



## Financial Analytics For Logistics

### Relevance of Analytics in Finance

In today’s business environment importance of analytics cannot be over emphasized. As with other functions, analytics plays a very important in Finance as well. Applications of analytics are aplenty – analysis of company financial health and performance, analyzing financial data related to AR and AP, cash flow, costing, profitability and financial ratios, risk analysis, benchmarking with industry and so on.

Our courses are generally customized to match specific needs of our clients, in consultation with key stakeholders. The course outline given below is indicative, and would be applicable for general financial analytics and also cover financial analytics as applicable for the logistics sector. Right through the course when concepts and use of tools are being taught scenarios and examples related to logistics will be used. The final course design will be done only after further discussions with Maersk.

### Learning Objectives



This training program is aimed at facilitating participants to gain an understanding of application of analytics and the tools that can be used to obtain more powerful insights from raw data. Business analytics is effective only when a well-defined model is used. Hence, we have designed a training program to help participants use a proven framework to apply analytics skills:

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|-----------------|--|-----------------|--|
| <p><b>1</b></p> | <p><b>Key Business Challenges (KBCs)</b><br/>Defining KBCs and performance measures (KPIs), framing objectives for analytics and visual reporting.</p> | <p><b>2</b></p> | <p><b>Data Organization &amp; Preparation</b><br/>Identifying the type of data required, sourcing and organizing data.</p> |
| <p><b>3</b></p> | <p><b>Data Analysis &amp; Visualization</b><br/>Identifying the type of data required, sourcing and organizing data.</p>                               | <p><b>4</b></p> | <p><b>Presenting Results</b><br/>Tell your story and present the results</p>   |

# Program Delivery

The training will be delivered in an online mode or in classroom sessions. The format will be a combination of discourse, breakout sessions and knowledge sharing for participants to internalize their learning.



## Course Outline

### Module 1 - What is Financial Analytics?

- What is Financial Analytics?
- Why Is Analytics Important to the Finance?
- Changing Role of Finance
- Uses and benefits of Financial Analytics

### Module 2 - Data Organization

- Know Your Data
  - Data Types - Structured vs unstructured data
  - Data Scales - Nominal, Ordinal, Interval/Ratio
  - Working with string data, date & time
- Data Preparation
  - Importing csv and tab delimited Files
  - Connecting to external databases
  - Database Merging
- Role of Data warehouse
  - Managing Databases
  - Filters, Sort and Transpose data commands
  - Data Mining - (CRISP DM) methodology

### Module 3 - Analytics Approaches and Tools

- Types of Analytics Descriptive, Diagnostic, Predictive, Prescriptive etc.
- Some popular Analytical Tools (EXCEL/R/Python)
- Advanced Excel Commands (Sum, If, Pivot, Index, Lookup etc.)for Analytics
- Basic Statistical Tools for Analytics

### Module 4 - Data Visualization and Presentation

- Importance and Power of Visual Reporting
- Slicers, Tables, Charts and Excel Dashboards,
- Some popular Visualization Tools (Tableau, Power BI)

- Using Tableau or Power BI for Scenario building, Pareto Charts Waterfall Charts etc. and Dashboards (optional)

### **Module 5 - Basic Financial Analytics**

- Key Business Questions for assessing Financial; Performance and Health
- Identifying Key Metrics and Dimensions for AR, AP, Cash Flow and GL
- Aging Analytics for AR and AP
- Cash Flow Analytics
- GL, BS and P&L Analytics
- Reports and Dashboards for AR, AP, Cash Flow and GL
- Customer analytics
- Risk analytics
- Costing and Profitability Analytics

### **Module 6 – Financial Analytics for Logistics**

- Route Analytics
  - Resource Utilization
  - Profitability
  - Cash Flow
- Freight Analytics
  - Audit
  - Billing Accuracy
- Vendor Performance Analytics
- Asset Analytics
  - Asset Utilization Efficiency
  - Asset Lifecycle Analysis
  - Modelling Depreciation methods
  - Cost of Inventory

### **Module 7 – Financial Modelling (Optional)**

- Introduction to Financial Modelling
  - What Is Financial Modelling?
  - What's the Difference between a Spreadsheet and a Financial Model?
  - Types and Purposes of Financial Models
  - Tool Selection
- Model Building
  - Building a Model
  - The Golden Rules for Model Design
  - Design Issues
- Model Validation
  - Stress-Testing, Scenarios, and Sensitivity Analysis in Financial Modelling
  - What Are the Differences between Scenario, Sensitivity, and What-If Analyses?

- Overview of Scenario Analysis Tools and Methods
- Comparing Scenario Methods
- Financial Modelling
  - Financial Modelling Techniques
  - Limitations of Excel
  - Error Avoidance Strategies
  - Linking to External Files