



Metrics Based Training

Techniques for Making the Tough Decisions for Software Projects

Total Metrics training focuses on the issues you face in planning, implementing and supporting software projects.

Our metrics based governance techniques improve the outcomes of your project decision making such that your decisions are based on facts rather than opinions and therefore easily communicated, verifiable and auditable.

Total Metrics training teaches leading edge techniques to enable you to confidently objectively answer questions such as:

- How big is your project and how can you have confidence that the project cost estimates are reasonable? – See [Module 1](#) – Project Estimation & [Module 2](#) – Project Sizing
- How cost effective is your development process and would it have been cheaper to outsource? – See [Module 3](#) – Governance & Benchmarking
- How can you know the developers are providing value for money?
- Is the change you requested really worth what you were charged? – See [Module 1](#) – Project Estimation & [Module 2](#) – Project Sizing
- AND more importantly should the project have ever been started? – See [Module 4](#) – Investment Management Standard

ABOUT TOTAL METRICS

Total Metrics is recognized as leading the world in its training on metrics based project governance – we are the only training company, in the world whose trainers:

- Represent their country on the ISO/IEC, and ISBSG standards for Size Measurement and Benchmarking
- Were developers and reviewers of the IFPUG and COSMIC size measurement standards
- Are officially certified in the Investment Management Standard, IFPUG Functional Size Measurement, COSMIC Size Measurement and Accredited Measurement Specialists to gold level
- Are tertiary qualified in teaching and Information Technology
- Have over 20 years IT and Metrics experience
- Have been giving measurement and estimation training world wide since 1994

Our training is '*module based*' so you can customize your options and choose the modules that are appropriate for your immediate and future needs.

Module 1 Can I trust the cost estimates for my Project? <i>Practical Software Project Estimation</i>					
Topic	Major Concepts	Duration (day)	Audience	Pre-requisites	Templates and Takeaways
1	Principles of Software Project Estimation	DAY 1	Business Analysts, Project Managers, Team Leaders or people involved in software development projects who require knowledge of software estimation techniques	Familiar with the Software Development Process	ISBSG Estimation Workbook, ISBSG Industry Data, Total Metrics Outline Method Size Estimation
2	Bottom-up Vs Top Down Estimation				
3	Estimating Project Size at Planning stage				
4	How to use Industry data for Early Estimates				
5	Estimating Project Effort , Schedule and Cost using Parametric models, Comparison and Analogy				
6	Practical exercises in Software Project Estimation				

OUTCOMES AND BENEFITS:

- Increased management confidence that project estimates are based on quantitative standardized proven methods
- Reduced risk of projects being over budget and late or cancelled.
- Formal methods to easily verify supplier quotations

Module 2								
Is this project bigger than we think?								
Functionally Sizing a Software Project								
Topic	Major Concepts	Duration (2 days)	Audience	Pre-requisites	Templates and Takeaways			
1	Overview - What is Functional size (function point analysis) and how can it be used to monitor Software Development Productivity and Quality	DAY 1	Business Analysts, Project Managers Team Leaders or people involved in software development projects who require knowledge of how to do detailed accurate functional sizing and managing size of software on an ongoing basis	Participants to have a background in software development or experience working as part of a software development team, to the level that they can read and understand Functional Requirements and understand the concepts of Data modelling	SCOPE Project Sizing Software (Evaluation copy valid for 1 month)			
2	What is required to measure the functional size of software?							
3	Analysing the Functional Components of the software - preparing to measure							
3	Practical Workshops - Students Functionally size a real Project Specification							
	Understanding the IFPUG Function Point Standards Rules to measure functional components - Part 1							
4	Understanding the IFPUG Function Point Standards Rules to measure functional components - Part 2	DAY 2				Business Analysts, Project Managers Team Leaders or people involved in software development projects who require knowledge of how to do detailed accurate functional sizing and managing size of software on an ongoing basis	Participants to have a background in software development or experience working as part of a software development team, to the level that they can read and understand Functional Requirements and understand the concepts of Data modelling	SCOPE Viewer Software (free for ongoing use)
5	Measuring the Size of a new Development Project							
6	Measuring the Size of Projects that change the functionality of a Package or Implemented Software							
7	Ongoing Management and Measurement of size over the life of a software application							
8	Practical Workshops - Students Functionally size an Enhancement Project Specification							

OUTCOMES AND BENEFITS:

- Formal Industry standard methods for quantitatively scoping projects such that size can be objectively compared with past and future projects
- Requirements changes can be formally quantified so pricing variations can be easily agreed and verified between developers and users
- Industry comparable project size enables industry data to be used to verify estimates and compare project cost effectiveness

<p align="center">Module 3</p> <p align="center">Is our software development process cost effective?</p> <p align="center"><i>Using Metrics for Project Governance Benchmarking and Process Improvement</i></p>					
Covered	Major Concepts	*Duration Hours	Audience	Pre-requisites	Templates and Takeaways
1	How to cost effectively implement Software Functional Sizing	2			
2	How and when to use Metrics to support Project Governance and Contract Management	2			
3	Performance Benchmarking – An Organizational Framework for Internal and External benchmarking	4	Middle Management	Ideally attendees will have attended either Module 1 or 2 to gain an understanding of the concepts of functional size measurement and using Industry Productivity and Quality data	Various templates
4	How to implement Measurement for Process Improvement	2	Project Managers, Team Leaders or people responsible for managing software development projects		
5					
6	Strategies to Manage IT Projects as an Investment	2			
7	Implementing Software Measurement - A Case Study based on ISO15939	1			
8					
9	Key Result Areas, Key Performance Indicators	1			

***Course = 1 day - Select any 6 hours of Topics to customize your own training program**

OUTCOMES AND BENEFITS:

- Methods for communicating performance and costs between developers and users focusing on outcomes delivered rather than resources consumed
- Knowing where your strengths and weakness are so that you can focus improvements where they have the most effect

<p align="center">Module 4</p> <p align="center">Is this Software project the best way to spend our money?</p> <p align="center"><i>Investment Management Standard</i></p>					
Topic	Major Concepts	Duration (1 day)	Audience	Pre-requisites	Templates and Takeaways
1	Background of the Investment Management Standard	DAY 1	Project Managers, Senior Management Business Management or decision makers responsible for proposing and approving Project and their funding	Appreciation of the need to assess a proposed project for its business value prior to progressing to Business Case or RFT	IMS templates Example KPIs
2	Investment Logic Maps				
3	Benefits Management Plan				
4	Key Performance Indicators' – how to build good KPI's				
5	Concept Brief – what is the financial impact of the investment				

OUTCOMES AND BENEFITS:

- Ensures that only projects with a sound Investment Logic proceed to Business Planning Stage
- KPIs measure project benefits providing ongoing evidence of investment value for management reporting
- Formal methods of Investment assessment increase chance of project approval

For Pricing Contact us at: admin@totalmetrics.com