

# Summary of "Design study Methodology: Reflections from the Trenches and the Stacks"

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## 1 SUMMARY

This paper, written by some IEEE members, talks about how to write design study papers. More in details, a design study is defined by the authors as "a project in which visualization researchers analyze a specific real-world problem faced by domain experts [and] design a visualization tool that supports solving this problems". To address this problem, they propose a 9-step framework that should help researchers to take into account all the relevant aspects and to avoid the main pitfalls when writing a paper about their design study. The framework is a waterfall-based model composed by three "top-level categories": precondition, core, analysis. Each of them is split in turn into many sub-steps. Although the framework is waterfall-based, the authors allow to go back and forth through the phases in a re-iterative and refinement way. The authors explain also in details all the stages of the model presented and for each of them they describe the problems and the pitfalls hidden in that specific step. Many hints are given to the reader so that he can avoid them. In fact, being aware of the common mistakes done is useful and it is the first step to recognize them when going through the process.

## 2 COMMENTS

Even though the authors claim that the waterfall nature of the model could be overcome by going back and forth the stages of the framework proposed, I think this class of methods

are too rigid to support a research project. Making a comparison with software engineering, while at the beginning rigid top-down approaches were considered the best way to design software, recently agile-programming methods are becoming very effective and widely used. In the last years, researchers somehow had to accept that a more flexible methodology could better support the "development" process. As well as it happened in the software engineering field, I think that an agile methodology would be more interesting and more applicable in real projects. So, I expect in the next few years iterative-based methodologies will be widely applied also in this field. Given that, I do think having a methodology to face a design study is at the base of successful works.