Power BI Basics for Project Reporting

The Ultimate Guide To Setting Up Teams & SharePoint For Project Management

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Contents

Introduction

The aim of this **POWER BI BASICS FOR PROJECT REPORTING** workbook is to provide you with a quick introduction into what Power BI is, it's licensing, how it works and how you, as a casual Power BI user (without a pro license) can leverage it's capabilities for quick insights.

This booklet is probably not for you if you are an experienced Power BI user and it is not intended to be a 'how to' guide *per se*. There are many resources within the Collab365 environment which teach Power BI brilliantly – I don't intend to repeat any content from those here…

… My aim here is to show you how to create a Power BI report from an Excel spreadsheet in your personal workspace in minutes. You will then be able to use your visualizations in presentations and documents without having to build them manually. No **Pro** license? No problem!

Who knows? You might be able to use this little exercise to showcase the potential of Power BI to take your reporting to the next level and build a business case for investing in those additional licenses.

Please don't forget to share your ideas and any questions in the Collab365 Academy space!

Lynzie Cotton

What is Power BI?

Power BI is a collection of Microsoft services which allow you to create visually impactful snapshots of your data.

It enables you to pull data from multiple sources and share these insights with the people who need to understand them.

It consists of an MS Windows desktop app called Power BI Desktop, an online, browser based service and mobile Power BI apps that are available on any device.

For the purposes of this exercise, we will be using the **Power BI Online Service** as this is most commonly accessed by casual users. The Power BI Service is used to create and view dashboards and reports online.

The **BUILDING BLOCKS of Power BI** are described as **Power BI content**. The 4 types of Power BI content we will look at here are **datasets, visualizations, dashboards and reports**:

DATASETS

Datasets are the places Power BI pulls information from. These could be Excel spreadsheets or databases. You can manage this data within Power BI to enable visualization of what is interesting, relevant and desirable.

VISUALIZATIONS

Visualizations are types of chart built within Power BI. They display the data gathered from datasets and are interactive. Visualizations can be filtered, sliced, highlighted and drilled into.

DASHBOARDS

Dashboards are single screens containing your chosen visualizations. They can be given titles, graphics and branding to align with business needs. A dashboard can answer a specific question such as the need to provide budgetary updates or other project information.

REPORTS

Reports are made up of one or more pages of text, visualizations and graphics.

What about licenses?

Power BI Service users have either a free, Pro or Premium license: Business users are likely to be using a free license managed by a Power BI admin.

If you need to create then SHARE dashboards or other Power BI content or view content SHARED with you, you will need a Power BI **Pro** user license.

You can take advantage of a 60 day free trial of all **Pro** features which will revert back to your previous license when your trial ends. Individual users within an organization can be given pro licenses but any one you wish to share with must have the same license.

The free license is great if you want to use Power BI for your own purposes but you aren't able to collaborate, share or view shared content.

For more information on BUSINESS USER licenses use the following link:

https://learn.microsoft.com/en-us/power-bi/consumer/end-user-consumer

In this booklet we will be using the AUTO-CREATE feature within your personal Power BI Workspace (available with free license) to create your project visualisations.

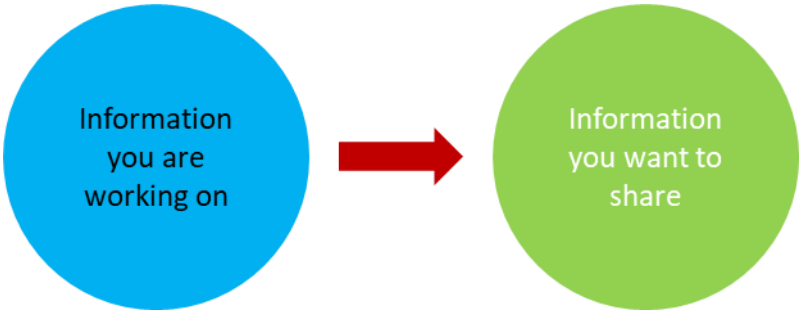
You will be able to share and use images created from these insights in your Word, PowerPoint and PDF documents.

Power BI for project reporting

Power BI is ideal for project reporting because it can connect to multiple data sources and combine them into single, unique reports and dashboards.

Your data can be presented in attractive, accessible ways and can be refreshed so that insights are always up to date.

