

# An introduction to R using the tidyverse

@ BC Stats

Charlotte Wickham

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cwickham@gmail.com

# Introduction

**HELLO**

my name is

**Charlotte**

# Your Turn

Introduce yourselves to your neighbours:

Who are you?

What do you do with data?

How would you describe your R experience?

# Day 1

Introduction &  
Getting Started

1:00 - 2:45

Afternoon Break

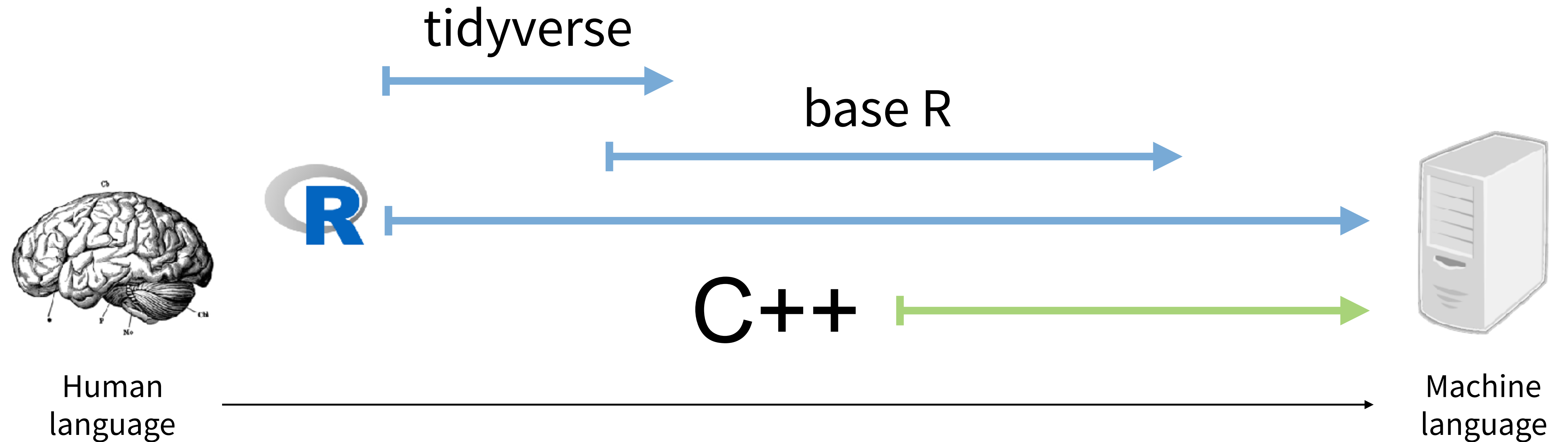
2:45 - 3:00

Data Basics

3:00 - 4:30

# Why R?

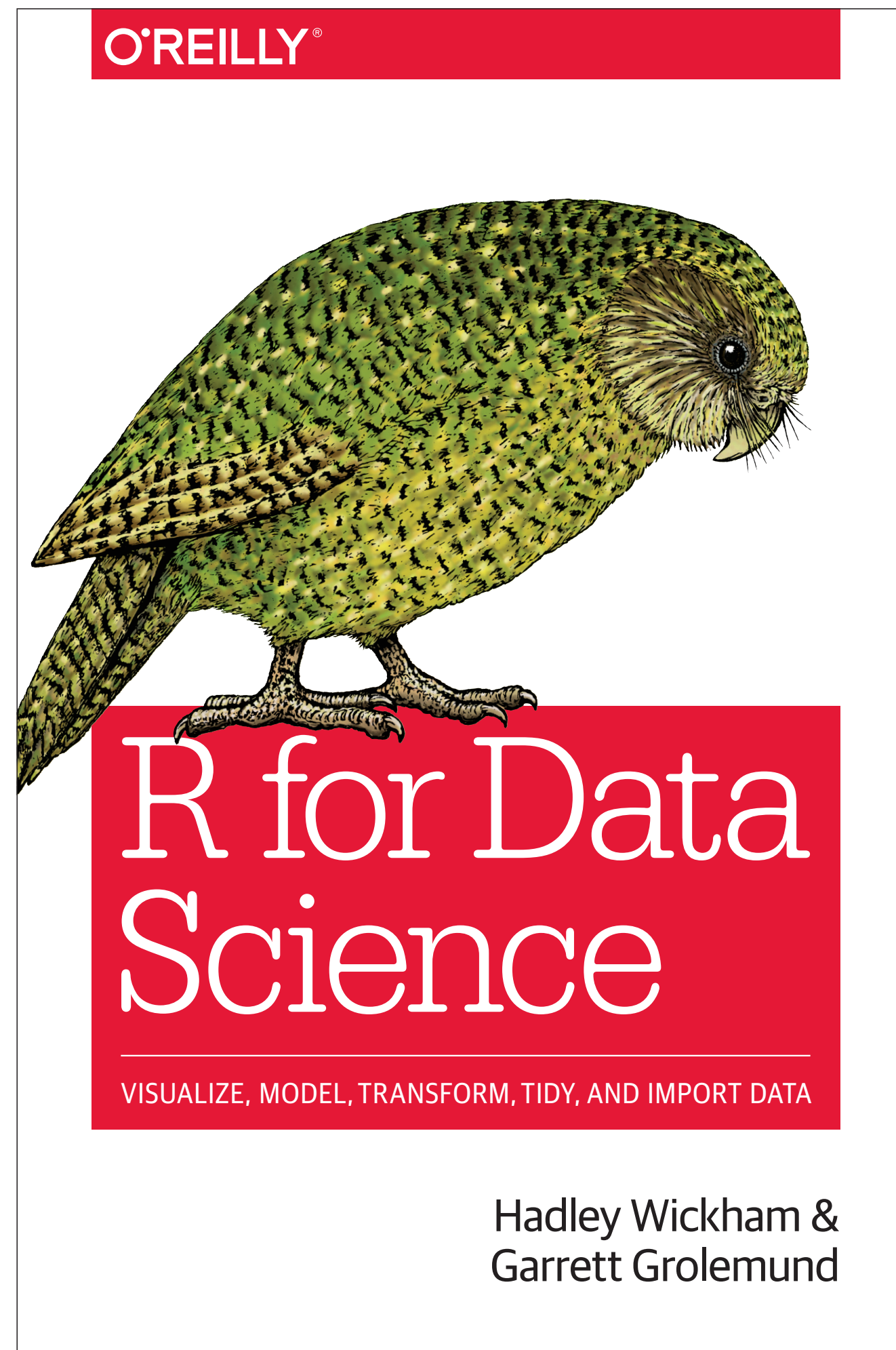
# R - A computer language for scientists





**Online at:**

<http://r4ds.had.co.nz/>





Single, 9-inch  
PIE CRUST

$\frac{1}{2}$  C Crisco  
 $\frac{1}{2}$  t salt

Sift flour & salt into bowl. Take out  $\frac{1}{4}$  C  
flour & set aside. Cut Crisco into remaining  
flour til pieces are size of small peas. Mix  
water with flour & add paste to other mixture.  
Mix & shape into ball. Roll on floured board  
to fit 9-in. pan. Place in pan, flute edges, prick sides  
and bottom generously with fork, and bake in hot oven  
(450) for 12 to 15 min.

Pastry for:  
H PIE

LATTICE CRUST 9 INCH

$\frac{2}{3}$  C Crisco  
2 C sifted flour  
1 t salt  
 $\frac{1}{4}$  C water

$\frac{1}{3}$  salt into bowl. Take out  $\frac{1}{3}$   
Crisco into remaining flour until  
the size of small peas. Mix  $\frac{1}{4}$  C  
flour to form paste. Add flour paste  
to flour mixture. Mix & shape into a ball.  
Dough into 2 parts and proceed to make  
crusts. Use  $\frac{1}{2}$  of the lattice crust recipe for a  
crust pie. (in 2 parts) 450° oven - 12-15 min.

