like 'The Answer' now, spring 2009 KDE4 is right back on track. With new major releases (KDE4.x) on all platforms available confidence and in the choosen innovation direction is stonger than ever before. The main pillars of KDE are performing better and better and lay a foundation for innovative software in near future. The main pillars are:

- Nepomuk;Nepomuk stands for Networked Environment for Personal Ontology-based Management of Unified Knowledge. Nepomuk is also know as the

social semantic desktop. NEPOMUK brings together researchers, industrial software developers, and representative industrial users, to develop a comprehensive solution for extending the personal desktop into a collaboration environment which supports both the personal information management and the sharing and exchange across social and organizational relations. Big companies like IBM, Thales, HP are also driving forces behind this innovation on the desktop;

- Phonon; A new way to integrated multimedia aspects in the desktop.
- Akonadi; A new architecture model for the PIM storage service which will ultimate benefit all computer users. Akonadi is in essential a new extensible cross-desktop storage service. So in the end every mail program, office program can more easy combined.
- Solid; A new architecture to get all out of new hardware for developers without knowing the hardware in detail.

The new pillars of KDE are the most advanced today. The way it is set up is open and transparent. Every can benefit and join to make it even better. Of course windows is also still innovative in it own way, but an open innovation model is not what comes to mind when talking about Windows7. KDE4 is targeting also on getting back to the windows desktop. Since a new promising project is started to run KDE application native (!) on the windows Desktop. The word open gets a whole new dimension in this way!

5 Breaking enterprise messaging open

Enterprise messaging is in 2009 still in the hands of a few vendors with propriety protocols. This black spot in OSS land is seen and a around globe some really dedicated smart mathematics are working on a solid OSS implementation. The business problem is trival: Delivery a message from system A to system B. In a world where open business integration with use of open internet protocols as http/soap still a problem to solve. A lot of eyes where on the openAMQ project the last years (AMQ stands for Advanced Message Queuing Protocol). But on this conference it was unofficial declared obsolete by its founding fader Pieter Hintjens ([Check his track record!](#)). AMQ failed because it was too complex and too much enterprise oriented (as with IBM's MQ). RestMS defines RESTful operations on AMQP resource types, dropping AMQPs wire format in favor of HTTP. AMQP itself is a message routing protocol for message oriented middleware (or message broker) used in e.g. service oriented architecture implementations. There are a number of implementation out there to get on going. The implementation to watch if found at zyre.com/.

Besides restms another spin off of AMQ is also interesting. This is the project zeromq <http://www.zeromq.org/>. MQ claims to be very fast, and yes with performance figures as 4,100,000 messages per seconds every one should be interested! Pieter warns us that performance is however not the only thing. Usability and easy of integration for developers are even more important. that's why Pieter think his new child resms.org is the innovation direction to go. So

innovation in messaging is build on the foundation of AMQ where the REST messaging services seems very promising for near future. .

6 New developments happening

The following new developments are coming and are heavily thought of in diverse OSS communities:

- Supporting Mobile devices; This mean porting everything you can think of to that mobile device. Including OSS software like drupal for creating sites that hold on mobile devices;
- Getting the mobile technology more open; Various vendors ban OSS developments. Mozilla e.g. is thinking how we the freedom can remain in the mobile world;
- The way we use and create Portals and WebSites;
- Semantic web features are being implemented right now in all major projects;

7 Conclusions

From an open innovation perspective Fosdem 2009 learned us a lot. We went back with a our heads full of new ideas and more knowledge on how innovation within OSS communities is still going on. The lessons learned from this event are summarized as followed:

- Never ever use Microsoft or MSPowerpoint at a OSS conference. Athrough not everyone is that smart using all Presenter features you still want to hold some people in your lecture room for listening;
- Learn from the many diverse OSS communities around. All have their pro's and cons; A general rule for good quality software and a solid organization can not be easily given;
- Small projects and sponsored OSS projects can be very successfull;
- Follow the major leading OSS projects like KDE, Gnome, *BSD, Xorg, Debian and Mozilla to learn what is going on in technology land and how this could changes the way we use technology over a few years.
- Even the big OSS projects like KDE do depend on crucial work of individuals like Alexander Neundorf with Cmake.
- The way ideas are born and new products are developed is still innovative in its own. With optimal use of strong structures of the past combined with new web20 technologies and new threats from the big closed software companies, OSS communities and software are getting stronger day by day.

References

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