

Visualization types in Power BI

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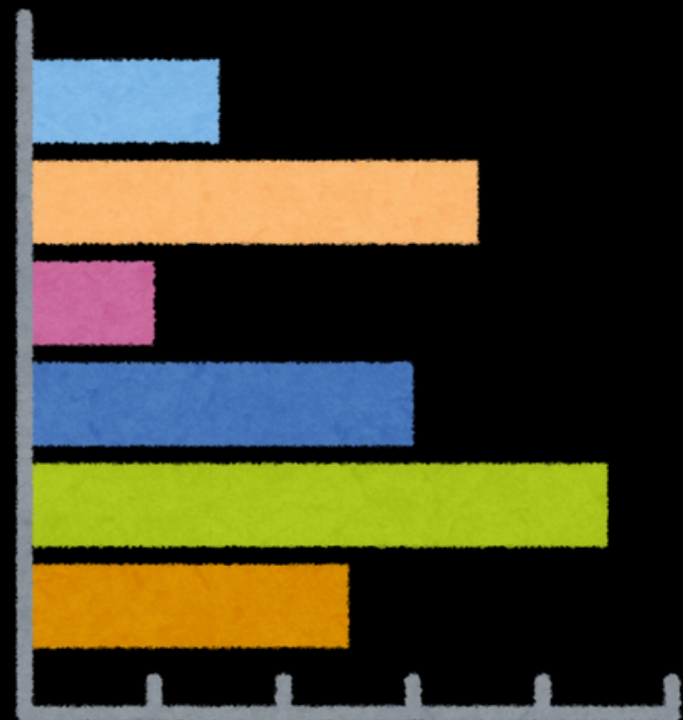
1. Bar Graphs

When to Use?

When comparing values across different categories, such as sales by region or survey responses by category

Examples:

Comparing sales figures across different regions.



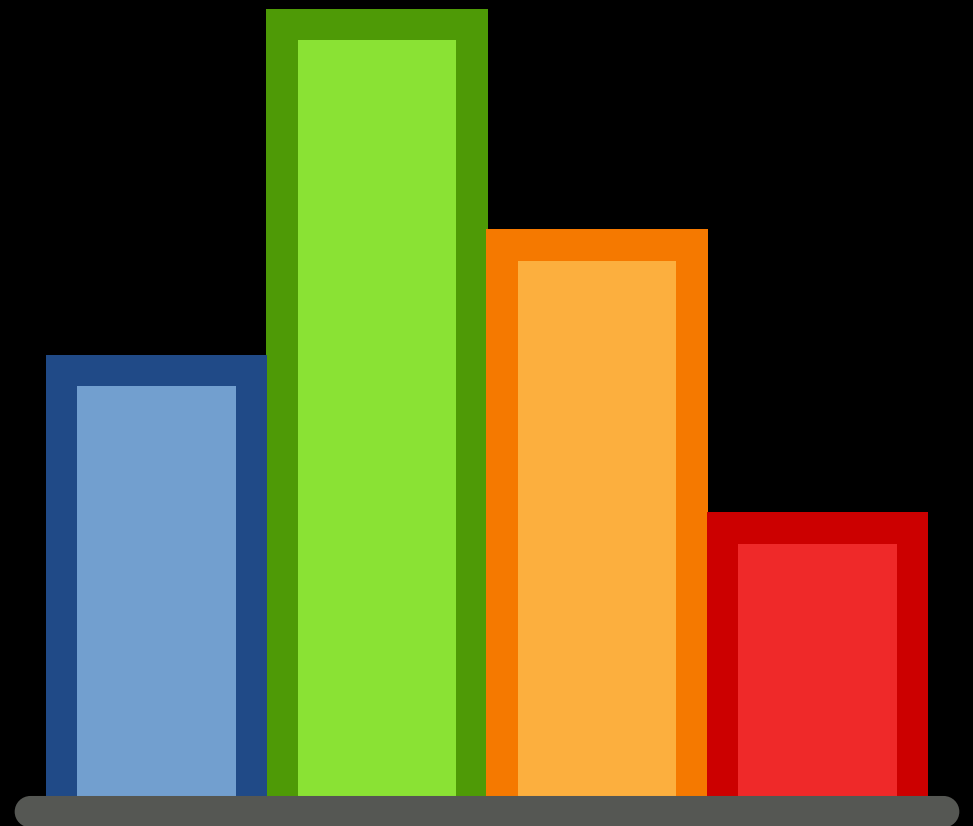
2.Column Chart

When to Use?

When comparing data over time, such as monthly revenue or quarterly performance.

Examples:

