Analisis Kebutuhan Perangkat Lunak

Tim Dosen

REQUIREMENT FROM CUSTOMER PERSPECTIVE

Introduction

Gerhard, a senior manager at Contoso Pharmaceuticals, was meeting with Cynthia, the manager of Contoso's IT department. "We need to build a chemical tracking information system," Gerhard began. "The system should keep track of all the chemical containers we already have in the stockroom and in laboratories. That way, the chemists can get some chemicals from someone down the hall instead of always buying a new container. This should save us a lot of money. Also, the Health and Safety Department needs to generate government reports on chemical usage and disposal with a lot less work than it takes them today. Can you build this system in time for the compliance audit in five months?"

"I see why this project is important, Gerhard," said Cynthia. "But before I can commit to a schedule, we'll need to understand the requirements for the chemical tracking system."

Gerhard was confused. "What do you mean? I just told you my requirements."

"Actually, you described some general business objectives for the project," Cynthia explained. "That doesn't give me enough information to know what software to build or how long it might take. I'd like to have one of our business analysts work with some users to understand their needs for the system."

"The chemists are busy people," Gerhard protested. "They don't have time to nail down every detail before you can start programming. Can't your people figure out what to build?"

Cynthia replied, "If we just make our best guess at what the users need to do with the system, we can't do a good job. We're software developers, not chemists. I've learned that if we don't take the time to understand the problem, nobody is happy with the results."

"We don't have time for all that," Gerhard insisted. "I gave you my requirements. Now just build the system, please. Keep me posted on your progress."

Expectation GAP

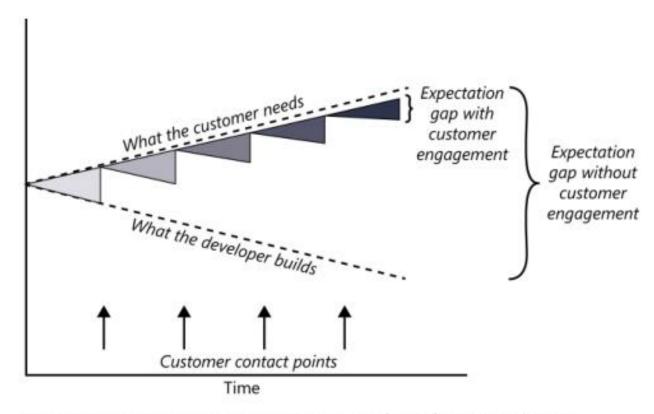


FIGURE 2-1 Frequent customer engagement reduces the expectation gap.

Who is Stakeholders?

Outside the Developing Organization

Direct user Business management Consultant

Indirect user Contracting officer Compliance auditor

Acquirer Government agency Certifier

Procurement staff
Legal staff
Contractor
Subject matter expert
Program manager
Software supplier
Materials supplier
Subcontractor
General public
Venture capitalist

Developing Organization

Development manager Sales staff Executive sponsor

Marketing Installer Project management office

Operational support staff
Legal staff
Information architect

Maintainer
Program manager
Usability expert

Manufacturing
Training staff
Portfolio architect

Company owner Subject matter expert Infrastructure support staff

Project Team

Project manager Tester

Business analyst Product manager
Application architect Quality assurance staff

Designer Documentation writer
Developer Database administrator
Product owner Hardware engineer
Data modeler Infrastructure analyst

Process analyst Business solutions architect

FIGURE 2-2 Potential stakeholders within the project team, within the developing organization, and outside the organization.

Customer-Development Partnership

- An excellent software product results from a wellexecuted design based on excellent requirements.
- Excellent requirements result from effective collaboration between developers and customers (in particular, actual users)—a partnership.

Requirement Bill of Right

TABLE 2-1 Requirements Bill of Rights for Software Customers

You ha	ave	the	rig	ht	to
--------	-----	-----	-----	----	----

- Expect BAs to speak your language.
- Expect BAs to learn about your business and your objectives.
- Expect BAs to record requirements in an appropriate form.
- 4. Receive explanations of requirements practices and deliverables.
- Change your requirements.
- Expect an environment of mutual respect.
- 7. Hear ideas and alternatives for your requirements and for their solution.
- Describe characteristics that will make the product easy to use.
- 9. Hear about ways to adjust requirements to accelerate development through reuse.
- Receive a system that meets your functional needs and quality expectations.

Requirement Bill of Responsibilities

TABLE 2-2 Requirements Bill of Responsibilities for Software Customers

You have the responsibility to

- 1. Educate BAs and developers about your business.
- Dedicate the time that it takes to provide and clarify requirements.
- Be specific and precise when providing input about requirements.
- 4. Make timely decisions about requirements when asked.
- 5. Respect a developer's assessment of the cost and feasibility of requirements.
- Set realistic requirement priorities in collaboration with developers.
- Review requirements and evaluate prototypes.
- Establish acceptance criteria.
- Promptly communicate changes to the requirements.
- Respect the requirements development process.

Creating the culture to respect the Requirements



Identifying Decision Maker



Reaching agreement on Requirement



Agreement on Agile Project

- 1. Agile projects do not include a formal sign-off action.
- Agile projects generally maintain requirements in the form of user stories in a product backlog.
- 3. The product owner and the team reach agreement on what stories will be developed in the next iteration in a planning session. The set of stories is chosen based on their priority and the team's velocity (productivity).
- 4. After that set has been established and agreed to, the stories contained in the iteration are frozen. Requested changes that come in are considered for future iterations. There's no attempt on an agile project to achieve stakeholder approval on the full scope of requirements for the project up front, however.
- In agile projects the full set of functionality is identified over time, although the vision and other business requirements do need to be established at the outset.

TERIMA KASIH