# **USER GUIDE: POWER BI**

University of Oxford | Finance Division

#### Abstract

A step-by-step guide to accessing and interacting with PowerBI content published by the University of Oxford's Finance Division

Finance Data & Analytics Team

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### Introduction

The purpose of this document is to give a step-by-step guide of how colleagues within the University of Oxford can view the reports they have been given access to and the different options that are available to them within the reports.

This user guide will also explain how the different visuals within the reports interact with each other, as well as the specific options that are available on the visuals.

All the Reports and Visuals within Power BI have the same abilities, so the same properties and functionality shown in this document can be applied to all the reports.

## **PowerBI Terminology**

### Visualisation

A visual representation of data. Some examples of visualisations used in PowerBI include bar charts, tree-maps, doughnut charts, and maps.

### Report

A PowerBI report contains visualisations relating to a single area of organisational activity and is designed to provide insights into that area. The visualisations in a report can be organised on a single page or across multiple pages.

### Dashboard

A dashboard is a single page that brings together visualizations from various reports to tell a story. Because it's limited to one page, a welldesigned dashboard contains only the most important elements of that story.

### Арр

An App is a container for PowerBI content such as reports and dashboards. It allows related content to be packaged together making it easier to find and access.

### Logging in to the Power BI Service

Open your web browser of choice and go to https://app.powerbi.com/home

Here you will need to login in using your University of Oxford Single Sign-On account.

When signing in to your SSO account, provide your username in the format abcd1234@ox.ac.uk and enter your SSO password.

Complete the multi-factor authentication steps using your authenticator method of choice e.g. the Microsoft Authenticator App.

### Accessing Reports, Dashboards and Apps

### Published via Direct Link

PowerBI content may be shared with you via an email containing a weblink sent from the Power BI Service. Clicking the link within the email will take you directly to the report, dashboard or app.

### Published via an App

After logging in to the PowerBI Service select 'Apps' from the left-hand navigation pane.

At the top right of the Apps page select 'Get apps'.

In the PowerBI apps window that appears select 'Organisational apps'.

Locate the app you want and select 'Get it now'.

This will load the content of the app and add it to your apps page.

Select 'Go back' in the bottom left of the screen to return to your Apps page.

### Interacting with reports

### The Parts of a Report



A. This report has six pages (or tabs). The example shows the Sentiment page.

B. This page has five visuals and a page title.

C. The Filters pane shows all applied filters. To collapse the Filters pane, select the arrow (>). **Note:** The Filters pane can be excluded from displaying in reports by the report writer if it is not required.

D. The Power BI banner shows the title of the report and the sensitivity label. Select the title to open a menu that shows the report location, date it was last updated, and contact information for the report creator.

E. The action bar contains links to numerous actions you can take on this report. Some actions require extra permissions. For example, based on your permissions you may be able to edit, subscribe, and share the report. All users can add a comment, view a bookmark, or generate automatic insights. Select More options (...) to see the full list of report actions.

### **Report Features**

### Slicers

Slicers are a way of filtering. They're displayed on the report page and narrow the portion of the data that's shown in report visualizations. They can take the form of checkbox, drop down lists, or buttons.

**Note:** A slicer may only filter some visualisations on a report page and not all. The visualisations that are filtered by a slicer is set by the report writer.

Below is an example of a slicer that filters the report page by department manager.



To deactivate a slicer, select the eraser icon.



### Cross-filter and cross-highlight visuals

You can explore the relationships between the visuals in your report without using filters or slicers. Select a value or axis label in one visual to cross-filter or cross-highlight the related values in other visuals on the page.

- Cross-highlighting Selecting a value in one visual will highlight the related data in visuals such as column and bar charts. Crosshighlighting doesn't remove the unrelated data from those visuals. The unrelated data is still visible but dimmed.
- Cross-filtering Selecting a value in one visual will act like a filter in other visuals, such as line charts, scatter charts, and maps. In those visuals, only the related data remains visible. The unrelated data isn't visible, just as you'd see with a filter.

To remove the highlighting, select the value again, or select any empty space in the same visual. For more examples, see the Cross-filtering and cross-highlighting section of "How visuals cross-filter each other in a Power BI report."

Note: Whether a visual cross filters or cross highlights other visuals on a report page is set by the report writer.

Below is an example of this feature in practice (click image to play).



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#### **Tooltips**

Tooltips provide contextual information and detail to data points on a visual. Tooltips appear when you hover over a data point in a visual.

