

## Power BI Assignment 2

1 Explain the advantages of Natural queries in power BI with an example?

power BI Q&A is free and available to all users. In Power BI Desktop, report designers can use Q&A to explore data and create visualizations. In the power BI service, everyone can explore their data with Q&A. Our mobile apps support Q&A too, with the Q&A virtual assistant in iOS and the Q&A visual on Android devices. If you have permission to edit a dashboard or report, you can also pin your Q&A results.

\* Ask natural questions which sales has the highest revenue?

\* Use relative date filtering show me sales in the last year.

\* Return only the top 10 top 10 products by sales

\* provide a filter show me sales in the USA

\* View Trends show me sales over time.

Explain web Front End (WFE) cluster from power BI service architecture?

Clients and back end are connected by the front end, commonly known as the web front end cluster. The front-end servers

handle the initial connection and Azure Active Directory client authentication. User ID are kept in the Azure Active Directory. After authentication, user requests are routed through Azure Traffic Manager to the ~~closest~~ Closest data center. The Azure Content Delivery Network (CDN) makes static power BI content and files available to users when a client or user has been authorized.

3) Explain Back end cluster from power BI Service Architecture?

Visualizations, datasets, storage, reports, data connections, data updating, and other power BI interactions are handled by the power BI services on the back end. A web client can only directly interface with Azure API Management and Gateway Role on the backend. These two parts are in charge of routing, load balancing, ~~and~~ authentication, and authorization.

The Back-end cluster determines how authenticated clients interact with the power BI Service. The Back-end cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the power BI Service.



1) What ASP.NET components does in power BI Service Architecture?

Data Sources An important component of power BI is its vast range of data sources.

power BI Desktop. Power BI Desktop is a client side tool known as a composition development and authoring tool.

power BI Services:-

power BI Report Server

power BI Gateway

power BI Mobile

power BI Embedded.

5) Compare microsoft excel and power BI Desktop on the following features:

Data import

power BI is a Business Intelligence (BI) and data visualization tool for creating custom and interactive dashboard from different data sources while Microsoft excel is a software application from Microsoft that is used for data analytics, mathematical operation data organization and many more feature using a spreadsheet system.

power BI is very much faster in processing data compared to Microsoft Excel.

power BI can smoothly handle a large amount of data while Microsoft excel is limited to some extent of data.

power BI handle Big Data while microsoft excel is not capable of handling big data.

power BI can connect with different varieties of sources while microsoft excel can connect to limited sources.

power BI dashboards are more interactive and custom while microsoft excel dashboards are so much interactive.

power BI is easy to use and very much flexible while microsoft excel is not so handy to use.

power BI is a more powerful tool comparing microsoft excel.

power BI Desktop is free to download and use for personal use, but it takes \$10 per month per user to share reports with others.

Since we have already have excel, we need to spend additional money to procure this and build dashboards.



## List 20 Data Sources supported by power BI desktop

Excel  
Text/csv  
XML  
JSON  
Folder  
PDF  
Share point folder

### Database

- \* SQL Server Database
- \* Access Database
- \* SQL Server Analysis Services Database
- \* Oracle Database
- \* MySQL Database
- \* Google Bigquery
- \* Mark Logic
- \* BI Connector

### Power Platform

- \* power BI Datasets
- \* power BI Dataflows
- \* Microsoft Dataverse
- \* power platform Dataflows (Data)

### Azure Data Sources

- \* Azure SQL Database
- \* Azure Synapse Analytics (SQL DW)
- \* Azure Analysis Services Database
- \* Azure Database for PostgreSQL