FINANCIAL MODELING AND FORCASTING TECHNIQUES USING ADVANCE EXCEL TOOLS.

Course Description

(Available also for Customized Training by Duration, Venue & Fee)

(PARTICIPANTS MUST BE WITH THEIR COMPUTERS)

Programmed Description

Modeling techniques that this course teaches are used in investment appraisal, capital planning, budgeting, valuation, financial analysis, and forecasting to make accurate financial and business decisions at the right time. The course will deliver competencies in the use of Financial Tools designed for Account/Finance, Risk Management and Financial Control.

It is for delegates who already can create moderately complex spreadsheets and want to build models. The course will examine very briefly some foundational and intermediate topics and then progress to advanced functionality such as: Pivot Tables, Vertical Lookup (Vlookup), Goal-seeking and Solver, Cost of Capital, Ratio Analysis, Financial Forecasting, Profit Volume & Break-even Analysis, "What if", Investment Return Appraisal, Financial Model Design and Constructions, Project Evaluation and Sensitivity Analysis.

Learning Objectives

After completing this course, participants should be able to perform the following using excel models:

- Advanced financial performance presentation and analyses
- Loan management and loans schedules determination
- Product sales, marketers and distributors performance analyses
- Profit maximisation
- Product costing and pricing decisions
- Investment appraisals and capital rationing solutions
- Cost of capital determination
- Cash flow planning
- Business forecasting.

Pre-requisite

- Participants should already be using Excel on a regular basis.

Course Contents

DAY ONE

Data Modeling

- Meaning and Purpose of Financial Modeling
- Advance Referencing
- Date manipulation
- if and nested if's functions
- Pivot table & Chat
- INDEX & MATCH functions
- Filter and Advanced Filters
- Subthe organisation, Transpose
- Sum, Sum IF, Sum IF's analysis.

Formula Auditing Tools

- Revealing Formulae
- Tracing Precedents/Dependents
- Goto Special
- Linking sheets in the same file
- Linking different Excel files
- Using Edit, Links
- Viewing different files at once
- Saving a workspace
- Viewing different sheets at once
- Window Split
- Data consolidation.

Conditional Functions and Data Calculation

- Use If Statements, Nested If
- Use And, Or, Not
- Nesting If, And, Or, Not
- Use the Sumif, Countif, Averageif
- Apply Conditional Formatting
- Date Calculations
- Calculate working days
- Use the DAY(),MONTH(),YEAR() functions
- Create and use Time calculations.

Worksheet Management and Linking

- Link sheets in the same workbook
- Link cells in different Excel files
- Manage and edit Links
- View different files at same time
- Saving a workspace

- View different sheets at same time
- Data consolidation (within same file)
- Data consolidation (across workbooks).

Data Management List

- Create an Excel data list
- Use the Excel List Tools
- Use Autofilter
- Sort the Data
- Use the Advanced Filter
- Add Sub the organisations to a list
- Apply Data Validation to keep data clean
- Group and Outline your data
- Use the Data Form.

DAY TWO

Advanced Excel Charts/Graphs

- Create a Chart with keyboard
- Use the Chart Wizard
- Edit and Format a chart
- Change the Chart source Data
- Apply Trendlines
- Change Charts from objects to sheets
- Add labels and axes to chart
- Show specific Data Points
- Save custom chart types
- Change the default chart type
- Using the Chart Wizard
- Editing and Formatting charts
- Saving custom chart types
- Setting a default chart type.

Lookup Functions and Application

- Build the Vertical Lookup (Vlookup) function
- Build the Horizontal Lookup (Hlookup) function
- Build the Match and Index functions
- Build and use Database Functions
- Create A PivotTable
- Change the PivotTable layout
- Manipulate PivotTable fields
- Format the PivotTable and apply Styles
- Use Banding (Formatting)

- Group & Ungroup items
- Filter data in the PivotTable
- Insert calculated fields.

Pivot Table Creation and Manipulation

- Create A PivotTable
- Change the PivotTable layout
- Manipulate PivotTable fields
- Format the PivotTable and apply Styles
- Use Banding (Formatting)
- Group & Ungroup items
- Filter data in the PivotTable
- Insert calculated fields
- Change calculation options
- Change PivotTable Options
- Display and hide data in fields
- Lay out reports on worksheet
- Create a PivotChart from report
- Manipulate PivotChart fields.

Articulating Profit Volume & Break-even Analysis

- Creating break-even model
- Knowing when a business break-even
- Application in price strategy.

What If Analysis (Sensitivity Testing)

- Create and manipulate Scenarios
- Create and change Custom Views
- Build scenario Reports
- Use the Goal Seek tool
- Use Solver & Advanced Solver Features
- Build Data Tables
- Apply Data validation rules
- Read only and Pass wording of files.

DAY THREE

Building Financial Models

- Financial Model Design and Construction from scratch using Deterministic Approach (Du Pont format)

- Statement of Comprehensive Income (SCI)
- Revenue Modeling

- Building Statement of Financial position (SFP)
- Cash flows modeling.

Ratio Analysis and Ratio Interpretation from the Model

- Liquidity Ratios
- Activity Ratios
- Gearing Ratios
- Insolvency Ratios
- Profitability Ratios.

DAY FOUR

Capital Budgeting Techniques (Linear Programming)

- Multi-Product Mix Problem - Product Optimisation(Solver)
- Capital Budgeting Problem - Multi-Period Capital Rationing
- Investment Planning Problem
- Replacement Decision Problem.

Cost of Capital

- Debt Financed Business
- Equity Financed Business
- Weighted Average Cost of Capital.

Project Evaluation Techniques

- Present Value (PV)
- Future Value (FV)
- Payback period (PBP)
- Net Present Value (NPV)
- Internal Rate of return (IRR)
- XNPV
- XIRR
- MIRR.

Business and Financial Forecasting Techniques

- Forecast function
- Trend function
- Growth function
- Coefficient of determinant (R2) interpretation
- Business Break Even Analysis (Cost Volume Analysis Curve).

Introduction to Macro and VBscripting

- Review the purpose of Macros
- Record a macro
- Save a macro
- Edit a Macro.