Training Course on Analyzing and Visualizing Data with Power BI

Professional Development Training Course Outline

Category	Business	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Unlock the power of your data with our comprehensive **Analyzing and Visualizing Data with Power BI** training course. In today's data-driven world, the ability to transform raw data into actionable insights is a critical skill for individuals and organizations alike. This course provides a hands-on learning experience, guiding you through the essential features of Power BI, from connecting to diverse **data sources** and performing robust **data analysis** to creating compelling and interactive **data visualizations** and **business intelligence** dashboards. Master the techniques needed to explore trends, identify patterns, and communicate your findings effectively, empowering data-driven decision-making across your organization.

This intensive training program is designed for individuals and teams looking to leverage Microsoft's leading **data analytics** platform. Through practical exercises and real-world case studies, you will gain proficiency in the Power BI ecosystem, including Power BI Desktop, Power BI Service, and Power BI Mobile. Learn to build sophisticated **data models**, write powerful DAX (Data Analysis Expressions) calculations, and design insightful reports that drive business value. By the end of this course, you will be equipped with the skills to become a proficient Power BI user, capable of transforming data into strategic assets and fostering a strong **data culture** within your workplace.

Programme Curriculum

Training Course on Analyzing and Visualizing Data with Power BI

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Course Duration

5 days

Course Objectives

1. **Master Power BI Desktop Interface:** Navigate and utilize the core functionalities of Power BI Desktop for data manipulation and visualization.
2. **Connect to Diverse Data Sources:** Import and connect to various data sources including Excel, databases (SQL, Azure), and cloud services.
3. **Perform Data Transformation with Power Query:** Clean, shape, and transform data using the Power Query Editor for optimal analysis.
4. **Build Relational Data Models:** Create effective data models by establishing relationships between tables for accurate insights.
5. **Utilize DAX for Calculations and Measures:** Write and implement DAX expressions to create calculated columns and measures for advanced analysis.
6. **Design Interactive Data Visualizations:** Develop a wide range of charts, graphs, and other visuals to effectively communicate data insights.
7. **Create Dynamic Reports and Dashboards:** Build interactive reports and dashboards with slicers, filters, and drill-through capabilities.
8. **Implement Data Security and Row-Level Security (RLS):** Secure your Power BI reports and ensure data privacy with RLS.
9. **Publish and Share Reports via Power BI Service:** Deploy and share your reports and dashboards with colleagues and stakeholders using the Power BI Service.
10. **Collaborate Effectively with Power BI Workspaces:** Utilize Power BI workspaces for team collaboration and content management.
11. **Optimize Report Performance:** Learn techniques to enhance the speed and efficiency of your Power BI reports and dashboards.
12. **Utilize Power BI Mobile for On-the-Go Insights:** Access and interact with your Power BI reports and dashboards on mobile devices.
13. **Explore Advanced Analytics Features (AI Insights, Forecasting):** Discover and utilize Power BI's advanced analytical capabilities, including AI-powered insights and forecasting.

Organizational Benefits

- **Enhanced Data-Driven Decision Making:** Equip employees with the skills to analyze data and extract meaningful insights, leading to more informed business decisions.

- **Improved Efficiency and Productivity:** Streamline data analysis and reporting processes, reducing reliance on IT and freeing up valuable time.
- **Better Data Visualization for Communication:** Enable employees to create clear and compelling visualizations that effectively communicate complex data to stakeholders.
- **Increased Data Literacy Across the Organization:** Foster a data-centric culture where employees at all levels can understand and work with data.
- **Cost Savings on Business Intelligence Tools:** Leverage the cost-effective and scalable Power BI platform to meet evolving analytical needs.
- **Competitive Advantage through Actionable Insights:** Identify new market opportunities, optimize processes, and gain a competitive edge through data analysis.
- **Improved Collaboration and Data Sharing:** Facilitate seamless sharing of reports and dashboards, promoting collaboration across departments.
- **Empowerment of Business Users:** Enable business users to perform self-service analytics, reducing the burden on IT and accelerating insights generation.

