



CALL FOR APPLICATION FOR TRAINING ON DATA ANALYSIS AND VISUALIZATION USING POWER QUERY AND POWER BI

1. Background

In today's data driven world, the ability to analyze and visualize data effectively is crucial for making informed decisions. Power Query and Power Bi, two powerful tools from Microsoft, have revolutionized the way professionals handle and interpret data. Power Query provides a robust platform for data preparation, enabling users to clean, transform, and load data from various sources efficiently. Power Bi, on the other hand, is a comprehensive business analytics tool that allows users to create stunning visualizations generate insightful reports and share them across the organization. Together, these tools empower professionals to unlock the full potential of their data, transforming raw information into actionable insights. This training is designed to equip participants with the essential skills needed to leverage Power Query and Power Bi for enhanced data analysis and visualization.

2. Objectives of the training

The general objective of this training is to equip participants with the knowledge and skills necessary to use Power Query and Power Bi effectively for data analysis and visualization. Specifically, this training aims to:

- (i) To understand the fundamentals of data analysis and visualization;
- (ii) To learn how to use Power Query for data preparation and transformation;
- (iii) To develop skills in creating interactive dashboards and reports using Power Bi;
- (iv) To gain practical experience in integrating Power Query with Power Bi for seamless data analysis;
- (v) To explore advanced features in Power Bi, including DAX (Data Analysis Expressions) and custom visuals.

3. Expected Output

Upon completing this training, participants will have a strong command of Power Query and Power Bi, enabling them to transform complex data sets into clear, actionable insights. They will be able to prepare and clean data from multiple sources, create dynamic and interactive visualizations, and generate comprehensive reports that can be easily shared with stakeholders. Participants will also gain confidence in applying advanced features of Power Bi to tackle more complex data analysis challenges. Ultimately, this training will empower participants to make informed decisions that contribute to the strategic goals of their organizations.

4. Content

This training will have seven main chapters

Chapter 1: Introduction to Data Analysis and Visualization

- 1.1 Overview of Data Analysis
- 1.2 Importance of Data Visualization
- 1.3 Introduction of Power Query and Power Bi

Chapter 2: Power Query Basics

- 2.1 Importing Data from Various Sources
- 2.2 Data Cleaning and Transformation
- 2.3 Merging and Appending Queries

Chapter 3: Advanced Data Preparation with Power Query

- 3.1 Advanced Data Transformation Techniques
- 3.2 Creating Custom Columns and Calculations
 - 3.2.1 Managing Data Relationships and Joins

Chapter 4: Introduction to Power Bi

- 4.1 Power Bi interface and Key Features
- 4.2 Connecting Power Query to Power Bi
- 4.3 Creating Basic Visualizations and Reports

Chapter 5: Advanced Power Bi Techniques

- 5.1 Introduction to DAX (Data Analysis Expressions)
- 5.2 Building Interactive Dashboards
- 5.3 Using Custom Visuals in Power Bi

Chapter 6: Interacting Power Query and Power Bi

- 6.1 Best practices for Data Integration
- 6.2 Real World Case Studies and Applications
- 6.3 Hand on practices with Real Data Sets

Chapter 7: Sharing and Collaborating with Power Bi

- 7.1 Publishing Reports to Power Bi Service
- 7.2 Sharing Dashboards and give the users access
- 7.3 Pinning the reports to dashboards
- 7.4 Understanding the concepts of data Gate way and how it works

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5. Participants

This training is ideal for data professionals, analysts, business intelligence developers, and anyone responsible for data driven decision making in their organization. Participants should have a basic understanding of data analysis concepts and familiarity with Microsoft Excel. Whether you are new to Power Query and Power Bi or looking to enhance your existing skills, this training will provide valuable insights and hands on experience to elevate your data analysis capabilities.

Notice: We can offer this training demanded by institutions for their staff at their office or as per their plan

6. Date and Venue

This training is scheduled to take place from 23rd September to 04th October, 2024 from 6:00pm to 9:00 pm, from Monday up to Friday. The training will be hosted at the office of the firm which is located in Kigali – Nyarugenge at KN 1 Ave 55 (Near Sainte Famille Hotel).

7. Participation fee and payment processes

The participation fee is 100,000 Rwf. Interested applicants are encouraged to pay the participant fees through the following bank details: Bank Account: 20071588001 open in I&M Bank, in the name of The Result Consult Co. Ltd and send bank slip via info@theresult.rw or contact us through 0781004638 (Training and Events Coordinator). For more information, you can always visit us at www.theresult.rw. To make easy for participants, payment can be made in two installments, 50% at the start and the remaining 50% at the end of the training. This is the link for registration: <https://forms.office.com/r/rwvj3kcJeC>

8. Facilitator

A trainer of this training is a seasoned data analyst and business intelligence expert with extensive experience in using Power Query and Power Bi across various industries. He has a deep understanding of data analysis techniques and is skilled in transforming complex data into meaningful insights through visualization. With a strong background in training and mentoring professionals, the trainer is dedicated to helping participants gain practical skills that can be directly applied to their work; participants can expect a highly interactive and engaging learning experience, with real world examples and hands on practice sessions.

9. Post-training support

We offer an option of post-training support for a period from 1 month to 3 months to ensure that, we stick to the main and specific objectives of the training. Apart from this, we offer on-the-job coaching to ensure that skills are applied effectively and productively.

10. Certificate

At the end of the training, we provide a certificate of completion

Deadline for application is due 22nd September, 2024 at 5 pm, Kigali Time

Done at Kigali, 05th September, 2024

Sylvain Bikorimana
Managing Director



APPENDIX

The table below illustrates trainings to be conducted between May and December 2024

S/N	Training Courses	Timeline (2024)
1.	Python	6 – 17 May
2.	Advanced Excel	3 – 14 June
3.	R Programming	18 – 28 July
4.	Preparation of Financial Statements	19 – 30 August
5.	Advanced Excel	2 – 13 September
6.	Data Analysis and Visualization Using Power Query and Power Bi	23 September – 4 October
7.	Machine Learning for Data Scientist	7 – 18 October
8.	Budget Preparation and Financial Forecasting for Micro, Small and Medium Enterprises	4 – 15 November
9.	Introduction to Artificial Intelligence and Business Intelligence Solutions	18 – 22 November
10.	Data Management and Analysis Using STATA	2 – 13 December
11.	Developing Data Collection Tools Using KoBo Tool Box	16 – 18 December