**Assignment 3**

List and explain different PowerBi products?

Sol:

Power BI Desktop: A windows desktop application for data analysis and reports creation.

Power BI Service: An online software service, used to collaborate and distribute Power BI reports.

Power BI Mobile: A native mobile app to view reports.

Power BI Report Builder: A tool for creating paginated reports.

Power BI Report Server: An on-premises report server available through Power BI premium service.

Power BI Embedded: A service to embed visuals, reports and dashboard into and application.

What limitations of Excel, Microsoft solved by PowerBi?

Sol:

They are both are just tools and there will be some differences more than Pros and Cons. Below are my thoughts on comparing both for few differences:

* Power BI can connect hundreds of data sources to get data using native connectors or partner connectors compare to Excel can connect less than hundred data sources to get data.
* Power BI is very efficient at processing and analysing very large data sets(millions of rows) where as Excel can be slower and less performant compare to Power BI for same large dataset.
* Power BI UI is great self service UI compare to Excel where as Excel offers familiar UI consistent with other Office products.
* Power BI has Q & A and Functions to consume Azure Text Analysis which can be deal breaker not only when Power BI compared to Excel but also other BI players like Tableau, Looker etc.
* Power BI has plethora of visuals both native and third party which just make Business Intelligence a lot easier compare to Excel. I have seen some partners have done amazing job to offer extend visualizations in Excel but Power BI would stand out for design elements and modern look and feel.
* Excel is part of Office 365(Microsoft 365) and Office Install so it is cheaper option when compared to Power BI’s Pro or Premium service and other licensing needs.
* Power BI is part of Microsoft 365 (Premium E3, E5, Business) or as a standalone license (with some prerequisite) and inherits security and identity infrastructure of Azure AD and Groups and Workspaces which makes it very efficient, secure and trustworthy way to handle data in more simple and complex implementations alike. Excel does inherit some of it but Excel is not meant to be used as Self Service BI so it would never be positioned to compete with Power BI.

Explain PowerQuery?

Sol:

Power Query is a data transformation and data preparation engine. Power Query comes with a graphical interface for getting data from sources and a Power Query Editor for applying transformations.

Explain PowerMap?

Sol:

A power map lets you discover insights you might not see in traditional two-dimensional (2-D) tables and charts. With Power Map, you can plot geographic and temporal data on a 3-D globe or custom map, show it over time, and create visual tours you can share with other people.

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

Sol:

SharePoint 2016 was focused on traditional document management. With SharePoint 2019, Microsoft eliminated some collaboration, social media and enterprise search functions that are now included in Office 365. Those functions include the following:

* **Delve.** A data visualization and discovery tool that incorporates elements of social networking and machine learning with the search capabilities of the Office 365 suite.
* **Office Graph.** A back-end tool in the Office 365 Suite that facilitates search across integrated applications and applies machine learning to organizational interactions and content use.
* **Sway.** A presentation tool in the Office suite.
* **Teams.** A work collaboration tool that allows employees to interact on a working document wherever they are.
* **Yammer.** A private microblogging and collaboration platform for enterprise social networking.

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

Sol:

 The latest version has more robust features, and it is famous with the name Power BI Desktop. This is an all-in-one solution for Power View, Power Pivot, and Power Query in the backend.