



# Power Query: Transforming Your Work Processes in Microsoft Excel (1 Day) ;1 November,1 December 2023

If you can relate to the following, Power Query will transform the way you work far more effectively than you have ever experienced

- I regularly get data from multiple sources e.g. Excel files, CSV/Text files, external databases (SQL, Access etc.), and bring it into Excel and consolidate it into one table so I can analyse it.
- My data is spread over multiple Excel worksheets/workbooks and I have to consolidate it into one table so I can use it
- The constant update of data received requires cleaning before I can use it -splitting text into multiple columns, remove columns/rows/duplicates , adding columns, Format text as dates or numbers, Other random data cleaning tasks that drive me crazy and waste my time
- ♦ I currently use Excel VBA/Macro to clean my data every week/month and it's tedious.

While normal Excel Functions or Macro/VBA can do all of the above tasks, Excel Power Query tool can perform far more effectively - simply refresh Power Query and it gets your data and cleans it in seconds.

## WHAT IS MICROSOFT EXCEL POWER QUERY?

Excel Power Query is BIG DATA which tool enables you to extract, transform and load data (ETL) very effectively. In this course, you will acquire the knowledge and skills in using Power Query which is far simpler, straight forward and easy to use when you need to extract, consolidate, merge data and automate work processes in Excel. *Heavy users of Microsoft Excel will find this course very practical and useful. Basic knowledge of Microsoft Excel is assumed.*

Leverage on the 6 critical functions and its MAGIC with a few clicks of your mouse away!

### 1. Extracts, Transforms, Loads (ETL) your data from different sources/software

Learn to extract, load data from different sources/formats/files (SAP, CSV, database tables, Web Pages, Text, CRM, ERP etc) and transform data to your Excel worksheet/data model that is ready for analyzing and reporting.



### 2. Automates repetitive tasks (alternative to Microsoft Excel Macro/VBA).

Learn to automate common repetitive tasks with a few clicks of buttons. E.g.- splitting text into multiple columns, remove/adding columns/rows/duplicates, clean/trim text or remove empty spaces/characters, Fill blank cells, Format text as dates/numbers, sort, filter, summarize data etc. You'll be able to come out with a faster solution compared to Excel Macro/VBA. No coding nor Excel Macro/VBA knowledge is required.



### 3. Records your work flow and Automate Processes

Learn to set and record the steps of your work processes so don't have to re-do over-and-over again. You can conveniently click the refresh button every time you update and change or add your data.



### 4. Unpivot data from Pivot Table.

Learn the techniques to transpose, unpivot complex data and normalize it into a tabular format.

### 5. Append (Combine) Tables with Power Query

Learn to combine multiple tables into a large table within one file or pull in data from different files/sources. All information will be updated and added automatically into a master worksheet with a click of the 'refresh' button.



### 6. Merge Tables- A Vlookup Alternative

Learn to optimize on Power Query ability to merge/join tables to minimize the file size and processing time (alternative to using Vlookup, Index, and Match).

## COURSE OUTLINE (1 Day)

### Morning 9.00am-12.30pm

#### LESSON 1 – INTRODUCTION TO POWER QUERY

- Introduction
- 

#### LESSON 2 – GETTING STARTED WITH POWER QUERY

- Extract, Transform, Load, Edit, Refresh, Appending Files

#### LESSON 3 – IMPORTING EXCEL DATA

- Connecting to Excel Tables
- Connecting to Named Ranges
- Connecting Dynamic Named Ranges
- Consolidating Excel Tables
- Consolidating Ranges and Worksheets

#### LESSON 4 – CONSOLIDATE FILES IN A FOLDER

- Consolidate Excel Files
- Consolidate CSV files
- Adding More Files
- Importing File Name as a Data Column

#### LESSON 5 – “UNPIVOT” PIVOT DATA

- Set up your pivoted data as a table
- Load table data in to Power Query
- Unpivot Data

### Lunch: 12.30pm-1.30pm

### Afternoon 1.30pm-5.00pm

#### LESSON 6 – TRANSPOSING AND UNPIVOTING COMPLEX DATA

- Transpose Data
- Unpivoting Subcategorized Tables
- Transposing Stacked Tables

#### LESSON 7 – IMPORTING NON DELIMITED TEXT FILES

#### LESSON 8 – MERGING TABLES AND QUERIES

- Case Study 1 & 2

#### LESSON 9 – IMPORTING FROM DATABASES

- From SQL Server Database

#### LESSON 10 – OTHER POWER QUERY DATA SOURCES

- Web Data
- OData Data Sources
- Data from Microsoft Exchange
- Data from Facebook
- Data from SAP

#### LESSON 11 – DATA DESTINATIONS

- Query Loading Options
- Query Loading Methods
- Changing the Default Query Loading Settings

#### LESSON 12 – GROUPING & SUMMARIZING

- Get Distinct Values

#### LESSON 13 – AUTOMATING REFRESH

- Example with a csv file
- Refresh the connection
- Change the source
- Refreshing a Single Connection

#### LESSON 14 – POWER QUERY FORMULAS

- 5 Very Useful Text Formulas
- IF Scenarios
- Split Scenario using Text functions

**Course Fee: RM700 per person. Course is claimable under SBL Khas**

**Fee is inclusive of 6% SST**

**Methodology: On-Line (Microsoft Teams)**

## Yes! Sign Me Up

### ORGANIZATION DETAILS

Participant 1, Preferred Date: \_\_\_\_\_

Name: \_\_\_\_\_

IC/NRIC Number: \_\_\_\_\_

Email: \_\_\_\_\_

Participant 2: Preferred Date: \_\_\_\_\_

Name: \_\_\_\_\_

IC/NRIC Number: \_\_\_\_\_

Email: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Position: \_\_\_\_\_

Email: \_\_\_\_\_

Tel: \_\_\_\_\_

Fax: \_\_\_\_\_

HRDF Contributor?  Yes  No

### APPROVED BY:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

*\*Registration cannot be processed without an authorized signature*

Company Stamp:

For more information, please contact :

For further inquiries & registration please contact MEF

Academy Sdn Bhd

Ms Zana

Tel: 03-7498 7200 ext 7244

Email: [roszana@mef.org.my](mailto:roszana@mef.org.my); [nazlina@mef.org.my](mailto:nazlina@mef.org.my)