In a project setting, there are often two types of information to work with:



You may wish to share project information and insights with key stakeholders within your organisation or with clients. These stakeholders won't usually want to see the detail of your ongoing work such as your Planner boards or your entire financial breakdown but would benefit from access to snapshots of data which is immediately relevant to them.

Power BI allows you do this easily and quickly!

Because Power BI can pull from multiple data sources, you can show information on your project schedule, resources, risks and milestones met all in one place.

Building a simple dashboard from an Excel sheet

During the Ultimate Guide to Setting up Teams and SharePoint for Project Management workshop, we used an Excel workbook to show financial information about the project.

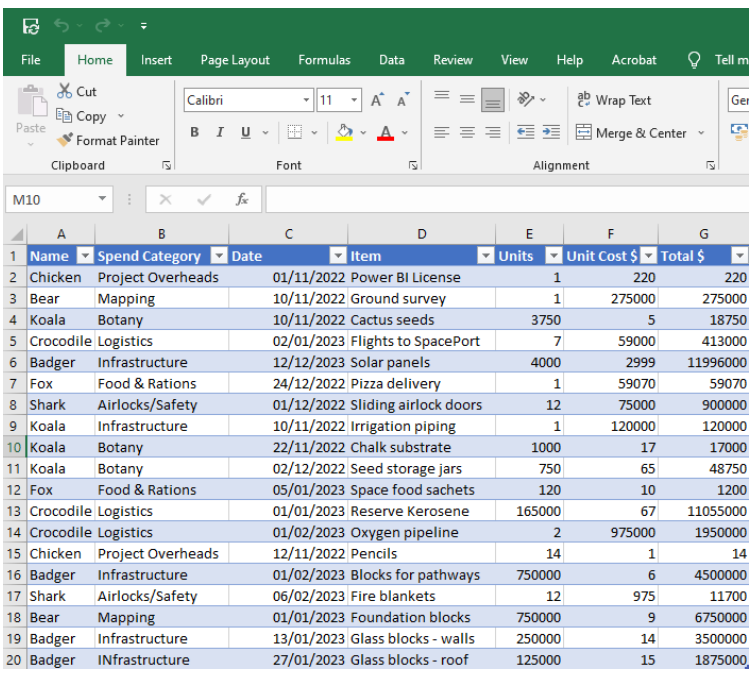
We will use this spreadsheet as an example to produce a simple PROJECT BUDGET DASHBOARD in Power BI using the **AUTO CREATE** feature.

As you can see, this spreadsheet contains 7 simple columns and has no complex formulae other than a calculated total. I have used only whole numbers. You can add in as much complexity as you need and as you learn.

You can export your MS Planner boards and MS Lists into Excel although you will need to 'clean up' the data from these – this process is not covered here.

The purpose of this exercise is to help you recognise the possibilities Power BI holds for creating project reports quickly and easily!

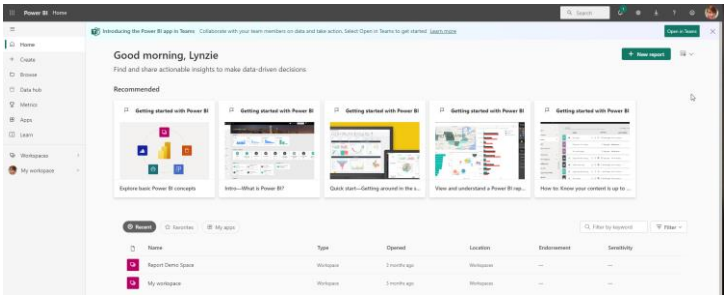
You will find additional step by step resources for building Power BI reports and dashboards from scratch within the Collb365 Academy.



