Mastering the Requirements Process

Getting Requirements Right

Traditional • Agile • Outsourcing

Software can solve almost any problem. The problem is that we don’t always understand what the problem is. Understanding the problem—the real problem—is the role of the requirements process.

This workshop presents a complete process for uncovering the real requirements, testing them for correctness, and recording them clearly, comprehensibly and unambiguously. This requirements process starts with the business—for it is only within the business that you can discover the real needs. When you know the real needs, it is possible to determine the system that best serves those needs, and to specify, completely and innovatively, the requirements to get the right system built.

Requirements are the most misunderstood part of systems development, and yet the most crucial. Requirements must be correct if the rest of the development effort is to succeed. This workshop presents a complete process for eliciting the real requirements, testing them for correctness, and recording them clearly, comprehensibly and unambiguously.

“The continual use of real examples and experience made it all come to life. The best course I have ever attended. All questions were answered and none dodged”.

-- Wes Mar, Senior Analyst, Insurance Australia Group
Software development today has more demands on it than ever; and fewer resources to meet those demands. Getting the software right—the first time—is the most effective way to succeed under these circumstances. Today’s requirements process is incremental with quick cycle times. It uses prototypes and scenarios, and it ensures that your developers know precisely what you—and your customer—mean when you write a fit criterion – a concise test case for the requirement.

This workshop shows you how to precisely define the scope of the business problem, to discover and involve the appropriate stakeholders, to use techniques such as apprenticing and use case workshops to learn what the business really needs, to write testable requirements, unambiguously so the right system gets built.

You Will Learn How to:

- Determine the real needs of your client
- Uncover the essence of the business
- Recommend a system to improve it
- Learn diverse elicitation techniques to uncover the real requirements
- Write requirements that are complete, traceable, and testable
- Write requirements for agile projects
- Understand the need for (and how to write) both functional and non-functional requirements
- Precisely define the scope of the project
- Discover the stakeholders and keep them involved
- Use prototypes and sketches to discover hidden needs
- Get the requirements quickly, and incrementally
- Learn state of the art requirements techniques
- Discover the right requirements

Is This for Me?

Yes, if you want to be involved in delivering the right systems—the ones that get used. Your title is probably business analyst, systems analyst, project leader or manager, requirements engineer, consultant, product or program manager or similar. Or if you are a user or software customer and want to ensure the requirements process delivers what you need.
What Will I learn? What Will I be Better at?

• **Project Blastoff**
  This builds a foundation for the requirements project by establishing its Scope-Stakeholder-Goals. This gives you the precise scope of the business area to be studied; a testable goal for the project; and using stakeholder maps, you can identify all the sources of requirements. Additionally, the blastoff ensures the project is viable and worthwhile.

• **Trawling for Requirements**
  At the core of any requirements process is the ability to get people to tell you what they really need, rather than their perceived solution, or what they think you might be able to deliver. We show you how to use apprenticing, use case workshops, interviewing, brainstorming, and other techniques to discover exactly what the customers need—and want.
  This section introduces the *brown cow* model that gives the business analyst different ways of thinking about the problem, and allows the real problem to emerge. We also look at innovation—fresh thinking about the problem—and how it is a necessary component of any requirements process.

• **Functional Requirements**
  Functional requirements are those things the product must do. You discover them by understanding the real work of the organisation, and determining what part of that work the automated product can best do. The automated product is specified using well-formed requirements. We also show you how to use agile story cards as a way to capture the needed functionality.

• **Non-functional Requirements**
  Non-functional requirements are properties the product must have, such as the desired look and feel, usability, performance, cultural aspects and so on. This section demonstrates the importance of correct non-functional requirements, and discusses the various types. It shows you how to use the template, and other methods, to find the all-important qualitative requirements for your product.

“The course not only treated the technical aspects but also the softer subjects in requirements gathering like psychological aspects”

*Ron Buskens, Oce Technologies*
• **Prototyping and Deviations**
Prototyping is a way of discovering requirements by testing mock-up products for the user’s work. Here we look at the merits of both low and high-fidelity prototypes, and how they and scenarios are used to discover previously-hidden requirements. We also look at the wanted alternatives, unwanted exceptions and potential misuses of the product.

• **Writing Requirements**
This section addresses the need to communicate requirements—how to formulate them and how to include an unambiguous fit criterion. This makes the requirement testable, as well as ensuring the implemented solution precisely matches the client’s expectations.
• **The Quality Gateway**
  Testing is most effective when it is done early in the development cycle. Here we demonstrate how to test requirements before they become part of the requirements specification. The Quality Gateway rejects out-of-scope, gold-plated, non-viable, incorrect and incomplete requirements.

• **Managing your Requirements**
  Managing requirements varies with the kind of development method you plan to use. We look at strategies for your requirements project from the waterfall process through to agile techniques. The use of the requirements knowledge model is discussed, along with how to prioritise requirements, and how to resolve conflicting requirements. We take a quick look at tools to help manage requirements.

• **Your Requirements Process**
  You discuss and determine how to make your own requirements process as effective and efficient as possible. This involves incorporating your own organisational processes into the requirements activity. You build a model of how you will use what you have learned when your return to your own work place.

  **Workshops**
  We want you to use this right away. Each of the teaching chapters is reinforced with a workshop where you apply the concepts presented in the seminar. Participants work in teams to discover, specify and evaluate requirements for a significant system by:

  - Defining the project’s scope, its goals and the relevant stakeholders
  - Identifying business use cases and product use cases
  - Prototyping the product to find hidden requirements
  - Applying the requirements specification template
  - Defining functional and non-functional requirements
  - Deriving the fit criterion, or measurement, for the requirements

**There’s More . . .**

• Your instructor is not an “announcer”. He or she has real-world experience.
• You learn industry-proven requirements techniques.
• You can discuss your own requirements issues with your instructor.

• This course introduces the concepts of business use cases and product use cases as the most convenient way to manage your requirements.

• We show you how to use fit criterion to bring precision to your requirements.

  • Teaching chapters are reinforced with hands-on workshops.
  
  • In the final session, through discussions, interaction and demonstrations, you ensure that you have the requirements process that is most suitable for your organization.
  
  • You receive the Volere Requirements Specification Template (downloaded over 20,000 times) with advice on how to make this your own template.
  

Mastering the Requirements Process / 6