



PROJECT MANAGEMENT PRINCIPLES & METHODOLOGIES

INTRODUCTION

In today's competitive global economy, virtually all organizations are project-based. Whether they are governmental, industrial or commercial ones, these organizations supply products or services intended to satisfy the needs and requirements of their clients by applying the principles and methodologies of project management to implement their projects.

Consequently, this seminar is designed to:

- Assist organizations in developing professional project managers who are aware of the strategic importance that project management plays in the achievement of the mission of their organizations
- Provide the fundamental knowledge and skills project managers need to successfully complete a project
- Increase the capability of organizations to deliver projects successfully by using appropriate processes and current best practices
- Understand the project manager's role in leading the way to better project performance and profits
- Understand the basic principles and methodologies of project management

WHO SHOULD ATTEND?

This intensive 3-day seminar is suitable for individuals from all industries, government bodies, non-profit organizations and anyone who are interested in learning techniques for effectively and efficiently managing projects as it is based on the best practices found in the Project Management Institute (PMI)'s "A Guide to the Project Management Body of Knowledge" covering the entire project life cycle:

- Portfolio managers
- Program Managers
- Project managers
- Project team members
- Members of Process Improvement Teams
- Contractors
- Owners
- Administrators responsible for managing projects
- Consultants
- Technical professionals and engineers moving into project leadership/management





Those new to the functions of project management, or preparing for a major project will find a solid grounding, and experienced managers looking for a refresher will also benefit from this seminar.

SEMINAR OBJECTIVES

- Establish project goals and objectives that are directly linked to stakeholders' needs and expectations
- Develop and use work breakdown structures
- Develop realistic and measurable objectives to ensure positive results for project performance
- Estimate project time and costs using proven techniques
- Establish an effective project control system and monitor efficiently project progress
- Use a practical, step-by-step process to manage project risks
- Identify threats and opportunities to your project, and weigh their relative values
- Identify and overturn the psychological barriers to risk in stakeholders
- Utilize tried and proven project management tools and techniques to get the jobs done on time, within budget and in accordance with client's requirements

TRAINING METHODOLOGY

The seminar will combine conventional teaching with a high level of participation; including an interactive approach to involving participants in discussion of topics; exercises; and encouraging participants to bring their own experiences forward for discussions and debates. Wherever possible, real examples and short case studies will be included from different industries around the world to make the course as relevant as possible. It includes concepts definition, experiential exercises, practical examples, dialogues and discussions, video presentations and case studies.

SEMINAR SUMMARY

The seminar provides participants with an excellent introduction to this highly specialized, process-oriented discipline. It introduces to them the foundational concepts of project management and shows them how to initiate, plan, execute, monitor, control and close a project. The intention is to offer participants essential steps for developing and defining goals and objectives, setting up the project plan, assigning and scheduling the work, establishing the budget, monitoring progress, and exercising control to achieve desired project results by meeting the project objectives with preset levels of quality expected by the client and being responsive to clients' needs and expectation.

SEMINAR OUTLINE

DAY 1 – Foundations of Project Management





The Nature of Projects and Project Management
Project/Program and Portfolio Management
From Strategic Planning to Project Management
Management Criteria versus Engineering Criteria
The Project Life Cycle
Managing the Triple Constraints
Managing the Triple “C” in Project Management
Managing Project Risks
Stakeholders In Project Management
Managing Stakeholders
The Project Manager’s Responsibilities
The Role of Senior Management
Steps in Managing a Project
The “Hard” Skills of Managing a Project
The “Soft” Skills of Managing a Project
Project Management Body of Knowledge (PMBOK)
Project Management Maturity Level
Typical Project Organization Structures
The Project Management Office (PMO) Concept
Basic Contract Types in Managing Projects
The Generic Planning and Control Cycle in Project Management

DAY 2 - Project Initiating, Planning and Scheduling

The Project Charter
Stakeholder Identification
The Imperative of Planning
Planning Definition
Project Planning Overview
The Project Plan
Developing the Mission, Vision, Goals and Objectives of the Project
Basic Project Planning Steps
Identifying Success Criteria
Developing the Requirements
Scope Definition
Procurement Planning: “Make or Buy” Decision
Defining the Work Breakdown Structure (WBS)
The Organization Breakdown Structure (OBS)
The Responsibility Assignment Matrix (RAM)
Defining and Sequencing Project Activities
Estimating Activity Resources and Durations
Staffing Management Plan



Scheduling the Project Work

Estimating Costs and Determining Budgets

The Performance Measurement Baselines (PMB)

Communication Planning

Quality Planning

Risk Management Overview

Definitions of Certainty, Risk and Uncertainty

Risk Relationship Between Information and Uncertainty

Definition of Project Risks

Definition of Risk Management

The Primary Aspects of Risk Management

Effective Risk Management Process Top Level Summary

Risk Management Planning

Risk Identification

Risk Issue Filtering

Risk Assessment and Prioritization

Qualitative Risk Analysis

Quantitative Risk Analysis

Risk Avoidance Plans

Risk Contingency Plans

Risk Tracking and Reporting Approach

Risk Management Organization and Responsibilities

Risk Management Plan Documentation and Risk Database Preparation

The Output of Risk Management Planning

Risk Management Planning Process Summary

Flow of Risk Management Planning Responsibilities

DAY 3 – Project Execution, Monitoring & Control

Directing & Managing Project Execution

Monitoring Work Performance Information (WPI)