Displaying monthly revenue over the course of a year



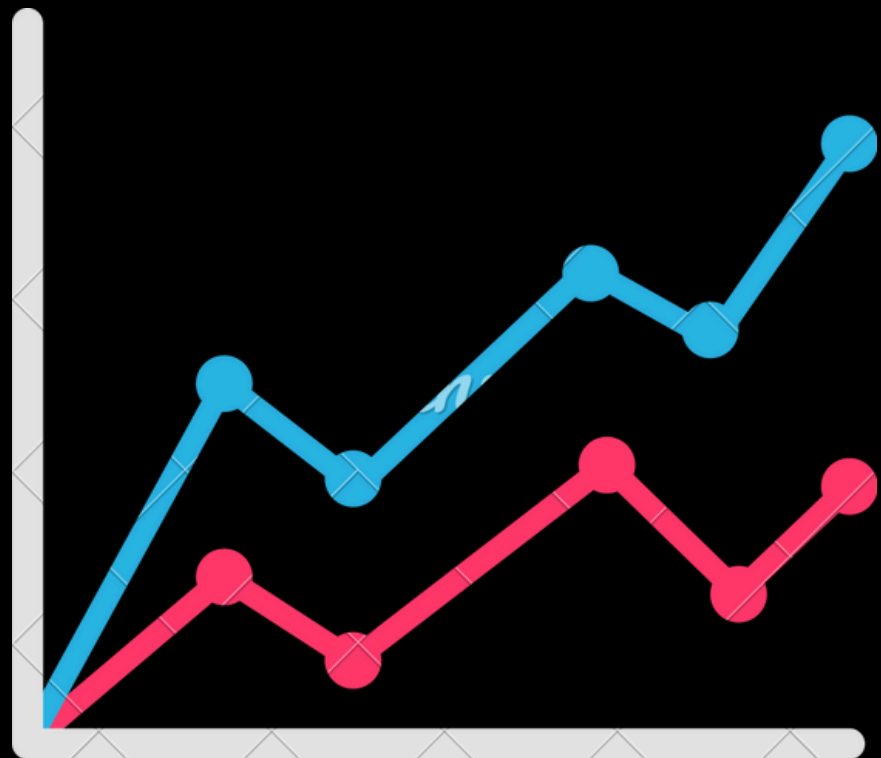
3.Line Chart

When to Use?

**When visualizing trend over time,
Such as tracking website & stock
prices**

Examples:

**Displaying monthly
revenue over the
course of a year**



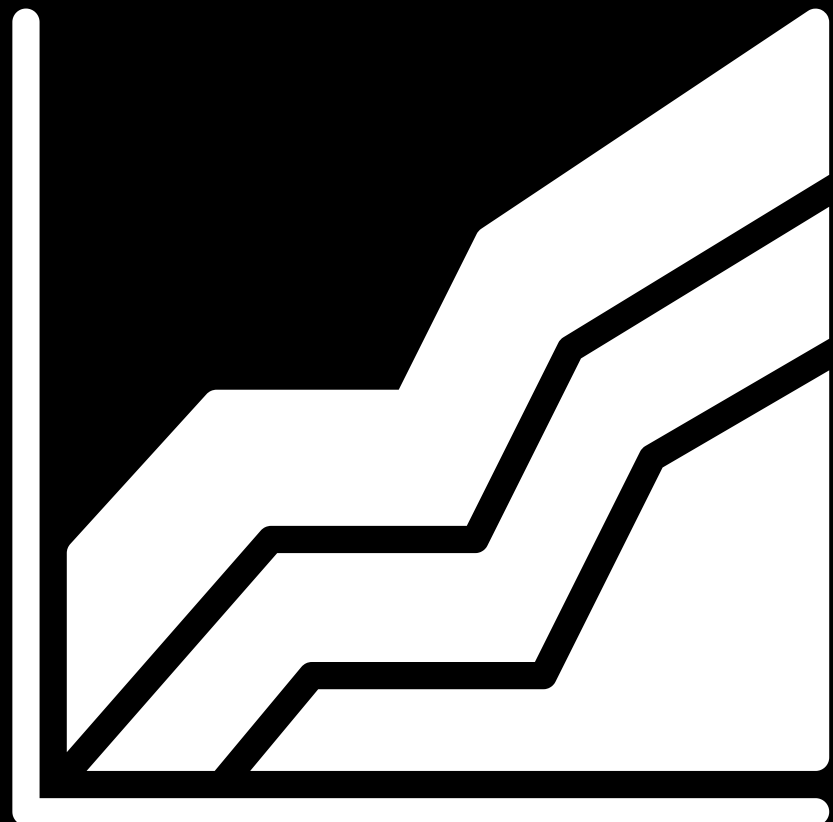
4. Area Chart

When to Use?

When showing cumulative values over time to illustrate the total growth, such as cumulative sales or employment contributions.

Examples:

Visualizing cumulative sales over time to show growth.



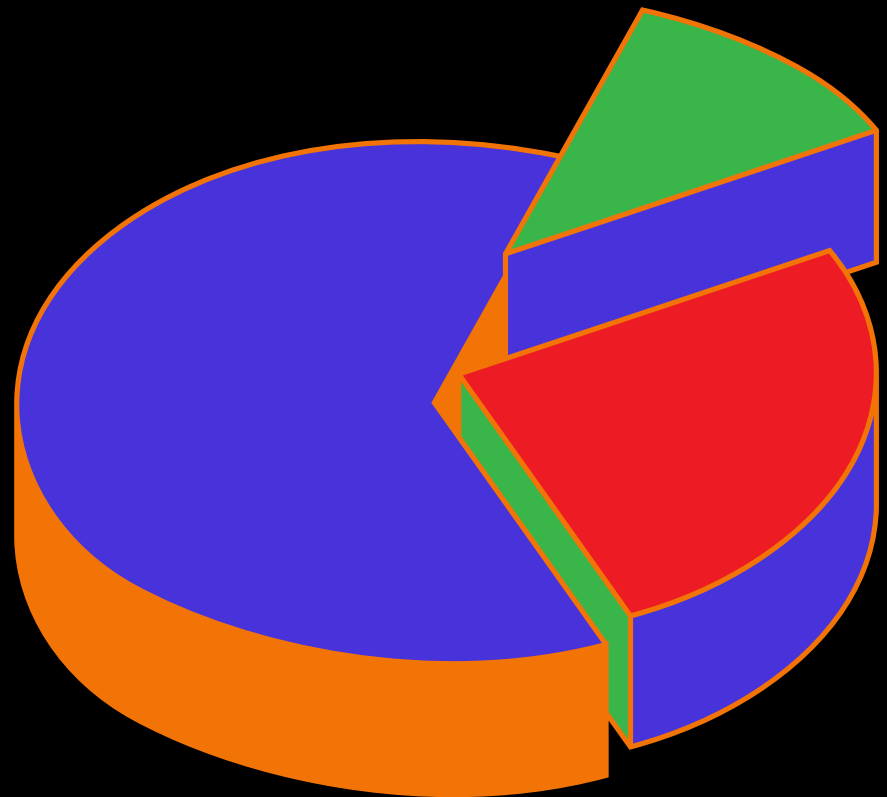
5. Pie Chart

When to Use?

