Are agile methods the software chaos?*

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Abstract

A small difference in the software project input settings might cause a big difference in the project software output, i.e. prior decisions have higher impact on late results. This sentence concludes our experience in using classical and agile methods which was partially presented in [1]. While searching for the reasons inside agile method characteristics presented e.g. in [2], we came to the conclusion that this property is characteristic for the waterfall model too. The main difference is in dividing the initial problem into smaller iterations and being lean in selection of requirements and project goals, which allows real-time reaction to changes in the production environment. Such differences could be found between agile methods too. We could say that test-driven development (TDD) follows Ford's idea "Failure is simply the opportunity to begin again...," while SCRUM benefits from transparency in decision-making. During agile method analysis, we focus on three co-related questions in this article: 1) Is TDD a cascade of segmented waterfalls? 2) Is SCRUM a tiered multi-step horsetail of waterfalls? 3) Having a waterfall simulator, would we be able to simulate agile development?

Keywords: agile methods, SCRUM, waterfall model

MSC: 68N30; 68U20

References

- SZABÓ, CS., TONHAUSEROVÁ I., KOTOS T., Feature Driven Information System Development, Egyptian Computer Science Journal Vol. 35 No. 2 (2011), 104–111.
- [2] ABRAHAMSSON, P., SALO, O., RONKAINEN, J., WARSTA, J., Agile software development methods: Review and analysis, VTT Publications 478 (2002), 107 p.

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