Managing the Project Team

Managing Stakeholder Expectation

Project Deliverables Tracking

Project Control Definition

The Objectives of Project Control

Project Control Approach

The Earned Value Management (EVM) Concept: An Integrated Project Control Approach

Integrated Change Control

Quality Assurance and Quality Control (QA/QC)

Communication and Documentation Control

Procurement Administration

Risk Management Control Process





Risk Avoidance Plan Implementation
Risk Contingency Plan Implementation
Risk Reports and Reviews
Risk Activities Effectiveness Evaluation
Risk Management Plan Updates
Risk Management Control Process Summary
Flow of Risk Management Control Responsibilities
Risk Management Process Flow
Risk Management Best Practices

Project Closure

Management Challenges
Key elements of Successful Project Closure
Effective Project Closure
Project Closure Objectives
Project Closure Plan
Contract Closure
Administrative Closure
Project Closure & Contract Closure Interaction
The Punch-List Approach
Lessons Learned
Post-Project Evaluation
Success Celebration

Group Discussions, Practical Examples, Video Presentations and Case Studies

Seminar's Instructor: Dr. Nghi M. Nguyen, Ph.D., P.E., PMP, M.ASCE. President and CEO of NDV Project Management Services, Inc (NDV) since 1995, Dr, Nghi Nguyen has had more than 30 years of progressive, domestic and international consulting and training experience in the field of project/program/portfolio management on major construction, aerospace, defence and high-technology projects with leading Canadian and U.S. corporation such as the SNC-Lavalin Group, Lockheed Martin, CAE and the Canadian Space Agency and NASA. Prior to founding NDV in 1995, he served as Program Control Manager for the multi-billion dollar Canadian Patrol Frigate (CPF) program, the largest and most complex shipbuilding program in Canadian history for Lockheed Martin Canada (formerly Unisys Systems Canada).

As an internationally recognized project management consultant and trainer, Dr. Nguyen has assisted clients with project management approaches to effectively and efficiently complete projects and attain their objectives. He is a specialist in project management training, consulting, definition, development, identification of project objectives, constraints and methodologies. Dr. Nguyen worked as a project management consultant for the Canadian Space Agency (CSA) on projects associated with the International Space Station (ISS) program, the 16-nation effort, lead by NASA, to build the permanently orbiting laboratory in space, the largest and most sophisticated international engineering project ever undertaken in the history of the world as well as for SNC-Lavalin International on China's Three Gorges





hydro-electric development project, the largest construction project in the world to date, and was involved in a number of projects in the Information Technology (IT) and Oil and Gas (O&G) sectors, among them was the construction of the \$ 5 billion Hibernia Oil Production Platform in St John, Newfoundland, Canada. Dr. Nguyen has delivered project management seminars for the American Society of Civil Engineers (ASCE), International Institute for Learning, Inc (IIL) in the USA, EuroMatech and Britannia of the U.K., Glariden Global in Singapore and various organizations in Asia and Vietnam as well as those associated with the engineering organizations worldwide.

An internationally recognized speaker, author and presenter, Dr. Nguyen has written and presented numerous technical papers on project/program management related topics in international conventions and congresses in Canada, the U.S., Europe, Asia and the Caribbean, sponsored by professional associations such as the Project Management Institute (PMI), the American Consulting Engineering Council (ACEC), The Association for the Advancement of Cost Engineering (AACE) International, American/Canadian Society of Civil Engineers (ASCE/CSCE), the Pan-Pacific Business Association (PPBA), the American Institute of Aeronautics and Astronautics (AIAA), the Caribbean Council of Engineering Association (CCEA) and the Paris-based association Francais des Ingenieurs et Techniciens d'Estimation et de Planification de Projets (AFITEP). Since 1995, Dr. Nguyen has conducted numerous project management seminars for thousands of project managers practising in all industries in a variety of topics in many countries including Canada, the U.S.A., the U.K., France, Spain, Germany, the Netherlands, Austria, Norway, Switzerland, Cyprus, China, Hong Kong, Thailand, Singapore, Malaysia, Japan, Indonesia, Vietnam, Australia, New Zealand, the U.E.A.(Dubai and Abu Dhabi), Kuwait, Saudi Arabia, Colombia and Barbados.

Educated at McGill and Concordia Universities in Montreal, Quebec, Canada, Dr. Nguyen holds B.S., M.S. and Ph.D. degrees in Civil Engineering and Construction & Project Management, is a Certified Project Management Professional (PMP) and has been a part-time professor at the Faculty of Engineering and Computer Science at Concordia University, teaching project management courses at both undergraduate and graduate levels since 1997. He has also lectured under the United Nations Development Programme (UNDP), McGill University Executive Institute, the Maastricht MBA programme (a joint programme between the Maastricht School of Management of the Netherlands and the School of Industrial Management of Ho Chi Minh City University of Technology, Vietnam) and is a registered civil engineer and project manager in both Canada and the USA. Dr. Nguyen was certified as a PMP (Project Management Professional) by the Project Management Institute (PMI) in 1995. He served as a member of the Canadian Advisory Council (CAC), set up by The Standards Council of Canada (SCC) to participate in the development of the International Organization for Standardization (ISO)'s project management standard released in September 2012 as ISO 21500 for project management as well as provided recommendations as Draft Reviewer and Contributor to the PMBOK® Guide – Fifth Edition of the Project Management Institute (PMI) released in January 2013, both considered by project management professionals worldwide as globally and internationally accepted project management standards. Dr. Nghi Nguyen has also been serving the same role to the “soon-to-be-released” PMBOK® Sixth Edition to be published in 2017 by PMI.