

Proceedings of the Federated Conference on Computer Science and Information Systems (FedCSIS), Leipzig University, Leipzig, Germany, 1-4 September 2019

Factors that contribute significantly to Scrum adoption

Ridewaan Hanslo

Council for Scientific and Industrial Research Pretoria, South Africa

Email: rhanslo@csir.co.za

Ernest Mnkandla

University of South Africa, School of Computing, College of Science, Engineering and Technology, Pretoria, South Africa

Email: mnkane@unisa.ac.za

Anwar Vahed

Data Intensive Research Initiative of South Africa, Pretoria, South Africa

Email: avahed@dirisa.ac.za

<https://ieeexplore.ieee.org/document/8859982>

Abstract

Scrum is the most adopted Agile methodology. The research conducted on Scrum adoption is mainly qualitative and there is therefore a need for a quantitative study on Scrum adoption challenges. The primary objective of this paper is to present the findings of a study on the factors that have a significant relationship with Scrum adoption as perceived by Scrum practitioners working within South African organizations. Towards this objective, a narrative review to extract and synthesize the existing challenges was conducted. These synthesized challenges were used in the development of a conceptual framework for evaluating the challenges that have a correlation and linear relationship with Scrum adoption. Following this, a survey questionnaire was used to test and evaluate the factors forming part of the developed framework. The findings indicate that Relative Advantage, Complexity, and Sprint Management are factors that have a significant linear relationship with Scrum adoption. Our recommendation is that organizations consider these findings during their adoption phase of Scrum.