Course Name:

Microsoft Power BI For Business Analysis

Synopsis

In today's data-driven landscape, organizations are collecting massive amounts of data from various sources. However, without the right tools and techniques, this wealth of data remains largely untapped. That's where Power Query and Power BI come into play. These robust tools empower you to efficiently transform, cleanse, and integrate diverse datasets, unleashing the true potential of big data analytics. This module is designed to equip you with the fundamental skills needed to handle and analyze big data seamlessly. Whether you are a business analyst, data professional, or an aspiring data scientist, this course will cater to your learning needs, taking you from the basics to advanced data manipulation and visualization techniques. Throughout the module, you will discover how Power Query serves as a powerful ETL (Extract, Transform, Load) tool, enabling you to connect to various data sources, apply data transformations, and prepare data for analysis. Moreover, we will delve into the magic of M, the powerful formula language behind Power Query, and learn how to write custom functions and queries to tackle complex data challenges. Once your data is refined and ready, we will introduce you to Power BI – Microsoft's cutting-edge business intelligence platform. Power BI allows you to create stunning interactive visualizations and insightful reports, providing you with the ability to communicate your findings effectively and make data driven decisions.

What you will Learn

Master Power Query Fundamentals: Understand the core concepts of Power Query and utilize its data transformation capabilities to clean, shape, and integrate data from various sources effectively.

Leverage Advanced Power Query Techniques: Apply advanced data transformation techniques, custom functions, and the M formula language to handle complex data challenges and prepare data for analysis.

(003587769-K)
Persiaran Mayang Pasir
Bayan Baru, 11950
Pulau Pinang, Malaysia
Mobile: 019-9790786
Email: hr.department@softspheretraining.my
Website: www.softspheretraining.my

Combine and Merge Data with Confidence:
Seamlessly merge and append data from multiple sources, ensuring data integrity and consistency in the resulting datasets.

Create Interactive Visualizations: Build compelling and interactive visualizations in Power BI to effectively communicate data insights and make data-driven decisions.

Understand Data Modelling: Design efficient and optimized data models in Power BI, establishing relationships between tables and utilizing calculated columns and measures to support analysis.

Harness the Power of DAX: Utilize the Data Analysis Expressions (DAX) language to create sophisticated calculated columns and measures, enabling advanced data analysis and business intelligence.

Implement Time Intelligence Functions: Effectively use DAX time intelligence functions to perform date-based analysis and gain deeper insights from time-series data.

Who Should Attend

The Power BI for Business Analysts course is ideally suited for a variety of professionals who are involved in data analysis and business intelligence tasks. Here's a list of individuals who should consider attending:

Business Analysts: Primary audience, as they regularly use data to make business decisions and can greatly benefit from Power BI's data visualization and analytics capabilities.

Data Analysts: Professionals who manipulate large datasets and perform complex queries to provide business insights.

Project Managers: Who need to visualize and report project data efficiently to stakeholders.

(003587769-K)
Persiaran Mayang Pasir
Bayan Baru, 11950
Pulau Pinang, Malaysia
Mobile: 019-9790786
Email: hr.department@softspheretraining.my
Website: www.softspheretraining.my

Marketing Professionals: Who analyze market data and campaign performance to refine marketing strategies.

Financial Analysts: Who require detailed financial reporting and data-driven forecasting.

IT Professionals: Who need to manage and report on large sets of data within an organization.

HR Professionals: Who analyze employee data and metrics to optimize human resources management.

This training is also beneficial for any professionals eager to improve their ability to turn data into interactive insights, thus enhancing their decision-making and strategic planning skills.

Prerequisite

N/A

Course Methodology

- Interactive Presentation
- Group Discussions
- Group Activities
- Role Play
- Simulation
- Sharing Experience
- Gamification Method
- Case Studies

Course Duration

2 days - 9am - 5pm

Course Structure

Session 1: _Welcome and Introduction_

o   Workshop objectives and agenda overview
o   Brief review of Power Query basics for context

Session 2: _Advanced Data Transformations_

o   Recap of basic data transformations
o   Advanced filtering techniques (date filtering, advanced text filters)
o   Conditional columns and custom expressions

Session 3: _Merging and Appending Queries_

o   Combining data from multiple sources using merging and joining
o   Appending queries vertically and horizontally
o   Handling data inconsistencies during merging

Session 4: _Introduction to Functions in Power Query_

o   Understanding built-in functions
o   Creating custom functions with the M formula language
o   Practical applications of functions in data transformation

Session 5: _Advanced Error Handling and Query Refinement_

o   Handling errors and invalid data in queries
o   Query diagnostics and troubleshooting techniques
o   Refining queries for optimal performance

Session 6: Introduction to Query Parameters

o Working with parameters in Power Query
o Parameterizing queries for dynamic data refresh
o Use cases and benefits of query parameters

Session 7: Power Query Best Practices and Tips

o Guidelines for efficient and maintainable query design
o Summary of key takeaways and final Q&A session

Session 8: Data Modelling in Power BI

o Understanding Power BI data models
o Creating relationships between tables
o Using calculated columns and measures

Session 9: Advanced Data Visualization Techniques

o Enhancing visuals with formatting options
o Customizing interactions between visuals
o Drill through and drilldown capabilities

Session 10: Introduction to DAX (Data Analysis Expressions)

o Understanding DAX basics and syntax
o Creating calculated columns and measures with DAX
o Time intelligence functions for date-based analysis

Session 11: _Advanced DAX Functions and Techniques_

o   Using advanced DAX functions (FILTER, ALL, etc.)
o   Working with iterators and row context
o   Solving complex business problems with DAX

Session 12: _Power BI Service and Collaboration Features_

o   Publishing reports to Power BI Service
o   Creating and sharing dashboards
o   Collaborating with colleagues on shared reports

Session 13: _Power BI Best Practices and Performance Tips_

o   Guidelines for creating efficient and optimized reports
o   Summary of key takeaways and final Q&A session