Power BI

GoSkills online course syllabus

Sunday, April 28, 2024

Skill level	**Lessons**	**Accredited by**
Beginner	39	CPD

Pre-requisites	**Video duration**	**Estimated study time**
None	3h 48m	19h 30m for all materials

Instructor

Ken Puls

What is Power BI?

1 Introduction to Power BI

In this lesson we will explore what Power BI is, as well as the problems it solves for us.

2 Overview of PowerBI Components

This lesson explores the main components of Power BI, including Power BI Desktop, Power BI Free, Power BI Pro and Power BI Premium, and discusses how to get access to each component.

3 Power BI Workflow

In this lesson we will explore the steps used in Power BI to get from data to dashboards, as well as all points in between.

Getting Started with Power BI

4 Getting Data From a Text file

We will begin our journey by pulling some sales data into Power BI from a text file, as well as making some minor manipulations to the data.

5 Creating visuals

This lesson covers an introduction to create different visuals and cross filtering in Power BI.

6 Publishing to the Power BI service

This module covers how to publish your data into the Power BI service, explores the feature parity between desktop and cloud, and covers how to update your data in the service.

7 Dashboards vs Reports

Dashboard is a loaded term to Excel users, and Power BI calls those reports. So what is a "Dashboard", and how do we create one?

8 Sharing Power BI Reports and Dashboards

In this module we will look at the methods of sharing your BI artifacts. We explore sharing without using the cloud, as well as sharing both within and external to your "tenant".

9 Working with Q&A

What is Q&A? Great question! Check out this module not only to get an Answer, but to learn how to tailor those answers as well.

10 Generating Quick Insights

If you've ever had a challenge creating good business intelligence visuals, why not let the system help? This module is all about making the system do the hard work so that you don't have to.

11 Working with Alerts

Dashboards are all about exposing problems. So why not let the system notify you when something goes offside?

Data & Modeling

12 Adding Excel Data to an Existing Power BI Model

In this module we will explore collecting Budget data to link into our dashboards. The only issue is that it comes from a completley different source: an Excel file.

13 Key Concepts for Relating Data

This lesson focuses on the characteristics that are required in order to link tables together properly, as well as a key tip that will prevent getting yourself into trouble later.

14 Solving m:m Joins via Composite Keys

One potential source of m:m (many to many) join issues in Power BI can be solved by combining multiple columns into a "composite key" in order to relate tables together. This module will dig into this issue, as well as how we solve the problem.

15 Solving m:m Joins via Table De-Aggregation

In this module we'll explore how to build dimensional tables that solve the m:m (many to many) linking problem, allowing you to create much more robust models.

16 Table De-Aggregation - Application

This module shows how to apply de-aggregation to our sample model. The end goal here is to avoid m:m (many to many) joins by creating new dimensional tables that can be linked into the model via 1:m (one to many) relationships.

17 Dynamic Calendars – Theory

Every model that will perform any kind of date/calendar intelligence must have a proper calendar table. This lesson gives you the tips that you can apply to any model to build a calendar table that dynamically updates with your data.

18 Dynamic Calendars – Application

It's now time to build a dynamic calendar on the fly for our sample model. After identifying your calendar's start and end dates, it's one line of code, 5 clicks, 4 characters and the Enter key, and you're set.

Working with DAX (Power BI's formula language)

19 Basic Measures – Theory

In this module we'll explore how to use Power BI's formula language to create re-usable "Measures"

20 Basic Measures – Application

It's now time to apply our knowledge of basic formulas, and build measures that add business intelligence value to our sample model.

21 Understanding Measure Calculation

Creating measures is all very well, but you need to understand why they return what they do. In this module we will explain how to identify the filter context applicable to your data point, and how that influences the way measures are calculated.

22 Performing Math with Compound Measures

This lesson explores the syntax and practical application of adding or subtracting measures from each other, and lays the groundwork for creating more complicated mathematical combinations

23 The CALCULATE() Function – Theory

CALCULATE() is the super-charged SUM(anything) function, and mastering it is the secret to truly mastering Power BI's formula language. In this module we will show how it works, as well as how it impacts basic measure calculation.

24 The CALCULATE() Function – Application

In this module we will review several CALCULATE() functions that live in a real model, showing how they work and add value to our business intelligence.

25 The ALL() Function – Theory

How do you ensure that your "All Time Sales $" retains it's "All time" status when someone click on a visual and cross filters your report? This lesson is ALL() about the function that lets you do exactly that.

26 The ALL() Function - Application

In this module we look at practical examples of using the ALL() function to modify and override the filter context, resulting in measures that only change when we want them to.

27 Quick Measures

Quick measures are ready-rolled formula patterns built through a drag and drop user interface, allowing you to write really complicated formulas for you without having to learn all the nuances of Power BI's DAX formula language.

Exploring Visuals

28 Global Visual Concepts

In this module we will look at some of the global features that are applicable to many visuals including formatting options, drill down, tooltips and more.

29 Bar & Column Charts

In this module we will take a look at creating bar and column charts to display our data.

30 Line Charts

Line charts are a great way to show trends over time, and we'll explore doing so here.

31 Combination Charts

Combination charts combine line and column charts into a single visual. They are very useful for showing values versus a standard or target.

32 Maps & Filled Maps

Working with maps can be a bit tricky. This module will explain the good, the bad and the ugly of maps, as well as provide recommendations to avoid the ugly.

33 Pie Charts

In this lesson we'll explore Power BI pie charts, donut charts and their characteristics.

34 Treeviews

Also known as "breakdown trees", this visual can show interesting statistics about the makeup of your data sets.

35 Cards

Cards are super useful in order to drive alerts. They also have a close cousin called the multi-row card. In this module we will explore both, as well as their pros and cons.

36 Matrix

The matrix is similar (but not the same as) Excel's PivotTable. In this lesson we will show how to work with this specific visual.

37 Tables

Summary tables are a great way to convey key indicators and underlying data points.

38 KPIs

KPIs are great for showing you most recent period's performance versus a target value, with a longer term trend as an area chart in the background.

39 Custom Visuals - Chiclet Slicer

When the default visuals are not inspiring, or you just need to use a visual that Microsoft doesn't supply by default, you can often find another version in the Custom Visual store. In this module we will look at the Chiclet Slicer, a vast improvement over Power BI's native Slicer visual.

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