# Document





# Communicate

Image credit: *Poster Session* widdowquinn <https://flic.kr/p/7KD1iU> by ©©©©



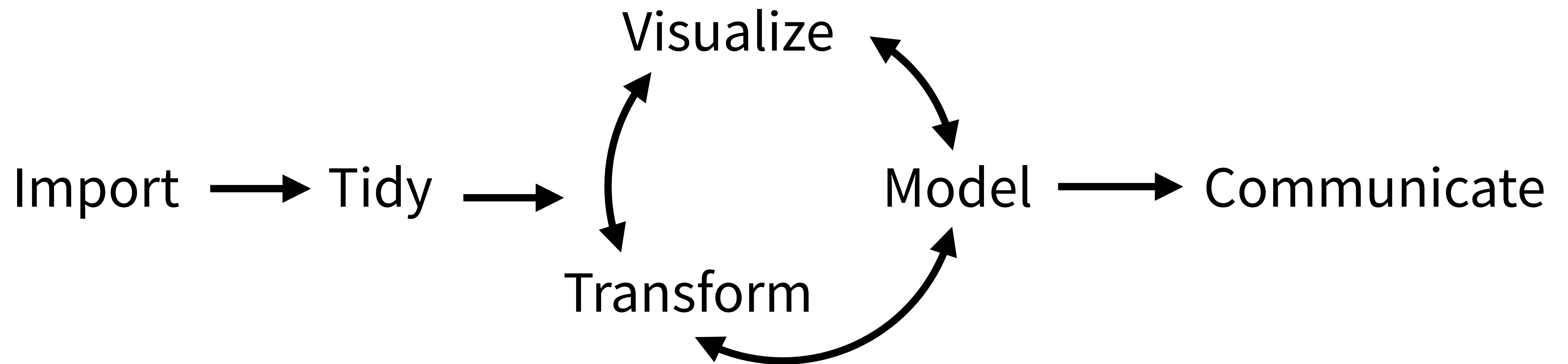


# Automate

Image credit: *Rover 200 Framing Line* Spencer Cooper <https://flic.kr/p/cp5WgS> by © ⓘ ⊖



