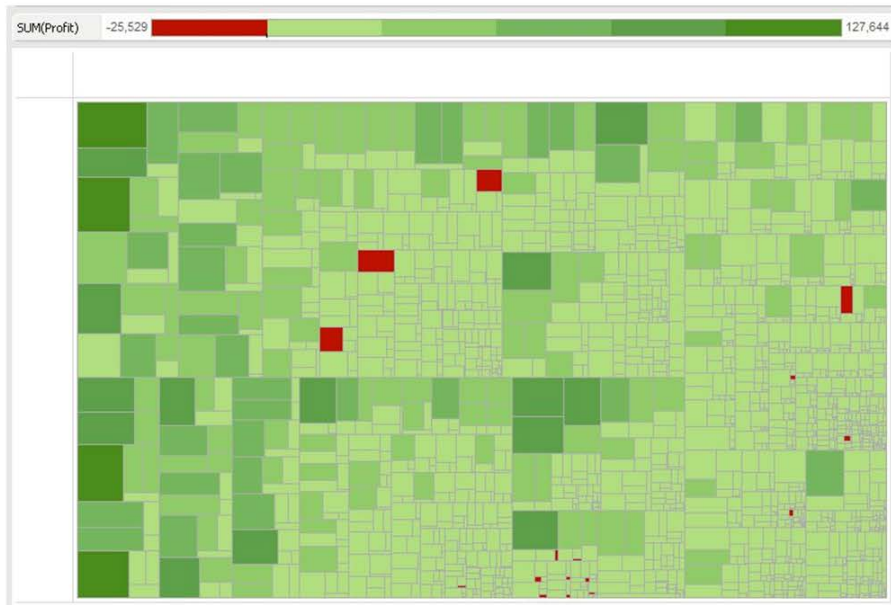


Visual Analytics with Tableau

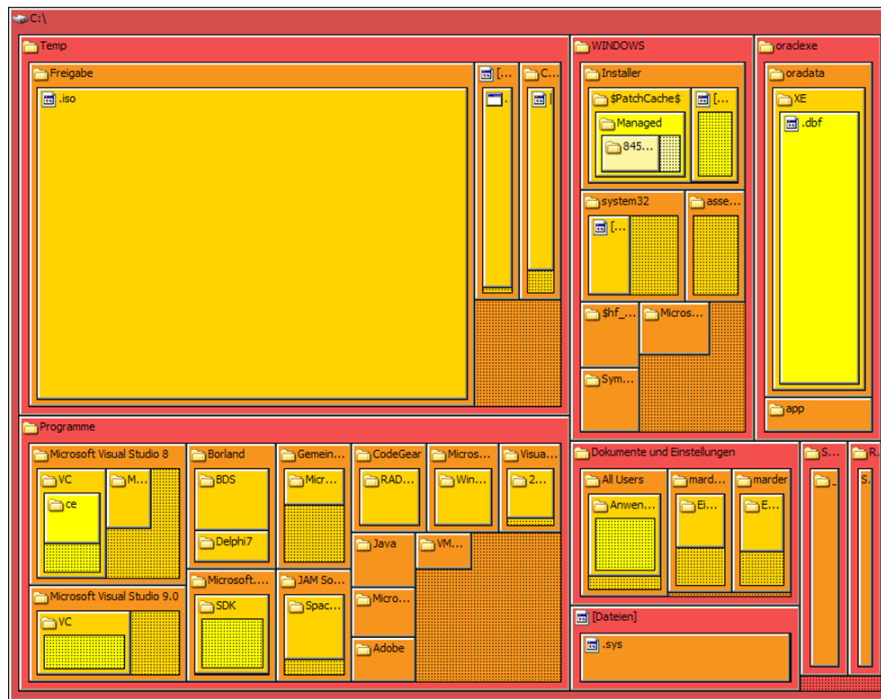
Charting Guidelines: Treemaps and Box-and-Whisker Plots



Treemap shows sales and profit of product categories by department at the country and state-level. Sales are depicted by size and profit is depicted by color

Treemaps show users how parts relate to the whole

Series of nested rectangles show hierarchy as a proportion to the whole



Treemap visualizing hard disk space usage

Your data is like a tree

Each branch is a rectangle

Each rectangle can be sub-divided

Data is shown in proportion to the whole



Treemap of soft drink preference in a small group of people. Color and gradients are used to group items, while still identifying individual items.