Target Audience

1. **Business Analysts:** Professionals who need to analyze data, identify trends, and create reports for business insights.
2. **Data Analysts:** Individuals responsible for collecting, cleaning, and interpreting data to support decision-making.
3. **Financial Analysts:** Professionals who analyze financial data, create forecasts, and develop financial reports.
4. **Marketing Professionals:** Individuals who need to track campaign performance, analyze customer behavior, and measure marketing effectiveness.
5. **Project Managers:** Professionals who need to monitor project progress, analyze risks, and report on key project metrics.
6. **IT Professionals:** Individuals responsible for managing data infrastructure and supporting business intelligence tools.
7. **Operations Managers:** Professionals who need to analyze operational data to improve efficiency and optimize processes.
8. **Executives and Managers:** Leaders who need to understand key business metrics and make data-driven strategic decisions.

Course Outline

Module 1: Introduction to Power BI

- Overview of Business Intelligence (BI) and Self-Service BI.
- Understanding the Power BI Ecosystem: Desktop, Service, Mobile.
- Key Components of Power BI: Datasets, Visualizations, Reports, Dashboards.
- Navigating the Power BI Desktop Interface and Key Features.
- Setting up your Power BI Environment and Initial Configuration.

Module 2: Connecting to Data Sources

- Exploring Different Types of Data Sources Supported by Power BI.
- Connecting to Files: Excel, CSV, Text Files and Best Practices.
- Connecting to Databases: SQL Server, ???????? ???? ?????? (Azure SQL Database).
- Connecting to Online Services and Web Data Sources.
- Understanding Data Connectivity Modes: Import vs. DirectQuery.

Module 3: Data Transformation with Power Query

- Introduction to the Power Query Editor Interface and Functionality.
- Performing Basic Data Cleaning and Transformation Operations.
- Shaping Data: Filtering Rows, Removing Columns, Renaming Fields.
- Transforming Data Types and Handling Missing Values.
- Combining Data: Appending and Merging Queries for Comprehensive Datasets.

Module 4: Data Modeling in Power BI

- Understanding Relational Database Concepts and Data Normalization.
- Creating and Managing Relationships Between Tables.
- Understanding Cardinality and Cross-Filter Direction in Relationships.
- Creating Calculated Columns to Derive New Information.
- Best Practices for Designing an Effective Data Model.

Module 5: Introduction to DAX (Data Analysis Expressions)

- Understanding the Basics of DAX Syntax and Data Types.
- Creating Measures for Aggregations and Calculations.
- Using Common DAX Functions: SUM, AVERAGE, COUNT, MIN, MAX.
- Understanding Filter Context and Row Context in DAX.
- Writing Basic DAX Formulas for Business Analysis.

Module 6: Creating Data Visualizations

- Exploring Different Types of Visualizations in Power BI.
- Creating and Customizing Basic Charts: Bar Charts, Line Charts, Pie Charts.
- Utilizing Advanced Visualizations: Scatter Plots, ????????? ??????? (Area Charts), Maps.
- Formatting Visualizations for Clarity and Impact.
- Best Practices for Choosing the Right Visualization for Your Data.

Module 7: Building Interactive Reports and Dashboards

- Designing Report Layouts for Effective Data Storytelling.
- Adding Slicers and Filters for Interactive Data Exploration.
- Using Drill-Through Functionality for Detailed Analysis.
- Creating and Configuring Dashboard Tiles from Reports.
- Best Practices for Designing User-Friendly and Insightful Dashboards.

Module 8: Publishing and Sharing in Power BI Service

- Publishing Power BI Desktop Reports to the Power BI Service.
- Navigating the Power BI Service Interface and Features.
- Creating and Managing Workspaces for Collaboration.
- Sharing Reports and Dashboards with Colleagues and Stakeholders.
- Understanding Data Refresh Options and Scheduling.

Training Methodology

This training course employs a blended learning approach that combines:

- **Interactive Lectures:** Engaging presentations covering key concepts and features of Power BI.

- **Hands-on Labs and Exercises:** Practical exercises using real-world datasets to reinforce learning.
- **Case Studies:** Analysis of practical business scenarios to apply learned skills.
- **Group Discussions:** Collaborative sessions to share insights and best practices.
- **Q&A Sessions:** Opportunities to ask questions and clarify doubts with the instructor.
- **Post-Training Support:** Access to resources and support for continued learning.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org **or call** *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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