Preface

We are very pleased to introduce *Open Source Development, Adoption and Innovation,* the proceedings of the *Third International Conference on Open Source Systems* (OSS 2007). Open source software (free software, libre software) has emerged as a major field of scientific inquiry across a number of disciplines (software engineering, information systems, business, economics, law, sociology, just to name a few). In addition to this highly successful conference series, open source has been the focus of dozens of conference program tracks, workshops, tutorials and panels, as well as the theme for numerous special issues published by many of the top journals in the disciplines listed above. A substantial library of books has been published, targeted at both researchers and practitioners, and the web is awash with the experiences and perspectives of a large community of open source developers, observers, advocates (and detractors).

When the concept of open source began to gain mindshare in the global business community, decision makers faced a challenge: to convert hype and potential into sustainable profit and viable business models. As a community of researchers, we face a similar challenge: to convert anecdote and speculation into empirical description and predictive theory. Over the past several years, a substantial body of multi-disciplinary (and in some cases truly inter-disciplinary) literature has emerged. This literature provides us with rich descriptions of the various aspects of open source, many based on empirical data rigorously gathered and analyzed using both qualitative and quantitative methods. Our challenge is to continue this work, setting aside anecdote and insisting on rigor, depth and completeness in our research. We must also extend the work, so that open source research can move beyond description to understanding and prediction. Our rhetoric is filled with claims that open source is a different way to build software, acquire software, use software; that it challenges development processes, software business models, and intellectual property frameworks. Such rhetoric calls out for theory, both the careful testing of existing theory in new (open source) contexts and also the building of new theory emerging from the phenomenon itself.

We believe that this conference series, and the IFIP working group it represents, can play an important role in meeting these challenges, and hope that this book will become a valuable contribution to the open source body of research. Nearly 100 submissions from authors in 23 countries were carefully peer-reviewed; in the end, 15 papers are published here as full papers (Part I) and 25 published in a condensed form as short papers (Part II). Additionally, 12 paper authors presented their work in poster form for discussion at the conference (Part VI). Complementing the paper program, we are pleased to include descriptions of the two panels (Part III), three tutorials (Part IV) and five workshops (Part V) which were all an important part of the conference event.

About IFIP WG 2.13

This is the first conference since the formal acceptance of this new Working Group 2.13 on Open Source Software by IFIP. Since the formal founding meeting on 10 June 2006 in Como, Italy, we have sought to consolidate the working group. The Working Group has 27 founding members from Europe, North America, Middle East, Asia /Pacific and Africa. The main objective of the Working Group is to enable the diverse community of free, libre and open source software (OSS) researchers and practitioners to rigorously investigate the technology, work practices, development processes, community dynamics within OSS systems, complementing appropriately other IFIP Working Groups where OSS is increasingly relevant. The scope of the Working Group is detailed on the website which is being maintained by Kevin Crowston at http://www.ifipwg213.org.

   Since the group has been founded, the have been several exciting developments in which group members have been centrally involved. Firstly, the results of several EU-funded initiatives are emerging, such as *CALIBRE* (www.calibre.ie), which studied the impact of open source software on the European secondary software sector, *COSPA* (www.cospa-project.org), which studied the adoption of open source by public administrations across Europe, and *FLOSSIMPACT* (www.flossimpact.eu) which studied the impact of free/libre/open source software on innovation and competitiveness of the European Union.

   Ongoing projects in which the Working Group's members are central include *COSI* (www.itea-cosi.org), which is focusing on transferring the lessons of open source and agile methods to traditional in-house development (the so-called inner source phenomenon); *OPAALS* (www.opaals.org), which is seeking to build a sustainable interdisciplinary research community in the emerging area of digital ecosystems; QualiPSo (www.qualipso.org), which studies the quality and trust aspects of Open Source Software and its adoption in the main stream industrial process; and *Open Code, Content and Commerce (O3C) Business models*, a three-year investigation of open innovation and value-creation strategies.

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