

Visual Analytics with Tableau

Charting Guidelines: Bar Charts, Line Graphs, Pie Charts



Know what you want
to say

Don't get lost in the
details

A good visualization has
a clear purpose

Be selective about what
to include



Who is your audience?

What are their
questions?

What information do
you want them to know?



What other questions
might your visualization
inspire?

What idea will your
audience take away after
using your visualization?



Figure 1: Chart types.

What is the right chart
for your particular
visualization?

Particular charts convey
specific insights

Choose wisely

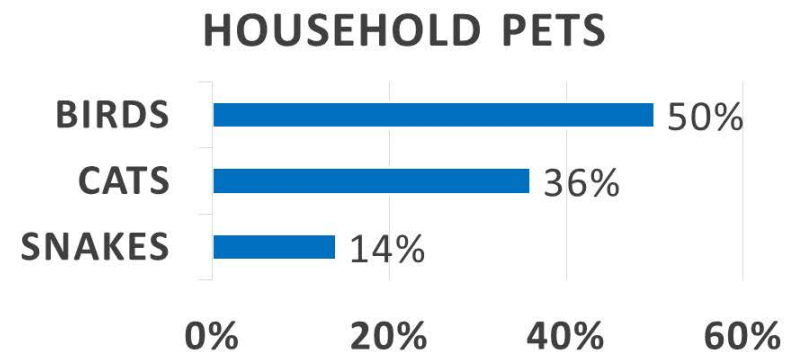
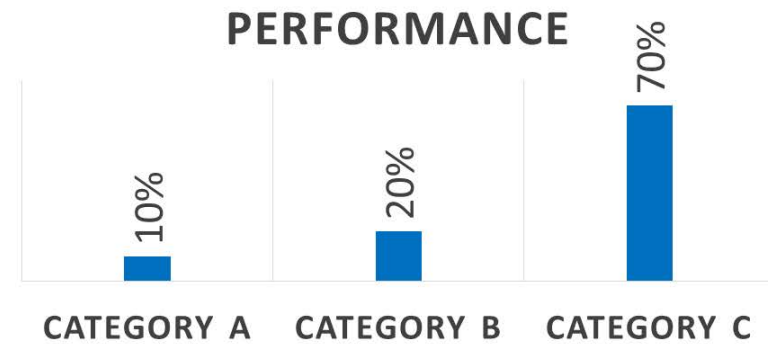
Bar charts are a common way to visualize data

