

## Power BI Dashboard using cards, Filters, New measures & Matrixes:

- **Cards in power BI:** Cards in Power BI are visualizations used to display single values, making them ideal for highlighting key metrics, such as total sales, profit margins, or the number of active users. There are two primary types of cards:
  1. **Single Number Cards:** Display a single data point. For example, a card showing the total revenue for the current month.
  2. **Multi-row Cards:** Display multiple pieces of data in a list format. For example, a multi-row card showing sales figures for different products.
- **Filters in power BI:** Filters in Power BI are used to restrict the data that is shown in visualizations, allowing users to focus on specific information. There are several types of filters in Power BI: like visual level filter, report level filter, page level filter, etc.
- **New Measures in power BI :** New Measures in Power BI are calculations created using DAX (Data Analysis Expressions) to perform dynamic calculations on your data model. Measures are used to create complex calculations that can be used in visualizations. Unlike calculated columns, measures are not stored in the data model; they are calculated on the fly when needed.
- **Matrix in power BI:** A Matrix in Power BI is a type of visualization similar to a table but with advanced features. It allows for data to be displayed in a grid format, with the ability to:
  1. **Drill Down/Up:** Users can expand and collapse levels of data to see detailed information.
  2. **Display Subtotals and Grand Totals:** Automatically calculates and displays subtotals and totals for rows and columns.
  3. **Conditional Formatting:** Apply formatting based on the value of the data, such as color scales, data bars, and icons.
  4. **Hierarchical Data:** Display data in a hierarchical format, which is useful for data with parent-child relationships
- **Dealing with categorical features in cards:** In Power BI, dealing with categorical features when using cards can be a bit different compared to dealing with numerical data. Here are several strategies to effectively use cards with categorical features: