

3.1.2 Handling Stakeholders in the Project

Managing stakeholders

It can often be observed in practice that a lot of stakeholders are involved in complex and “difficult” projects. Due to limited resources, the stakeholders that are the most suitable for requirements elicitation must be carefully selected. To document the stakeholders in the development process, it makes sense to use tables and spreadsheets that contain (at least) the following data: name, function (role), additional personal and contact data, temporal and spatial availability during the project progress, relevance of the stakeholder, area and extent of expertise of the stakeholder, and the stakeholder’s goals and interests regarding the project.

Making collaborators out of the affected

Handling stakeholders also means continuously exchanging information: Periodic status updates and continuous involvement of the stakeholders assist the requirements engineer in turning people previously simply affected by the project (i.e., principally affected stakeholders) into collaborators (i.e., well-integrated, jointly responsible stakeholders).

Individual “contracts” with the stakeholders

Stakeholders that are not given enough attention by the requirements engineer might be overly critical toward the project. In addition, some stakeholders may show a lack of motivation because they are sufficiently

satisfied with the legacy system, are afraid of change, or are negatively biased due to previous projects. It's the requirements engineer's task to support the project manager in convincing all stakeholders of the benefit of the project. To avoid misunderstandings and disputes regarding competence, it is useful to formally agree on the tasks, responsibilities, and managerial authority as well as to determine individual goals, communication paths, and feedback loops that can be used by the stakeholders. Depending on the culture of the organization, this agreement and determination can be done verbally (i.e., by "shaking hands") or, more formally, by means of written documentation. The individual agreements should be signed off by the managers.

A number of obligations and privileges result from the agreement with the stakeholders.

*Obligations and privileges
of the stakeholders*

The requirements engineer

- speaks the language of the stakeholders,
- becomes thoroughly familiar with the application domain,
- creates a requirements document,
- is able to get work results across (e.g., by means of diagrams and graphs),
- maintains a respectful relationship with any stakeholder,
- presents her ideas and alternatives as well as their realizations,
- allows stakeholders to demand properties that make the system user-friendly and simple,
- ensures that the system satisfies the functional and qualitative demands of the stakeholders.

The stakeholders

- introduce the requirements engineer to the application domain,
- supply the requirements engineer with requirements,
- document requirements assiduously,
- make timely decisions,
- respect the requirements engineer's estimates of costs and feasibility,
- prioritize requirements,
- inspect the requirements that the requirements engineer documents, such as prototypes, etc.,
- communicate changes in requirements immediately,
- adhere to the predetermined change process,
- respect the requirements engineering process that has been instated.

*Elicitation techniques
determine communication
and process.*

In addition, the requirements engineer plans and organizes the communication paths as well as drafts a structured schedule for the requirements engineering activities that are to be performed in collaboration with the stakeholders. This organization and the type of communication are significantly influenced by the elicitation techniques that can be used during requirements engineering.