

Is Open Source Revolutionising the Software Industry?

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Abstract

The need for rigorous academic investigation into open source software (OSS) is pronounced. If the media hype surrounding the topic since 1998 has a kernel of truth, then OSS promises to revolutionise the ways in which organizations build, sell, buy, use and exploit software systems. Needless to say, that's a big "if". This panel, which takes the form of a debate, will provide audience members with an up-to-date understanding of OSS built upon the emerging research literature, and detailed arguments both for and against the assertion that open source is revolutionising the software industry.

Keywords

Open Source Software, Software Process, Software Business Models, Information Systems (IS) Development

1. Whither the Revolution?

Due to record breaking market performances (Red Hat and VA Software), category-killing applications (Apache, BIND and Sendmail), David vs. Goliath rhetoric (Linux vs. Windows) and colourful, publicity-savvy leadership, open source software (OSS) has garnered wide-spread media coverage since the term was coined in 1998. In the same period, a substantial research literature has emerged, comprised of papers appearing in major information systems (IS) and software engineering (SE) conferences (*ICIS*, *ECIS*, *AMCIS*, *UKAIS*, *IFIP 8.2*, *ICSE*) and journals (*Information Systems Journal*, *European Journal of Information Systems*, *Research Policy*, *IEE Proceedings – Software*, *Communications of the ACM*, *Software Engineering Notes*, *IEEE Software*) as well as book length treatments of the subject (e.g. Feller and Fitzgerald, 2002; Feller *et al.*, 2003).

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This panel, which takes the form of a debate, will provide audience members with:

- an up-to-date understanding of OSS built upon the emerging research literature, and
- detailed arguments both for and against the assertion that OSS is revolutionising the software industry.

Feller will argue the affirmative case, asserting that OSS development does represent a revolutionary shift in the systems development field and that OSS has had, and will continue to have, a major impact on the business models surrounding both software development and use. Fitzgerald will argue the negative case, elaborating on the paradoxes that surround OSS and the non-trivial barriers that prevent OSS from becoming a significant component in organisational systems development.

2. About the Panellists

Feller and Fitzgerald have been extremely active in facilitating and contributing to the international research agenda on open source software. They are the authors of *Understanding Open Source Software Development* (Addison-Wesley, 2002) and of “A Framework Analysis of the Open Source Software Development Paradigm,” which was awarded best paper on conference theme at *The 21st International Conference in Information Systems (ICIS 2000)*. They are co-editors (with Scott Hissam and Karim Lakhani) of *Making Sense of the Bazaar: Perspectives on Open Source and Free Software* (O’Reilly, July 2003) and are the lead organizers of the international *Open Source Software Engineering Workshop* series – the third workshop is being hosted by the ACM and IEEE at the annual *International Conference on Software Engineering* in May 2003. They served as guest editors for special issues on open source software of *IEE Proceedings Software* (with Andre van der Hoek, 2002), *Information Systems Journal* (2001 and 2002), and *Systemes d’Information et Management* (with Frederic Adam, late 2003). In 2002, Fitzgerald was awarded a €1 Million Science Foundation Ireland Investigator grant to lead a research program (*B4-STEP*) addressing the gap between software theory and practice - open source software forms one of the main focal points for this research program. Feller is a research collaborator for this program.

Joseph Feller, PhD is a College Lecturer in Business Information Systems at University College Cork, Ireland. He is the maintainer of the *Open Source Resources* website and the *IS World Net EndNote Library on Open Source Software*. In addition to the work described above, his research on open source software has appeared in *Software Engineering Notes* and *IEE Proceedings Software*, and in the proceedings of *IFIP 8.2 2002*, *UKAIS 2000* and *UKAIS 2001*.

Brian Fitzgerald, PhD, holds the Frederick A Krehbiel II Chair in Innovation in Global Business and Technology at the University of Limerick, Ireland. He has also held positions as Visiting Professor at Northern Illinois University in the US and the University of Gothenburg in Sweden. He has been Associate Editor for the *Information Systems Journal* and *Data Base*, and his publications include 6 books and more than 70 papers published in international journals. He has also presented research at a number of international conferences, and spent more than fifteen years in industry, prior to entering academia.

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