

Power BI Visual Guide

Visual Name	Suitable Data Type	Typical Use Case	Example Column Names	Real-Life Scenario (Case Study)
Bar Chart	Categorical (X), Numeric (Y)	Compare values across categories	Department, Revenue	Compare revenue generated by each department
Column Chart	Categorical (X), Numeric (Y)	Time-based or vertical comparison	Month, Sales	View monthly sales amount
Line Chart	Time Series (Numeric-Y)	Trend over time	Date, Visitors	See how many visitors came to the website daily
Area Chart	Time Series, Stacked Value	Accumulated trend over time	Date, Revenue by Product	View accumulated product-wise revenue over time
Pie Chart	Categorical Only	Show proportions	Product Category, Sales	See what percentage each product category sold
Donut Chart	Categorical Only	Pie + center label	Region, Customers	View customer percentage by region
Table	Any	Raw data view	Name, Salary, Join Date	View customer data in Excel-like format
Matrix	Two-dimensional categorical	Pivot-style aggregation	Department, Role, Headcount	People count by department and roles
Card	Single Value	Show single KPI	Total Sales, Avg Rating	Show total sales or average rating
Multi-row Card	Few Metrics	Multiple KPI values	Profit, Cost, Revenue	Display key metrics together
KPI	Numeric	Performance against target	Actual Sales, Target	Check if sales target met
Gauge	Numeric	Show progress toward goal	Score, Goal	Track how much of a score has been achieved
Slicer	Categorical / Date	Filter visuals	Region, Date	Filter the report
Tree Map	Categorical with size value	Hierarchical category distribution	Category, Sales	Sales by product category
Scatter Plot	Numeric X & Y	Correlation analysis	Experience, Salary	Analyze relation between experience and salary
Bubble Chart	Scatter + size (Z)	3D relation with size context	Marketing Spend, Revenue, Reach	Cost vs reach and revenue analysis

Power BI Visual Guide

Box Plot	Numeric	Distribution + Outlier detection	Age, Salary	Find salary range most employees fall into
Histogram	Numeric	Frequency distribution	Age, Product Price	See age distribution of people
Waterfall Chart	Sequential categories	Step-by-step change	Start Value, Change Category, End	Profit change from start to end of year
Funnel Chart	Categorical stages	Conversion analysis	Stage, Count	Customer count at each journey stage
Decomposition Tree	Hierarchical Drill-down	Break down one value into sub-factors	Sales -> Region -> Product	Break down sales by region and product
Map (Filled / ArcGIS)	Location + Numeric	Geo visualization	Country, Revenue	Show revenue by country
Stacked Column Chart	Categorical (X), Multiple Numeric (Y)	Compare parts of total	Region, Product, Sales	Compare sales of products across regions
Ribbon Chart	Categorical, Numeric	Show rank change over time	Product, Month, Rank	Visualize which product rose/fell in ranking over months