# (Applied) Data Science



Program



## Issue 17-146 Price of New Housing

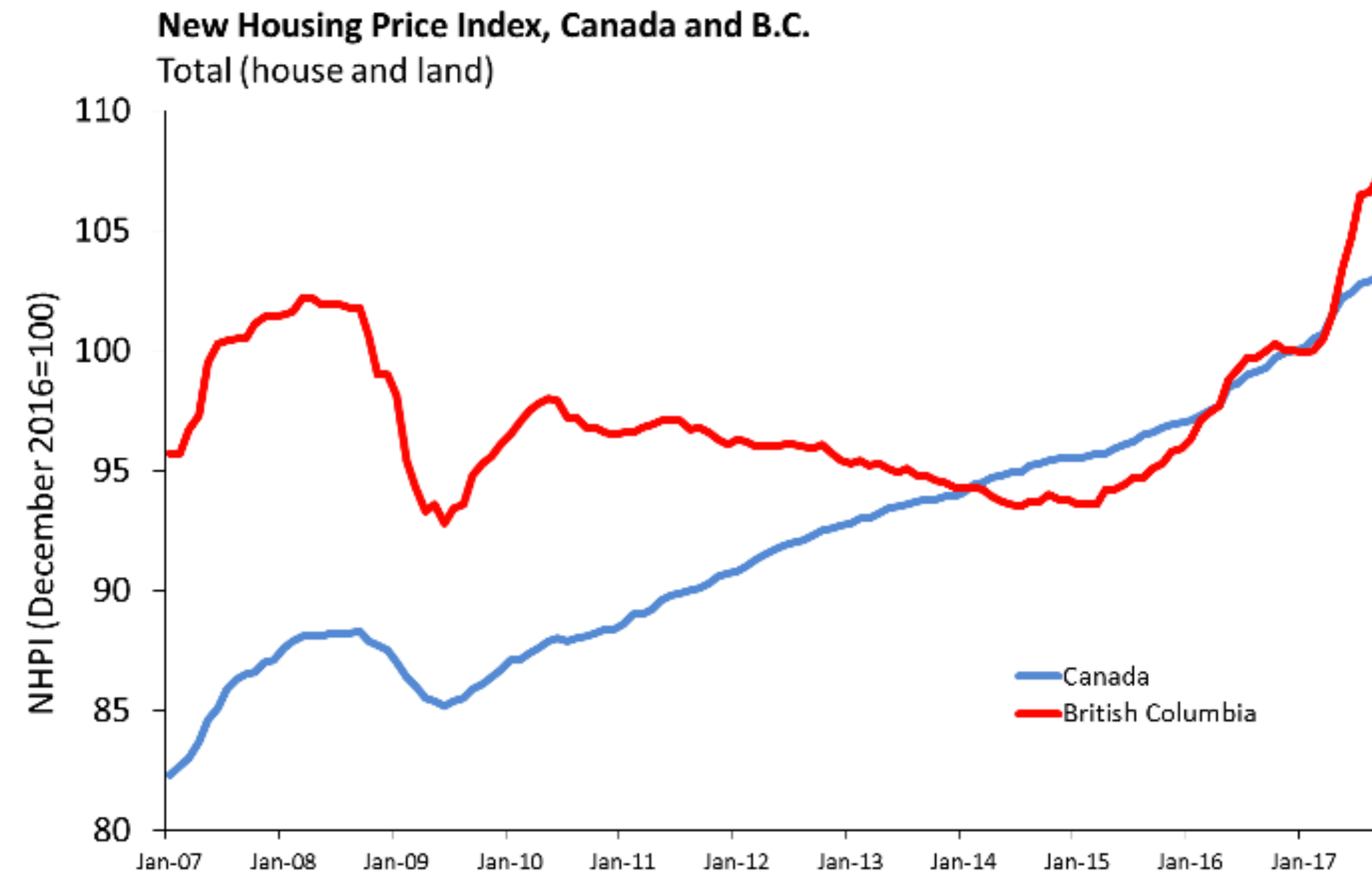
November 9, 2017

In September the cost of new housing in B.C. was up from August by 0.7%. The rise was concentrated in Kelowna (+0.9%) and Vancouver (+0.7%), as Victoria registered no change in prices compared to the previous month.

Relative to the same month of 2016, the cost of new housing in B.C.'s two largest cities continued to climb in September. Vancouver (+8.3%) reported the largest price increase among surveyed census metropolitan areas, with the price of both land (+5.7%) and building (+8.9%) up from last year. In Victoria, new housing prices rose 2.5% in September compared to the same month the previous year.

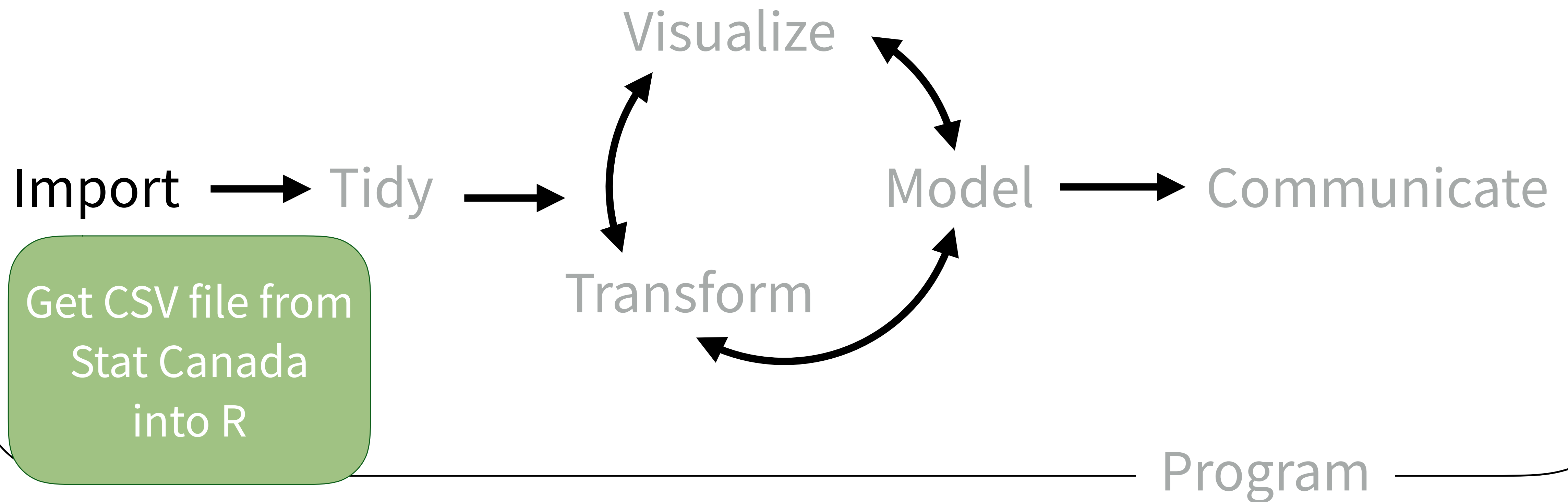
Nationally, new housing prices were 3.8% higher in September than in the same month of 2016. The increase was led by Vancouver, followed by London (8.1%) and Toronto (+6.4%). The increase was widespread, with new housing prices up in all but four of the reported census metropolitan areas.

