

The notion of Stakeholder in Requirements Engineering community

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1 Context and Motivation

Stakeholders play an important role in software process to meet the goals of the development project. The software development process requires understanding the stakeholders and assuring their involvement. Stakeholders are a key source of information about the system under construction and are relevant protagonists in validation and prioritization processes. Independently of these characteristics we found inconsistencies and contradictions in the use of the notion of stakeholders.

Some authors consider stakeholders as *individuals*; others considerer they *groups or individuals* and others think stakeholders are *individuals or organizations*. Some authors consider *individuals, groups or organizations* as stakeholders; others admit as stakeholder a “thing” or an interface..

In the literature the stakeholder notion includes different relationships with different entities of Software Product Life Cycle. A software project is a set of activities to produce a software system with certain constraints. It involves three key entities: project, product of the project and requirements of the software under construction. We found instances of the stakeholder notion related with one, two or all entities. A no structured review of text of Requirements Engineering or related with, shows great differences between these entities and their relationships (for example [1][2][3][4], a version with all the references can be requested to the author) .Stakeholders have an interest in the new system; they will be involved by the system and who have an influence on the system requirements; they influence the requirements; they have an interest in the system or are affected by the development and implementation of the system; they are person whose opinions, needs, or preferences could be relevant to the Project; they determine requirements; they are affected by or are accountable for some output of the project; they have an interest in the product or knowledge about to the product; they obtain benefits from the system under construction; they have indirect influence on the system requirements; they are actively involved in the Project, or are affected by the end product; they are interested in the behavior of the use case or the system; they have a "stake" in the success of the system; they are affected by the system and are critical for its success; they are

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affected by the implementation of the system; have a stake in the operation of the system.

In the requirements engineering community we found different contents of the notion de “stakeholder”. This first approach suggest that there is no a clear concept in the requirements community of stakeholder. The research is organized in three dimensions: 1) Stakeholder notion definition; 2) Types of roles of stakeholders; 3) Relationship of the definition an typology with the application domains, 4) Stakeholder identification process. The largest **question** of this project is: What is a stakeholder? From that question we derive several second level questions, for example: How the RE community defines (explicitly or implicitly) stakeholder? What kinds of roles are present in the literature? Does the notion of stakeholders include relationships with the three entities of a project? Which type of relationship has the stakeholder with these entities? Is stakeholder notion application domain dependent?

The **methodology** considers analyzing scientific results of de Requirements Engineering scientific community. The first step of the investigation will be conducted from the proceedings of the *International Requirements Engineering Conference (RE)* since 1993 to the last digital version available on line. This Conference is a relevant component of the RE scientific community and there is not a special reason to begin with it. After this first step we will extend the research to others conferences and journals. The rationale of this approach is to analyze the concept associated with the concept of “scientific community” as a key actor in science progress. The analysis of the proceedings will begin identifying the use of the word “stakeholder” trough the title, abstract, text (including tables and figures) and references. Then we will do direct inspection of the papers.

2 Contribution

Identification how this scientific community considers the notion and taxonomy of stakeholders and the relationship of this notion with application domains. Major characteristics of stakeholders identification processes. Based on these results we will build the strategy to extend the analysis to other communities and corpus within software engineering community.

3 References

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