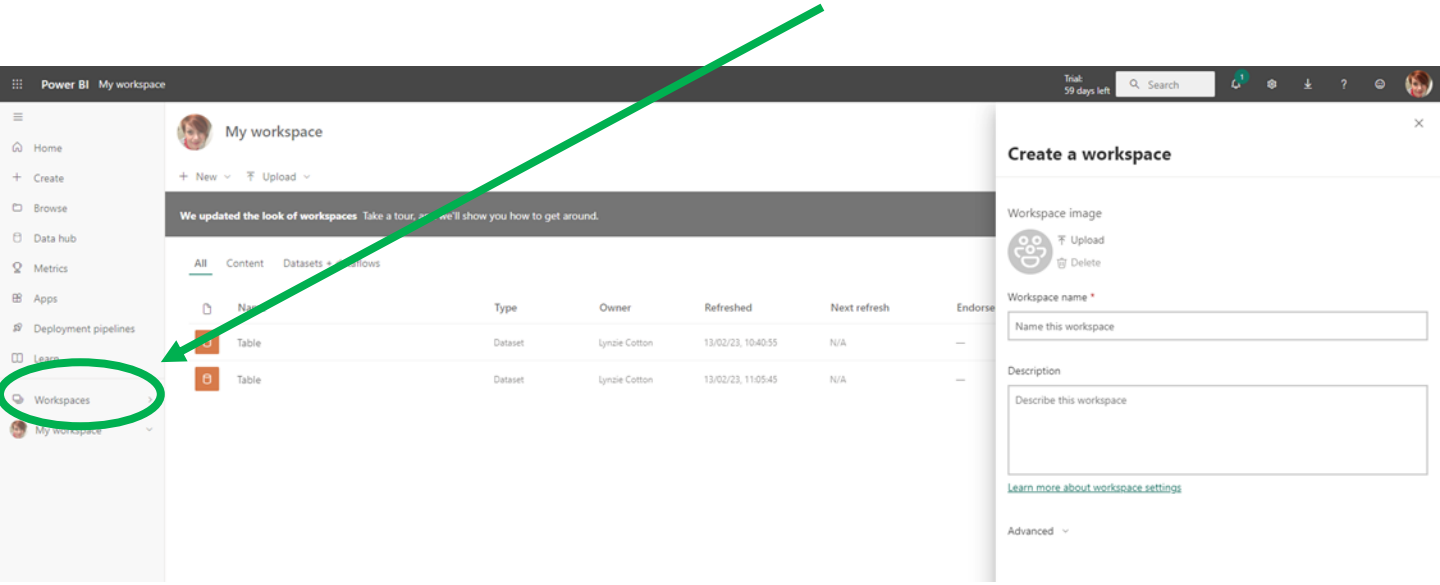
	A	B	C	D	E	F	G
1	Name	Spend Category	Date	Item	Units	Unit Cost $	Total $
2	Chicken	Project Overheads	01/11/2022	Power BI License	1	220	220
3	Bear	Mapping	10/11/2022	Ground survey	1	275000	275000
4	Koala	Botany	10/11/2022	Cactus seeds	3750	5	18750
5	Crocodile	Logistics	02/01/2023	Flights to SpacePort	7	59000	413000
6	Badger	Infrastructure	12/12/2023	Solar panels	4000	2999	11996000
7	Fox	Food & Rations	24/12/2022	Pizza delivery	1	59070	59070
8	Shark	Airlocks/Safety	01/12/2022	Sliding airlock doors	12	75000	900000
9	Koala	Infrastructure	10/11/2022	Irrigation piping	1	120000	120000
10	Koala	Botany	22/11/2022	Chalk substrate	1000	17	17000
11	Koala	Botany	02/12/2022	Seed storage jars	750	65	48750
12	Fox	Food & Rations	05/01/2023	Space food sachets	120	10	1200
13	Crocodile	Logistics	01/01/2023	Reserve Kerosene	165000	67	11055000
14	Crocodile	Logistics	01/02/2023	Oxygen pipeline	2	975000	1950000
15	Chicken	Project Overheads	12/11/2022	Pencils	14	1	14
16	Badger	Infrastructure	01/02/2023	Blocks for pathways	750000	6	4500000
17	Shark	Airlocks/Safety	06/02/2023	Fire blankets	12	975	11700
18	Bear	Mapping	01/01/2023	Foundation blocks	750000	9	6750000
19	Badger	Infrastructure	13/01/2023	Glass blocks - walls	250000	14	3500000
20	Badger	INfrastructure	27/01/2023	Glass blocks - roof	125000	15	1875000

Building a simple dashboard from an Excel sheet

Going to the Power BI Service home screen enables you to access learning resources to get you started:



The first thing we need to do is CREATE A WORKSPACE



Give your workspace a name and description and add an image.