Use size and color to show patterns across data categories

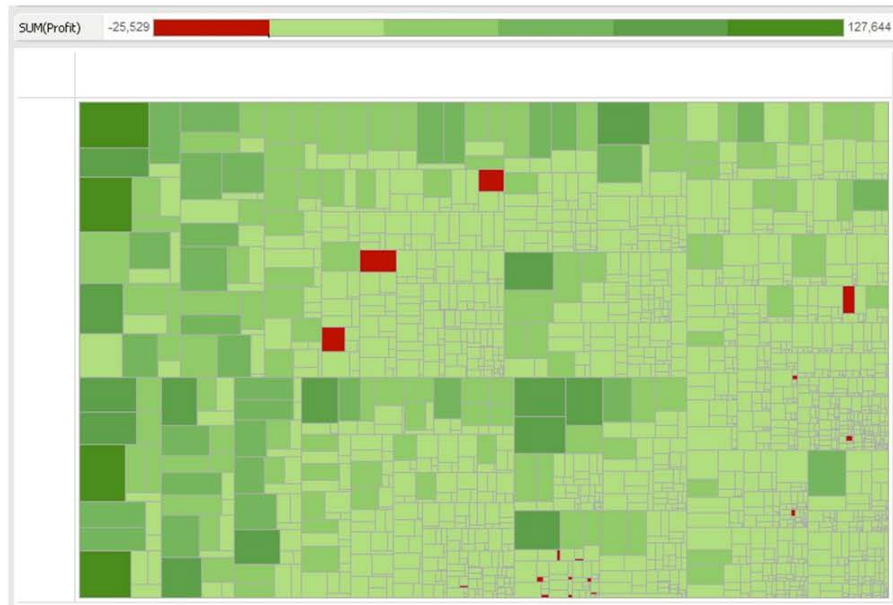
Treemaps use space efficiently while allowing the user to see an entire data set



Storage usage across
computer machines

Managing the number
and priority of technical
support cases

Comparing budgets
between years

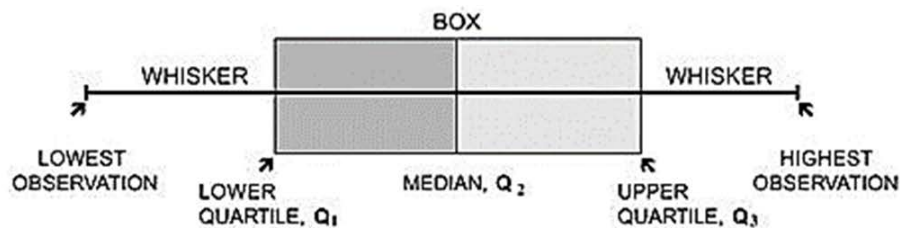


Color rectangles by
category differently
from how they are
structured hierarchically



