Letter to Stakeholders (Year-End 2011)

The Open Source Research Group is looking back on a second successful year at the Friedrich-Alexander University of Erlangen-Nürnberg (FAU).

Overview

1. Research

In our open source software engineering research, empirical work is farthest ahead, with interesting results: For example, by analyzing developer work rhythms we were able to show that most open source is being developed weekdays, 9-5, on company time. No surprise, you might say, but someone had to prove it. In the same vein, we have been empirically analyzing open source programming behavior, with more interesting results on how to improve tools to be published next year.

Open source is not only software, but a collaboration model and a legal framework as well. The adoption of this collaboration model in various contexts only accelerated during 2011. We are actively researching open-source-based collaboration models for industry consortia and for firm-internal use (so-called „inner source"). IT user consortia provide IT user firms with lower costs and higher flexibility while avoiding strategic vendor lock-in. Inner source allows a software development firm to benefit from successful open source best practices and make its development more effective. Such work raises even more governance questions than before and we have been publishing accordingly [1] [3] [12] [13].

In our software engineering work we went public with our first open source project this year, the Sweble Wikitext parser. This component lets users parse in Wikipedia (and other Mediawiki content) and analyze its data. This component, developed by OSR Group Ph.D. student Hannes Dohrn, has quickly been picking up a user community with first contributions on the horizon. For more information, check out the project website at http://sweble.org [4] [6] [7] [9] [10] [11].

After a first failed DFG grant proposal in 2010, we are finally working on new proposals again, both for the DFG, the European Union framework program, and others. The EU proposals are about inner source and open source community processes.

Prof. Riehle traveled repeatedly to China in 2011 and intends to keep doing so. Informal collaborations exist with Prof. Schneider of City University of Hong Kong and Prof. Bai of Tsinghua University, and we hope to deepen these relationship and take them to the next level. Chinese research partners are a key focus of our international interactions.

Our industry sponsorship and collaboration has been accelerating. Next to SUSE and Google,

our 2010 sponsors, who continued their sponsorship, we added Bearingpoint and Bosch as new 2011 project partners and sponsors. We are looking forward to more fruitful years of collaboration. We were also able to receive friendly financial gestures from GfK, Univention, Quinscape, and WeWebU and are looking forward to future collaboration as well.

In addition, we performed the usual services on journal (ISM, IEEE Software, SoSyM, JSS, IST) and conference committee (OSS, ICSE (SEIP Track), AOSD (Modularity Track), HT (Track 3)) review boards.

2. Teaching

We teach as part of the applied software engineering alliance at FAU. To our existing classes AMOS (the "agile methods and open source" lab course), FIRM (how software product firms work), and NYT ("nailing your thesis", i.e. how to perform research) we added the new classes PROD (software product management) and ARCH (software architecture). These classes are co-taught with our industry lecturers Dr. Martin Jung, Dr. Erich Meier, Stefan Probst, and Michael Rohrmüller who we would like to thank for their engagement!

We are particularly proud of the product management class, for two reasons: First, product management is perhaps the most important function in software development organizations, yet it is almost completely being neglected in computer science university teaching. Second, we have started to develop our own set of (Harvard Business School-style) cases to improve the dire situation that little good teaching material is available.

A "case" describes in 5-10 pages a specific decision situation that a company once faced and we use it to guide the class discussion around that decision. At the end of the class session a real person from the case comes into class to discuss the students' conclusions! For this, we are collaborating with local companies (and are still looking for more).

3. Entrepreneurship

2011 was the year when our entrepreneurship teaching was bearing first tangible fruits. The **Mydosis** project, an outgrowth of our 2010 AMOS class, received EXIST funding, about EUR 100,000. Congratulations to the team of Markus Stipp, Christoph Wille, and Johannes Link! [8] We have high hopes that Mydosis will help improve medical practices in pediatrics and turn a profit as well. For more information, check out http://mydosis.de.

Free Seas Ahoy!, the 2011 AMOS project, is on its way. Please find a first impression at http://fsahoy.com.

