

Which Data Visual Should I Choose?



Visual Model	Best For	When to Choose It	Example
Bar Chart	Comparing values across categories or time periods	When you want to quickly compare discrete data points or show changes over time.	Sales by product category, monthly revenue comparison
Line Chart	Displaying trends and changes over time	When you want to visualize continuous data, especially to track progress or identify trends.	Website traffic over a year, stock prices over a month
Pie Chart	Showing parts of a whole or relative proportions	When you want to emphasize the relative size of different categories within a whole.	Market share by company, budget allocation
Scatter Plot	Revealing relationships or correlations between two numerical variables	When you want to explore the relationship between two variables and look for patterns or outliers.	Relationship between advertising spend and sales revenue
Heatmap	Visualizing density or magnitude of values across a matrix	When you have data that can be organized into a grid or matrix format, like a web page.	Website click patterns, geographic sales data
Histogram	Showing the distribution of a single numerical variable	When you want to see the frequency of different values or ranges of values in a dataset.	Distribution of customer ages, employee salaries
Box Plot	Displaying the distribution of a numerical variable across different categories	When you want to compare the distribution of a variable across multiple groups.	Test scores by class, customer satisfaction ratings by product line
Treemap	Displaying hierarchical data in a space-filling format	When you have hierarchical data with varying sizes or proportions.	Company revenue by department, website traffic by source
Network Diagram	Visualizing relationships between entities or concepts	When you want to show complex relationships between different elements.	Social network connections, supply chain relationships
Gantt Chart	Illustrating project schedules and timelines	When you need to manage and track project tasks and dependencies.	Project timeline with milestones, task dependencies