Managing Construction Risk

A Two-Day Workshop

Two Gold Seal Credits

Intro:

Construction projects are exposed to various kinds of risk events at all times. A person involved in construction projects should have the ability to anticipate, evaluate and deal with such risky events. Like other aspects of construction projects, risk should be managed along the lifecycle of a project managing risk involves qualitative and quantitative considerations, as well as striking a calculated balance between risk and return. As a temporary business venture, a construction project is faced with choices that require informed decisions by the project manager and leading personnel.

Purpose:

The purpose of this workshop is provide participants with the working knowledge required to identify, assess, and design risk management plans for construction projects. The content will cover practical and easy-to-use tools, templates and procedures that guides the participants through the process of composing a risk management plan for a given construction project. Guided by the facilitator, group activities will allow the participants to apply the content of the workshop and learn from each other, in the process. The workshop includes substantial coverage of the risk of lateness, which is not uncommon in the construction industry at large.

Objectives:

Upon completion of this workshop, the participants will be able to

- Define risk in construction activity and identify risky events in a given project
- Describe risky events and provide a qualitative assessment for such events
- Quantify the identified risky events in order to tell apart small from big risk
- Become familiar with the different risk treatment strategies available to them
- Recalibrate the risky event and devise contingence plans
- Construct risk-return analysis for project lateness

Outline:

PMI Definitions
- *Project and Planning*
- *WBS*
- *Risk Management Plan*

Risk Identification
- *WBS as a basis leading to RBS*
- *Team brainstorming is key*
- *Lessons learned from previous projects*
- *Risk may be identified in all WBS levels*
- *Areas to look for risk in construction*
- *Risk register*

Risk Response
- *Failure cause analyses*
- *Risk assessment and prioritization*
- *Risk response strategies*
- *Risk Response Matrix (aka FMEA)*

Failure Response
- *Risk owner*
- *Trigger signal*
- *Contingency plan*
- *Failure Response Matrix*

Project Scheduling
- *From WBS to elemental tasks*
- *Schedule ingredients*
- *Network diagramming*
- *Critical path calculations*

Schedule Uncertainties
- *Risk due to uncertainties*
- *From best to worst case scenarios*
- *Uncertain tasks durations lead to uncertain project duration*
- *Quantifying and evaluating the risk of lateness*

The Facilitator:

Brian Amouzegar is the founder and president of Plantek Productivity Consulting Inc. A "capacity building" catalyst, Plantek provides world-class consulting and training to improve operational efficiencies, enhance quality of products and services, and implement the most effective management practices. Brian holds a bachelor degree in industrial accounting, a master degree in industrial engineering and is pursuing his doctoral studies in engineering management. He is a senior member of the American Society for Quality, an ASQ certified Quality Engineer (CQE), Six-sigma Black Belt (SSBB) as well as a Project Management Professional (PMP). As a scholar-practitioner, Brian has a lifelong passion for education and teaches graduate and undergraduate courses in his area of expertise. He is an adjunct faculty with BCIT, New York Institute of Technology and University Canada West. Brian's international project experience spans over North America, Asia, Europe, and the Middle East.