Tableau Advance Analytics with R training

Course description

Moving from data visualization into deeper, more advanced analytics? This course will intensify data skills for data wiz-savvy users who want to move into analytics and data science in order to enhance their businesses by harnessing the analytical power of R and the stunning visualization capabilities of Tableau. Tableau and R together offer accessible analytics by allowing a combination of easy-to-use data visualization along with industry-standard, robust statistical computation. At the end of this course, you will get to grips with advanced calculations in R and Tableau for analytics and prediction with the help of real use cases and hands-on examples from various domains like HR, Marketing, Sales and Finance

Tableau Advance Analytics with R training online training curriculum

Introduction to Data Visualization
- What is Data Visualization?
- Identify the prerequisites, goal, objectives, methodology, and Goal

Architecture of Tableau
- What is Tableau?
- Features of Tableau
- Installation of Tableau Desktop
- The interface of Tableau (Layout/Toolbars/Data Pane/Analytics Pane etc)

Managing Data Sources
- Connection to various data sources
- MySql Database connectivity and tables
- ODBC and other sources connectivity

Introduction to Visual Analytics with Tableau
- Introduction to various charts
- Bar Charts, Line Graphs, Pie Charts
- Maps, Scatter Plots, Gantt Charts, Bubble Charts
- Tree maps and Box-and-Whisker Plots
- Managing Extracts
- Managing Metadata
- Visual Analytics
- Data Granularity using Marks Card
- Highlighting

Deep dive into Visualization
- Highlighting Tables, Heat Maps
- Circle Plots
- Side by Sidebar charts, Dual Axis Charts, Area Charts
- Waterfall Charts, Bump Chart, Word Cloud Chart, Pareto Charts
- Parameter using sets and filters
- Fields: continuous and discrete visualization
- Quick Sort, Sorting using measure, Sorting using header and legends, sorting
- Filtering Use cases covering different options (General, Wildcard, and Conditional)
- Interactive Filter, Quick Filter, Context Filter
- Grouping using Data Window, Visual Grouping, Calculated Grouping

Static and Dynamic
- Adding trend line and reference line (along with various options available for them)

Data Organization and Scripting
- Calculated Metrics, Apply Sorting on Dimension and Measures
- Calculating Total and Subtotals
- Various Aggregated measures, Percentages
- Data Spotlighting, Summary Card, Date and Time Functions
- Logical Functions
- Hierarchies, Groups, and Bins

Working with Time Dimension
- Quick Table Calculations
- Custom Table Calculations
- YTD, Parallel Period, Moving Averages
- Running totals, Window Averages
- Trend Lines and Predictive Models

Data Incremental Loading and Data Blending
- Data blending from multiple source systems Creating Incremental Loads
- Creating File Extractions, Parameters

Dashboard and Stories
- Creating a Dashboard and learning its UI component
- Changing the layout of the dashboard
- Using Device Designer to create a dashboard for devices
- Create an interactive dashboard using actions (Filter, Highlight, URL)
- Creating a story with dashboard

Tableau Server Comprehensive
- Single Installer
- Worker Installer
- Authentication
- Processes
- Data Server
- Create the First Admin User
- Create Projects and Groups
- Assign Permissions to Projects
- Data Connections
- Metadata management
- Connecting to data with Data Server
- Updating data sources

Advanced Analytic with R and Tableau
- Installing R and R Studio
- Installing Reserve
- Environment of R
- Connecting to Reserve

Power of R
- Variables
- Vectors and Lists
- Matrices
- Factors
- Data Frames
- Control Structures
- For Loops
- Functions
- Using R in Tableau

Prediction with R and Tableau Using Regression
- Simple Linear Regression
- Comparing Actual Values with Predicted Results
- Logistic Regression

Advanced Analytics Using Clustering
- How Does K-Means Work?
- Creating a Tableau Group from Cluster Results

Classifying Data with Tableau
- Decision Trees in Tableau Using R
- Multivariate Forecasting in Tableau