

# INVITATION TO ATTEND THE MASTER EXCEL POWER PIVOT & DAX (BEGINNER TO PRO) COURSE

### Dear Sir/Madam,

We are pleased to invite you to join our in-depth training program on **Master Excel Power Pivot & DAX** (**Beginner to Pro**). This course is designed for individuals and professionals who want to elevate their data analysis skills by mastering Power Pivot and Data Analysis Expressions (DAX). You will learn to model large datasets, create relationships between data sources, and perform advanced data calculations to gain valuable insights.

# **Training Overview:**

Power Pivot and DAX are among Excel's most powerful features, enabling users to analyze and visualize large amounts of data with ease. Power Pivot allows you to work with millions of rows from multiple sources, while DAX offers a robust language for creating complex calculations and business logic. This course takes you from the foundational concepts of Power Pivot to advanced DAX formulas, ensuring a smooth transition from beginner to professional proficiency.

# **Objectives:**

By the end of this course, participants will:

- Understand the concepts of Power Pivot, its interface, and how to import large datasets.
- Learn how to build data models using relationships between tables.
- Master DAX expressions to create calculated columns and measures.
- Perform advanced calculations and data analysis using DAX functions.
- Develop skills to create interactive reports and dashboards using Power Pivot and DAX.

### **Training Outcomes:**

### Participants will:

- Gain proficiency in importing, transforming, and modeling large datasets with Power Pivot.
- Create relationships between data tables for more insightful analysis.
- Understand and apply various DAX functions for advanced data calculations.
- Develop custom calculated columns and measures using DAX for dynamic reporting.
- Learn best practices for building robust data models and improving performance.
- Be equipped to design and create interactive reports and dashboards with Power Pivot.

## **Course Content:**

The course will cover the following key topics:

#### 1. Introduction to Power Pivot:

- What is Power Pivot, and why is it important for data analysis?
- The Power Pivot interface: Key features and tools.
- Differences between Excel Pivot Tables and Power Pivot.
- Working with large datasets: Importing data from multiple sources (Excel, CSV, databases).
- Creating and managing data models in Power Pivot.

### 2. Data Modeling with Power Pivot:

- Building relationships between tables: One-to-one and one-to-many relationships.
- Understanding the data model architecture in Power Pivot.
- Data normalization: Best practices for organizing and managing large datasets.
- Using hierarchies and key performance indicators (KPIs) in Power Pivot.

## 3. Introduction to DAX (Data Analysis Expressions):

- What is DAX, and how does it enhance Power Pivot capabilities?
- Writing basic DAX formulas for calculated columns and measures.
- Differences between calculated columns and measures.
- Understanding row context and filter context in DAX.
- Common DAX functions: SUM, COUNT, AVERAGE, MIN, MAX.

# 4. Advanced DAX Functions and Techniques:

- Logical functions: IF, SWITCH, AND, OR.
- Text functions: CONCATENATE, LEFT, RIGHT, FIND.
- Date and time intelligence functions: TODAY, YEAR, MONTH, QUARTER, DATEADD, SAMEPERIODLASTYEAR.
- Aggregation functions: SUMX, AVERAGEX, COUNTX.
- Filter functions: CALCULATE, ALL, FILTER, RELATEDTABLE.

# 5. Advanced Data Analysis with DAX:

- Creating dynamic calculations and custom time periods (e.g., Year-to-Date, Month-to-Date).
- Building measures for comparative analysis (e.g., actual vs. budget, year-over-year growth).
- Using DAX for financial analysis: Ratios, growth rates, and rolling averages.
- Performance optimization techniques with DAX.

# 6. Building Interactive Dashboards with Power Pivot and DAX:

- Designing dashboards using Power Pivot and DAX-calculated measures.
- Incorporating slicers, timelines, and filters for interactive reporting.
- Best practices for report formatting and visualization.
- Creating and managing dynamic data models for real-time reporting.
- Linking Power Pivot models with Power BI for enhanced visualization.

### 7. Data Transformation and Cleaning in Power Pivot:

- Power Pivot integration with Power Query for data transformation.
- Using Power Query to clean, shape, and combine data before loading into Power Pivot.
- Applying advanced transformation techniques in Power Query.
- Automating data updates with Power Pivot and Power Query.

# 8. Advanced Power Pivot Techniques:

- Building and managing complex data models across multiple data sources.
- Managing data granularity and performance in large data models.
- Handling circular references and understanding the auto-detect functionality in relationships.
- Managing memory and performance issues in Power Pivot models.

#### Who Should Attend:

This course is ideal for:

- Financial analysts, data analysts, and business professionals who handle large datasets.
- Professionals looking to enhance their data modeling and analysis skills using Power Pivot and DAX.
- Excel users who want to move from basic data analysis to advanced reporting and interactive dashboards.
- Accountants, financial managers, and business decision-makers seeking to improve reporting accuracy and insights.

### 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,

Yustino Nyendeza

Step Ahead Financial Consultants Limited (SAFCO)

Training Director

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