4. Public service

During 2011, Prof. Riehle provided his expert opinion in various forums. The two main noteworthy (and pro-longed) engagements that we can publicly talk about are his membership of

- an expert advisory board to one of the public foundations for the German Enquette Commission "Internet und Digitale Gesellschaft", and

- an expert advisory board to the "Open Commons Region Linz", which advises the city and region of Linz in their Open Government, Open Data, Open Source, etc. efforts.

Not surprisingly, Prof. Riehle has been spending a fair amount of time in Berlin this last year.

Thank You!

At the end of this year we would like to thank

- SUSE, Google, Bearingpoint, Bosch, Univention, GfK, Quinscape, and WeWebU for their new or continued sponsorship,

- Dr. Martin Jung, Dr. Erich Meier, Stefan Probst, and Michael Rohrmüller for their engagement in helping us teach practical software engineering and entrepreneurship, and

- Prof. Bernd Hindel, Prof. Detlef Kips, Dr. Norbert Oster, and Dr. Klaudia Dussa-Zieger for their collaboration as part of the Applied Software Engineering Alliance.

All the best for 2012! And please subscribe to our blog at http://osr.cs.fau.de for on-going information and late-breaking news!

For the Open Source Research Group,

Prof. Dr. Dirk Riehle, M.B.A.

A. Publications

Abstracts and PDFs are available from http://dirkriehle.com/publications.

[1]   RIEHLE, D. 2011. Controlling and Steering Open Source Projects. IEEE Computer vol. 44, no. 7 (July 2011), 93-96.

[2]   RIEHLE, D. 2011. Lessons Learned from Using Design Patterns in Industry Projects. Transactions on Pattern Languages of Programming II, LNCS 6510. Springer-Verlag, 2011, 1-15.

[3]   RIEHLE, D. 2011. The Single-Vendor Commercial Open Source Business Model. Information Systems and e-Business Management. Springer Verlag, 2010, 13 pages. Republished from The Commercial Open Source Business Model. Value Creation in e-Business Management, LNBIP 36. NELSON, M.L. et al., Eds. Springer Verlag, 2009, 18–30. Republished from The Commercial Open Source Business Model. In Proceedings of the 15th Americas Conference on Information Systems (AMCIS 2009). AIS Electronic Library, 2009, Paper 104.

[4]   DOHRN, H., AND RIEHLE, D. 2011. Design and Implementation of the Sweble Wikitext Parser: Unlocking the Structured Data of Wikipedia. In Proceedings of the 7th International Symposium on Wikis and Open Collaboration (WikiSym 2011). ACM Press, 2011.

[5]   SCHÖNDIENST, V., KRASNOVA, H., GÜNTHER, O., AND RIEHLE, D. 2011. Micro-Blogging Adoption in the Enterprise: An Empirical Analysis. In Proceedings of the 10th International Conference on Wirtschaftsinformatik (WI 2011), 931-940.

[6]   DOHRN, H., AND RIEHLE, D. 2011. WOM: An Object Model for Wikitext. Technical Report CS-2011-05 (July 2011). University of Erlangen, Germany, 2011.

B. Student Theses

Abstracts and PDFs are available from http://osr.cs.fau.de/category/final-theses/.

[7]   Jing Tang. Improving the Wikipedia Parser. Diplomarbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[8]   Christoph Wille. Marketing a Community-Based Open Data Portal. Master Thesis, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[9]   Sebastian Berschneider. Analyse und Vergleich von Open Source Vereinigungen. Bachelorarbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[10] Guido Leisker. Abschnittsbasierte Textklassifikation in der Wikipedia. Magisterarbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[11] Martin Helmreich. Best Practices of Adopting Open Source Software in Closed Source Software Products. Diplomarbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[12] Ke Chang. Open Source Collaboration Codified. Diplomarbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

[13] Florian Weikert. Ein Modell der Produkte von Open-Source-Unternehmen. Bachelor-Arbeit, Friedrich-Alexander University of Erlangen-Nürnberg: 2011.

C. More Links

- This letter as PDF.
- All research publications.
- All student theses with PDFs.