

Power BI Assignment - 2

1. Explain the advantages of Natural Queries in Power BI with an example.

Users cannot be productive by going through multiple pages of reports to answer business questions. Analysts cannot also anticipate all possible questions a user might have. Therefore, even while they have BI reporting, users still struggle to find answers to questions that come up.

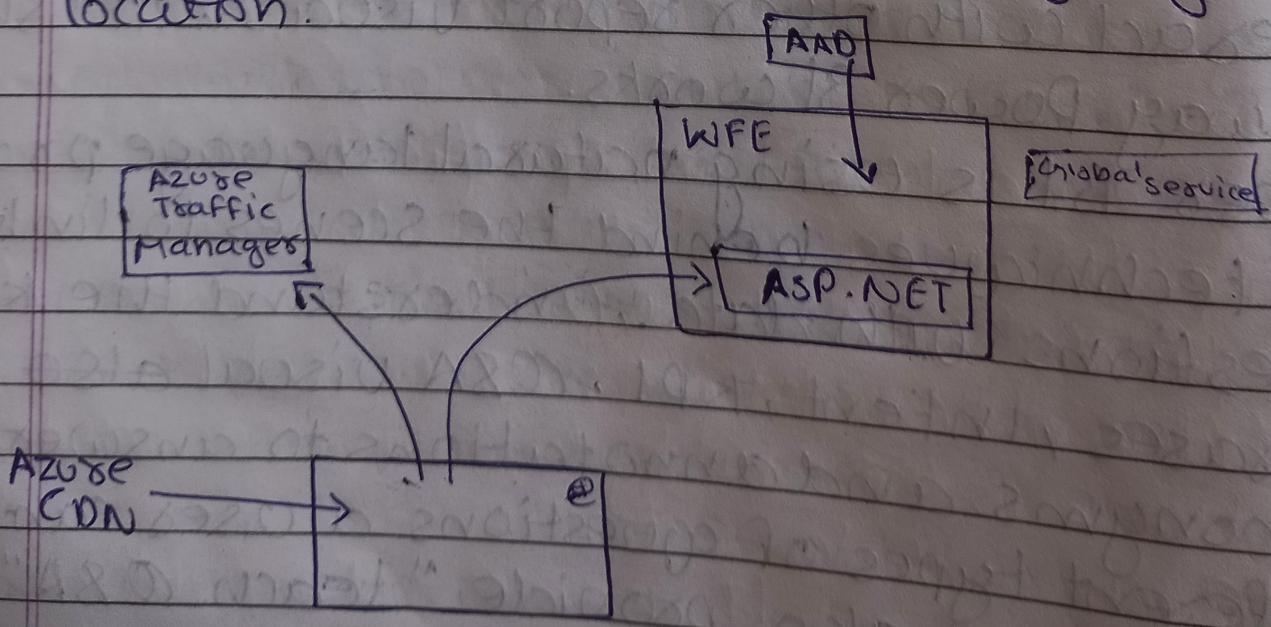
Power BI Q&A visual allows users to ask the question in natural language and get answers in report visuals. Q&A visual is also integrated with other report visuals and work seamlessly. The Q&A visual will interact with other report visuals, and slices the way Power BI works.

Power BI is using natural language processing techniques behind the scenes to link questions with data. Understand the key phrases, intent, KPI. Q&A visual also uses synonyms and annotations to answer different types of questions a user can ask. Q&A visual also provide "teach Q&A" functionality where it uses Q&A to teach

Q & A visual.

Q. Explain Web Front End (WFE) (hosted from Power BI service) Architecture?

Web front end sees to the initial connection, client authentication and request routing to nearest data centers in Power BI. Power BI uses Azure Traffic Manager (ATM) to direct user traffic to the nearest data-center, determined by the Domain Name System (DNS) record of the clientele attempting to connect to Power BI for the authentication process and to download static content and files. Power BI also uses the Azure Content Delivery Network (CDN) to efficiently distribute the necessary static content and files to users based on geographical location.