When displaying proportions of a whole, such as market share or budget allocation

Examples:

Showing the market share of different products.



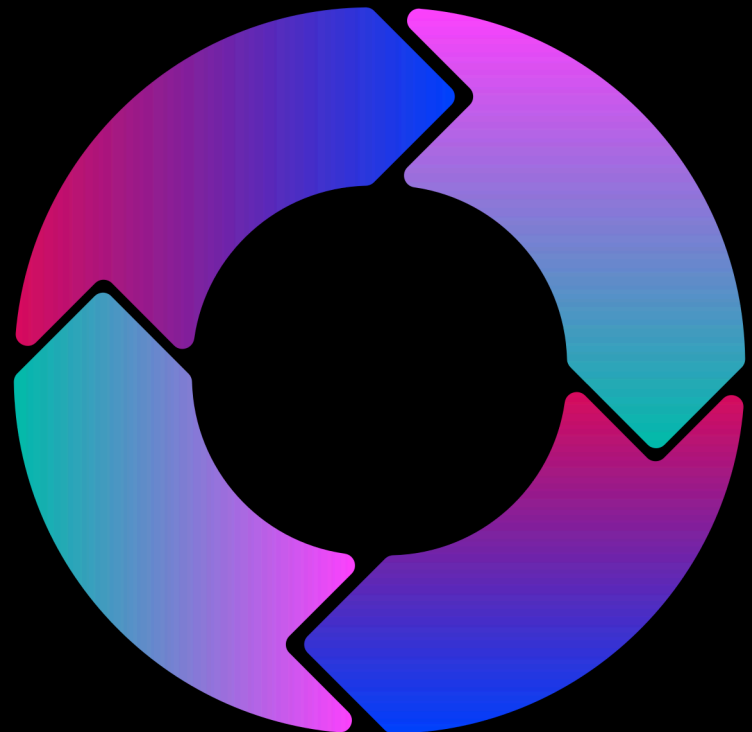
6. Donut Chart

When to Use?

When showing proportions with an additional ability to add more data in the center, like a breakdown of budget allocation.

Examples:

Displaying the percentage distribution of customer demographics.



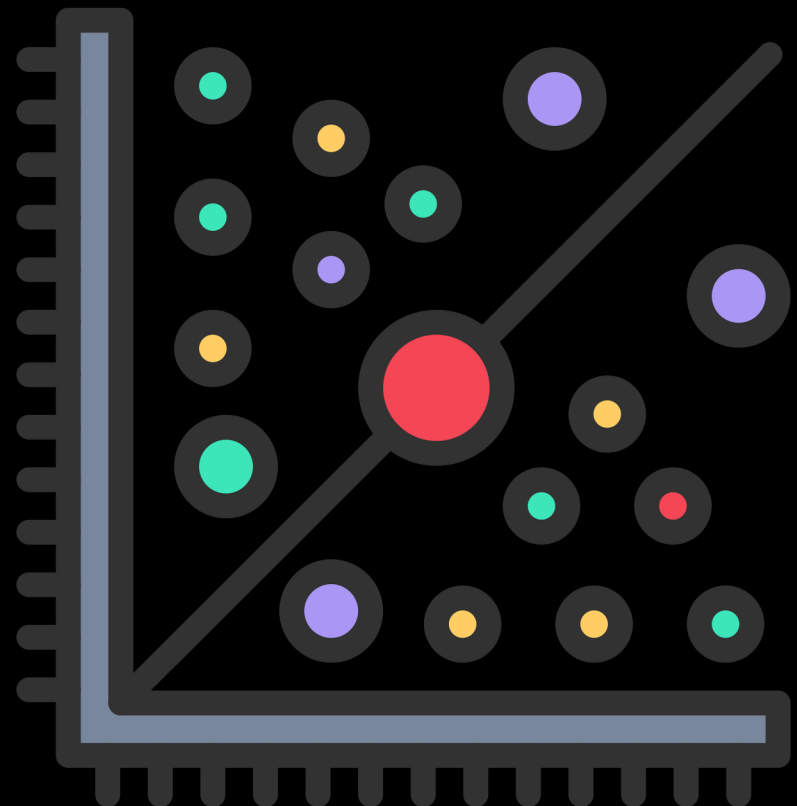
7.Scatter Chart

When to Use?

When analyzing relationships between two variables, such as advertising spend versus sales revenue.

Examples:

Exploring the relationship between advertising spend and sales revenue



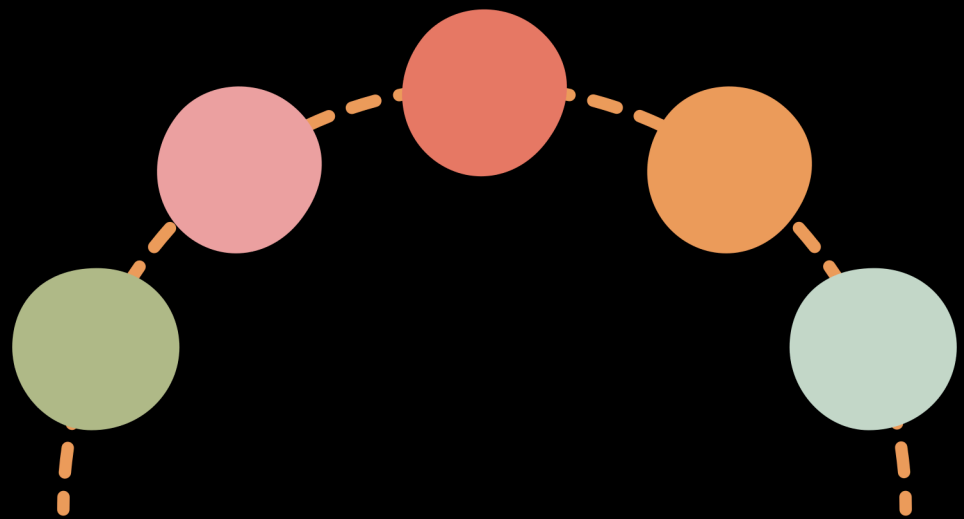
8. Bubble Chart

When to Use?