Allow quick comparisons

Reveal highs and lows

Helps categorize data

Spot trends





Volume of shirts in
different sizes

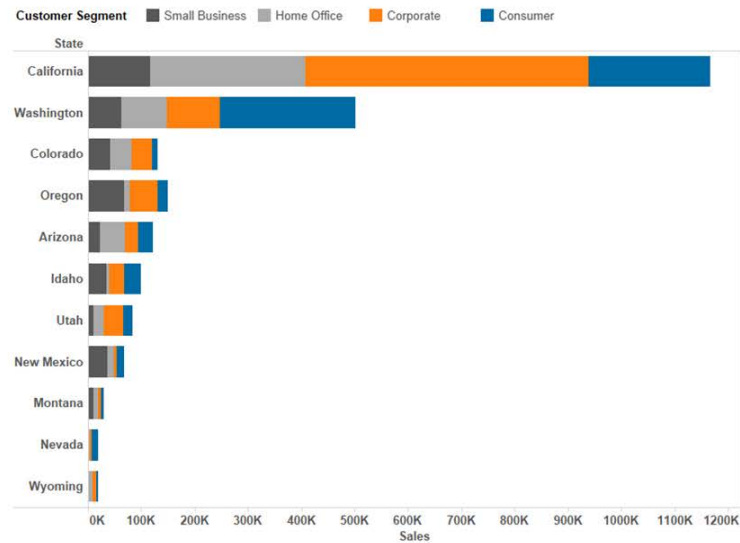
Website traffic by
origination site

Percent of spending by
department



Use bar charts on a dashboard to compare related information



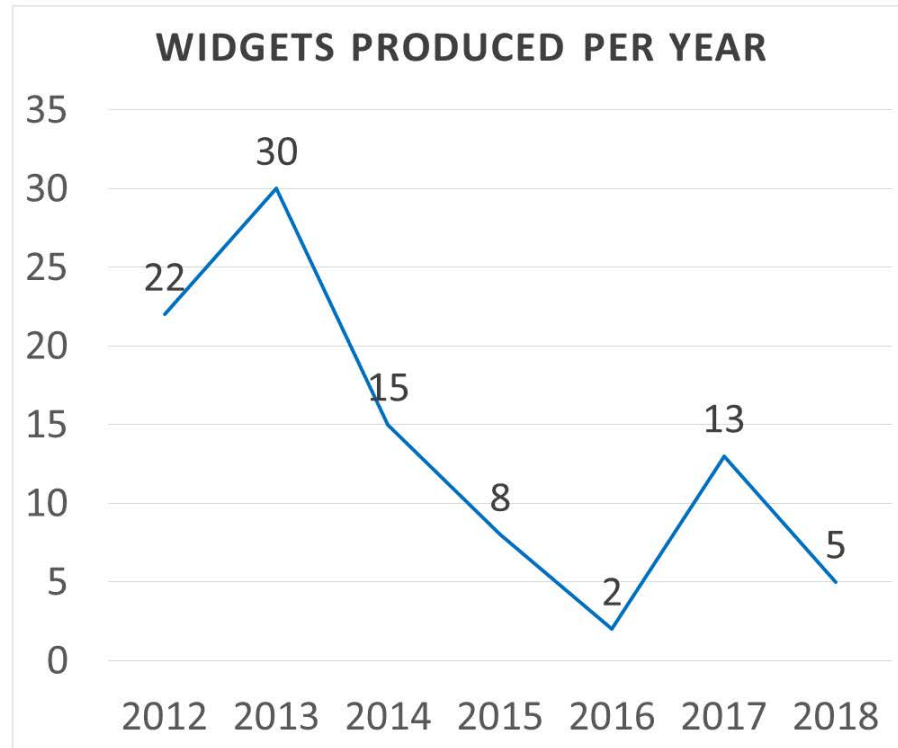


Stacked and side-by-side
bar graphs answer
multiple questions at
once



Combine bar charts
with maps – the
becomes a data filter

Putting bars on both
sides of an axis shows
both positive and
negative trends



Line charts:

Connect individual
numeric data points

Visualize a sequence of
values

Display trends over time



Changing stock prices
over a five-year period

Website views per
month

Quarterly revenue
growth



Bar + line graph:
Show trends for two
types of data

Volume sold per day of a
stock

Stock price fluctuations
throughout day



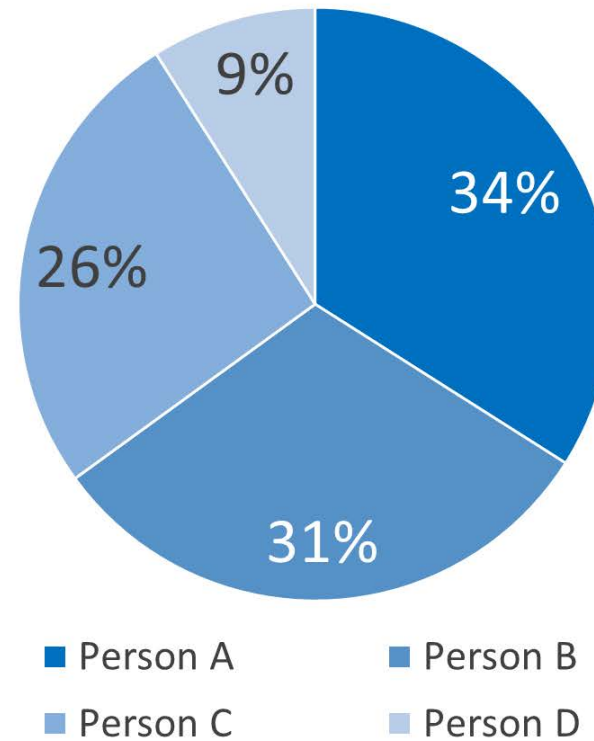
Shading under line charts:

Provides information about the relative contribution that each line gives to the whole

Pie charts show relative proportions or percentages of information

Most commonly misused type of chart

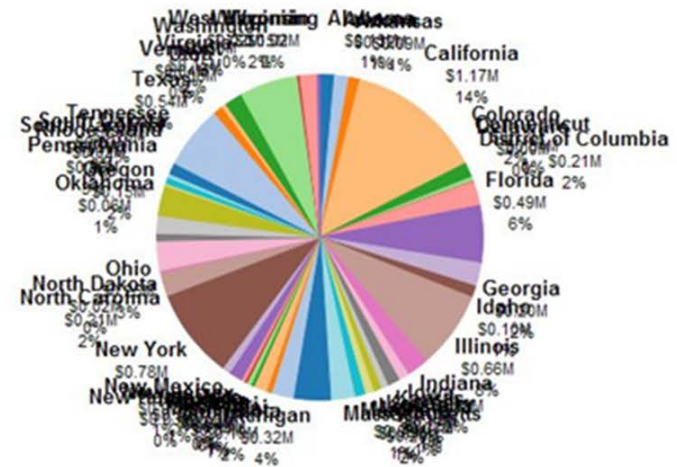
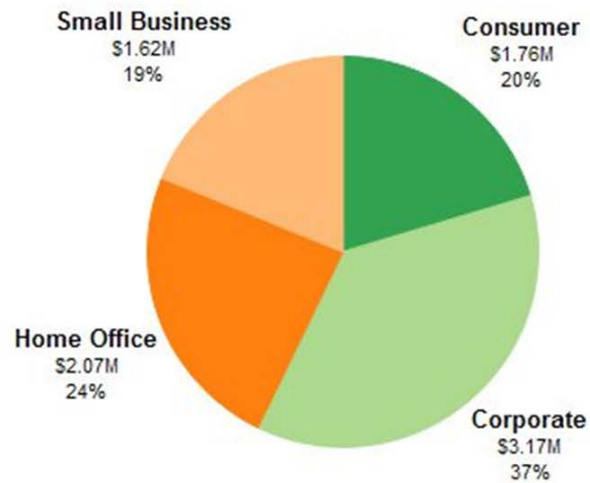
Bar charts more clearly show comparisons





Percent of budget spent
by department

Breakdown of how
Americans spend their
leisure time



Pies have no more than 6 wedges -- > 6 types of data, use a bar chart



Pie charts + maps:
highlight geographic
trends

Use pies with only 2 or 3
wedges