

# BUSINESS ANALYTICS VIA STATISTICAL DATA ANALYSIS UTILISING MICROSOFT EXCEL

Confused with numbers? Can't make decisions from it? Learn to simplify your forecasting techniques, identify trends, and analyse customer data to increase sales.

## In this 2-day session, you will learn:

- Highlighting specific values based on criteria specified
- Summarising data based on categories, date and top/bottom values
- Using logical statements to perform multiple level analysis
- Understand the need for statistical analysis for business decision making
- How to determine if the data gathered from a sample truly reflects an entire population
- The need to compile data within databases and extracting specific values from it
- The benefits of analysing data using Pivot Table, Pivot Chart and Dashboards within it.
- The relevance of data cleansing and why it is needed
- Forecasting and predicting future values
- Dealing with various date formats and performing calculations from it



Author of 51 books on software applications

### Palani Murugappan

Palani Murugappan, is a Malaysian HRD Corp certified trainer, who shares with his participants his knowledge and experience culled over 20 years of involvement in areas of data management. His specialty is in helping participants and companies grow their business purely by analysing raw data, extracting useful and meaningful information from it, and presenting the findings in a visually creative manner via infographics - all using existing tools such as Microsoft Excel. His clients range from multinational companies in Malaysia, Singapore, and he has travelled as far as Oman to deliver his training. Palani holds hold an MBA (Majoring in Electronic Commerce) from the Charles Sturt University, Australia.

24-25 MARCH 2022 • 9AM-5PM •  
CONDUCTED VIA ZOOM.

# COURSE OUTLINE

## 1. USEFUL TIPS, TECHNIQUES, AND FEATURES OF EXCEL

- Learn various shortcuts and techniques in formatting • Validate a specific range of cells • Applying Conditional Formatting • Password protect a range of cells and workbook • Applying Filters and Advanced Filter • Performing calculations using Subtotals • Converting text to numbers from external data file • Absolute Cell Referencing (appropriate use of the \$ sign in formulas) • Changing text orientation • Creating a watermark

## 2. UNDERSTANDING THE USE OF LOGICAL FUNCTIONS

- Comparing two or more sets of logical tests • Applying the IF statement for comparison purposes • Applying the Nested IF statement for more than a single condition

## 3. USE OF STATISTICAL FUNCTIONS

- Counting Items in a Data Set • Difference between MEAN, MODE and MEDIAN and what it means • Understanding Percentiles • Comprehending Standard Deviations and Variances • Explaining Normal Distributions

## 4. SEARCHING SPECIFIC VALUES USING LOOKUP FUNCTION

- Understanding concepts of Databases • Setting up a Database in Vertical or Horizontal format and benefits of doing so • Applying VLOOKUP and HLOOKUP functions to search specific values from a database • Calculating bonuses for multi-tier payment scheme

## 5. ANALYSING DATA USING PIVOT TABLE

- Use of Pivot Table • Updating and modifying Pivot Table • Changing calculated fields in Pivot Table • Rearranging Fields in a Pivot Table • Explaining the Report Layout Options • Using the Report Filters Feature • Using Top 10 & Date Filters • Handling Blank Cells • Sorting a Pivot Table • Formatting a Pivot Table • Creating Custom Formats • Adding Formulas to a Pivot Table • Changing a Calculation in a Pivot Table • Counting with a Pivot Table

## 6. APPLICATION OF TEXT FUNCTIONS

- Comparing contents of one cell with another • Replacing specific text with another • Removing unwanted spaces within a cell content • Combining contents of various cells • Finding length of text within a cell

## 7. DATE CALCULATIONS

- Calculating differences of two dates and converting it to years and months • Understanding various date formats and performing calculations accordingly

## 8. FORECASTING AND ANALYSIS USING ADVANCED STATISTICAL FUNCTIONS

- Performing various "What-if" calculations • Understanding types of charts for forecasting for linear and exponential growth • Forecasting future values based on previous results (e.g. sales forecasting, market analysis, etc.) • Ranking a value based on multiple values • Selecting the "x" largest and smallest value from a range of data • Applying the FREQUENCY function • Other Statistical functions to understand what the data portrays