Deep Dive into Power Bi

Why Power BI?

Power Bi lets us to connect to and visualize any data using the unified and scalable platform for self-service and enterprise Business Intelligence which is easy to use and helps us to gain deeper data insight. Power Bi lets you easily connect to your sources, clean and modify the data without affecting the underlying source, then visualize your data and share it with whoever you want to share.

Parts of Power Bi

Power Bi Desktop – it helps to connect data, clean, and modify the data and create visuals according to the business insights.

Power BI Service – it is a online Service where the visual created can be shared and pinned as a dashboard. Then can be used to collaborate with colleagues.

Power BI Mobile – It is used to work on the go.

Power Query

Power Query editor tool allows us to shape and transform data. It has lot of tools to modify and clean data like Append, Merge, Transpose, create columns with examples, pivot, unpivot and many other features.

Languages used in Power BI

Power Bi uses two languages M Language which is used in Power Query and DAX (Data Analysis Expressions) Which is used in creating calculated columns and calculated Measures.

PowerBI View

Power BI has three views which are Report View, Data View and Model View.

Report View – is where we can create visuals. We can have multiple reports in one page or we can have multiple pages. We can create various charts like Stacked Bar charts, column Chart, Line Chart, Scatter Plot, Waterfall Chart, Cards, Multi row Cards, Gauge, Treemap, Map, KPI etc.

Data View – can be used to create the calculated columns and measures and to look into the data

Model View – can be used to create relationship between two tables using Primary Keys and Foreign keys

Power BI service – When a report is created it is published into Power BI service. Where we can create Workspace which can be used to collaborate within our organization. We can also share it as a app. We can also pin one particular report from a same dataset or different dataset into a dashboard.

Refresh

We can schedule a refresh or do a manual refresh to update the data in a particular period. We can also do incremental refresh.

Row Level Security

 Row-level security (RLS) allows us to create a single or a set of reports that targets data for a specific user.

RLS involves several configuration steps, which involves create a report, create RLS roles in Power BI Desktop by using DAX, test the roles in Power BI Desktop, publish the report to Power BI service, add members to the role in Power BI service and then finally test the roles.

Summary

Power BI has many features and ease of use. First we should know what we are looking and have good understanding of Data Source. Need to understand the Business needs.

Reference:

https://learn.microsoft.com/en-us/certifications/power-bi-data-analyst-associate/