

METRICS Training

Introduction

To control anything, you need to measure it. This is a well known statement; this statement is so apt for any organization. There are four reasons for measuring software processes, products, and resources: (1) to characterize; (2) to evaluate (3) to predict and (4) to improve. This work shop will familiarize the participants with the basics of metrics. How to measure, what to measure and how to analyze with few analysis techniques.

Values and Benefits

- The participants will Understand various analysis and measurement techniques.
- Plan, staff, execute, manage and improve the metrics process within the organization
- The participants shall Appreciate the need for measuring at frequent intervals and analysis if results

Course Material

On the day of the course, participants will receive a copy of course notebook with copies of the course slides.

Audience

Product developers , Process implementers, QA, SEPG members, Auditors, Consultants, Anyone interested

Methodology

- Lead faculty presentation and facilitation
- Participant led brainstorming
- Case studies and exercises
- Interactive and rigorous Q & A
- Discussion to satisfy students needs in their work environments
- Sharing industry best practices

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	Topics
	A. Introduction
	<ul style="list-style-type: none"> • Why Measure <ul style="list-style-type: none"> ➤ Measurement Purpose • Measurement entities and Attributes • Basics of Measurements
	B. Basic Tools of Metrics – Introduction
	<ol style="list-style-type: none"> 1. Histograms 2. Cause-And-Effect (Fishbone) Diagrams 3. Check Sheets 4. Pareto Diagrams and Root cause 5. Run Charts (Graphs) 7. Scatter Diagrams
	C. Metrics
	<ul style="list-style-type: none"> • Interpreting Control Charts: Metric Based MIS. • Setting up Control Limits – Baselines using standard deviation. • Case study / exercise on usage of control charts. • Exercises / usage of other metrics tools like histogram, Pareto.
	D. Analysis
	<ul style="list-style-type: none"> • Using Fish Bone Diagrams • 5 times Why techniques • Other Analysis techniques • Exercise on Metrics Analysis
	E. 10 - Step Measurement Plan
	<p>Step- 1. Identify your business goals.</p> <p>Step- 2 Identify what you want to know or control.</p> <p>Step- 3. Identify your sub – goals.</p> <p>Step -4 Identify the entities and attributes.</p> <p>Step- 5 Formalize your measurement goals.</p> <p>Step- 6 Identify your measurement question & indicators.</p> <p>Step- 7 Identify the data elements.</p> <p>Step- 8 Define and document measures and indicators.</p> <p>Step- 9 Identify the actions needed to implement your measures</p> <p>Step-10 Prepare an implementation plan</p>
	GQM (Goal Question Metrics) Approach
	Case study for participants and Presentation
	Q &A