



THINKTANK CONSULTING
PROJECTS. PROCESS. OPTIMIZATION.

ADMINISTRATIVE DETAILS

Duration:

2 days

Instructor:

Jamal Moustafaev, MBA, PMP

Class Limit:

up to 20 students (suggested)

List Price:

\$1,095 per student

Discounts:

Available for larger (>10) groups and for multiple orders

Location:

Client's site

Materials Provided:

Student's Coursebook (with lecture slides)

Professional Development Units:

Earn 16 PDUs!

WHO SHOULD ATTEND

- Experienced business analysts in the software development or IT industries
- All developers, architects and testers who are essential to the success of any technology project
- Technical people who have been recently promoted to the requirement analysts positions
- Project managers who work on projects and frequently have to assume business analysis responsibilities
- Managers and directors who want to better understand the challenges faces by requirements engineers and want to learn some universal skills
- Business representatives (e.g. sales, marketing and finance people) who frequently have to work with IT and software development teams

From Waterfall to Agile - Practical Requirements Engineering

INTRODUCTION

This course is a result of:

- Close to fifteen years of working as a Process Improvement Consultant, Project Manager and Requirements Analyst
- Experience in a variety of industries and exposure to a multitude of software development methodologies
- Teaching Requirements Engineering, Project Management, Use Cases and Estimation courses in corporate environments and at British Columbia Institute of Technology
- Successful presentations at various conferences (rating of at least 4.5 out of 5 from attendees)
 - Business Analyst World
 - PMI Research Conference
 - PM Society of Vancouver
- Publications on requirements engineering, estimation, project management, IT strategy and software process improvement
- Multitude of books and articles related to requirements engineering, estimation, process improvement and project management.

WHAT TO EXPECT FROM THIS COURSE

- This course is an attempt to look at the requirements engineering from three possible angles:
 - The traditional or waterfall methodologies,
 - The agile projects and
 - The "something-in-between" approaches
- Each section begins with an "Agility Guide" explaining in detail how to apply the knowledge obtained in the course to actual projects
- Multiple cases studies taken from the software industry and outside of it to illustrate the key points
- Relevant and fun exercises to practice the techniques learned in the course
- Strong focus on practitioner's rather than academic view including:
 - Interviewing
 - Business Process Diagrams
 - Scenarios
 - Apprentice model
 - Workshops
 - Brainstorming sessions
- Non-technical skills needed by business analysts
 - Conducting meetings
 - Dealing with difficult people
 - Resolving conflicts
- Strong focus on the "Problem vs. Solution" and "Requirement vs. Design" dilemmas
- A discussion of creativity and fostering innovation
- Review of overlaps and intersections of requirements engineering and project management
- Class discussions, lots of exercises and question/answer sessions
- Review of typical Vision and Scope and Requirements Specifications templates



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INSTRUCTOR'S BIO

- Jamal Moustafaev, MBA, PMP
- President and Principal Consultant - Thinktank Consulting
- Author of the book “**Delivering Exceptional Project Results: A Practical Guide to Project Selection, Scoping, Estimation and Management**” to be published by J. Ross publishing in April 2010
- Frequent contributor to various software development publications
- Presenter at IT conferences and seminars
- Teaches project management courses at BCIT

ABOUT THINKTANK CONSULTING

- Project Management and Requirements Engineering consulting and outsourcing
- Process improvement audits & programmes including:
 - Business Process Re-engineering
 - Change Management
 - Requirements engineering
 - Estimation
 - Project management
 - Portfolio management
 - IT/Business Alignment
- Training
 - “*Successful Hands-On Management of IT and Software Projects*”
 - “*From Waterfall to Agile - Practical Requirements Engineering*”
 - “*Practical Portfolio Management - Selecting & Managing The Right Projects*”

THINKTANK Consulting

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DETAILED COURSE OUTLINE

Module 1: Introduction To Requirements – Why? What? Who?

- Examine the state of the software industry
 - Case Study: “The failed anti-aircraft weapon” story
- What are the root causes of our problems?
- Defining requirements
 - What is a requirement?
- Defining the role of a Business Analyst
 - Case Study: “The executed sailor” story

Module 2: Kick-Starting The Project

- Agility Guide for the blastoff
- How many degrees of freedom do you have?
 - Three degrees of freedom model
 - Five degrees of freedom model
- How do we foster creativity?
 - Case Study: The British redcoats and American revolutionaries

Module 3: How And Where Do You Find Requirements?

- Agility Guide for elicitation stage
- Where do you find requirements?
- What types of requirements exist in users’ minds?
- Types of questions you should be asking
- Which techniques are the best and when?

Module 4: Functional and Non-Functional Requirements

- Agility Guide for functional requirements
- Why bad requirements happen?
- Requirements vs. Design discussion
- Agility Guide for non-functional requirements
- A look at non-functional requirements
- Why prioritize requirements?

Module 5: Peer Reviews

- Agility Guide for peer reviews
- Why do we need peer reviews?
 - Case Study: Israeli Air Force – New Autopilots
- How to conduct peer reviews?
 - Words to watch out for
- Agility guide for measurability
- Imposing measurability on requirements
- How do you know when to stop?

Module 6: Meetings, Conflicts, Difficult People

- Agility guide for meetings
- How to make meetings work?
- What are the types of conflicts and how to deal with them?
- What can you do about “difficult people”?
- How to use whiteboard and posters efficiently

Module 7: Managing Requirements

- Agility guide for managing requirements
 - Case Study: The Never Ending Computer Game
- How do you manage the requirements?
- Agility Guide for change requests
- Assessing the impact of the change

Module 8: Requirements – Miscellaneous (But Necessary) Topics

- How are requirements related to estimation?
- What are the lessons learned for requirements success?
- Capability Maturity Model (CMM) introduced
- Requirements and process improvement
- Requirements troubleshooting guide