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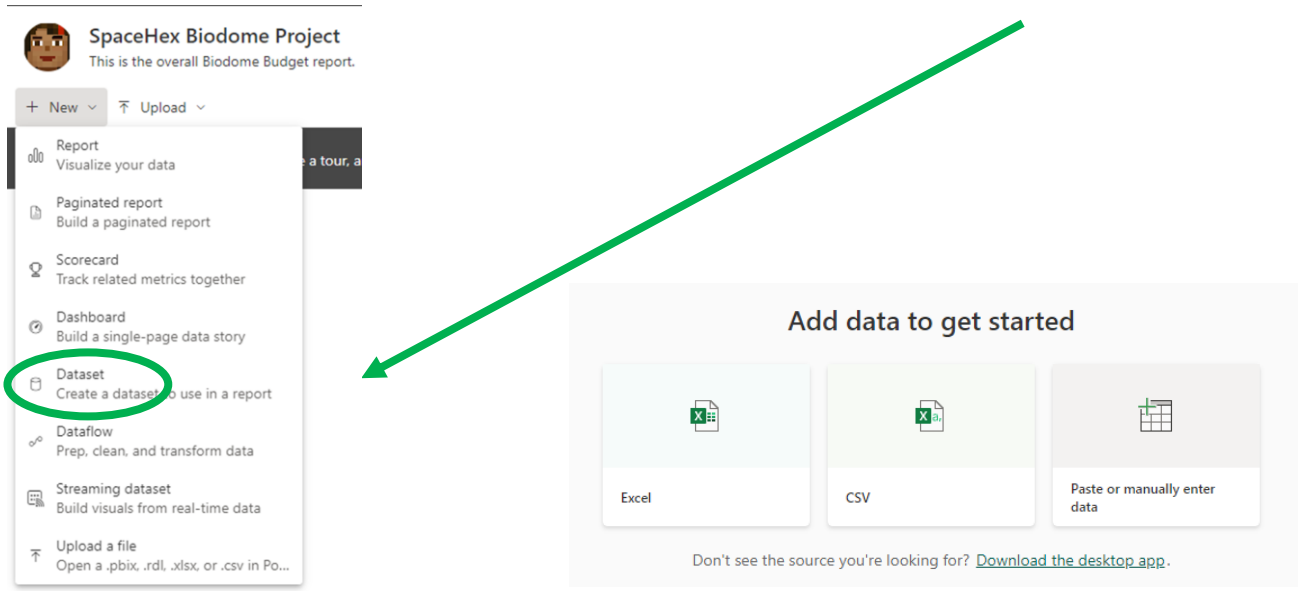
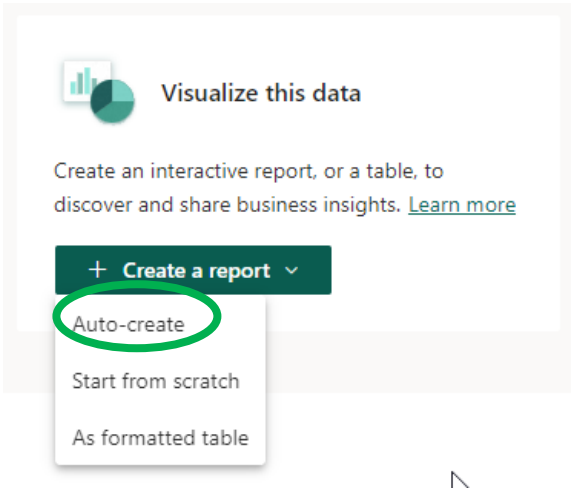
Building a simple dashboard from an Excel sheet

Once you have created your workspace, you can add a dataset.

Add your dataset from FILES and choose the one you want to use. In this case we are using our Excel file.



Once this data is imported we will choose VISUALIZE THE DATA - CREATE A REPORT – AUTO-CREATE:



