

Extending Requirements - a Practical Workshop



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Extending Requirements

Taking your requirements to the next level. This seminar shows you how to build on your existing expertise and integrate requirements into project management for the maximum effect.

This seminar gives you:

- A way to select the lightest requirements process that will work for your project
- Approaches to managing requirements where you have multiple components in the solution
- Techniques for building and maintaining good stakeholder relationships
- How to tell the cost and value of a requirement
- Techniques for choosing appropriate levels and groupings of requirements

Extending your requirements skills

This workshop extends what you know about requirements and gives you ways of taking your projects to a higher level of requirements excellence.

The last five years have seen considerable improvements in the techniques and processes we use to gather and communicate requirements. Our Volere requirements template has been used by a wide variety of organisations all over the world. The successful application of connecting analysis modelling to requirements, requirements templates, fit criteria for individual requirements, quality gateway testing techniques and trawling techniques, have highlighted other areas where we need to improve our requirements skills.

In this workshop we show you ways of choosing the best set of requirements to give you a competitive edge and still get your product to market on time, including techniques for quantifying the business value of investing in requirements. We also address the need to anticipate market opportunities by creating and inventing visionary requirements. And we address the question of dealing with requirements for existing systems along with techniques for managing meta projects – large projects made up of a number of smaller ones.

A good requirements engineer has the skill of helping a wide variety of people communicate with each other. The project sociology structure in this seminar helps you to discover the correct stakeholders for your project. Then we give you proven techniques for helping them to be involved in the appropriate parts of the project, and even more importantly to stay involved throughout.

Is this for me?

This seminar is appropriate for **business analysts, systems managers, project leaders, consultants** and **systems analysts** and **planners**. The material is aimed at people who are experienced requirements engineers and are already familiar with business events, product use cases, context models, functional requirements, non-functional requirements and constraints. The sister seminar, **Mastering the Requirements Process**, covers all of these concepts.

What will I learn? What will I be better at?

- **eXtreme Requirements**

A light or agile process is one that gives you fast results with the minimum of waste. Waste is categorised by activities that do not give you a tangible benefit. Techniques like rapid application development, extreme programming and dynamic systems development all contain elements that you can use to speed up your requirements process by making it slimmer. However you need to balance the slimness of your process against the need to build products that satisfy relevant requirements. Here we show you how to understand the requirements ingredients and your own critical success factors and how to use these to make your requirements more effective. We also examine which detailed requirements attributes you need to trace and which ones you can afford to ignore. We also talk about how and when to separate a solution from a requirement.

- **Project Sociology**

Who are the stakeholders? Where are they? How can we interest them in the project? How can we keep them interested? Who needs to know about which aspects of the project requirements and why? If you have the answers to these questions then you can build and maintain the sociological structure that your project needs to survive. We draw on knowledge from sociology, family therapy, philosophy and psychology to explain how to do a project sociology analysis for building and maintaining a collaborative project.

- **Inventing Better Products**

The traditional approach to requirements is to find out how the user works, ask him what he wants, and specify and build it. However people often do not know what they want or need, or they cannot imagine what the world might be like in the future or what is possible. During requirements, rather than just duplicating what we have, we need to consider how we can invent something better. Here we talk about how to invent, and how to inspire people to come up with new ideas.

• Using Stories in Requirements

Human intelligence is concerned with taking our experience and applying it in new ways. We tell stories to one another as a way of communicating our experience. Requirements engineers can use stories to discover requirements by building different scenarios of a situation. We also use stories to drive requirements workshops and to help us create innovative requirements to make our products more competitive.

• Costs and Benefits

How much do requirements cost and what are the benefits? We quantify requirements so that we can measure how much they cost to gather and implement, and compare that to the benefit that they deliver. We discuss ways of prioritising and negotiating requirements in the way that best fits your project sociology. We treat requirements as a business investment and consider ways to quantify business value. We also discuss how to take advantage of requirements reuse.

• Meta Management and Multi-Technology

The larger your project the more need there is to manage the connections between the pieces. Meta-management is concerned with keeping track of connections between tasks, people and technologies, and managing changes in the most time efficient way. You can apply meta-management principles to the pieces of one large project or to the project for managing a number of inter-dependent projects. Here we identify the components that need meta-management along with approaches for keeping track of the dynamics.

• Requirements for Existing Systems

Changes or additions to an existing system have some special requirements considerations because they have the potential to produce all sorts of unexpected ripples. Here we examine some approaches for analysing new requirements and assessing the impact (from the point of view of cost, benefit, effort, delay) on other parts of an existing system. We also look at ways of communicating new requirements to the variety of people who might be affected by them.

• A Skinny Framework

We start with a minimal framework of deliverables and checkpoints and then modify it to fit a variety of projects with different sociologies and different critical success factors. We look at ways of identifying potential communication chasms and requirements black holes and designing feedback loops to cater for them.

Workshops

This course includes intensive workshops that give you the opportunity to apply the concepts presented. The case study is a multiple technology project involving a mixture of sub projects concerned with embedded software, a web site, COTS software, custom built software and business processes. Participants work in teams and explore the extended requirements ideas by:

- Defining the critical requirements success factors
- Developing a project sociology map
- Doing communication demand analysis
- Inventing creative requirements
- Using requirements stories
- Quantifying the requirements costs, benefits and value
- Using meta-management principles
- Analysing requirements for an existing product
- Planning your Skinny Framework

Participants also get the chance to interact personally with the instructor, receive advice on their own situations, and discuss how the ideas from this seminar can be implemented in their own work environment.

Learning from Experience

Suzanne Robertson and James Robertson are principals and founders of The Atlantic Systems Guild, a London, New York and Aachen based think tank founded in 1983.

Suzanne and James are co-authors of *Mastering the Requirements Process* (Addison-Wesley 1999) a book that provides guidance on finding, writing and managing requirements. Together they developed the *Volere* requirements template and process, which has been adopted by companies all over the world as their requirements standard.

James works with his clients, teaching and consulting on requirements and how to adapt modern software development techniques to fit specific projects. His current research includes ways to discover and invent requirements to make more creative and competitive products.

Suzanne teaches project groups about requirements, runs project start-up meetings and requirements reviews. She is the editor of the Requirements column in IEEE Software.

How do I get it?

You may contact the Atlantic Systems Guild directly <http://www.systemsguild.com>. Alternatively, we have agents worldwide who will be happy to make the arrangements for you:



Australia contact DP Education <http://www.dped.com.au/>



Denmark contact Iocore <http://www.iocoreconsulting.dk>



Italy contact Technology Transfer S.r.l. <http://www.tti.it/>



Benelux and Germany contact QA Systems <http://www.qa-systems.com/>



United Kingdom contact IRM UK Strategic IT Training <http://www.irmuk.co.uk/index.htm>



United States contact Software Quality Engineering <http://www.sqe.com/>