When comparing three variables, such as product sales, profit, and market size

Examples:

Comparing product performance by sales, profit, and market size.



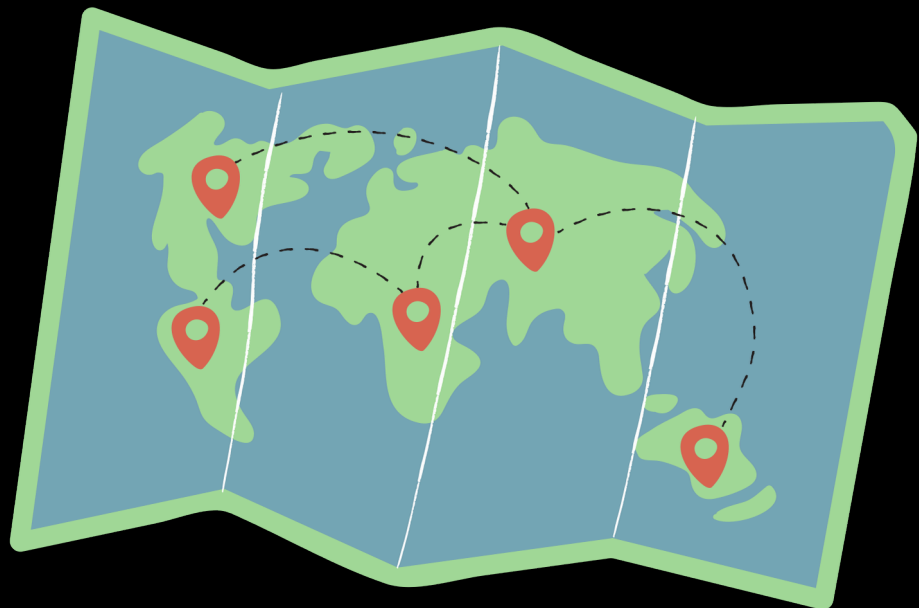
9. Basic Map

When to Use?

When plotting geographic data points, such as customer locations or store sites.

Examples:

Plotting customer locations to visualize geographic distribution.



10.Filled Map

When to Use?

When displaying data over geographic areas, such as sales performance by state or country.

Examples:

Showing sales performance by country or region.



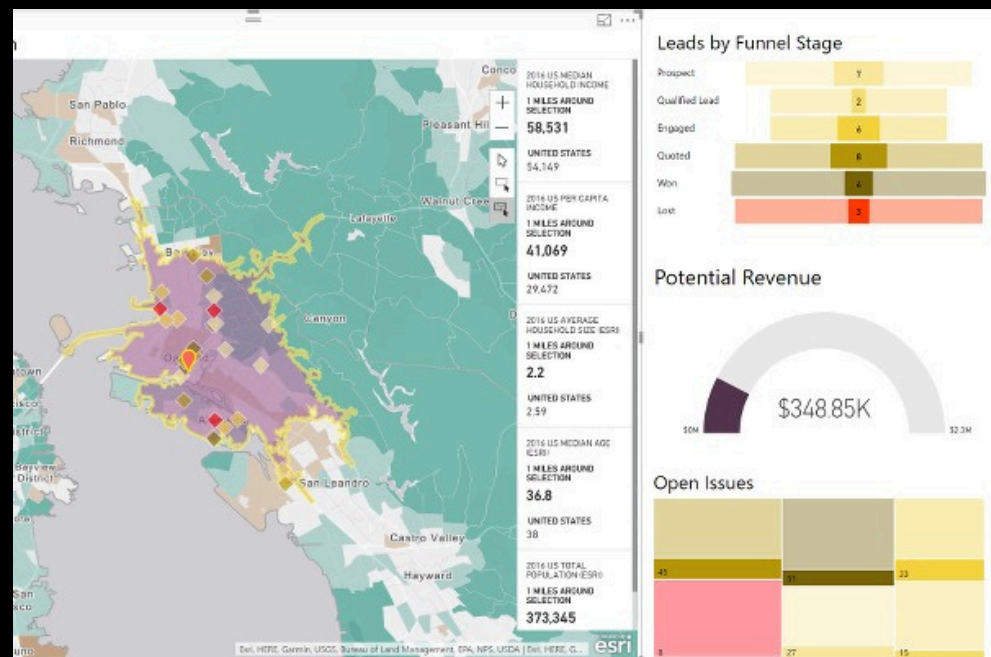
11.ArcGIS Map

When to Use?

When you need advanced geographic features and spatial analysis, like analyzing traffic incidents or demographic data.

Examples:

Analyzing spatial data with advanced geographic features



12.Tree-Map

When to Use?

When displaying hierarchical data in a compact format, such as sales by product category.

