R Markdown

R for Data Science workshop

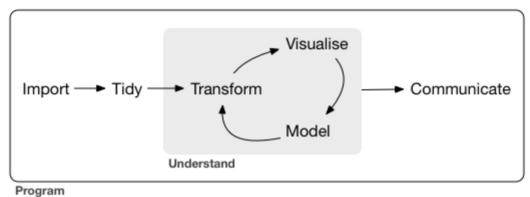
2019-05-01 (updated: 2019-05-16)

R Markdown

Outline

- Overview
- R Markdown basics
- Code chunks
- YAML header

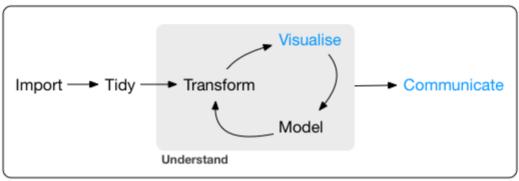
Data science workflow



riogram

Image source: R for Data Science by Hadley Wickham & Garrett Grolemund.

Data science workflow



Program

Image source: R for Data Science by Hadley Wickham & Garrett Grolemund.

R Markdown Overview

Use cases:

- Communicating with decision makers
- Collaborating with other data scientists
- Environment for doing data science

Reproducible research

```
Karl -- this is very interesting,
however you used an old version of
the data (n=143 \text{ rather than } n=226).
I'm really sorry you did all that
work on the incomplete dataset.
Bruce
```

R Markdown basics

Plain text file with extension *.Rmd*

Three types of content

- 1. Optional YAML header
- 2. Chunks of R code
- 3. Text with Markdown formatting

"Knitting" with **knitr**



R Markdown basics

Markdown Quick Reference in RStudio Help

Demo

Code chunks

knitr provides almost 60 options for code chunks.

RStudio provides help for the most common ones.

Demo

Couldn't figure out how to display markdown in markdown. 🙂

Your turn

R Markdown

- Create a new R Markdown document with File > New File > R Markdown...
- Knit it by clicking the appropriate button.
- Knit it by using the appropriate keyboard short cut.
- Verify that you can modify the input and see the output update.