These can either be default tooltips that show the data point's value and category, or a custom tooltip created by the report writer to provide greater context and information for users viewing the visual.

#### Example of a default tooltip:



#### Example of a custom tooltip:



#### Drill Mode

If a visual has a hierarchy (e.g. Year, Month, Day), then you can use drill mode to move between the different levels of the hierarchy.

You can tell if a visual has a hierarchy by hovering over it. If the drill control options appear in the action bar, the visual has a hierarchy.

$$\uparrow \quad \downarrow \quad \downarrow \downarrow \quad \pitchfork$$

The first icon, the up arrow, is used to go up a level in a hierarchy after you have performed a drill down action on a visual. It is essentially how you reset the visual.

The second icon, the single down arrow, can be selected to enable the option of drilling down **one field at a time** by selecting a visual element, like a bar, bubble, or leaf. Think of it as enabling 'click to drill'.

The third icon, the double down arrows, takes you to the next level in the hierarchy replacing the current level on display e.g. going from Year to Month.

The fourth and final icon, the expands fields option, adds another hierarchy level to the current level on display e.g. adding month to year.

Note: For full details of all Drill Mode options please go to Drill mode in the Power BI service - Power BI | Microsoft Learn

#### Drillthrough

When a report page displays summarized results, a drillthrough page can be used to lead report users to transaction-level details. This design approach allows the viewing of supporting transactions when needed.

To access a drillthrough page, right click on the data point in question. If the 'Drillthough' option is displayed, navigate to it, and select the drillthrough page you want to navigate to.

Note: Not all values will have a drillthrough page associated with them.

The image below demonstrates how to navigate from a data point in a visual to the associated drill through page.

V2018							
12010	\$1,428,020.38		\$1,406,491.96	\$2,834,512	.33		
Y2019	\$3,179,517.56	\$1,983,988.04	\$2,872,516.87	\$8,036,022	.46		
CY2019 Apr	\$53,834.40	\$192,211.66	\$116,094.10	\$362,140	.17		
CY2019 Aug	\$468,277.51	\$143,793.75	\$151,047.79	\$763,119	.05		
CY2019 Dec	\$119,236.30	\$136,457.24	\$425,979.11	\$681,672	.65		
CY2019 Feb	\$703,714.99	\$254,388.44	\$213,490.61	\$1,171,594	.05		
CY2019 Jan	\$55,465.41	\$180,040.57	\$152,484.49	\$387,990	.47		
CY2019 Jul	\$40,814.59	\$112,638.82	\$80,574.32	\$234,0			
CY2019 Jun	\$153,406.10	\$161,191.86	\$418,461.00	\$733,0	See Kec	oras	
CY2019 Mar	\$198,316.78	\$125,723.49	\$496,251.52	\$820,2	Show da	ata	
CY2019 May	\$638,169.15	\$185,310.66	\$198,629.90	\$1,022,1	Group	agn 💌	Order Detail
CY2019 Nov	\$605,404.06	\$193,329.28	\$198,648.08	\$997,3	Group		
CY2019 Oct	\$54,602.78	\$163,616.96	\$110,014.25	\$328,254	.00		
CY2019 Sep	\$88,275.47	\$135,285.31	\$310,841.69	\$534,402	.46		
	\$4,607,537.94	\$1,983,988.04	\$4,279,008.83	\$10,870,534	.80		
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			S	061176	1 1	\$1,466.01	\$36.65
			3	061190 82	6 7	\$3,040,66	\$75.02
			s	061197	6 10	\$7,351.62	\$183.79
			S	O61198	1 1	\$323.99	\$8.10
			S	061214 2	1 7	\$4,706.06	\$117.65

 SO61238
 630
 143
 S22,608.86
 S565.22

 SO61242
 3
 4
 S2,049.28
 S51.23

 SO61246
 6
 4
 \$1,409.38
 \$335.23

 SO61249
 210
 42
 \$26,203.84
 \$655.10

 SO61252
 3
 2
 \$372.59
 \$9,931

 SO61254
 15
 7
 \$8,043.03
 \$201.08

 SO61258
 210
 101
 \$10,879.40
 \$271.99

 SO61263
 528
 133
 \$29,625.69
 \$740.64

 Total
 **4,295
 941** \$234,027.74
 \$5,850.70

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# Further Reading

Power BI for business users - Power BI | Microsoft Learn