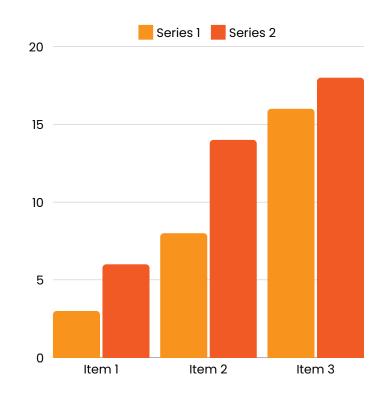
Data Visualization Examples and Use Cases





Bar Charts

Use: Compare quantities across categories

Best for: Discrete data, frequency distributions

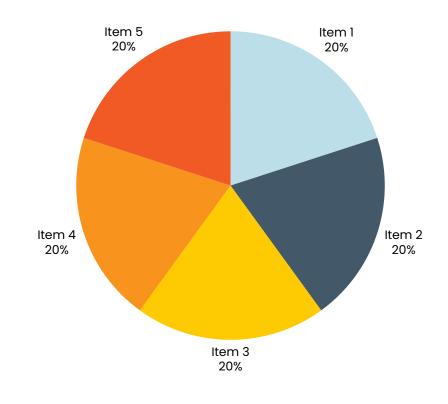
Example: Product sales comparison



Line Charts

- Use: Show trends over time
- Best for: Continuous data, time series
- Example: Stock price changes





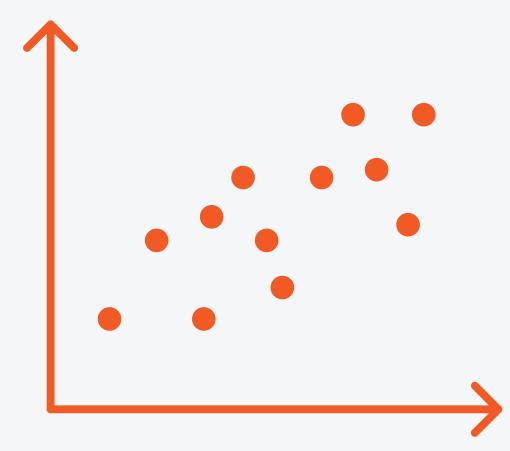
Pie Charts

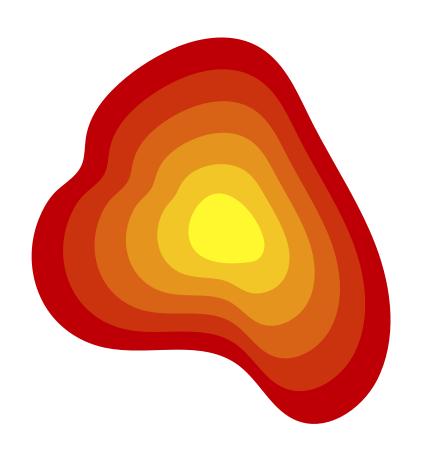
- Use: Show composition of a whole
- Best for: Parts of a whole, percentages
- Example: Market share of companies



Scatter Plots

- Use: Show relationship between two variables
- Best for: Correlation analysis, identifying outliers
- **Example**: Height vs. weight distribution





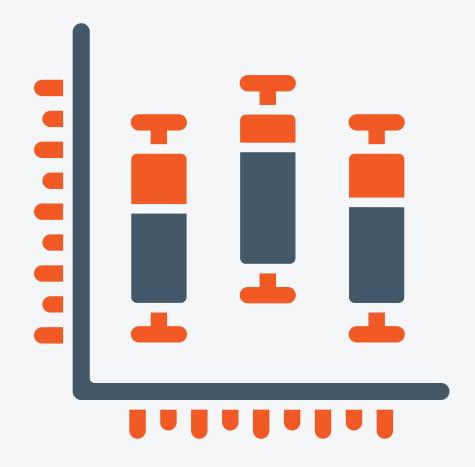
Heat Maps

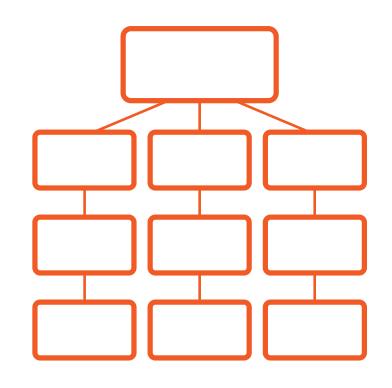
- Use: Show patterns in a matrix of data
- Best for: Large datasets, identifying hot spots
- Example: Website click patterns



Box Plots

- Use: Show distribution of data
- Best for: Comparing distributions, identifying outliers
- **Example:** Salary distributions across departments