Treemaps + bar charts

Compare bar's lengths
and see proportional
relationships
simultaneously



Box and whisker plots
data distributions

Box contains the
median of the data from
1st through 3rd
quartiles

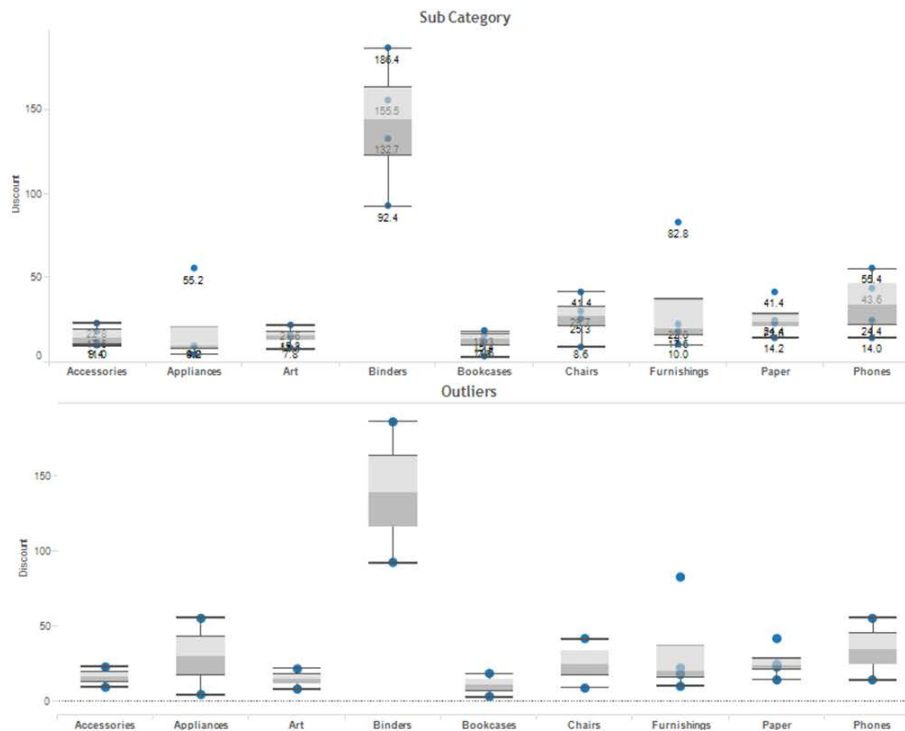
Whiskers represent data
within 1.5 times the
inter-quartile range or
can show maximum and
minimum data points



Understand your data set at a glance

See how data is skewed towards one end

Show outliers in your data



Hide the data points within the box to focus user on outliers

Compare box plots across categorical dimensions to see distributions across the data



Creating effective views
takes practice, intuition
and attention to detail

Practice involves a lot
of trial and error

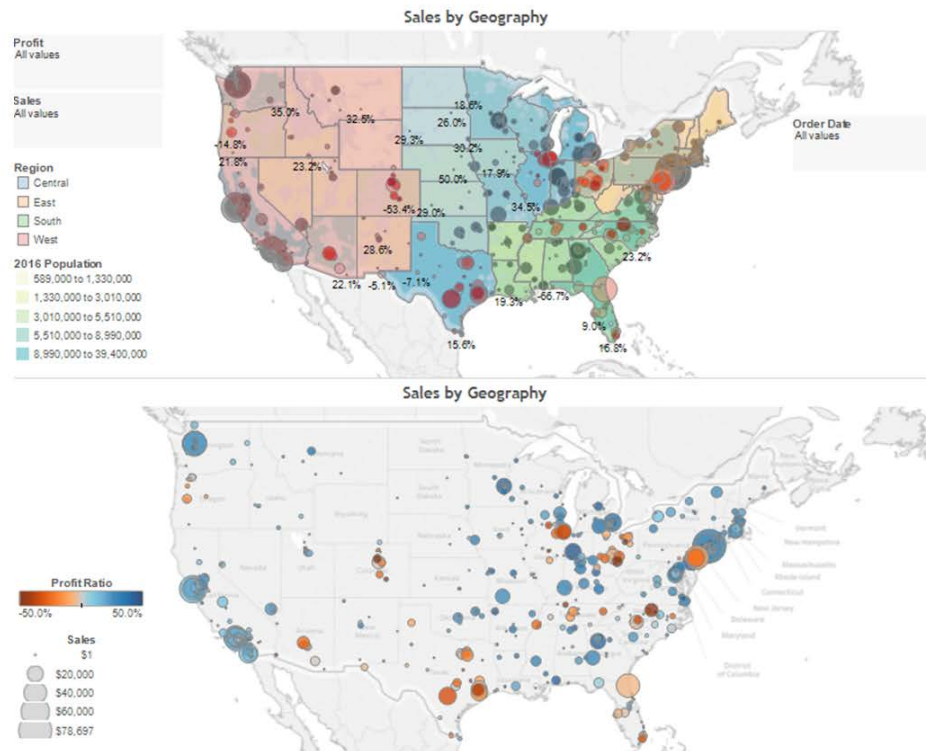


The goal is to emphasize the most important data

Rules of thumb:

