Summary: A Curated Selection of Charts for DMV

Author: Suzanne Little

This document provides a comprehensive overview of various chart types used in Data Visualisation and Management (DMV), beyond the commonly known pie, bar, line, scatter plots, histograms, and boxplots. It emphasizes understanding data types (categorical vs. quantitative) and the intended message (comparison, trend, distribution, etc.) to select the most effective chart type.

Key Groupings of Charts (CHRTS):

Based on Andy Kirk's classification in Data Visualisation (2016), charts are categorized into:

- 1. Categorical: For comparing categories and distributions of values (e.g., bar charts, dot plots, histograms).
- 2. Hierarchical: For part-to-whole relationships and hierarchies (e.g., pie charts, treemaps, dendrograms).
- 3. Relational: For exploring correlations and connections (e.g., scatterplots, heat maps, Sankey diagrams).
- 4. Temporal: For trends and activities over time (e.g., line charts, Gantt charts, stream graphs).
- 5. Spatial: For mapping patterns (e.g., choropleth maps, cartograms).

The mnemonic "CHRTS" serves as a tool to recall these categories, which cover a broad range of applications in business, journalism, and research.

Best Practices and Considerations:

- Prioritize clarity and communication over aesthetic appeal.
- Understand audience familiarity with complex visualizations (e.g., boxplots).
- Avoid over-reliance on controversial or less effective visualizations like pie charts.
- Recognize spatial distortions in maps and ensure audience comprehension of the spatial context.

Resources and References:

For exploring unfamiliar charts, several visualization libraries and references are provided, including *Data Visualization* by Andy Kirk and *Storytelling with Data* by Nussbaumer Knaflic.