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Critique 4

Modeling User Story Completion of an Agile Software Process

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Summary

The authors describe an industrial case study focusing on simulating the Agile process through software process simulation (SPS), which has been widely used since 1980s to understand software development dynamics. Focus was placed on producing useful knowledge for the project rather than general knowledge about Agile development; however, the results were still applicable to the general case. The team's development process was modeled over a 2-month period. Major sources of uncertainty were found when dealing with a single time-consuming task and quality escapes. Four major changes were recommended to improve the process.

Strengths

- Focuses on an actual project and the interactions between customer/client, with a focus on improving quality and not on studying the process. This results in a more realistic scenario instead of a theoretical one.
- Very detailed model
- Sensitivity analysis for highly variable factors
- Study required 200 hours which resulted in sufficient data and time to analyze factors.
- Good review of literature for similar SPS

Weaknesses

- Since it was focused on an actual project, the recommendations and findings are specific to this team and its needs. They can still be generalized, but mostly if other agile teams have similar problems.
- Important roles such as project manager were left out of the model
- It would be nice to see the results of their recommendations on the team's productivity. It says these recommendations are not surprising and it helped the team focus its process improvement efforts, but that is very vague. They list some improvements the team enacted but there is no quantitative or qualitative information about how these improvements benefited them. Are these recommendations useful? By what measure?