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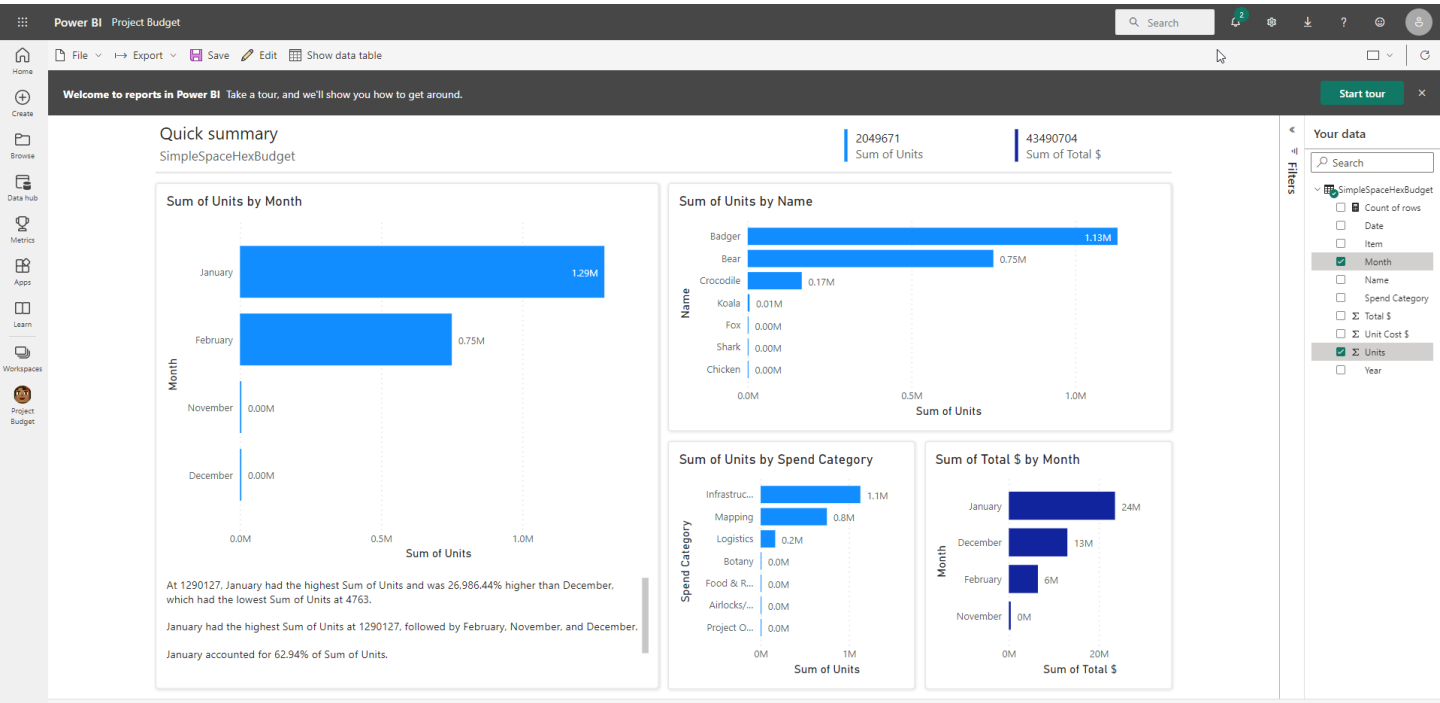
Building a simple dashboard from an Excel sheet

Power BI will now create an auto-generated report for you:



From this simple spreadsheet Power BI has created a dashboard – a single screen comprised of 4 different visualisations based on the data supplied:

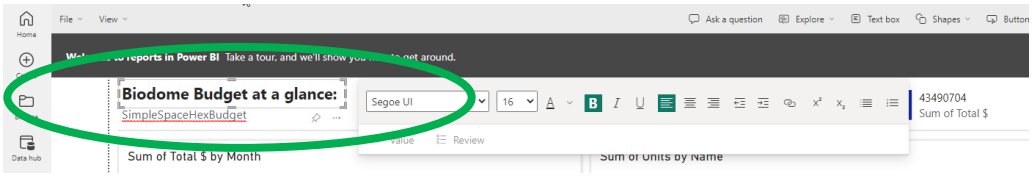
- SUM OF UNITS BY MONTH – how many individual units have been purchased
- SUM OF TOTAL $ SPENT BY NAME – who has spent what amount
- SUM OF TOTAL $ BY SPEND CATEGORY – what category has the highest outgoings
- SUM OF TOTAL $ SPENT BY MONTH - a monthly breakdown of total expenditure

Each visualization has it's own container and can be edited to show the data in different forms. In the screen shot above you can see that Power BI has provided bar graphs of each visualization.

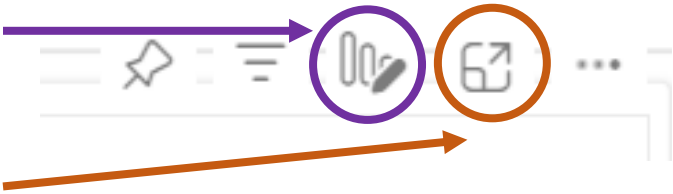
We can now edit these:

Building a simple dashboard from an Excel sheet

You can enter EDIT MODE edit your new report, add a title, change the visualisations and save it. You do not have to be in edit mode to change the individual visualizations.



