



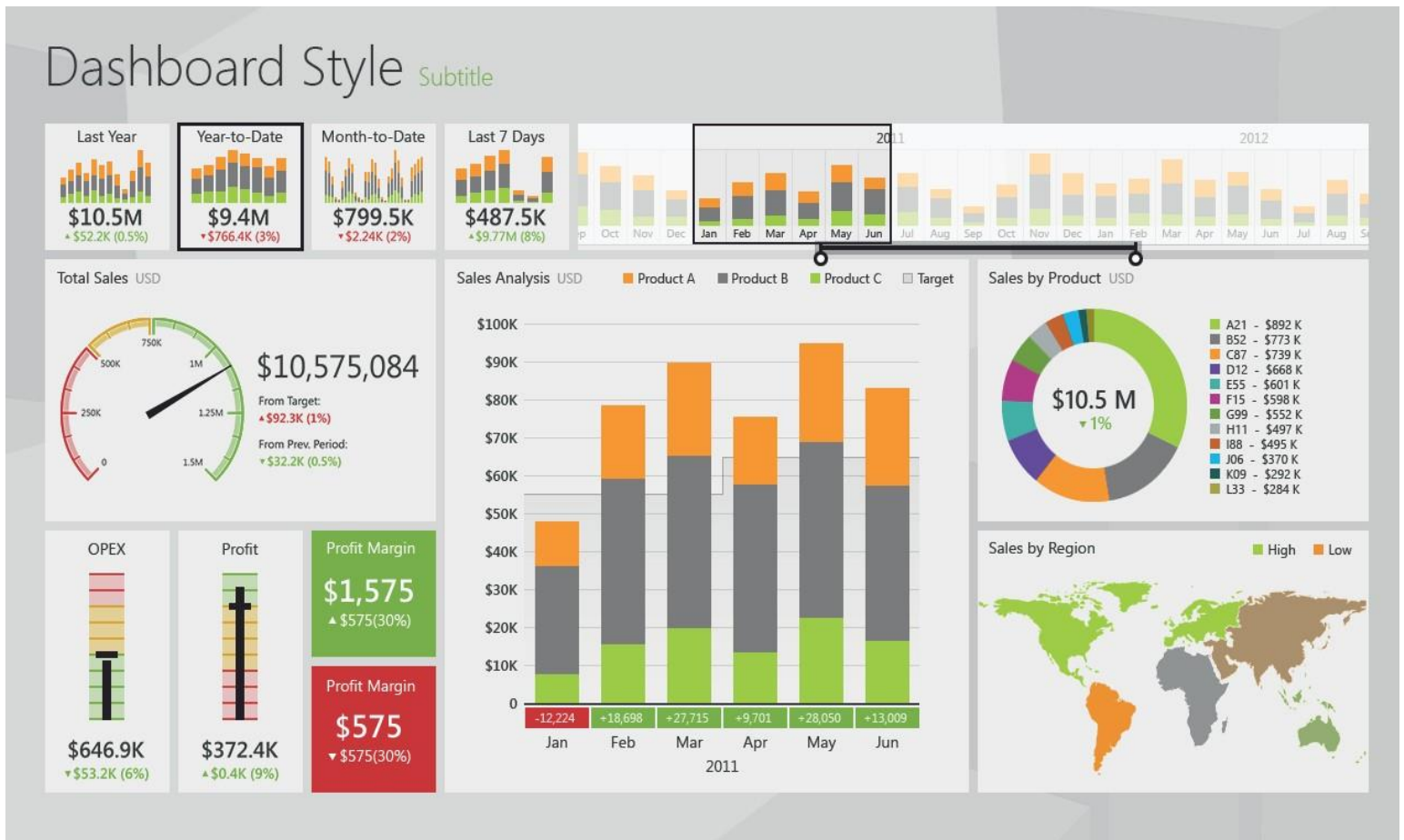
## ADVANCED POWER PIVOT TABLES TRAINING

Dates: 21<sup>st</sup> – 23<sup>rd</sup> May 2019

Venue: Park Inn Sandton Hotel - Johannesburg

# ADVANCED PIVOT TABLES

## COURSE OVERVIEW



Pivot tables are a powerful feature in Excel that enable you to manipulate data with simple dragging and dropping. Pivot tables allow you to sort, filter, group, count, summate, and format data easily and efficiently. This 3 day workshop focuses specifically on Pivot Tables. Delegates will work heavily on hands-on activities with an instructor to explore the variety of features within Pivot Tables and tackle different scenarios for when to use them.

The workshop covers PowerPivot topics, starting from basic concepts and moving on up to complex data models and DAX formulas, and including basic SharePoint configuration and usage. This course will assist professionals who want to use PowerPivot full capabilities while, at the same time, it permits to identify those scenarios where its use might not be convenient.

