Visual Techniques for Exploratory Data Analysis in R (with ggplot2)

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Why R?

- virtually unlimited graphical options
- opinionated graphics
- analytical tools (> 13,000 CRAN packages)
- community
- reproducibility
- ease of workflow: everything in one document
- free and open source

Why not R?

- learning curve
- lack of GUI for graphics
- interactive graphics are not native

Graphics in R

pie {graphics} R Documentation

Pie Charts

Description

Draw a pie chart.

Usage

```
pie(x, labels = names(x), edges = 200, radius = 0.8,
    clockwise = FALSE, init.angle = if(clockwise) 90 else 0,
    density = NULL, angle = 45, col = NULL, border = NULL,
    lty = NULL, main = NULL, ...)
```

Arguments

`x`	a vector of non-negative numerical quantities. The values in `x` are displayed as the areas of pie slices.
`labels`	one or more expressions or character strings giving names for the slices. Other objects are coerced by `as.graphicsAnnot`. For empty or `NA` (after coercion to character) labels, no label nor pointing line is drawn.
`edges`	the circular outline of the pie is approximated by a polygon with this many edges.
`radius`	the pie is drawn centered in a square box whose sides range from *-1* to *1*. If the character strings labeling the slices are long it may be necessary to use a smaller radius.
`clockwise`	logical indicating if slices are drawn clockwise or counter clockwise (i.e., mathematically positive direction), the latter is default.

Base R vs. Tidyverse