

# INVITATION TO ATTEND THE MASTER EXCEL POWER QUERY – BEGINNER TO PRO COURSE

#### Dear Sir/Madam,

We are excited to invite you to our comprehensive training program on **Master Excel Power Query** – **Beginner to Pro**. This course is designed to equip participants with the necessary skills to harness the full potential of Power Query for data transformation, cleaning, and automation. Whether you're new to Power Query or looking to enhance your expertise, this course will guide you through the entire process, from basic data import to advanced transformations.

## **Training Overview:**

Power Query is a powerful data connectivity and shaping tool available in Excel, allowing users to automate the process of importing, cleaning, and transforming data from various sources. With Power Query, you can simplify complex data tasks, enhance productivity, and streamline workflows. This course is perfect for individuals looking to improve their data analysis efficiency and save time with automation.

## **Objectives:**

By the end of this course, participants will:

- Understand the capabilities and interface of Power Query.
- Learn to import data from various sources and shape it according to their needs.
- Master data cleaning techniques for ensuring accurate analysis.
- Automate repetitive tasks using Power Query's robust transformation features.
- Integrate Power Query with Excel and Power Pivot for seamless data workflows.
- Develop skills in advanced data manipulation for reporting and analysis.

#### **Training Outcomes:**

#### Participants will:

- Gain confidence in using Power Query to connect, clean, and transform large datasets.
- Learn advanced techniques to simplify data workflows and eliminate manual data processing.
- Understand how to automate recurring data tasks and refresh queries automatically.
- Be able to perform complex data transformations such as unpivoting, splitting, and merging datasets
- Learn to use Power Query in conjunction with Power Pivot for efficient data modeling and reporting.

#### **Course Content:**

The course will cover the following key topics:

## 1. Introduction to Power Query:

- What is Power Query and why it is essential for data professionals?
- The Power Query user interface and key features.
- Difference between Power Query and traditional Excel data management tools.
- Importing data from Excel, CSV files, databases, and other sources.
- Navigating the Power Query Editor and its functions.

# 2. Basic Data Loading and Transformation:

- Importing and connecting to multiple data sources (Excel, Web, databases, etc.).
- Filtering, sorting, and grouping data within Power Query.
- Changing data types and performing basic transformations.
- Removing duplicates, managing missing data, and handling errors.
- Understanding the query structure and the Applied Steps pane.

# 3. Cleaning and Shaping Data:

- Removing unwanted columns and rows, renaming columns.
- Splitting, merging, and reshaping data fields for analysis.
- Using the unpivot and pivot functions for flexible data formatting.
- Data transformation techniques: Transpose, remove errors, and fill down.
- Advanced filtering techniques to extract relevant data subsets.

#### 4. Automating Data Imports and Refreshing Queries:

- Automating the refresh process: Connecting live data sources with scheduled refreshes.
- Using the Power Query refresh button for automated data updates.
- Automating import workflows and creating dynamic datasets.
- Techniques for combining multiple files and sources with ease.
- Managing Power Query settings for performance optimization.

#### 5. Advanced Data Transformations:

- Working with date and time functions: Calculations, transformations, and conversions.
- Advanced column transformations: Conditional columns, custom columns, and index columns.
- Merging and appending queries to combine datasets.
- Understanding the M Language behind Power Query: Creating custom formulas.
- Grouping data, performing aggregations, and summarizing large datasets.

## 6. Power Query in Combination with Excel and Power Pivot:

- Importing Power Query-transformed data into Excel for analysis.
- Creating relationships between datasets using Power Pivot.
- Data modeling with Power Query and Power Pivot integration.
- Automating the connection between Power Query, Excel, and Power Pivot for seamless data analysis.

• Using Power Query alongside Power Pivot for advanced data visualizations.

## 7. Working with External Data Sources:

- Connecting Power Query to online data sources such as websites and APIs.
- Working with relational databases and cloud-based datasets.
- Managing credentials and data privacy settings.
- Data extraction from complex sources like XML and JSON files.
- Best practices for handling large datasets from external databases.

# 8. Advanced Power Query Techniques and Troubleshooting:

- Handling complex data scenarios: Nested functions, joins, and queries.
- Creating custom functions in Power Query for repetitive tasks.
- Optimizing queries for performance: Reducing data load time and memory usage.
- Troubleshooting errors and resolving common Power Query issues.
- Real-world use cases: Automating business processes and reporting with Power Query.

#### 9. Building End-to-End Data Solutions with Power Query:

- Integrating Power Query into data reporting and dashboard workflows.
- Best practices for organizing and maintaining data pipelines.
- Using Power Query in Power BI for comprehensive business intelligence solutions.
- Automating monthly and quarterly reports using Power Query.
- Exporting Power Query data to external applications for further analysis.

#### Who Should Attend:

This course is ideal for:

- Data analysts, financial analysts, accountants, and professionals managing large datasets.
- Excel users looking to automate repetitive tasks and improve their workflow efficiency.
- Anyone who handles complex data and wants to streamline the cleaning and transformation process.
- Business professionals aiming to create dynamic reports, dashboards, and automated systems.

#### **Fees and Payment Method:**

**TZS 300,000/= per person** (Daily Evening session - Physical or Online Session). Payments can be made through bank deposit to the following details:

A/C NAME: STEP AHEAD FINANCIAL CONS

**BANK NAME: CRDB BANK** 

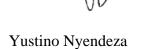
ACCOUNT NUMBER: 015C448187900

#### **Confirmation:**

To confirm your attendance or for any inquiries, please call +255 713 388 317 or email us at info@safco.co.tz.

We look forward to your participation in this insightful seminar, which promises to enhance your knowledge and skills in this fields. Your presence will undoubtedly contribute to the success of this event.

Sincerely,



Step Ahead Financial Consultants Limited (SAFCO)

**Training Director** 

Tel. No. 0713 388 317