# COURSE OUTLINE

## Day 1

### Smart Art and Objects

- ✓ Inserting smart art and editing the diagram
- ✓ Adding pictures, adding text boxes and drawing shapes
- ✓ About the contextual tabs

### Auditing

- ✓ Tracing precedent cells and dependents of a cell
- ✓ Displaying formulas within the sheet
- ✓ Adding, displaying, editing and removing comments

### Creating Charts

- ✓ Using recommended charts and inserting a chart
- ✓ Overview of the Chart Tools Tabs
- ✓ Understanding the parts of a Chart
- ✓ Resizing and moving the Chart

### Macros

- ✓ Displaying the Developer Tab
- ✓ Recording and Running Macros
- ✓ Changing the Security Level
- ✓ Customizing and Changing the Quick Access Toolbar

### Solving Formula Errors

- ✓ Using Named Ranges and Understanding Formula Errors
- ✓ Using Trace Errors Commands and Using Error Checking
- ✓ Evaluating Formulas

### Managing Your Data

- ✓ Transposing Data from Rows to Columns
- ✓ Using the Text to Columns Feature
- ✓ Checking for Duplicates and Consolidating Data
- ✓ Creating Data Validation Rules
- ✓ Grouping Data, Adding Subtotals and Outlining Data
- ✓ Viewing Grouped and Outlined Data

### Working with Outlines

- ✓ Applying an outline
- ✓ Automatic outlining
- ✓ Displaying and collapsing levels
- ✓ Modifying outline settings
- ✓ Creating subtotals

### Construct a PivotTable

- ✓ How to Construct a Pivot Table Add/Remove
- ✓ Pivot Table Fields Reorganize the PivotTable
- ✓ Work with multiple Values Areas
- ✓ Drill down to reveal the source data

### Analyzing Data using Pivots

- ✓ Summarizing values by using different functions
- ✓ Showing values as Percentages
- ✓ Comparing totals against a base value
- ✓ Showing Running Totals
- ✓ Ranking the values areas to show best to worst
- ✓ Changing the analysis function in sub-totals

### Basic PowerPivot Concepts

- ✓ Formatting Numbers
- ✓ Handling Technical and Useless Columns
- ✓ Understanding Calculated Columns
- ✓ Using Lookup Tables
- ✓ Understanding Calculated Fields
- ✓ Handling Many Tables
- ✓ Refreshing Data
- ✓ Using Slicers

### Designing the Pivot Table

- ✓ Using different Pivot Table styles
- ✓ Showing Sub-totals in different positions
- ✓ Removing Grand Totals
- ✓ Using Tabular and Outline views
- ✓ Creating "Flat" Pivot tables
- ✓ Apply numeric formats to the Data Area

# COURSE OUTLINE

## Day 2

### Multiple Consolidation Ranges

- ✓ Consolidate Data use a PivotTable
- ✓ Work with Consolidated Data

### Calculated Items and Fields

- ✓ Create Calculated Items
- ✓ Create Calculated Fields
- ✓ Work the Calculated Items and Fields

### GetPivotData Function

- ✓ Use the GetPivotData Function
- ✓ Construct the function

### Pivot Charts

- ✓ Create a PivotChart report
- ✓ Format a PivotChart report
- ✓ Lay out a PivotChart report
- ✓ Work with data in a PivotChart report

### Understanding Data Models

What is a Data Model?

Why PowerPivot Users need Data Modeling?

Physical and Logical Data Models

- ✓ Normalization and Denormalization
- ✓ Empty and Default Values
- ✓ Understanding How and When to Denormalize

SQL Query Designer as a Data Modeling Tool

- ✓ Different kinds of Joins
- ✓ Setting Relationship Manually
- ✓ Understanding OUTER Joins

### Loading Data and Models

Understanding Data Connections

- ✓ Different Kind of connections
- ✓ Using Existing Connections

Loading Tables from SQL Server

- ✓ Filtering options
- ✓ Loading and Detecting Relationships
- ✓ Loading from Views

Loading from Access

- ✓ Issues in the Query Designer
- ✓ Best Practices

Loading Data from Analysis Services

- ✓ The MDX Query Designer
- ✓ Handling of Keys in SSAS
- ✓ OLAP cube or DataMart?

Using Linked Tables

Loading from Excel Workbooks

Loading from Text Files

- ✓ Using the Schema.INI configuration

Using Copy & Paste Operations

Loading From Data Feeds

- ✓ Reporting Services Reports
- ✓ Internet Data Feeds
- ✓ Windows Azure Data Market

Loading From SharePoint

### Introduction to DAX

Calculation Foundations

- ✓ DAX Data Types
- ✓ DAX Operators

Calculated Columns Examples

Calculated Fields Examples

Introduction to the Execution Context (Row and Filter)

Choosing Between Calculated Columns and Calculated Fields

Handling Errors in DAX

Common DAX Functions Examples

- ✓ Statistical and Logical Functions
- ✓ Mathematical Functions
- ✓ Text Functions
- ✓ Date and Time Functions

### Table Functions and CALCULATE

- ✓ Filtering Table with FILTER
- ✓ Mixing ALL and Other Filters
- ✓ Use of RELATEDTABLE
- ✓ CALCULATE Examples and Relationships

