**FEATURES USED IN POWER BI**

* **Get Data**
* Identify and connect to a data source
* Get data from a relational database, like Microsoft SQL Server
* Get data from a file, like Microsoft Excel
* Get data from applications
* Get data from Azure Analysis Services
* Select a storage mode
* Fix performance issues
* Resolve data import errors

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* **MYSQL SERVER**
* You can get data from a MySQL database then publish it to the Power BI cloud then setup a schedule data refresh in the Power BI web app. Then you can create your reports and dashboards on the cloud and share them with your colleagues very easily.

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* **Transform Data**
* Changing the Table Name.
* Remove the First Row.
* Replace Null Value.
* Remove Unnecessary Rows.
* Rename Column Headings.
* Separating into two Columns.
* Merge Columns.
* Unpivot the Columns.
* Change Data Type.

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* **Visualisations**
* **Bar charts** are mostly used graphs because they are simple to create and easy to understand. Bar charts are also called horizontal charts that represent the absolute data. They are useful to display the data that include negative values because it is possible to position the bars above and below the x-axis.
* **Heat Map** is a custom visualization available with Power BI to show the data numbers through presentation or visual. The heat map will show the highest data density on one specific set of the area through dark heated color, and others will have the same heat as the highest value.
* **Scatter charts** are used to visualize the data using the dots that represent the values obtained from two different variables, such as the x-axis and y-axis. These charts are used to show the relationship between two different variables. It is also called a correlation plot because it shows how two variables are correlated to each other.
* **Filled map** uses shading or tinting or patterns to display how a value differs in proportion across a geography or region. Quickly display these relative differences with shading that ranges from light (less-frequent/lower) to dark (more-frequent/more).

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* **Normalisation**
* Database normalization is the process used to organize a database into tables in a way that eliminates redundant data and improves data integrity. The basic idea is that each table should be about a specific topic.

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* **Generalisation & Specialisation**
* Generalization is a bottom-up approach in which two lower level entities combine to form a higher level entity. In generalization, the higher level entity can also combine with other lower level entities to make further higher level entity.
* Specialization is opposite to Generalization. It is a top-down approach in which one higher level entity can be broken down into two lower level entity. In specialization, a higher level entity may not have any lower-level entity sets, it's possible.

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* **Filters**

There are three levels of filters in Power BI: **report**, **page**, and **visual.**

* **Report-level filters** are those that affect all of the data in the report, regardless of what you're looking at. Think of them as universal filters.
* **Page-level filters** only filter the data on a given page, which makes them useful for creating pages that focus on particular subsets of your data. For example, you can use page-level filters to make one page focus solely on revenue data, while the next page focuses on expense data. Page-level filters operate within the context of the report-level filters, which means that a page-level filter cannot override a report-level filter. They also cannot be programmed to filter the data on other pages.
* **Visual-level filters** only filter the data on a given visual, whether that's a table, chart, card, slicer, etc. These are the most granular filters you can apply to your data, and they operate within the context of both the page-level and report-level filters, which means visual-level filters cannot override them, nor can they be programmed to filter data on other visuals.

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