
1-day Workshop

“Software Management by Numbers”

Introduction

Reducing delivery time, increasing quality, and increasing productivity have always been goals of application development organizations. With tight labor markets and increasing pressure to deliver ever faster and cheaper, these goals are more important than ever. So it is not surprising that the popularity of the quality standards and process models has grown over the past few decades. Their premise is:

- Increased customer satisfaction by increasing the quality of the software.
- Increased responsiveness of your organization by reducing the delivery time of your software projects.
- Increased productivity of your organization, or, conversely, reducing the cost of the software organization while maintaining the same delivery speed and quality.

Meaningful Information

Successfully implementing improvement initiatives requires the institutionalization of a measurement process. Within a project or organization, it is often easy to get people enthused about metrics. But all too often, this enthusiasm does not translate into action. Even when it does, it is unlikely to be sustained, people might get lost in incomplete details.

Getting too little or too much data is easy, identifying the relevant data and converting it to meaningful information for everyone is the challenge

Management needs the ability to step back from the details and see the bigger, complete picture. The critical success factor here is defining Key Performance Indicators (KPIs) that cover a multi-dimensional view that goes far beyond an earned value chart. The goal of these KPIs is to foster greater visibility and faster reaction to opportunities and threats, hereby enabling informed decision-making. Once management starts actively using such KPIs, projects are forced to bring and keep their measurement process in place.

In this workshop, a powerful set of 16 best practice KPIs is presented, using a multi-dimensional perspective, together with benchmarking data (industry, best-in-class). This enables a quantitative assessment of a software manufacturer's capability and define an underpinned business case for improvements with quantified targets.

Target Audience

Software measurement and metrics specialists, project managers, functional managers, testers, quality engineering, developers, and other software project stakeholders involved in selecting, designing, implementing and utilizing software metrics and measures to obtain information about their software products, processes, services and projects.

Duration

1 day (08:30 – 17:00).

Program

1. What is Software Capability?
 - a. Software industry today.
 - b. Payoff of process improvement?
 - c. Schedule/effort trade-offs.
 - d. Rules of thumb for estimation.
2. Best practice Key Performance Indicators.
 - a. Project performance (schedule, effort, staffing rate, productivity).
 - b. Process efficiency (cost of quality).
 - c. Product scope (features, size and re-use).
 - d. Product quality (complexity, test coverage, defect density, removal efficiency).
3. Benchmarking.
 - a. Average industry data.
 - b. Best-in-class industry data.
 - c. Gap analysis.
4. Improving Software Capability.
 - a. Prioritization and target setting.
 - b. Business case definition.

Focus on exercises and quantitative techniques

This workshop is taught through (limited) lecture and interactive discussion. Actual examples from the software industry are utilized to make the information relevant. The focus is on team exercises (one case study), in which learned skills are practiced. The emphasis of this workshop is on *quantitative* techniques that allow the attendees to transition the skills learned in this workshop to their own work environments. Solutions to all exercises will be provided.

Customization

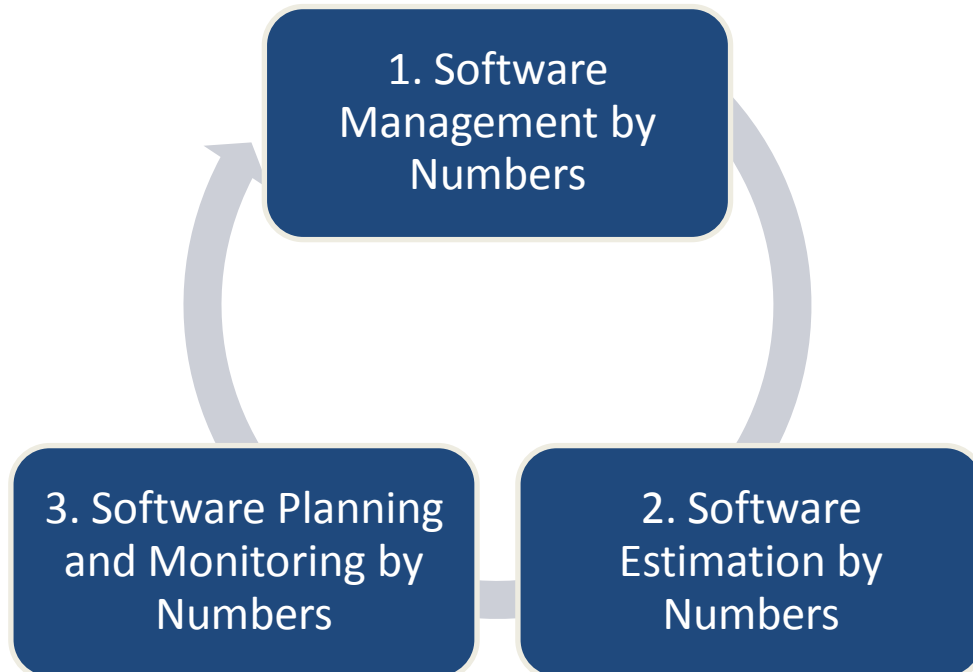
The Software Benchmarking Organization can also customize this workshop or any of our other standard workshops or develop unique software engineering, quality and project management workshops to meet your exact in-house training needs and specifications. For example, class exercises can be tailored to include actual examples from your organization in order to make the workshop more relevant to your environment.

Further information

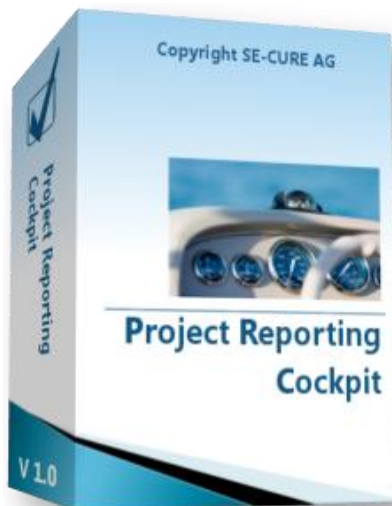
In case you are interested in this workshop, contact Dr. Hans Sassenburg:

T +41 33 733 4682
M +41 79 231 6600
E sassenburg@sw-benchmarking.org
W www.sw-benchmarking.org

In the series “**Software Management by Numbers**”, 3 powerful workshops are available. The preferred order of taking these workshops is given below; however each workshop can also be taken independently.



These workshops are based on two developed products by SE-CURE AG:



This product enables you to define and monitor a set of Key Performance Indicators (KPIs) for your software project. Historical, target and actual values are displayed in overviews and charts, from which information can be consumed at a glance.



This product provides powerful instruments to project managers and measurement specialists to plan, monitor and control their projects, using the same Key Performance Indicators.

Download a free trial version at www.se-cure.ch/Downloads.html!