**Elicitation Technique Selection: How Do Experts Do It?**

1. Bibliographic data

The paper titled “Elicitation Technique Selection: How Do Experts Do It?” was written by Ann M. Hickey and Alan M. Davis. It was published in 2003 as the proceedings of the 11th IEEE International Requirements Engineering Conference.

### Theme of the paper

This paper approaches the importance of the requirements elicitation techniques. Its aim is to find and document elicitation techniques that experts use in order to improve the requirements elicitation process and, consequently, the quality of futures products developed.

### Synthesis of the paper

### In the requirements engineering process, the elicitation phase consists in learning the users’ needs and correctly passing that information to the developers, which nowadays is done across several fields. The success or unsuccess of a product can be determined by this phase. If the users’ needs are not correctly understood and/or are not correctly defined for the development team the product will be a failure. With this in mind, the authors are concerned about the “how” and “when” of the elicitation techniques.

### For this paper, qualitative research was made, including participation in the setting, document analysis and in-depth interviews with experts. Although nine experts were selected based on the most practitioners and researchers’ opinion, they didn’t consider themselves experts. Instead, they agreed on having a lot of experience, but were still learning every day about the elicitation phase.

### After the in-depth interviews, several techniques and its situational techniques were mentioned by the experts: Collaborative Sessions, where multiple stakeholders are gathered in a single room to avoid missing opportunities and emphasize the power of creativity; Interviewing stakeholders to surface new information and uncover conflicts or politics; Team-Building since teamwork is needed for an effective elicitation and, when not present, team-building exercises are important; Ethnography, since ethnographic techniques are extremely effective, with observation of the stakeholders being highlighted; Issues List so issues are not forgotten and can be re-surfaced later; Models, such as Data Flow Diagrams (DFD), statecharts and UML, as a mean to facilitate communication, uncover missing information, organize information gathered from other elicitation techniques and uncover inconsistencies; Questionnaires, although they were mentioned by few; Data Gathering from Existing Systems was mentioned as a secondary method where every expert had a different opinion; Requirements Categorization to ensure that requirements are not missed; Conflict Awareness and Resolution to address and resolve conflicts by knowing the power structure, the politics and the political camps; Prototyping, surprisingly, was not very used; Role playing, when stakeholders are not available to better understand their needs; Formal methods were not advised or mentioned since they distance stakeholders from the process; Extreme Programming was mentioned by one expert and should be used when the domain is undergoing enormous and constant flux, requiring an omni-present customer, co-located with the development team to answer to its questions.

### Concerning the situational problems presented, some experts offered specific conditions under they would apply a certain technique while others provided general advice to apply in the elicitation phase.

### The power of the stories, the background that each professional has was something which was clear during the interviews with the experts. When asked how they perform elicitation, they answered by telling the stories of the previous projects that they had. Those stories were the ones where they applied their standard, default elicitation process, possibly indicating that individuals tend to choose commons stories and must be prompted for exceptions. In the interviews when the normalized situations were presented, experts showed more diversity showing that experts tend to have a default approach and adapt the approach to the situation if necessary.

### Finally, some general trends also appeared after the interviews: Major Drives which are predicates concerning situational characteristics which drive experts to consider a specific technique; Anomalies which are additional predicates that if true cause experts to change their primary choice; Prerequisite Skills which are assets of basic analyst skills that must be present in order to make techniques effective; Success Enhancers which are a set of additional skills that are not necessarily needed but help in the application of techniques without prior knowledge.

### It was not possible to reach definitive solutions due to the research’s own limitations, such as the small number of experts interviewed or the difference between what they said and what they actually did. However, the paper allows a better understanding of the techniques used by the experts during elicitation phase and the situational factors that influence the technique choice. The authors also stated that future research will help them to extend these conclusions to a wider range of experts, techniques and situations.

### Questions and reflection

**Q1:** Do elicitation experts really exist in requirements engineering?

**Q2:** Is it correct to have a default approach/technique to use and just adapt it to the circumstances?

### The questions mentioned above were the main ones that were raised throughout the reading of the paper. When it comes to the first question, expertise is something relative in requirements engineering. Expertise is strongly connected with experience in several different projects with several constraints. However, there will be always circumstances where any professional could have more difficulties and in which they will be required to learn. This is something that the interviewed experts reenforced by saying they didn’t consider themselves experts, but instead only had more experience and were still learning every day. As for the second question, I think that having a default approach/technique to start with is a good idea. However, the ability to adapt it or to just simply try a new technique can be seen as one of the most important ones. Focusing too much on a specific technique can result in a project’s failure. The ability to learn is another crucial ability which lead to success. This is done by learning new techniques or by learning how to adapt a specific one.

### In my opinion, the paper addresses important aspects of the elicitation phase. It does field research by interviewing experts and, despite the constrains that the authors assume to have, it shows other perspectives of elicitation. It is also clear that elicitation can have different approaches depending on the project and on the situational characteristics associated with it. I also agree with the authors when they say that this paper is a good starting point for future research.

### In the future, I believe I will be more aware of the importance of a good elicitation phase for the success of the project. I will also be more aware about the importance to adapt different techniques to the project context in order to fulfill the users’ needs and pass them on to the developers’ team. All of this will make me a better professional, a versatile engineer, capable of understanding correctly what is needed and how it should be accomplished.