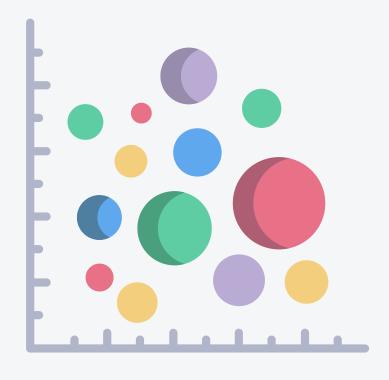


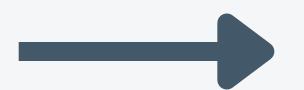
Tree Maps

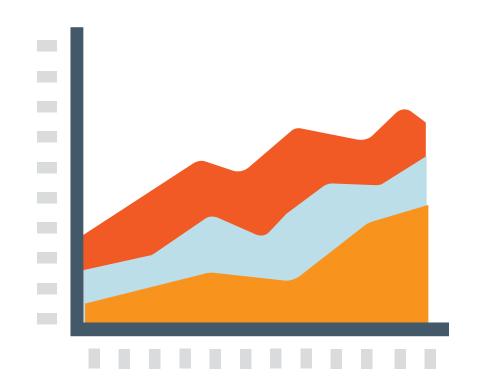
- Use: Show hierarchical data as nested rectangles
- Best for: Displaying hierarchies and proportions simultaneously
- Example: File system storage usage

Bubble Charts

- Use: Compare entities in 3 or 4 dimensions
- Best for: Multivariate data with size differences
- Example: Country statistics (GDP, population, life expectancy)





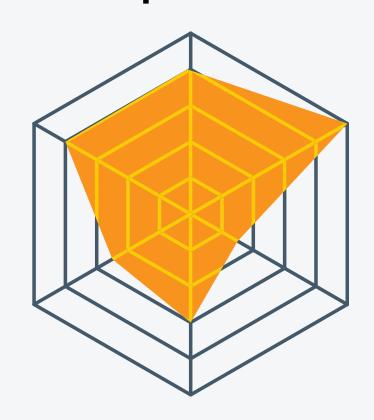


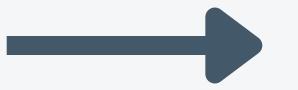
Area Charts

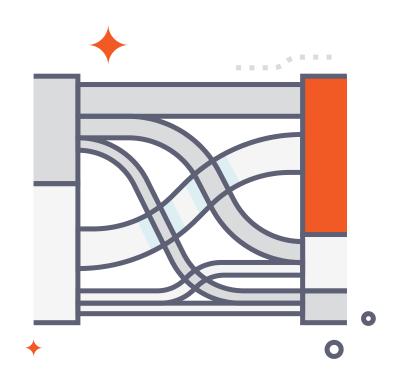
- Use: Show cumulative totals over time
- Best for: Part-to-whole relationships over time
- **Example:** Market share changes over years

Radar Charts

- Use: Compare entities in 3 or 4 dimensions
- Best for: Multivariate data with size differences
- Example: Country statistics (GDP, population, life expectancy)





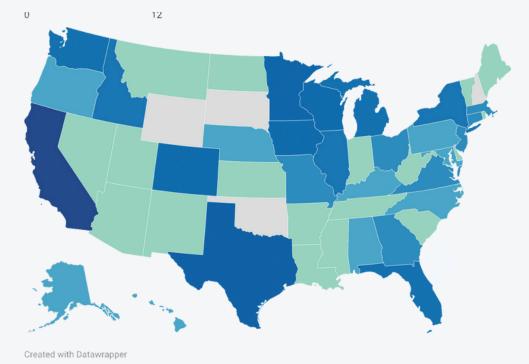


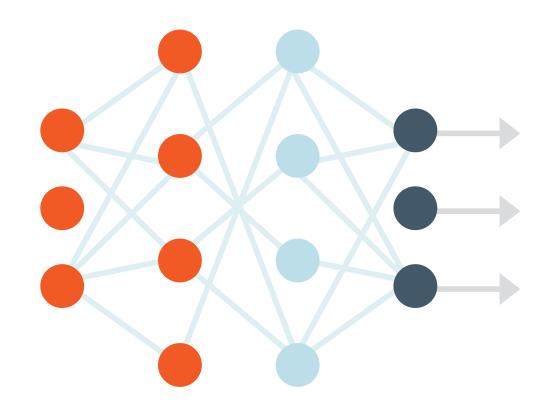
Sankey Diagrams

- Use: Show cumulative totals over time
- Best for: Part-to-whole relationships over time
- Example: Market share changes over years

Choropleth Maps

- Use: Compare entities in 3 or 4 dimensions
- Best for: Multivariate data with size differences
- Example: Country statistics (GDP, population, life expectancy)



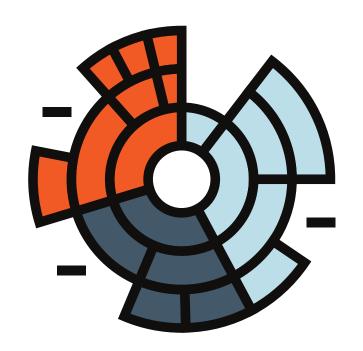


Network Diagrams

- Use: Show connections between entities
- **Best for:** Social networks, system architectures
- Example: Social media connections

Sunburst Diagrams

- Use: Displaying hierarchical data
- Best for: Illustrating relationships in data that have multiple layers
- Example: Sales by Product
 Category

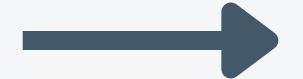






Word Clouds

- Use: Visualize text data, highlighting frequent terms
- Best for: Text analysis, survey responses
- Example: Most common words in a speech



Curious



how you can use natural langue to visualize your data?