Examples:

Analyzing spatial data with advanced geographic features



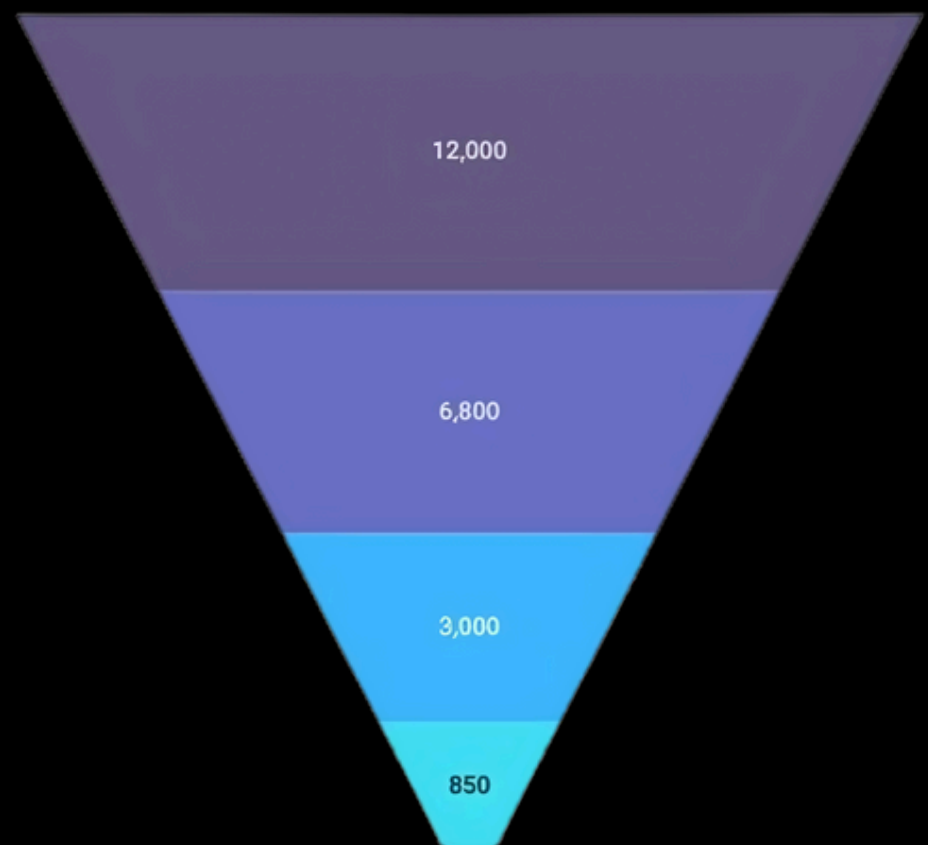
13. Funnel Chart

When to Use?

Visualizing stages in a sales process, from lead generation to closing

Examples:

Visualizing stages in a sales process, from lead generation to closing.



14. Gauge

When to Use?

When showing progress toward a specific goal, such as sales targets or performance metrics.

Examples:

Showing progress toward a sales target.



15.KPI

(Key Performance Indicator)

When to Use?

When displaying a key metric compared to a goal, such as monthly sales versus target.

Examples:

Displaying a key metric like monthly sales compared to a goal.



16.Card

When to Use?

When highlighting a single important figure, such as total revenue or the number of new customers.

Examples:

Highlighting a single important figure, such as total revenue.



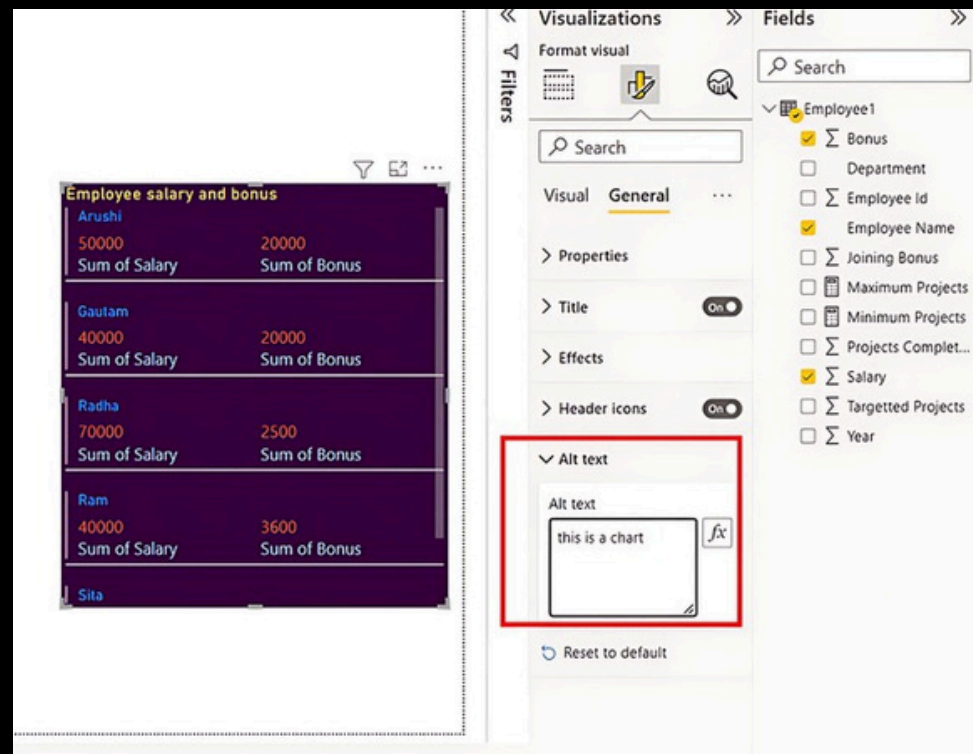
17. Multi-Row Card

When to Use?

When showing multiple key metrics in a compact format, like sales, profit, and expenses.

Examples:

Displaying multiple key metrics, such as sales, profit, and expenses.



