

SSM 19 – CAPITAL, REVENUE AND MRO TECHNIQUES

Budget planning has both financial and strategic goals of the organization. It is essential to apply the tools and techniques of financial planning, capital management and cash flow analysis when considering investment into new capital projects.

Participants will develop advanced financial engineering and cash flow management skills through formal and interactive learning methods. The material has been designed to enable participants to apply all of the material with immediate effect back at the office through individual exercises, team projects, applicable case studies, group discussions and video material that will bring to life the skills acquired throughout the course.

Additionally, the seminar does not assume prior knowledge of the topics covered in the course. New concepts and tools are introduced gradually to enable participants to progress from the fundamental to the advanced concepts of asset-based financial engineering.

WHO SHOULD ATTEND?

This seminar is designed for program and project professionals, project leaders, project engineers, cost engineers, and other middle - senior project control and business services professionals who are responsible for or involved in securing project financing and managing cash flow on projects.

PROGRAMME CONTENTS

Session 1: Fundamentals of Asset-Based Financial Engineering

Introduction to Project Financing

- Project Financing versus Direct Financing
- Analysis of Project Viability
- Risk and uncertainty
- Implications of Risk for Project Financing
- Aligning Projects with Corporate Strategy
- Security arrangements
- Legal structures

Basic Tools for Economic Appraisal

- Simple Project Payback Period
- Time Value of Money
- Simple and Compound Interest
- Nominal and Effective Interest Rates

Appraisal Methods – Discounted Cash Flow Projections

- Net Present Value Analysis (NPV)
- Internal Rate of Return Analysis (IRR)
- Comparing NPV and IRR Analyses
- Interpolation and Non-linearity
- Time Equivalence

Session 2: Project Risk Exposure and the Cost of Capital

Rate of Return Computations (IRR)

- Determining the Internal Rate of Return (IRR)
- IRR for a Single Project using Present and Annual Worth
- Incremental Analysis
- Using IRR to Analyse Options with Different Lives

Benefit-Cost Ratio (BCR)

- Costs, Benefits, and Non-benefits
- Estimating the Benefit-Cost Ratio for a Single Project
- Comparing Mutually Exclusive Projects Using Incremental Benefit-Cost Ratios

Session 3: Financial Modelling and Project Evaluation

Financial Considerations for Project Planning

- Preparing Cash Flow Projections
- Accounting Years and Tax Years
- Incremental Costs and Benefits
- Working Capital Requirements and Operating Costs

Forecasting Cash Flows

- Opportunity Costs and Sunk Costs
- Determining the Economic Life of a Project
- Quantifying the Effects of Inflation
- Relevant Cash Flows over Differing Time Horizons

Session 4: Depreciation, Insurance and Taxation Costs

Depreciation

- Straight-Line Method
- Declining Balance Method
- Depreciation versus Amortization

Taxation

- Corporation Tax Rates
- Taxable Profit
- Capital Allowances
- Tax Payments
- Incorporating Tax in Cash Flow Models

Assessing the Terminal (Salvage) Value of a Project

- Perpetuity (Annuity) Method
- Price/Earnings Ratio Method
- Book Value Method
- Cash Flows for a Replacement Project
- Preparing Projected Financial Statements
- Sensitivity Analysis

Session 5: Preparing the Financial Plan

- Project Financing
- Long-term Financing
- Tax Considerations
- Estimating the Borrowing Capacity of a Project
- Loan Repayment Parameters
- Borrowing Capacity: Full Drawdown
- Borrowing Capacity: Periodic Draw-downs
- Owner Financing Using Bonds