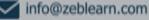


"Change is the end result of all true learning."

ZebLearn is an ISO 9001-2015 Certified Company that is co-founded by highly experienced industry professionals and alumni of top universities. It is headquartered at Noida & It is one of the fastest-growing solution providers in the field of Education, IT, Consulting and Corporate Trainings.







## Introduction to Data Visualization and Power of Tableau

- What is data visualization?
- Comparison and benefits against reading raw numbers
- Real use cases from various business domains
- Some quick and powerful examples using Tableau without going into the technical details of Tableau
- Installing Tableau
- Tableau interface
- Connecting to Data Source
- Tableau data types
- Data preparation

## Architecture of Tableau

- Installation of Tableau Desktop
- Architecture of Tableau
- Interface of Tableau (Layout, Toolbars, Data Pane, Analytics Pane, etc.)
- How to start with Tableau
- The ways to share and export the work done in Tableau

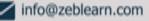
#### Hands-on Exercise:

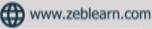
- Play with Tableau desktop
- Learn about the interface
- Share and export existing works

## Working with Metadata and Data Blending

- Connection to Excel
- Cubes and PDFs
- Management of metadata and extracts
- Data preparation
- Joins (Left, Right, Inner, and Outer) and Union







Dealing with NULL values, cross-database joining, data extraction, data blending, refresh extraction, incremental extraction, how to build extract, etc.

#### Hands-on Exercise:

- Connect to Excel sheet to import data
- Use metadata and extracts
- Manage NULL values
- Clean up data before using
- Perform the join techniques
- Execute data blending from multiple sources

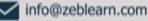
#### **Creation of Sets**

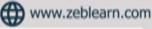
- Mark, highlight, sort, group, and use sets (creating and editing sets, IN/OUT, sets in hierarchies)
- Constant sets
- Computed sets, bins, etc.

#### Hands-on Exercise:

- Use marks to create and edit sets
- Highlight the desired items
- Make groups
- Apply sorting on results
- Make hierarchies among the created sets







## Working with Filters

- Filters (addition and removal)
- Filtering continuous dates, dimensions, and measures
- Interactive filters, marks card, and hierarchies
- How to create folders in Tableau
- Sorting in Tableau
- Types of sorting
- Filtering in Tableau
- Types of filters
- Filtering the order of operations

#### Hands-on Exercise:

- Use the data set by date/dimensions/measures to add a filter
- Use interactive filter to view the data
- Customize/remove filters to view the result

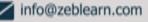
# **Organizing Data and Visual Analytics**

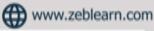
- Using Formatting Pane to work with menu, fonts, alignments, settings, and copy-paste
- Formatting data using labels and tooltips
- Edit axes and annotations
- K-means cluster analysis
- Trend and reference lines
- Visual analytics in Tableau
- Forecasting, confidence interval, reference lines, and bands

#### Hands-on Exercise:

- Apply labels and tooltips to graphs, annotations, edit axes' attributes
- Set the reference line
- Perform k-means cluster analysis on the given dataset







## Working with Mapping

- Working on coordinate points
- Plotting longitude and latitude
- Editing unrecognized locations
- Customizing geocoding, polygon maps, WMS: web mapping services
- Working on the background image, including add image
- Plotting points on images and generating coordinates from them
- Map visualization, custom territories, map box, WMS map
- How to create map projects in Tableau
- Creating dual axes maps, and editing locations

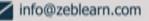
#### Hands-on Exercise:

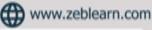
- Plot longitude and latitude on a geo map
- Edit locations on the geo map
- Custom geocoding
- Use images of the map and plot points
- Find coordinates
- Create a polygon map
- Use WMS

## Working with Calculations and Expressions

- Calculation syntax and functions in Tableau
- Various types of calculations, including Table, String, Date, Aggregate, Logic, and Number
- LOD expressions, including concept and syntax
- Aggregation and replication with LOD expressions
- Nested LOD expressions
- Levels of details: fixed level, lower level, and higher level
- Quick table calculations







- The creation of calculated fields \*
- Predefined calculations \*
- \*\* How to validate

#### Working with Parameters

- \* **Creating parameters**
- \* Parameters in calculations
- \* Using parameters with filters
- \*\* Column selection parameters
- \* Chart selection parameters
- \* How to use parameters in the filter session
- \* How to use parameters in calculated fields
- \* How to use parameters in the reference line

#### Hands-on Exercise:

- \*\* Creating new parameters to apply on a filter
- \*\* Passing parameters to filters to select columns
- \* Passing parameters to filters to select charts

## **Charts and Graphs**

- \* Dual axes graphs
- \* Histograms
- \* Single and dual axes
- \* Box plot
- \* Charts: motion, Pareto, funnel, pie, bar, line, bubble, bullet, scatter, and waterfall charts
- \* Maps: tree and heat maps
- \* Market basket analysis (MBA)
- \* Using Show me
- \* Text table and highlighted table



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#### Hands-on Exercise:

- Plot a histogram, tree map, heat map, funnel chart, and more using the given dataset
- Perform market basket analysis (MBA) on the same dataset

## **Dashboards and Stories**

- Building and formatting a dashboard using size, objects, views, filters, and legends
- Best practices for making creative as well as interactive dashboards using the actions
- Creating stories, including the intro of story points
- Creating as well as updating the story points
- Adding catchy visuals in stories
- Adding annotations with descriptions; dashboards and stories
- What is dashboard?
- Highlight actions, URL actions, and filter actions
- Selecting and clearing values
- Best practices to create dashboards
- Dashboard examples; using Tableau workspace and Tableau interface
- Learning about Tableau joins
- Types of joins
- Tableau field types
- Saving as well as publishing data source
- Live vs extract connection
- Various file types

#### Hands-on Exercise:

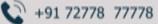
- Create a Tableau dashboard view, include legends, objects, and filters
- Make the dashboard interactive
- Use visual effects, annotations, and descriptions to create and edit a story





# Thanks you

Now or Never



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