Course Description

**Power BI**

|  |  |
| --- | --- |
| Learning Objectives | Connecting to different data sources.Preparing, transforming and modeling dataOptimizing data modelsDesigning calculations and measurements with the DAX languageBuilding dynamic charts and dashboardsAnalyzing dataPublishing and sharing your results with Power Bi Service and Power BI Mobile |
| Teaching methods | Active pedagogy including presentations, exercises and practical applications |
| Concerned public | Analyst, consultant, Developer, Decision-maker, management controller, study manager, etc.. |
| Prerequisites | None |
| Duration | 3 days |

**Programme**

|  |
| --- |
| **Introduction**Definition of Business IntelligencePresentation of the Microsoft BI offer.The stages of creating a Business Intelligence modelStar model vs Snowflake model**Introducing Power BI Desktop**Introducing Power BI DesktopExplanation of the different tools that make up Power BILicensing policyRole management**Connect to different data sources**Import vs DirectQueryFiles: Excel, CSV, Text, XMLDatabase: SQL Server, MySQL, Access, OracleOnline service, Web, Microsoft Exchange**Transform the Data**Introducing Query EditorPresentation of the M languageFormatting and processing of dataAggregating dataMerging and combining queriesLoading dataOptimization**Model the Data**Defining relationships between tablesManaging cardinalitiesDefining the direction of the filtersActive relationship vs inactive relationshipAdding calculated columns to the modelDefinition of measuresCreation of hierarchies**Create Calculations with DAX** Presentation of the DAX languageMain functions related to data typesFunctions for manipulating text stringsLogical and conditional functionsData filter functionsNavigation and aggregation functionsCreating a date table with DAX and using time intelligence functions**Visualize the Data** Creation of reports, pages and dashboards.Display of data : Table, Matrix, MapCreating charts : curves, histograms, TreemapInserting visual elements to the model: images, shapes, text boxesGeographic data and spatial representationsImplementation of segments, KPIs, Gauge.Importing new visualsFormatting and formatting.Adding tooltipsDefinition of interactions between visualsDefinition of the different filtering levelsManaging the layout for smartphone.**Power BI Service**Publishing the Power BI project reportConnecting with Power BI ServiceUnderstanding the workspace and the different menusSharing reports with other usersCreating dashboardsImporting data from Power BI Desktop**Power BI Mobile**Existing mobile applicationsViewing reports on mobileConfiguring mobile application alerts |