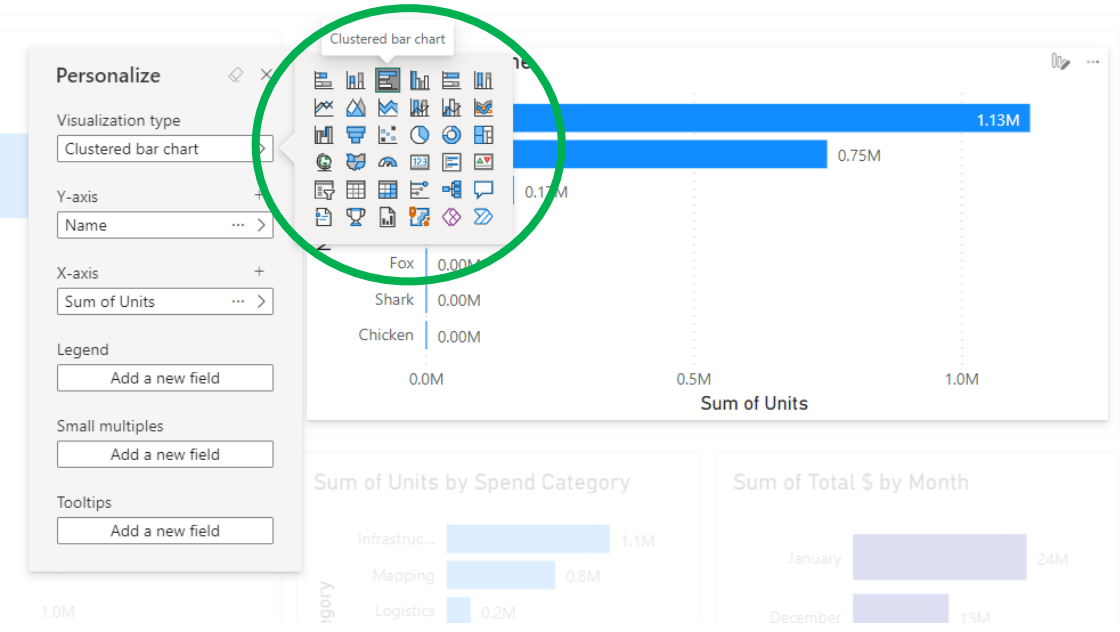
You can personalise each visualization by hovering over the right hand corner of the container and clicking the PERSONALIZE icon.



Use the FOCUS icon to expand out the specific visualization you want to work with – simply click RETURN TO REPORT to go back to your dashboard!

When you click the PERSONALIZE icon you can choose from multiple types of data visualization to display your data in a way that makes most sense for you.

This takes some experimentation - on the next page we will create a Pie Chart.



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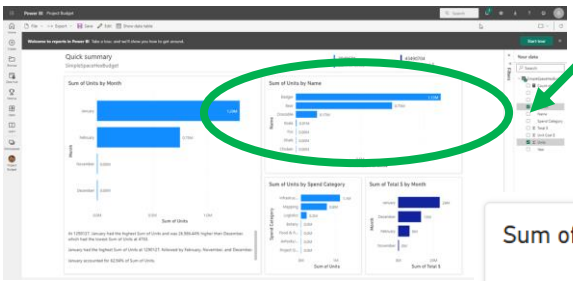
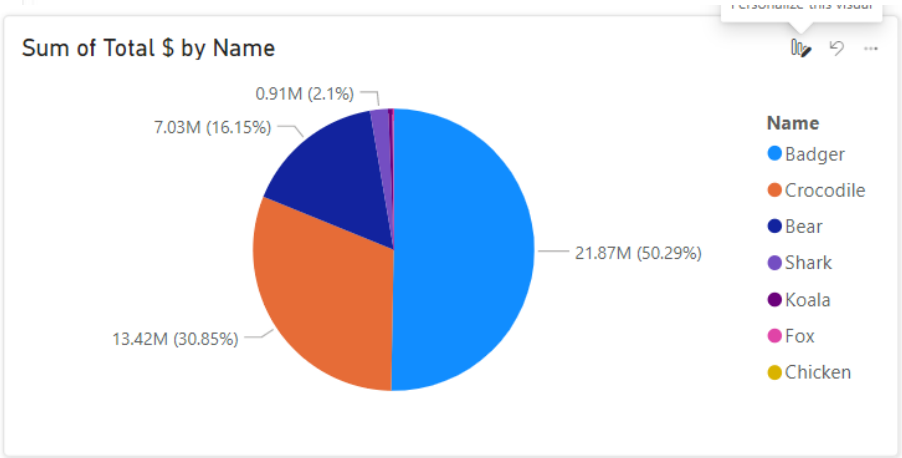
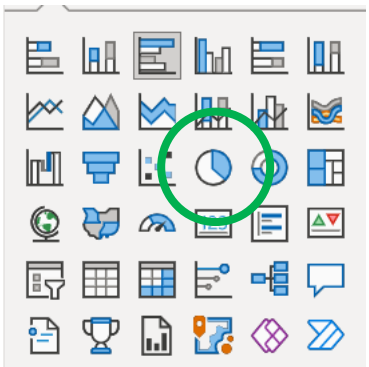
Create a pie chart

