**Power BI Assignment 3**

1. List and explain different PowerBi products?

Answer:

Here are different Power BI products offered by Microsoft:

* Power BI Desktop: Power BI Desktop is a Windows application that allows users to create interactive visualizations, reports, and dashboards. It offers advanced data modeling capabilities, data transformation features, and a wide range of visualization options.
* Power BI Service: Power BI Service, also known as Power BI Online or Power BI Cloud, is a cloud-based platform that enables users to publish, share, and collaborate on Power BI reports and dashboards. It provides web-based access to reports, data exploration tools, and collaboration features.
* Power BI Mobile: Power BI Mobile is a mobile app available for iOS and Android devices. It allows users to access their Power BI reports and dashboards on the go, providing a seamless and responsive experience across different mobile devices.
* Power BI Report Server: Power BI Report Server is an on-premises solution that enables organizations to host and manage Power BI reports within their own network infrastructure. It offers a similar set of features as the Power BI Service but with the added benefit of keeping data and reports within the organization's own environment.
* Power BI Embedded: Power BI Embedded is a development platform that allows developers to integrate Power BI reports and dashboards into their own applications, products, or websites. It provides the capability to embed interactive Power BI visuals seamlessly within custom applications.

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

Answer:

Power BI addresses several limitations of Excel, including the following:

* Data Size and Performance: Excel has limitations on data size and performance when dealing with large datasets. Power BI allows for handling much larger data volumes, leveraging technologies like columnar compression and in-memory processing for improved performance.
* Data Modeling: Excel's data modeling capabilities are limited compared to Power BI. Power BI provides advanced data modeling features, such as relationships between tables, calculated columns, and measures, allowing for more complex and structured data analysis.
* Collaboration and Sharing: Excel lacks robust collaboration and sharing capabilities, often leading to version control issues and difficulties in sharing reports with others. Power BI offers a centralized cloud-based platform, the Power BI Service, which enables easy collaboration, sharing, and real-time access to reports and dashboards across teams and organizations.
* Data Refresh and Automation: Excel requires manual data refresh, and automating data updates can be challenging. Power BI allows for scheduled data refreshes from various sources, ensuring that reports and dashboards are always up-to-date without manual intervention.
* Visualizations and Interactivity: Excel provides basic visualization options, while Power BI offers a wide range of interactive and customizable visualizations. Power BI enables users to create rich, interactive reports with drill-down capabilities, cross-filtering, and dynamic visualizations that enhance data exploration and analysis.

1. Explain PowerQuery?

Answer:

Power Query is a data connectivity and data transformation tool that is integrated into various Microsoft products, including Power BI, Excel, and Power Apps. It allows users to discover, connect to, and transform data from a wide range of sources, making it easier to prepare and analyze data.

1. Explain PowerMap?

Answer:

Power Map was a 3D data visualization tool available in Excel, which allowed users to create interactive geographical and time-based visualizations on top of Bing Maps. It provided a unique way to explore and analyse data by mapping it geographically and representing it visually in a 3D environment.

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

Answer:

Power BI eliminates the need to host SharePoint Server on-premises by providing a cloud-based platform for sharing, collaboration, and data visualization. Here's how Power BI achieves this:

* Cloud-Based Platform: Power BI is a cloud-based service provided by Microsoft, which means that the infrastructure, storage, and maintenance of the platform are handled by Microsoft. Users can access Power BI through a web browser or mobile app, eliminating the need for organizations to host and maintain their own SharePoint Server infrastructure.
* Secure Data Hosting: Power BI ensures secure hosting of data in the cloud. Organizations can securely upload their data to the Power BI Service, where it is stored and managed in a highly secure and compliant environment. Power BI follows industry best practices for data security, encryption, and privacy.
* Sharing and Collaboration: Power BI provides robust sharing and collaboration features that allow users to share reports, dashboards, and datasets with others within or outside their organization. Users can control access permissions, collaborate in real-time, and have a centralized platform for sharing and accessing reports without the need for hosting SharePoint Server on-premises.

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

Answer:

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.