



Contents lists available at ScienceDirect

The Journal of Systems and Software

journal homepage: www.elsevier.com/locate/jss

Editorial

Introduction to the special issue on “Software Business”



Software business refers to commercial activities in and around the software industry, aimed at generating income from the delivery of software products and software services. Although the software business shares common features with other international knowledge-intensive businesses, it has many inherent features making it a challenging domain for research. In particular, software companies often depend on one another in delivering a unique value proposition to their customers or a unique experience to their users. Moreover, recent developments like the emerging app economy offer a variety of opportunities for entrepreneurs or start-up companies, and clearly the future of software is not only in utility and but also in entertainment and increasing amount of leisure time available for people worldwide. This will have a profound effect on software business and requires novel business models and new approaches to software product development, as well.

Software engineering researchers have initially approached the field of software business as a “side business”, which is however becoming increasingly important on its own. A scholarly approach to software business suggests new ways of thinking, and in recent years it has in fact become a thriving and interesting field of research. However, the area of software business research is still emerging and it has not yet fully established itself within software engineering as a mature research field.

This special issue on Software Business aims at increasing the visibility of the specific research area within the broader field of Systems and Software Engineering. It is as such a continuation of a previous JSS special issue (Smolander et al., 2016) that was a first attempt to find out whether there is enough interest and established software business research that is also suitable for publication in a software engineering journal.

The call for papers was initially published at the International Conference on Software Business (ICSOB) 2016 and then in SE-WORLD, ISWORLD, the journal webpage, and other forums relevant to the software business and software engineering communities. Accordingly, several of the submissions to this special issue came from the ICSOB community, but the call for papers also attracted submissions from other researchers that are active in the field of software business. All submitted papers went through a rigorous review process by an international group of experts in the field to ensure rigor, novelty, and scientific contribution relevant for Journal of System and Software. Finally, four out of the initial 17 submissions were recommended for publication. These four papers have approached the topic of software business from different viewpoints:

1. In “A Theory of Power in Emerging Software Ecosystems Formed by Small-to-Medium Enterprises”, Valença and Alves present a theory that aims to explain how power and dependence manifest in the software ecosystems that form in partnerships among small-to-medium enterprises (SMEs).
2. In “Lean Internal Startups for Software Product Innovation in Large Companies: Enablers and Inhibitors”, Edison et al. investigate how Lean internal startup facilitates software product innovation in large companies.
3. In “A Decision-making Process-line for Selection of Software Asset Origins and Components”, Badampudi et al. refine, extend and validate a solution for selecting sourcing options that they presented in previous work. The refinement comprises a set of specific decision-making activities, which are described in the form of a process line and have been validated in three case studies with industry.
4. In “Motivating the Contributions: An Open Innovation Perspective on What to Share as Open Source Software” Linåker et al. propose a Contribution Acceptance Process (CAP) model from which firms can adopt contribution strategies that align with product strategies and planning. They developed a process for bridging product strategy with operational product planning and feature definition.

We would like to thank the editors-in-chief of the *Journal of Systems and Software* for agreeing this special issue on Software Business. In particular, we are very grateful to W.K. Chan for his continuous support through all stages. We are also very grateful to all our reviewers for their efforts in evaluating the submitted papers and for their high-quality and timely feedback, which was a great help for choosing and improving the selected papers. Finally, we would like to thank all authors who submitted their work and revised their manuscripts according to the reviewers' feedback, and thus made this special issue possible.

Andrey Maglyas
*Innovation and Software, School of Business and Management,
 Lappeenranta University of Technology, PO Box 20, FI-53851 Finland*

Anna-Lena Lamprecht*
*Department of Information and Computing Sciences, Utrecht
 University, Princetonplein 5, 3584 CC Utrecht, The Netherlands*

*Corresponding author.

E-mail address: a.l.lamprecht@uu.nl (A.-L. Lamprecht)

Reference

Smolander, K., Lassenius, C., Rossi, M., 2016. Preface to the special section on software business. *J. Syst. Software* 113, 407. <http://www.sciencedirect.com/science/article/pii/S0164121215002356>.

Andrey Maglyas was a postdoctoral researcher at the Department of Innovation and Software at Lappeenranta University of Technology. His research interests include software product management, process improvements, and management methodologies. Maglyas has a D.Sc (Tech) and M.Sc (Tech) in software engineering from Lappeenranta University of Technology and an M.Sc (Tech) in management of information systems and resources from Saint-Petersburg State Electrotechnical University, Russia. Now he is working as a product manager and a consultant.

Anna-Lena Lamprecht is an Assistant Professor and Westerdijk Fellow at the Department of Information and Computing Sciences at Utrecht University, Netherlands. She holds a M.Sc. degree in Applied Computer Science from the University of Göttingen and a PhD in Computer Science from TU Dortmund University, Germany. She was a postdoc at the University of Potsdam and a Research Fellow at Lero – The Irish Software Research Centre in Limerick before she came to Utrecht. Her research interests include software engineering, model-driven development, workflow and process modeling, formal methods and semantic web technology, with a particular focus on computational science applications.