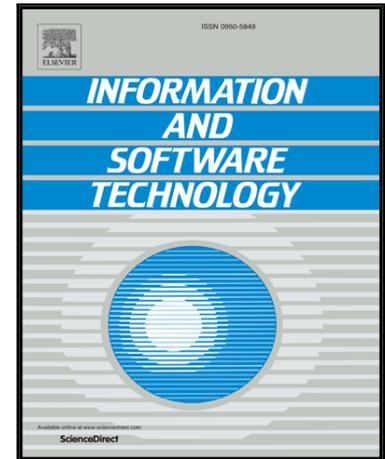


Accepted Manuscript

Systematic Literature Review on Agile Practices in Global Software Development

Raoul Vallon , Bernardo José da Silva Estácio ,
Rafael Prikladnicki , Thomas Grechenig

PII: S0950-5849(17)30297-5
DOI: [10.1016/j.infsof.2017.12.004](https://doi.org/10.1016/j.infsof.2017.12.004)
Reference: INFSO 5926



To appear in: *Information and Software Technology*

Received date: 4 April 2017
Revised date: 1 December 2017
Accepted date: 5 December 2017

Please cite this article as: Raoul Vallon , Bernardo José da Silva Estácio , Rafael Prikladnicki , Thomas Grechenig , Systematic Literature Review on Agile Practices in Global Software Development, *Information and Software Technology* (2017), doi: [10.1016/j.infsof.2017.12.004](https://doi.org/10.1016/j.infsof.2017.12.004)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Systematic Literature Review on Agile Practices in Global Software Development

Raoul Vallon^{1,a,b}, Bernardo José da Silva Estácio^c, Rafael Prikladnicki^c,
Thomas Grechenig^b

^a Center for Design Research, Stanford University
424 Panama Mall, Bldg 560, Stanford, CA 94305-2232, USA

^b Research Group for Industrial Software, Vienna University of Technology
Wiedner Hauptstr. 76/2, 1040 Vienna, Austria

^c Computer Science School, Pontifícia Universidade Católica do Rio Grande do Sul
Avenida Ipiranga, 6681, Porto Alegre, RS, 90619-900, Brazil

Abstract.

Context: Developing software in distributed development environments exhibits coordination, control and communication challenges. Agile practices, which demand frequent communication and self-organization between remote sites, are increasingly found in global software development (GSD) to mitigate said challenges.

Objective: We aim to provide detailed insight into what is reported on the successful application of agile practices in GSD from 1999-2016 and also identify the most frequently applied agile practices and reported distribution scenarios. We further strive to uncover research opportunities and gaps in the field of agile GSD.

Method: We build our systematic literature review on top of a previous review, which investigated studies published between 1999 and 2009, and extend the review by years 2010-2016, for which we conduct both a quantitative and a qualitative analysis.

Results: Our results show that the majority of the cases studied is global and involves complex distribution scenarios with Scrum or combined Scrum/Extreme Programming being the most used agile methods. Key results include that in contrast to 1999-2009, where four Extreme Programming practices were among the ten most frequently used agile practices, in 2010-2016 Scrum is in the center of agile GSD implementations with eight Scrum-based practices in the top ten agile practices used in GSD.

¹ Corresponding author. Permanent address: Research Group for Industrial Software, Vienna University of Technology, Wiedner Hauptstr. 76/2, 1040 Vienna, Austria
E-mail addresses: raoul.vallon@inso.tuwien.ac.at,
bernardo.estacio@acad.pucrs.br, rafaelp@pucrs.br, thomas.grechenig@inso.tuwien.ac.at.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات