## Microsoft Excel: PowerQuery Basic & Intermediate 2D

## **Microsoft Office Mastery Series**

#### Instructor Information

InstructorEmailTraining TypeKelvin Ng Choo Kentkhenghuat.koay@gmail.com Classroom

## **Course Overview**

#### Description

Course Description: The Excel Power Query Training is a comprehensive 2-day course designed to equip participants with the skills and knowledge to efficiently work with data using Microsoft Power Query, a powerful tool for data transformation and analysis. Through hands-on exercises and interactive sessions, participants will gain a deep understanding of Power Query's capabilities and learn how to seamlessly connect, transform, and analyze data from various sources. The course will cover essential concepts such as data sources, data transformation, query actions, and data destinations. Additionally, participants will explore the creation of PivotTables and PivotCharts to visualize and analyze the transformed data effectively. By the end of the course, attendees will have the expertise to harness the full potential of Excel Power Query, saving time and enhancing productivity in data-related tasks.

**Duration**, Hours

2 days

#### Learning Outcomes:

#### After completing the Excel Power Query Training, participants will be able to:

- Navigate and utilize the Power Query user interface efficiently.
- Comprehend the steps involved in creating, refreshing, and managing Power Query data.
- Access various data sources, including CSV and Text files, Excel workbooks, databases, and more.
- Transform data by filtering, sorting, removing duplicates, replacing values, and transposing tables.
- Group and aggregate rows for meaningful data analysis.
- Append and merge queries to combine data from multiple sources.
- Create PivotTables and PivotCharts to summarize and visualize data effectively.
- Customize PivotTables for improved readability and analysis.
- Use calculated fields and items to perform advanced calculations within PivotTables.
- Utilize PivotTable wizards for consolidating data from multiple ranges.

#### Prerequisites:

# To maximize the learning experience and ensure successful completion of the Excel Power Query Training, participants should have the following prerequisites:

- Basic proficiency in Microsoft Excel, including familiarity with data entry, cell formatting, and basic functions.
- Basic understanding of data concepts, such as tables, columns, rows, and data types.
- Knowledge of Excel functions and formulas will be beneficial but is not mandatory.
- Participants are expected to bring their laptops with Microsoft Excel 2019 or later versions installed, as the course will involve hands-on exercises to reinforce the concepts learned.

## **Course Requirement**

- Participants should be able to use a PC at the beginner level
- Basic knowledge and functionality of Microsoft Excel
- Microsoft Office 2019 and above

#### **About the Trainer**

## Professional Trainer Profile – KELVIN NG CHOO KENT



25 years Teaching Experience

**Kelvin Ng** is an exceptional corporate trainer who has been captivating audiences worldwide with his innovative approach to Microsoft Office applications. With over 25 years of experience in Classroom Training, Virtual Learning Space, and Office Automation Consultation, Kelvin has established himself as a highly sought-after Master Trainer who delivers nothing short of WOW in his training sessions.



#### **Course Schedule**

Registration	
Getting Started with Power Query   Topic 1 and Topic 2	
Morning Tea Break / Comfort Break	
Transform Columns and Rows Part 1   Topic 3 to Topic 4	
Lunch Break	
Transform Columns and Rows Part 2   Topic 3 to Topic 4	
Afternoon Tea Break / Comfort Break	
Explore Queries   Topic 5	
1st Day Debrief / Closing	
	Getting Started with Power Query   Topic 1 and Topic 2      Morning Tea Break / Comfort Break      Transform Columns and Rows Part 1   Topic 3 to Topic 4      Lunch Break      Transform Columns and Rows Part 2   Topic 3 to Topic 4      Afternoon Tea Break / Comfort Break      Explore Queries   Topic 5

Time Topic Day 2 45 AM Registration 9:00 AM - 10:30 AM Getting Started with Pivot Table | Topic 1 and Topic 2 10:30 AM - 10:45 AM Morning Tea Break / Comfort Break 10:45 AM - 12:30 PM Quick Summary using Pivot Table | Topic 3 12:30 PM - 1:30 PM Lunch Break 1:30 PM - 3:30 PM Advance Analysis with Pivot Table | Topic 4 and Topic 5 3:30 PM - 3:45 PM Afternoon Tea Break / Comfort Break 3:45 PM - 4:30 PM Building Interactive Chart & Others | Topic 6 and Topic 7 4:30 PM - 5:00 PM Debrief / Closing / Evaluation / Certificates/ Photo

Schedule/Timing is subject to change according to the Participants Progress and Level of Knowledge.

## **Course Information**

## Course Outline -Day 1

#### Introduction to Power Query

- Exploring Power Query User Interface
  - o 2013 Power Query Tab
  - o Excel 2016 Get & Transform Group
  - Power Query Basics
  - The Query Editor
- Understanding Query steps
- Refreshing Power Query data
- Managing Existing Queries
- Overview of Query Actions
- Understanding Data Destinations
  - o Close & Load
  - Close & Load To...

#### Power Query Data Sources

- Data Sources Overview
  Power Query Data Sources
- Get Data from
  - CSV and Text Files
  - Current Excel worksheet
  - Excel Workbooks
  - o Folder
  - o Database
- Reusing Recent Data Sources

#### Transform Data - Columns

- Transform data Overview
- Working with Columns
- Creating Custom Columns
- Pivot Column
- Unpivot columns

## Transform Data – Rows

- Filtering Rows
- Filter a column using Text Filters
- Filter a column using Number or Date/Time Filters
- Filter a column by Row Position
  - Keep Top Rows
  - o Keep Top 100 Rows
  - o Keep Range of Rows
  - o Remove Top Rows
  - o Remove Alternate Rows
- Removing Duplicate Records
- Remove rows with errors
- Sort a Table
- Changing Values
  - o Replacing Values
  - Replace text values
  - Replace number, Date/Time. or logical values
- Transposing a Table
- Grouping and Aggregate Rows
  Group Single Column
  - o Group Multiple Columns

## Working with Queries

- Append Queries
  - Perform an Append Operation
- Merge Queries

### Course Outline -Day 2

## PivotTable

- Get to know a PivotTable
- The Best Practice using a database for PivotTable

## Creating Pivot Table

- Database Pre-requisite for preparing a
  PivotTable Report
- Designing a PivotTable
- Adding Elements to the Report
- Creating a Report Filter
  - Use Table Field as Report Filter
  - Use the Report Filter
  - o Reset the Filter
- Use Slicers to Filter Report
  - What is Slicers?
  - o Remove Slicer
- Update the Data Source
  - o Changes Data Sources
  - Create a dynamic Range for the Data Table

## Customizing a PivotTable

- Format a PivotTable
  - Use PivotTable Style
  - Number and Text Format
  - Explore the PivotTable Options
  - $\circ$   $\,$  Use the Value Field Settings  $\,$
- Subtotals
- Show Value As
- PivotTable Print Options
- Grand Totals

## Thank you

Report Layout

## Grouping, Sorting and Filtering

- Grouping Pivot Fields
  - o Dates
  - o Number Fields
  - o Text
- Ungrouping
- Sort& Filtering the PivotTable

## Use "Fields, Item and Sets"

- Creating Calculated Field
- Creating Calculated Item
- Edit and Delete Calculated Field or Item

## **Pivot Charts**

• Convert PivotTable to PivotChart

## PivotTable Wizards

• Multiple Consolidation Ranges