
Power BI Assignment 3

1. List and explain different PowerBi products?

- a. Power Bi Desktop:- a window desktop application for data analysis and reports creation.
- b. Power Bi Service:- online software as a service, used to collaborate and distribute Power Bi reports.
- c. Power Bi Mobile :- a native mobile app
- d. Power Bi Report Builder:- a tool for creating paginated reports.
- e. Power Bi Report Server:- an on-premises report server (available through Power Bi Premium licensing)
- f. Power Bi Embedded:- a service to embed visuals, reports and dashboards into an application.

2. What limitations of Excel, Microsoft solved by PowerBi?

- a. Data Size:** One of the key differences is handling the capacity of data quantity. With Power BI, we can handle millions of rows together with fast speed, but with Excel, it is frustrating to handle large amounts of data.
- b. Cloud-Based Features:** Once the dashboard building completes in Power BI, we can publish the report to the end-users with Microsoft's cloud-based services. But, when it comes to Excel, we need to share the large data with the dashboard via email or any online sharing tool.
- c. Visualizations:** In Power BI, we have plenty of visualisations to design the dashboard, but with Excel, we have only limited visualisations.
- d. Custom Visualisations:** Power BI allows us to import visualisations that are not there in the file by going to the marketplace, but Excel does not have that luxury.

3. Explain PowerQuery?

Power Query is a data transformation and data preparation engine. **Power Query** comes with a graphical interface for getting data from sources and a **Power Query Editor** for applying transformations.

Because the engine is available in many products and services, the destination where the data will be stored depends on where **Power Query** was used. Using **Power Query**, you can perform the extract, transform, and load (ETL) processing of data.

Business users spend up to 80 percent of their time on data preparation, which delays the work of analysis and decision-making. Several challenges contribute to this situation, and Power Query helps address many of them.

4. Explain PowerMap?

Microsoft Power Map for Excel is a three-dimensional (3-D) data visualisation tool that lets you look at information in new ways. A power map lets you discover insights you might not see in traditional two-dimensional (2-D) tables and charts.

With Power Map, you can plot geographic and temporal data on a 3-D globe or custom map, show it over time, and create visual tours you can share with other people. You'll want to use Power Map to:

- **Map data** Plot more than a million rows of data visually on Bing maps in 3-D format from an Excel table or Data Model in Excel.
- **Discover insights** Gain new understandings by viewing your data in geographic space and seeing time-stamped data change over time.
- **Share stories** Capture screenshots and build cinematic, guided video tours you can share broadly, engaging audiences like never before. Or export tours to video and share them that way as well.

5. How powerBi eliminated the need to host SharePoint Server on premises?

Different customers may have different interpretations of terms such as "deprecated." To ensure that customers fully understand what we mean by the terminology in this document, we're including this brief definition of each term.

- **Deprecated**
A deprecated feature is no longer being invested in by Microsoft and we discourage customers from taking a dependency on it if they haven't used it before. Deprecated features are still supported by Microsoft in SharePoint Server 2019 for customers who are already using this feature in previous releases and need the feature for backward compatibility. Deprecated features may be removed in future major releases of SharePoint Server with no additional notice. Customers should begin to explore their options for migrating away from these features.
- **Removed**
A removed feature is no longer supported by Microsoft in SharePoint Server 2019. In many cases, the feature is actually removed from the product, but in some cases it may still be present. A feature labelled as "removed" is unsupported even if the feature is still present in the product.

6. Explain the updates done in Power Bi Service(power BI 2.0) as compared to older versions ?

Top 5 new features in the latest Power BI update - November 2021

● **The format pane gets a makeover:-** Power BI has changed the design of its format pane. The Power BI team has listened to their users feedback and redesigned the look and feel of the format pane to optimise the user experience and make creation easier.

The new design does not only **replace the format tab icon**, but also includes a descriptive caption to make it easier for users to find. The new Power BI format pane looks like this:

2. Two new navigators: Page and bookmark navigators

Prior to the new update, users who wanted to set a customer page or bookmark navigation experience had to set up each individual button for every page or bookmark. Power BI solves this problem with **two new navigators: the page navigator and the bookmark navigator** which make it easier to create personalised navigation experiences.

You can **activate the new feature** in: Insert > Buttons > Navigator.

3. New dashboard visual and new visuals available in the AppSource

Power BI has designed **a new dashboard visual that can be added to Power BI reports** to help companies integrate business goals, performance indicators, KPI and dashboards into Power BI reports.

This new visual allows users to **easily integrate a dashboard into a report** as well as update their business goals. In addition, goals can be created in Power BI Desktop and dashboards can be customised to fit the design of the report.

Power BI has also introduced 2 new visuals that can now be downloaded in the AppSource:

- Dual axis Scatter plot
- Process Mining with Power BI

4. New data connectors

Power BI extends its connectivity with new data connectors and by updating some of the existing connectors.

The **new Power BI data connectors** are:

- **Azure Synapse Analytics:** The Azure Synapse Analytics Workspace Connector (Beta) is now available in preview mode.
- **Google Sheets:** This connector received the most votes in the Power BI user forum. Microsoft has not kept its users waiting and the new connector with Google Sheets is now available.
- **Delta Sharing:** Finally, Power BI has launched a new connector that allows users to connect to any Delta Sharing server.

Updated connectors:

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- **Google BigQuery:** The performance of the Google BigQuery connector is improved by reducing the metadata calls required to load the browser experience. This reduces the loading time of the browser experience.
 - **Cognite Data Fusion:** Previous issues related to customised queries, login to the organisation's account and aggregation of time series when using tags containing special characters have been fixed.
 - **Dremio Cloud:** The connector has been updated to allow users to connect to regions in Dremio Cloud.

5. Choose your workspace

With the new version, once users have created a report's visuals they can **choose the workspace where they want to save the report**. This increases the capabilities of shared datasets, as users now have the ability to save reports created online in a different workspace from the workspace where the original dataset is located.