### Basic DAX Patterns

- ✓ Banding in PowerPivot
- ✓ New and Returning Customers
- ✓ Compare Budget and Sales
- ✓ Many-to-Many Relationships
- ✓ Merge Values from Different Tables

ABC / Pareto Analysis

# COURSE OUTLINE

## Day 3

### Time Intelligence in PowerPivot

Why a Calendar Table is Useful

- ✓ Attribute Consolidation
- ✓ Common Calendar Calculations

Creating a Calendar Table with Excel

- ✓ Excel Tips to Create a Calendar Table
- ✓ Working Days Calculation

Common Calendar Calculations

- ✓ X To Date (YTD, QTD, MTD)
- ✓ Same Period Last Year
- ✓ Other Custom Aggregation Function
- ✓ Delta Over Previous Year

### Understanding the Evaluation Context

What is the Row Context

What is the Filter Context

- ✓ Filter Context on a Single Table
- ✓ Updating Filter Context on a Single Table
- ✓ Filter Context + Row Context

The EARLIER and EARLIEST Functions

- ✓ Using EARLIER and EARLIEST Functions

Evaluation Context And Relationships

- ✓ Row Context for Multiple Tables
- ✓ Filter Context for Multiple Tables
- ✓ Updating the Filter Context with Relationships

### Calculate

- ✓ Introduction to Calculate
- ✓ Examples of CALCULATE
- ✓ Detailed Analysis of CALCULATE Behavior

### Advanced DAX Techniques

- ✓ Statistical Functions
- ✓ Ranking Over a Calculated
- ✓ Fields Using KEEPFILTERS

### Advanced Time Intelligence

Semi Additive Calculated Fields

- ✓ Closing Balance Over Time
  - ✓ OPENINGBALANCE/CLOSINGBALANCE
- Event in Progress Calculation

Calculation Over Weeks

### DAX as a Query Language

- ✓ EVALUATE syntax
- ✓ Using SUMMARIZE and ADDCOLUMNS
- ✓ Using GENERATE
- ✓ Creating linked back tables

### Advanced DAX Patterns

- ✓ Inside Many-to-Many Relationships
- ✓ Basket Analysis
- ✓ Currency Conversion

#### **TIME SCHEDULE:**

08:00 – Registration & Morning tea/coffee  
08:30 – Start of First Session  
10:00 – 10:20 - Tea/Coffee Break  
12:30 – 13:30 Lunch Break  
15:00 – 15:15 Afternoon Snack Break  
16:30 - End

# REGISTRATION FORM

Investment

R9490 ex Vat per Delegate without a Laptop

R14999 ex Vat per Delegate with a Laptop

## Authorising Person

Name:

Email:

Telephone:

Job Title:

Organisation:

Address:

Country:

Postal Code:

Signature:

## TERMS AND CONDITIONS

The following terms and conditions will apply:

Payment is required in full 5 days from date of invoice

All payments to be made directly to Mzingeli Trading and Skills Development Account. No seats will be reserved, unless Mzingeli Trading and Skills Development receives a signed registration form.

Mzingeli Trading and Skills Development reserves the right, due to circumstances beyond our control, to change speakers, program content, date & venue. The signed registration form is a legally binding contract.

## SUBSTITUTIONS

Delegates must inform Mzingeli Trading and Skills Development in writing of any substitutions.

There is no charge for substitutions.

Mzingeli Trading and Skills Development will not be held liable for incorrect delegate details on Certificates in the event of substitutions being made on the day of the conference.

In the event of Mzingeli Trading and Skills Development having to cancel or postpone an event due to circumstances beyond our control, delegates will be issued with a credit voucher, which may be used at our next scheduled event.

## CANCELLATIONS

All cancellations will be subject to approval by the management of Mzingeli Trading and Skills Development.

All cancellations made seven (7) working days prior to date of the above-mentioned event will be subject to a 50% cancellation fee.

Cancellations made within seven (7) working days of date of the above-mentioned event, will be subject to a 100% cancellation fee.

The will be no refunds or credit vouchers for no shows.

## Delegate Details:

Delegate Name & Surname	Position	Email	Cellphone Number

## PAYMENT

Electronic Transfer or Direct Deposit into our bank account, validated by fax or emailed copy of transaction slip.

[Make Payment to:](#)

Bank Name: First National Bank (FNB)

Branch Name: Westgate

Branch Code 250841

Account Name: Mzingeli Trading and Skills Development

Account Number: 62412926761

**PLEASE NOTE:** Payment is required in full 5 days from date of invoice.

## DATES & INVESTMENT

The registration fee includes all training materials, lunch, refreshments, and parking but **excludes** Travel & Accommodation. Please type or print clearly and submit by fax or email.

## ADVANCED PIVOT TABLES TRAINING

R9490 ex Vat per Delegate (with own Laptop)

R14999 ex Vat per Delegate (Laptop provided)

Dates: 21 – 23 May 2019

Venue: Park Inn Sandton Hotel, JHB