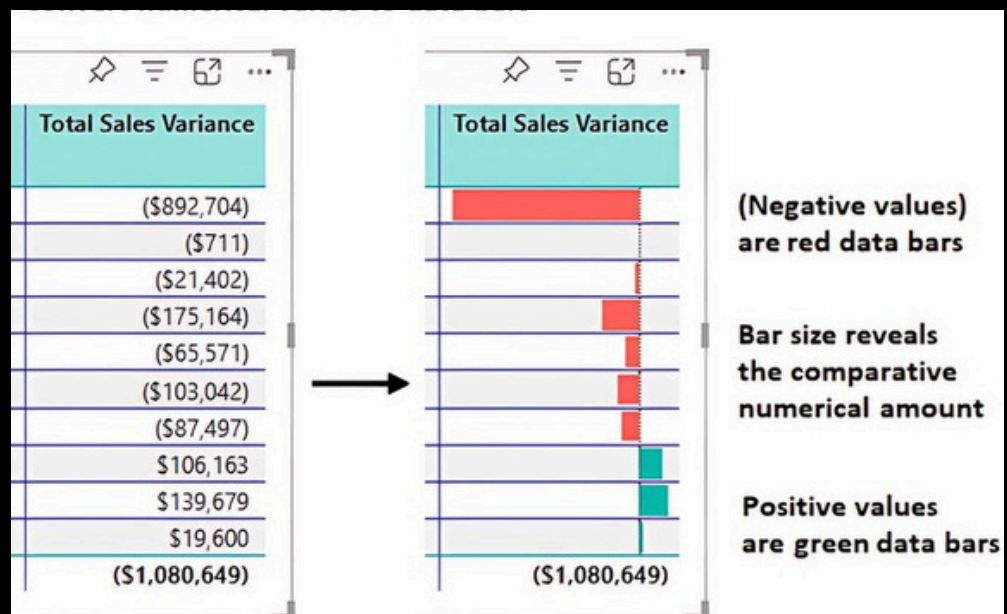
18.Table

When to Use?

When displaying detailed data in a tabular format, such as a list of transactions or product inventory

Examples:

Presenting detailed sales data in a tabular format.



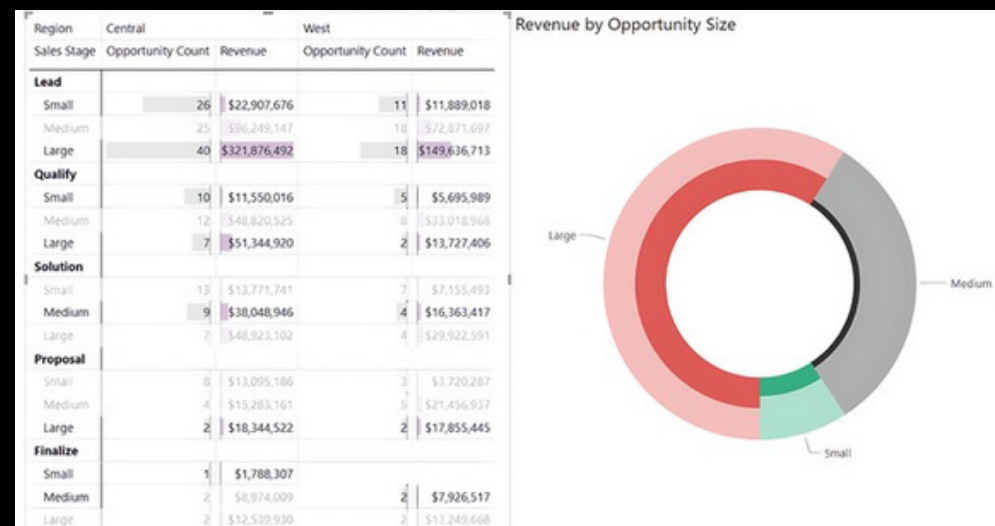
19.Matrix

When to Use?

When you need to show data with multiple levels of categorization, similar to a pivot table, like financial performance by region and department.

Examples:

Showing financial data with row and column grouping, similar to a pivot table.



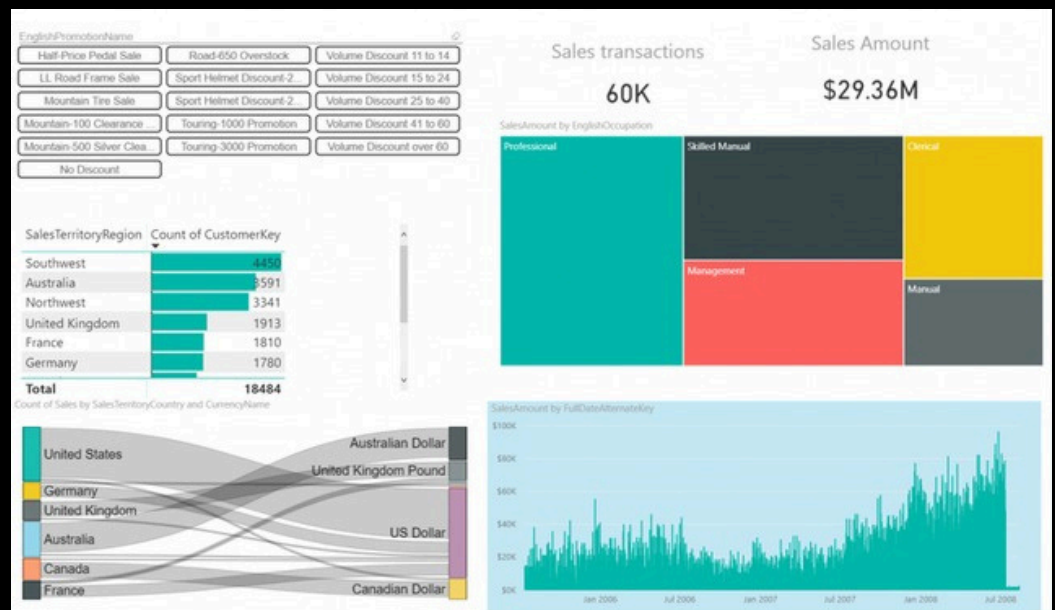
20.Slicer

When to Use?