We may choose to show all of our data in the form of bar graphs as provided by Power BI. We can make out data more accessible and visually appealing by making some simple edits.

In this example, I have changed the bar graph showing SUM OF TOTAL $ SPENT BY NAME into a PIE CHART:





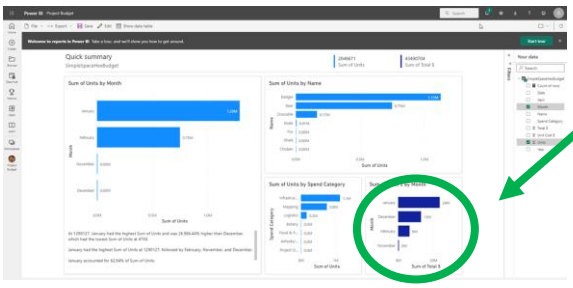


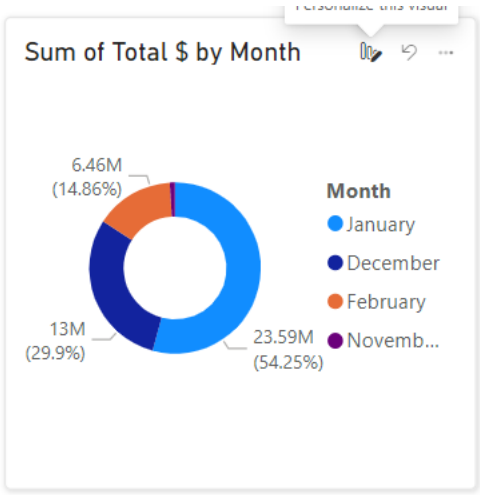
To do this simply hover over the top right corner of the container to see the PERSONALIZE icon then select PIE CHART from the choices available. Your chart will be created in seconds!

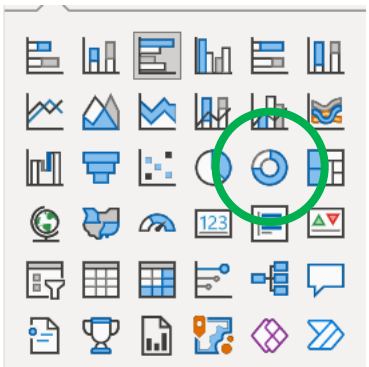
Create a donut chart

We may choose to show all of our data in the form of bar graphs as provided by Power BI. We can make out data more accessible and visually appealing by making some simple edits.

In this example, I have changed the bar graph showing SUM OF TOTAL $ SPENT BY MONTH into a DONUT CHART:







To do this simply hover over the top right corner of the container to see the PERSONALIZE icon then select DONUT CHART from the choices available. Your chart will be created in seconds!

