

COURSE OUTLINE		
	<b>Program Name:</b> Power BI - Dashboard in a Day (customised L1-L2)	
	<b>Software App:</b> MS Power BI Desktop	
	<b>Duration:</b> 8.0 hrs. (10 AM - 6 PM)	
	<b>Level:</b> Beginner to Intermediate	
	<b>Target Learners:</b> 1st time users of Power BI	
	<b>Program Objective:</b>	
	By the end of this session, you will be able to:	
	1. Use Power Query - for data preparation - both in Excel and Power BI Desktop	
	2. Use Visuals and Formatting features - for data visualisation, report preparation, and adding interactivity	
	3. Get an overview of Power BI Service - UI, Publishing, and Sharing	
	<b>Important Note:</b>	
	This is a hands-on practice based workshop. Learners are expected to complete the program pre-requisites before the start of the program.	
	<b>Program Pre-requisite:</b>	
	1. Download and Install Power BI Desktop (free) from this Microsoft link - <a href="https://www.microsoft.com/en-us/download/details.aspx?id=58494">https://www.microsoft.com/en-us/download/details.aspx?id=58494</a> (PBIDesktopSetup_x64.exe)	
	2. Download the detailed case studies and PDF material from the link shared in the email.	
	3. 25-mins 'Pre-Training Prep' video course - <a href="https://courses.yodalearning.com/p/introduction-to-power-query-and-power-bi-desktop/">courses.yodalearning.com/p/introduction-to-power-query-and-power-bi-desktop/</a>	
<b>1</b>	<b>Overview of the User Interface ("UI")</b>	<b>10 Mins</b>
<b>1</b>	<b>Power BI Desktop's UI: Visuals and Report formatting</b>	
	Left-side Panel: Report (Dashboard), Data (Tables), Relationships	
	Right-side Panel: Filter, Visuals (Field, Format, Analytics), Fields	
	Ribbon Tabs	
	File format - PBIX	
<b>2</b>	<b>Power Query - Part 1</b>	<b>100 Mins</b>
1	Case Study: Input vs Output - What if you do this in Excel? (Intro_Exercise)	
2	Power Query's role in data preparation & steps automation	
3	Power BI Desktop > Get Data & Transform tab	
4	General UI of Power Query - View Formula, Query Settings (Undo)	
5	Remove Other Columns	
6	Promote Headers	
7	Basics - Icon of Data Type (Left of column header)	
8	Remove Blank Rows	
9	Ctrl A & Remove Duplicates (single column vs. multi-column selection)	
10	UnPivot (cross-tab to flat-file)	

11	Why Pivot Table loves FlatFile? E.g., Grouping	
12	Rename Column Headers	
13	Merge Columns (~Concatenate) vs. Column from Examples (~FlashFill)	
14	Custom Column - Basics	
15	Custom Column - Google search - power query custom column formula to ...	
16	Check the impact of Data Type [ABC123] - $\Sigma$	
17	Conditional Column for Nested IFs (Low-Medium-High)	
18	Count Rows	
19	Duplicate Query (vs. Reference)	
20	GroupBy (based on Low-Medium-High)	
21	Copy Entire Table (1000 rows only)	
22	Close & Apply	
23	Copy the codes from "Advanced Query Editor"	
24	Copy Paste M-Query in Excel's Power Query (Advanced Editor & Blank Query)	
25	Go to Excel -> Data tab -> Get Data -> From Other Sources -> Blank Query	
26	Load to... [Table vs Pivot Table]	
27	Queries & Connections	
28	Right-click on Query -> Refresh, Load to, Edit = Launch Power Query Editor	
29	Demo: Format - Trim, Clean, Case Change; Fill Down, Split to Rows; Replace Values	
<b>3</b>	<b>Power Query - Part 2</b>	<b>120 Mins</b>
1	Case Study - Consolidate data using Append, Merge Queries (3y_Sales - annual sales files i.e., 2016,2017,2018... in a Folder)	
2	Importing data from a Folder with multiple Excel files Note: Column Header Names & Case have to be same. ** ** Self-reference guide (PPT with video links) provided for advanced / complex cases	
3	Merge Queries vs. Append Queries	
4	<b>Advantages over VLOOKUP:</b> Handle Speed & Volume: Can work on >1 mn rows Expand the table to give multiple output-columns in the same step unlike VLOOKUP Can do concatenated VLOOKUP – e.g., Lookup with 2 columns - 'Region' & 'Cust_Type' Multiple JOIN Types such as - Left Outer, Inner, Full Outer Fuzzy Merge for spelling differences (Jerry M. Campbell vs Jery Cambell) Can do reverse lookup unlike VLOOKUP	
5	<b>Common Blunders - Unwanted extra rows generated</b> PQ is case sensitive Using Duplicate IDs while doing Merge Queries (Cartesian Product)	
<b>4</b>	<b>Creating a Power BI report</b>	<b>120 Mins</b>
1	<b>Slicer:</b> List, Dropdown Orientation (List) for Horizontal tiles; Single Select, Select all	

2	<b>Common Formatting Options of Visuals - using Card Visual:</b>	
	Size (text)	
	Display Units	
	Value Decimal places	
	Shadow	
	Label	
	Calculation of Fields (Sum, Count, DistinctCount)	
3	<b>Clustered Column:</b>	
	Label	
	Dashed average line with Label	
	Conditional Formatting - for spotting patterns (DistinctCount of Customers)	
4	<b>Tricks - Visualization, Interactivity, Data Exploration</b>	
	Edit Interactions - Control Interactions between Visuals (Controller vs Controlled)	
	Edit Interactions - Filter vs Highlight vs None	
	Small Multiples	
	Horizontal Bar Chart with TopN Filter	
	Treemap	
	Demo - Custom Visuals from Marketplace - Calendar Heatmap (Tallan)	
	Refer our videos on data exploration	
5	<b>Matrix:</b>	
	It's like Pivot Table	
	Disable Subtotals (Row & Column)	
	Conditional Formatting like Rules along with <i>Advanced Controls</i>	
	Data Bars (Show Bar only) with +/-, Background Color for Heatmap, Icons	
6	<b>Extra:</b>	
	Filter levels - Report level vs Page level vs Visual level [^ if time permits]	
	Custom Tooltip - On hover visuals [^ if time permits]	
	Publish and Share a Power BI report	
5	<b>Recap, QnA &amp; Next Steps for Learning</b>	30 Mins
	DAX & Basics of Data Modelling	
End		