When providing interactive filtering options for your report, such as filtering by date, category, or region.

Examples:

Providing interactive filters to refine report data by date, category, or region



21. Waterfall Chart

When to Use?

When showing the cumulative effect of sequential positive or negative values, such as profit changes over time.

Examples:

Showing the incremental impact of individual components on a total figure, such as profit.



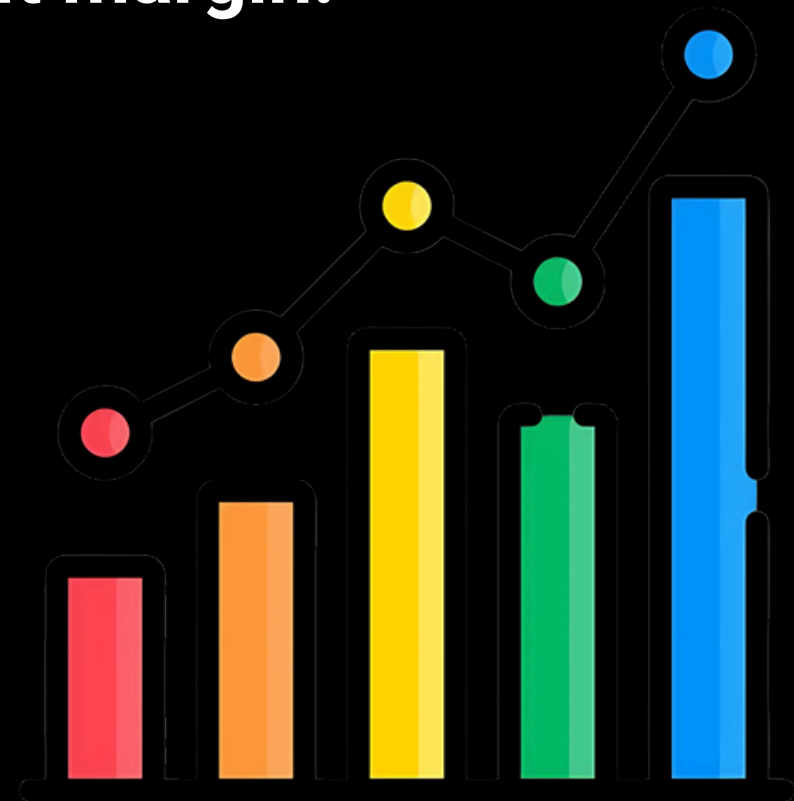
22.Combo Chart

When to Use?

When combining two different types of data in one visual, like sales volume and profit margin.

Examples:

Combining
revenue and profit
margin data in one
visual.



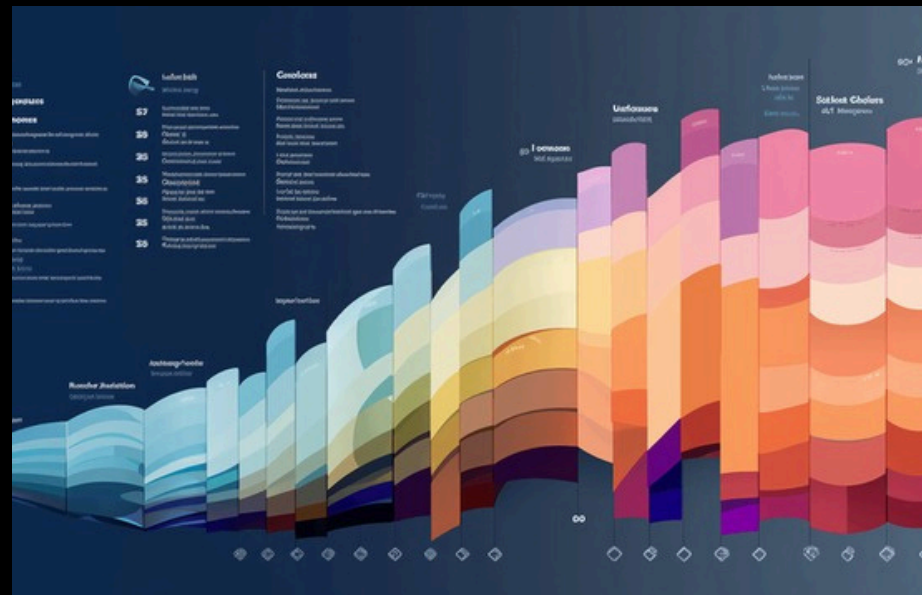
23. Ribbon Chart

When to Use?

When showing rank changes over time, such as product rankings or market positions

Examples:

Showing rank changes of products over time.



24.Decomposition Tree

When to Use?

When you need to drill down into data across multiple dimensions to understand contributing factors, such as analyzing sales by region, product, and time.

Examples:

Drilling down into sales data to understand contributing factors.



25.Histogram

When to Use?

When showing the distribution of a single variable, such as customer ages or transaction amounts.

Examples:

Displaying the distribution of customer ages.