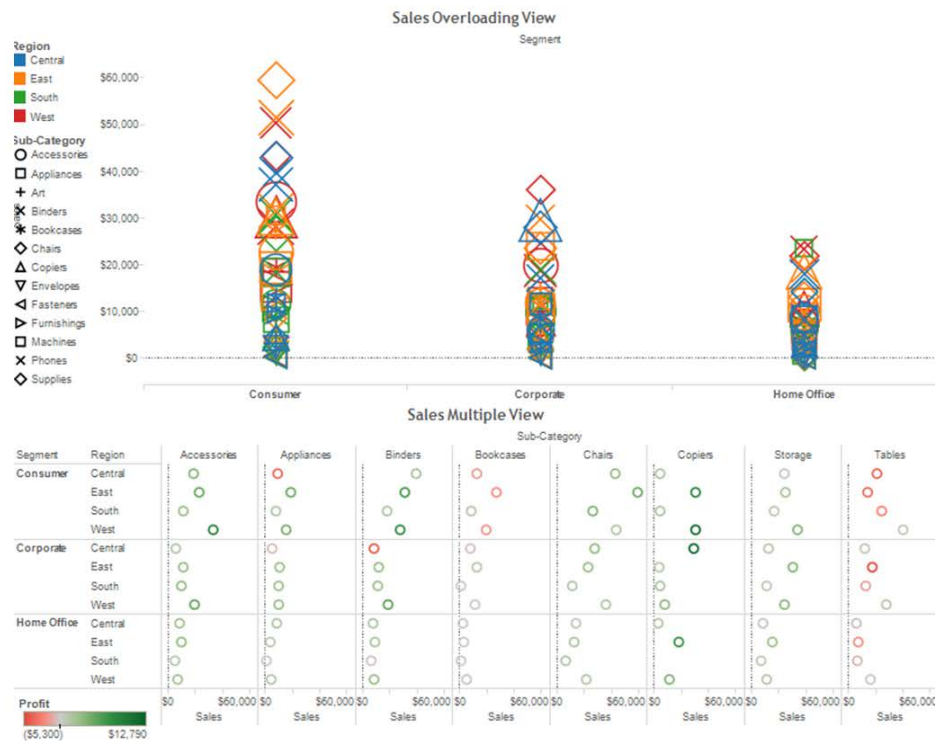
Put the most important data on the X or Y axis

Use color, size and shape to convey less important data



Rotate your charts and labels for easy reading

Do not overload your view – less is more

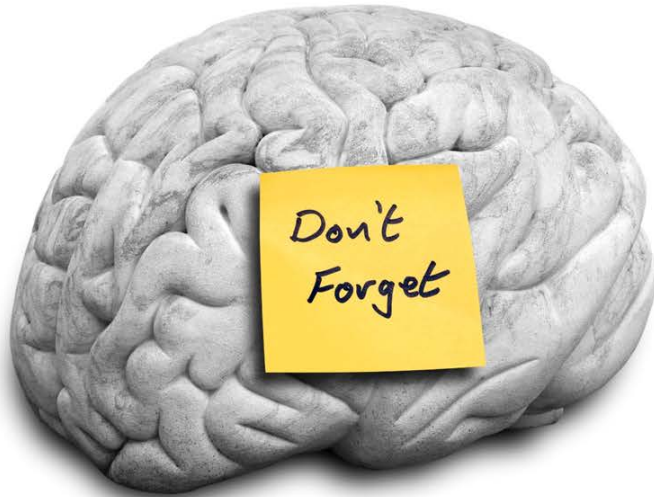


Break information into small multiples



Use color and shapes
thoughtfully to help the
user see patterns

Again, less is more



Use questions to select the right chart

Determine your visualization's purpose

Recall guidelines to help you select appropriate chart types



Practice helps mastery

Experiment with
different chart types and
how to customize
different features to
showcase your data