

Universidade de Pernambuco

Programa de Pós-Graduação em Engenharia da Computação (PPGEC)

Proposta de Dissertação de Mestrado

Área: Engenharia de Software

Título: Agile Software Development: Powering Industry-Academia Collaboration

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Many studies [1][2] have revealed that Agile Software Development (ASD) brings a significantly positive impact on software development performance, quality, and user satisfaction. The increasing prevalence of using these methods reflects their important role in the software engineering field. However, there are challenges in adopting agile practices and implementing agile methods, such as team management, distributed team, requirement prioritization, documentation, changing and over-scoping requirement, organization, process, and progress monitoring and feedback.

The rise and evolution of ASD in industrial and academic context have been discussed by researchers and practitioners [1][2]. However, these communities are often disconnected, with the level of joint industry-academia collaborations (IACs) in software engineering still rather low [6]. Successful collaboration does not just happen; it must be carefully planned and nurtured; a synergistic relationship should exist between the global community of software practitioners and the community of software engineering researchers in academia, both of which are large and diverse [6][7].

The aim of this research is to powering industry-academia collaboration in ASD context by the model composed by techniques that promote this collaboration[3][4][5]. In this direction, practitioners could obtain more relevant research results, and researchers in ASD could better understand the type and scope of problems to examine.

Referências Bibliográficas

- [1] Hoda, R., Salleh, N., & Grundy, J. (2018). The rise and evolution of agile software development. *IEEE Software*, 35(5), 58-63.
- [2] Mognon, F., & Stadzisz, P. C. (2017). Modeling in agile software development: A systematic literature review. *Communications in Computer and Information Science*, 680, 50–59. https://doi.org/10.1007/978-3-319-55907-0_5
- [3] Cartaxo, B., Pinto, G., Ribeiro, D., Kamei, F., Santos, R. E., da Silva, F. Q., & Soares, S. (2017, May). Using Q&A websites as a method for assessing systematic reviews. In 2017 IEEE/ACM 14th International Conference on Mining Software Repositories (MSR) (pp. 238-242). IEEE.
- [4] Garousi, V., Felderer, M., & Mäntylä, M. V. (2016, June). The need for multivocal literature reviews in software engineering: complementing systematic literature reviews with grey literature. In *Proceedings of the 20th international conference on evaluation and assessment in software engineering* (p. 26). ACM.
- [5] Garousi, V., Felderer, M., & Mäntylä, M. V. (2019). Guidelines for including grey literature and conducting multivocal literature reviews in software engineering. *Information and Software Technology*, 106, 101-121.
- [6] Carver, J. C., & Prikladnicki, R. (2018). Industry-Academia Collaboration in Software Engineering. *IEEE Software*, 35(5), 120–124.
- [7] Wohlin, C., Aurum, A., Angelis, L., Phillips, L., Dittrich, Y., Gorschek, T., Winter, J. (2012). The Success Factors Powering Industry-Academia Collaboration. *IEEE Software*, 29(2), 67–73.