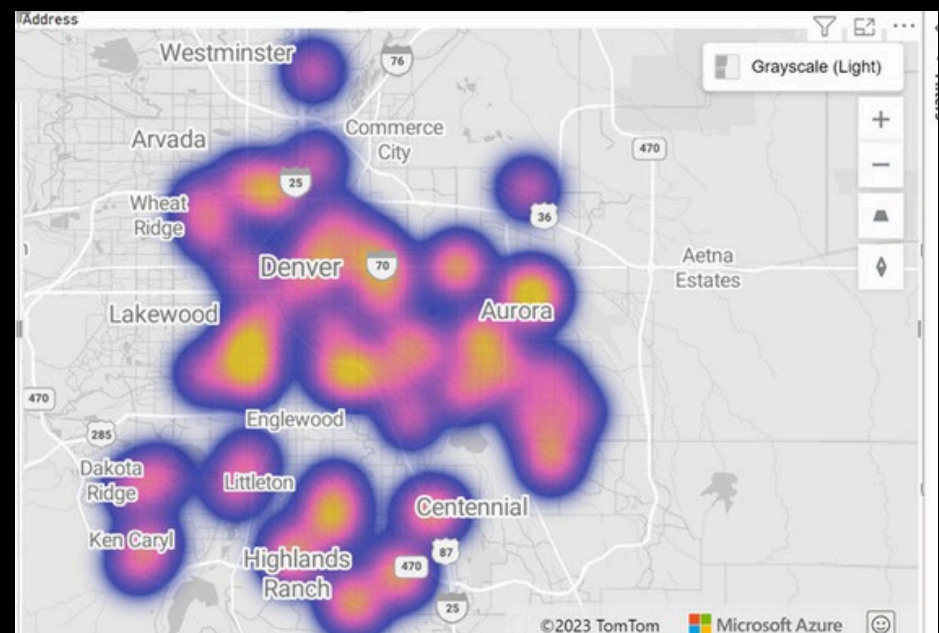
26.Heatmap

When to Use?

When visualizing data density or intensity, such as website click activity or sales performance across regions.

Examples:

Showing data density, such as website click activity.



27. Sparkline

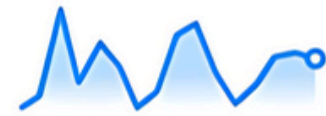
When to Use?

When showing trends in a small amount of space, often within tables or matrices, like monthly revenue trends.

Examples:

Adding mini trendlines to a table to show sales trends per product.

COGS
\$18.04M



Discounts
\$1.78M



Gross Sales
\$22.73M



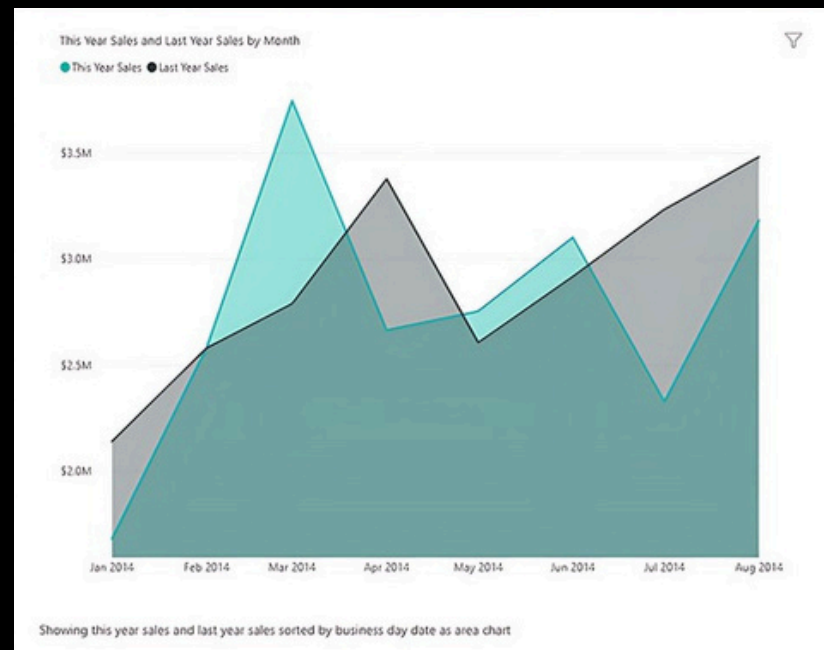
28.Q&A Visual

When to Use?

When allowing users to ask natural language questions and get visual answers, useful for ad-hoc data exploration.

Examples:

Allowing users to type natural language questions and get visuals based on data.



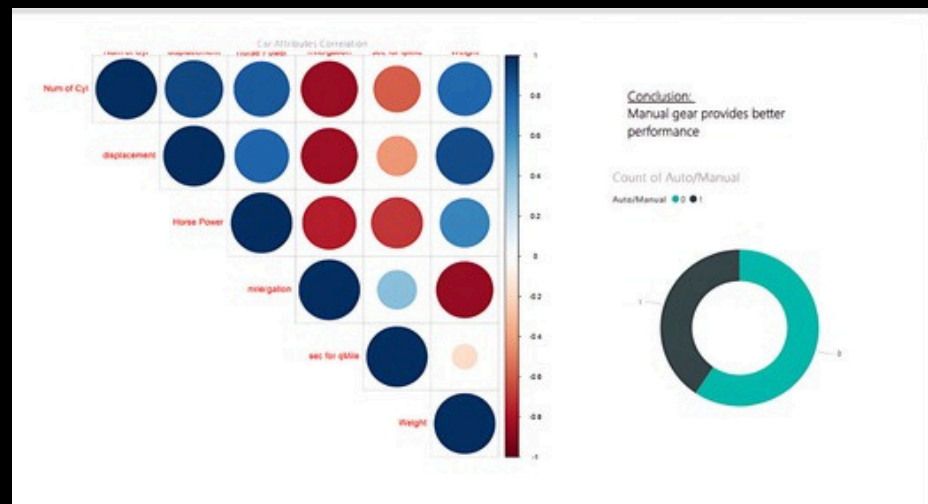
29.R-Visual

When to Use?

When you need to create custom data visualizations using R scripts for advanced analytics or statistical charts.

Examples:

Creating custom data visualizations using R scripts for advanced analytics



30. Python Visual

When to Use?

When using Python scripts to generate complex visuals or for advanced data analysis, such as machine learning model outputs or time series forecasting.

Examples:

Using Python scripts to generate complex visuals or statistical charts.



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