RG Freeman group

Identifying Problems and Providing Effective Solutions

2 Day Workshop – Course PM21

PM21 – Identifying Problems and Providing Effective Solutions
Course ID: PM21
Credits: 14 PDUs
Course Duration: 2 days
Course Level: Basic/intermediate

Course Abstract

In an environment of rapid change, an organization's outputs: its products, projects and processes – must all meet business objectives to make effective and efficient use of scarce resources. These outputs also have to satisfy the needs for which they were initiated by the organization, which requires first *identifying* these needs and then *analyzing* the best solution to fill them. At its heart, the ability to identify needs and then propose effective solutions is related to accurately measuring quality, in three dimensions:

1. <u>Process</u> quality to ensure that processes are effective and efficient
2. <u>Product</u> quality to ensure that the product of process improvement projects meet the needs of stakeholders
3. <u>Project</u> quality to ensure that the project itself meets the quality standards established for it

Failing to meet any one of these quality dimensions can create problems, waste critical resources and result in dissatisfied stakeholders. Meeting these three dimensions of quality requires the application of a broad array of skills that include:

- Identifying customer requirements
- Improving processes used in the project and those that are the product of the project
- Identifying quality standards
- Identifying the root causes of problems and making good decisions
- Employing process control tools like run charts, statistical sampling and control charts
- Making good project tradeoffs and decisions about quality standards for processes
- Measuring outcomes
- Instilling a sense of quality control in project team members
- Employing methods and tools related to the modern quality movement
- Understanding and managing the cost of quality

This two-day workshop focuses on identifying the causes of business problems, building solutions that answer those problems, and ensuring that those answers meet stakeholder quality standards. It is highly interactive and designed to allow participants to both acquire and apply skills that can serve them well in the workplace. It utilizes a case study throughout the workshop. Finally, this workshop is compliant with the Project Management Body of Knowledge (the *PMBOK® Guide*, Fifth Edition and draws insights on quality management and requirements from the *Business Analysis Body of Knowledge* (the BABOK®).

Target Student:
The target student for this workshop is a project manager, a business analyst working on improving organizational processes, team members engaged in process controls or quality improvement, or a process

stakeholder whose job performance involves effective interaction with organizational processes.   General managers with the intention of improving their understanding of process improvement and project management would also benefit from this workshop.

Prerequisites:
There are no prerequisites for this workshop.

The Goals of this Workshop
The goals of this workshop are to:
- Help participants increase their ability to satisfy stakeholders by creating projects, products, and processes that meet the needs of those stakeholders
- Create an understanding of the challenges of identifying stakeholder problems and concerns
- Explore the use of quality management tools and the lessons to be learned from the modern quality movement
- Provide an understanding of basic and more advanced quality management tools

Course Outline
  Day 1

Module 1: Introduction to the Workshop
- In this module, we will detail the workshop objectives and schedule and identify participant interests and concerns.

Module 2: Problem Analysis Fundamentals and the Link to Quality
- In this module, we'll examine the tenets of the modern quality movement and its pioneers, definitions of quality, and how quality management is linked to problem analysis.

Module 3: Identifying Problems and Managing Quality Solutions
- In this module, we'll examine the challenges of identifying user definitions of quality and the tools for eliciting accurate requirements.   We'll describe the attributes of sounds requirements and techniques for analyzing and documenting requirements.   Last, we'll examine the methods for ensuring that processes satisfy stakeholder needs.

Module 4: Problems and Root Cause Analysis
- In this module, we will examine techniques for identifying the root causes of business problems.   We'll describe methods for gathering information, applying root-cause diagrams and analysis, and identifying causes that are susceptible to corrective action.
Day 2

Module 5: Managing and Improving Processes
- In this module, we'll examine the basic tools for managing and improving process quality.   We'll identify the role of random errors and the eight principal tools of project quality management identified in the *PMBOK® Guide*, Fifth Edition.

Module 6: Advanced Tools for Quality Management
- In this module, we'll investigate some more advanced tools for process quality management.   The tools that we will explore include process and failure mode effect analysis (PFMEA), fault tree analysis, gap analysis, affinity diagrams, statistical process control (including Lean and Six Sigma), and process capability analysis.   We'll engage in an exercise to identify quality improvement methods that we'll employ on our projects and organizations.

Module 7: Workshop wrap-up
- In this module, we'll conclude the workshop and respond to remaining questions.   We'll identify additional resources and evaluate the workshop