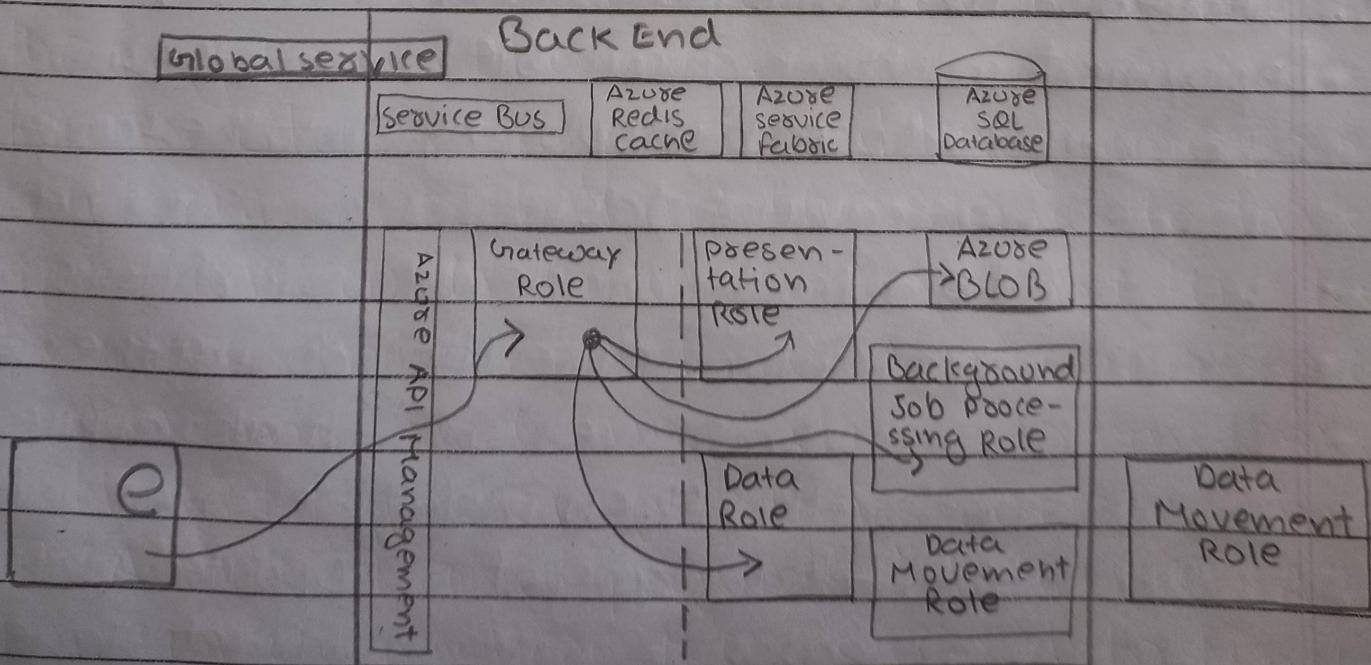


3. Explain Back End cluster from Power BI service Architecture?

The Back finish cluster manages the visualization, user dashboards, data-sets, reports, data storage, data connections, data refresh in Power BI services.

Power BI gateway is connected on-premises data sources to Power BI Desktop or Power BI cloud services to get continuous data for reporting and analytics. It basically acts as a gateway between users don't and Power BI services. Users don't act directly with any roles but the gateway role.

All data is stored in Azure BLOB storage and uses Azure storage account and authenticated by Azure Active Directory.



4. What ASP.NET component does in Power BI

Service Architecture?

ASP.NET is a server-side technology used for developing dynamic websites and web applications. ASP.NET aids developers to create web applications. It resolves all the issues that come up while building a web application like speed, cost and language.

Using .Net framework incorporate various tools to perform specific functions and make things even easier for developers. It ultimately ensures rapid project development and reduces cost & time to market by leveraging existing skills, tools and assets.

Facilitates smooth integration of security-centric features on the project.

5. Compare Microsoft Excel and Power BI Desktop on the following features.

Features	Excel	Power BI
1. Data Import	<p>There are two ways to import data in Excel. You can open it in Excel or import it as external range. It does not change the file format, use save as command to change the format.</p>	<p>With Power BI, we can easily import queries and Power Pivot models. It automatically creates reports based on the excel workbook. Once imported, we can continue to improve and define those reports.</p>
2. Data Transformation	<p>Data transformation in Excel means the same process but implemented in Excel, we can remove extra columns, change data type, and analyze data.</p>	<p>Data comes in an unformatted structure, and Power BI transforms it into a structured format for analysis.</p>

type, or filtered rows. data in a correlated
Each of these operation and interactive man-
means data transform. we can change name,
mation. remove rows, null
values, merge, separate
change data type.

3. Modeling Ability to work on simple and structured data models. Ideal for building complex data models. Is easily. Model language: MDX language. language: DAX language.

4. Reporting Simple and less attractive reports than those power BI More beautiful, personalized, attractive and interactive reports.

5. Server final integrated excel Deployment workbook available to end user by deploying we can use developer to a target oracle ADF applications directly application server or indirectly, then install this file to target server. Power PI copies the connection between the copied items are kept during the copy process. It also applies configuration deployment rules to the updated content in the target stage.

Deployment content may take a while, depending on the no. of items being deployed. During this time, we can navigate to other pages in Power BI portal, but we can't use the content in the target stage.

6. Convert Data Model allows you the easiest way to convert Models to integrate data from an imported Power BI multiple tables, effectively report to live connected building a relational data is to delete all the under source. Models are used by running queries in the transparently, providing report and point it to tabular data used in a workspace that contains PivotTables and Pivot-charts. ins the dataset you want to connect to.

Price Payment tool. It has a free version and a payment version.

6. List 20 data sources supported by Power BI desktop.

- * File data sources
 - Excel Workbook
 - Text / CSV
 - XML
 - JSON
 - Folder
 - PDF
 - Parquet
 - SharePoint folder
- * Database data sources
 - SQL server database
 - Access
 - Oracle
 - IBM DB2 database
 - Sybase
 - Vertica
 - Denodo
- * Power Platform data sources
 - Power BI datasets
 - Datamarts
 - Power BI dataflows
 - Dataaverse
 - Dataflows
 - Power Common Data Service