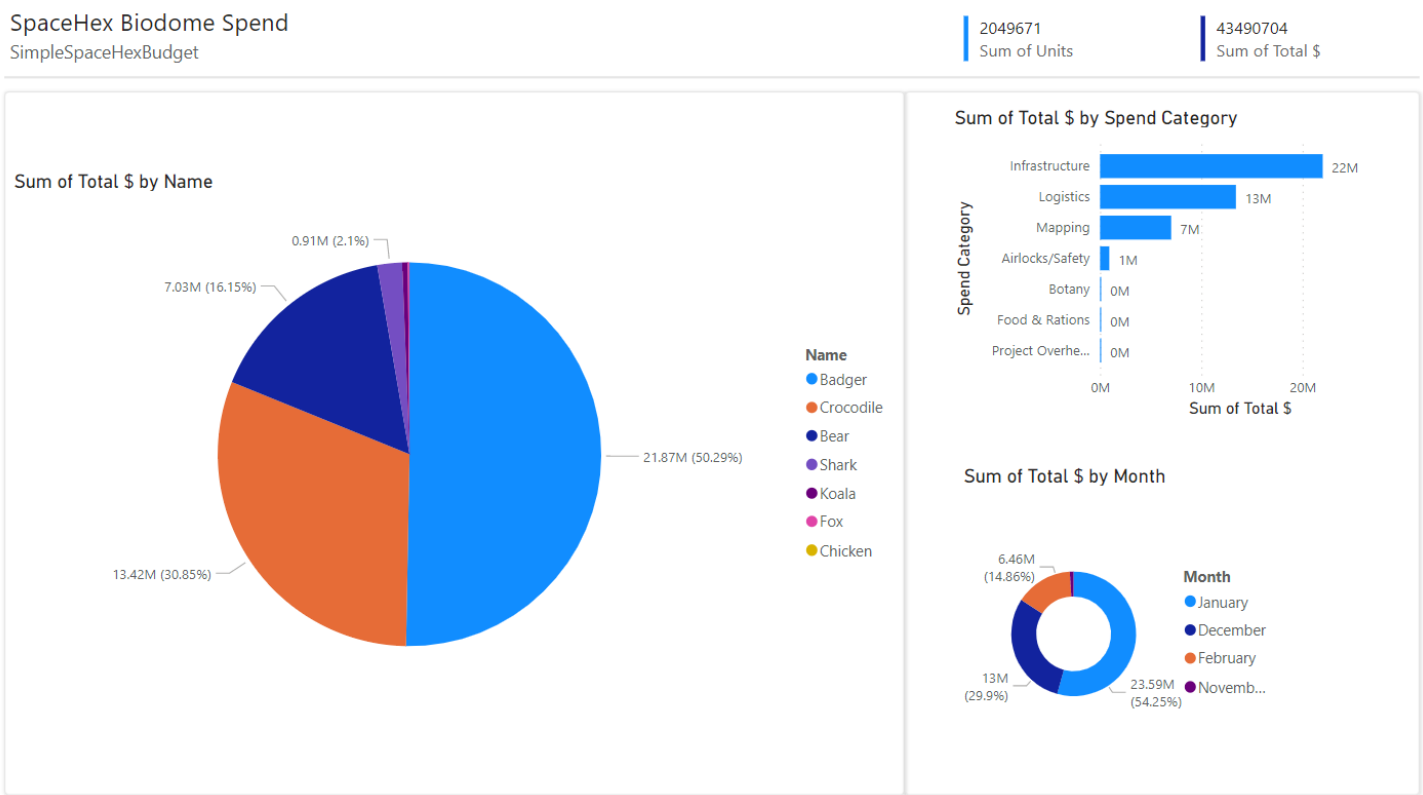
The end result:

You can easily change the layout of your dashboard by dragging and resizing your visualizations as you would images on a slide.

Taking screenshots of each of your visualizations or sections allows you to create graphics for your presentations and documents without spending hours creating them yourself.

Taking a screenshot of your entire dashboard allows you to share a PDF of your current position in seconds!

Here, you can see that I have rearranged my dashboard to show 3 simple views which I can share as an image (or images) with team members and key stakeholders. They can now see a snapshot of project expenditure.



Converting this data from Excel into visually meaningful content has taken less than 15 minutes!

Conclusion

Thank you for taking the time to read through this **POWER BI BASICS FOR PROJECT REPORTING** workbook.

I hope it has achieved its aim of providing a whistle stop tour through Power BI and given you an opportuntiy to create something from nothing very quickly using a simple spreadsheet and the AUTO-CREATE function.

I would love to hear how you get on using Power BI for your projects and can't wait to see you in the Collab365 Academy soon!

Best wishes,

Lynzie Cotton

Thank you

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