Power Bi Test

What is Power BI? And why is it used for?

Ans: Power BI is a collection of Business Intelligence tools, techniques, and processes that are used to extract valuable information from the raw business data by connecting, transforming, and visualizing raw data sets from multiple sources. It provides the right tools to create interactive dashboards and live reports that can be shared and published on various platforms to help business users and stakeholders make better decisions. With the competitive and highly categorized information, planners and decision-makers can track their performance in the market.

What are the main differences between self-service BI and Managed Enterprise BI?

Ans:

self-service BI:

1. This enables companies to ingest data from any data source, seamlessly. Companies take in data from any source in any format.
2. Analyzing data is easy, and it is done implicitly. Time constraints are hence alleviated.
3. There is no need for third-party vendors anymore and all associated constraints are eradicated.
4. Users could generate intuitive and actionable dashboards almost instantaneously without executing complex programming codes.

Managed Enterprise BI:

1. Here, data flows in from a plethora of sources and, for this reason, there is no order in which companies ingest and manage their data sources.
2. There are time constraints and a lack of proper information when it comes to analyzing data.
3. Third-party vendors are employed to help companies make the most out of their data sources, leading to budget problems and slow productivity.
4. Complex programming skills are necessary for generating reports.

How does Power BI work?

Ans:

Following are the ways in which power bi works:

1. **Data Importing**: The first step is to import the data and then convert it into a standard format.
2. **Data Cleaning**: Once the data is assembled, it needs to be transformed or cleaned to remove unwanted data.
3. **Data Visualization**: In this step, the data is visually represented on the Power BI desktop in the form of reports and dashboards with the help of powerful visualization tools.
4. **Save and Publish**: Once your report is ready, you can save and publish the reports. These can be shared with users through mobile apps and the web.

In what formats does Power BI available?

Ans: The different formats in Power BI are as follows:

- **Power BI Desktop** – Power BI Desktop can be downloaded and installed on your PC. You can connect it to the data source, transform the data, and analyze and visualize it with the help of templates.
- **Power BI Services** – Power BI Services is a Service-as-a-platform or a cloud based service.
- **Power BI Mobile App** – The Power BI App is available for iOs, Android, and Windows.

Describe the building blocks of Power BI?

Ans: Below are the building blocks of Power BI:

- **Visualizations:** These are the visual representations of the raw data collected from varied data sources. Visualizations can be different types such as line graphs, donut charts, pie charts, bar graphs, maps, etc.
- **Datasets:** It's a collection that Power BI uses to create visualizations and reports. Datasets in Power BI can be of different types such as Excel sheets, CSV files, Oracle tables, and more.
- **Reports:** A report in Power BI is a collection of visualizations bought together on a single or multiple pages. Each visualization in a report shows the specific aspect of the data based on the requirements. For example, profit by-products, sales by country, city report, etc.
- **Dashboards:** Dashboards are single-layer presentations with one or more visualizations embedded on a single page. Dashboards can be shared on various platforms like Power BI Apps to provide live information.
- **Tiles:** Tiles are the single visualizations in a dashboard or report. For example, a pie chart, line graph, or any other visualization is a single tile in Power BI.
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What are the major components of Power BI? And what do they do?

Ans: There are five different components of power bi and their uses:

- **Power Pivot**: Fetches and cleans data and loads on to Power Query
- **Power Query**: Operates on the loaded data
- **Power Q&A**: Makes it possible for users to interact with reports using simple English language
- **Power View**: Lets users create interactive charts, graphs, maps, and other visuals
- **Power Map**: Enables the processing of accurate geographic locations in datasets

Name some of the popular types of filters available in Power BI?

Ans: following are some of the popular types of filters available in Power BI:

- **Drillthrough filters**: With Drillthrough filters in Power BI Desktop, users can create a page in their reports that focuses on specific entities such as suppliers, customers, or manufacturers.
- **Page-level filters**: These are used to filter charts that are present on individual pages.
- **Report-level filters**: They are used to simultaneously filter charts that are present on all pages of a report.

What is the use of the "Get Data" icon in Power BI?

Ans: When users click on the Get Data icon in Power BI, a drop-down menu appears and it shows all data sources from which data can be ingested. Data can actually be directly ingested from any source including files in Excel, CSV, XML, JSON, PDF, and SharePoint formats and databases such as SQL, Access, SQL Server Analysis Services, Oracle, IBM, MySQL, and much more. Also, Power BI datasets and Power BI data flows are compatible. Data can also be taken in from Azure and other online sources.

How to create and manage relationships in Power BI Desktop?

Ans: In power bi desktop, relationship can be created and managed through relationship view. Relationships are defined between tables based on common columns, enabling accurate data modelling and analysis across different tables and data sources.

Differentiate Power BI vs Excel ?

Ans:

Power BI:

1. Power BI is not very good at handling tabular reports.
2. Power BI can't display duplicate tables.
3. Power BI allows interactive, personalized reports.
4. Power BI offers simple analytics
5. Power BI is ideal for KPIs, alerts, and dashboards.

Excel

1. Excel is better at handling tabular reports.

2. Excel allows users to display duplicate tables.
3. Excel users cannot perform advanced cross-filtering between charts.
4. Excel offers advanced analytics.
5. Excel has new charts now but they can't connect to data model.

Are Power View and Power Query the same?

Ans: Power View – Power View is used to design interactive and visual reports.

Power Query – Power Query helps in editing, loading, and finding external data.

What is the Power Map?

Ans: Power Map – Power Map helps display insights on 3D maps.

List the benefits of using variables in DAX.

Ans: Following are some of the benefits of using DAX:

1. Variables make DAX measures and calculated columns more readable and maintainable.
2. Common values or expressions can be defined once as a variable and reused across multiple DAX formulas.
3. Complex formulas can be broken down into smaller logical units using variables.
4. Variables reduce copy-paste errors and make refactoring easier.

Can you tell me what the difference between Power BI personal Gateway and Data Management Gateway is?

Ans? Power BI personal Gateway is for individual use while Data Management Gateway enables enterprise-scale data connectivity and security features for the whole organization.