<https://www2.gov.bc.ca/gov/content/data/statistics/infoline/infoline-2017/17-146-price-new-housing>



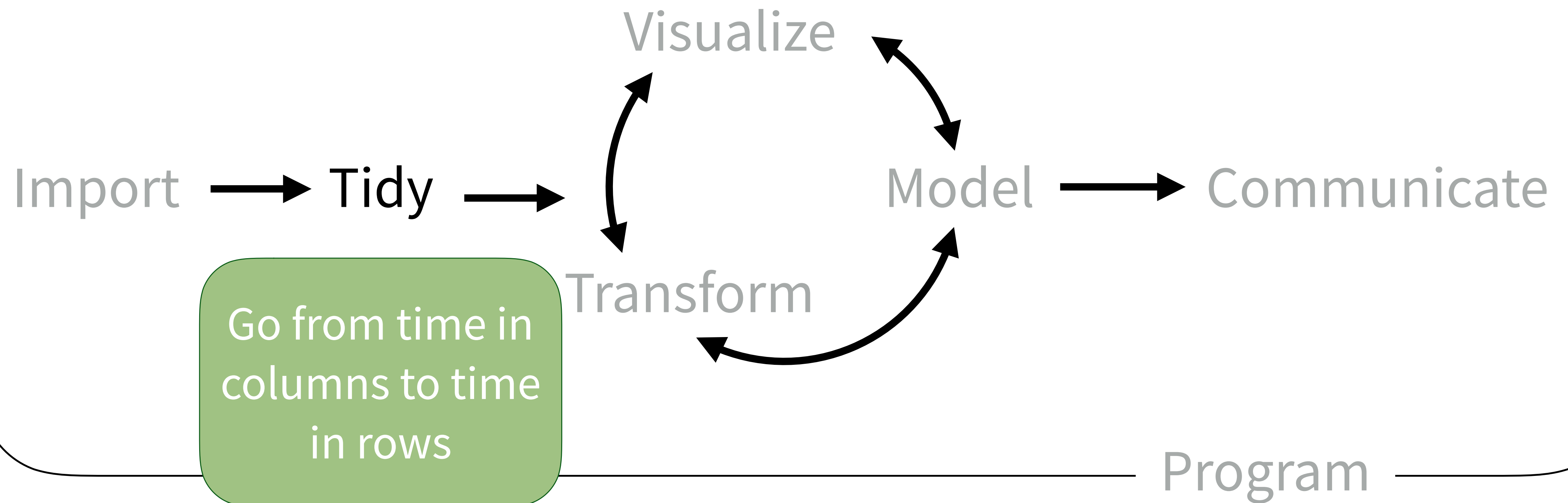
Source: Statistics Canada. CANSIM table 327-0056

# (Applied) Data Science

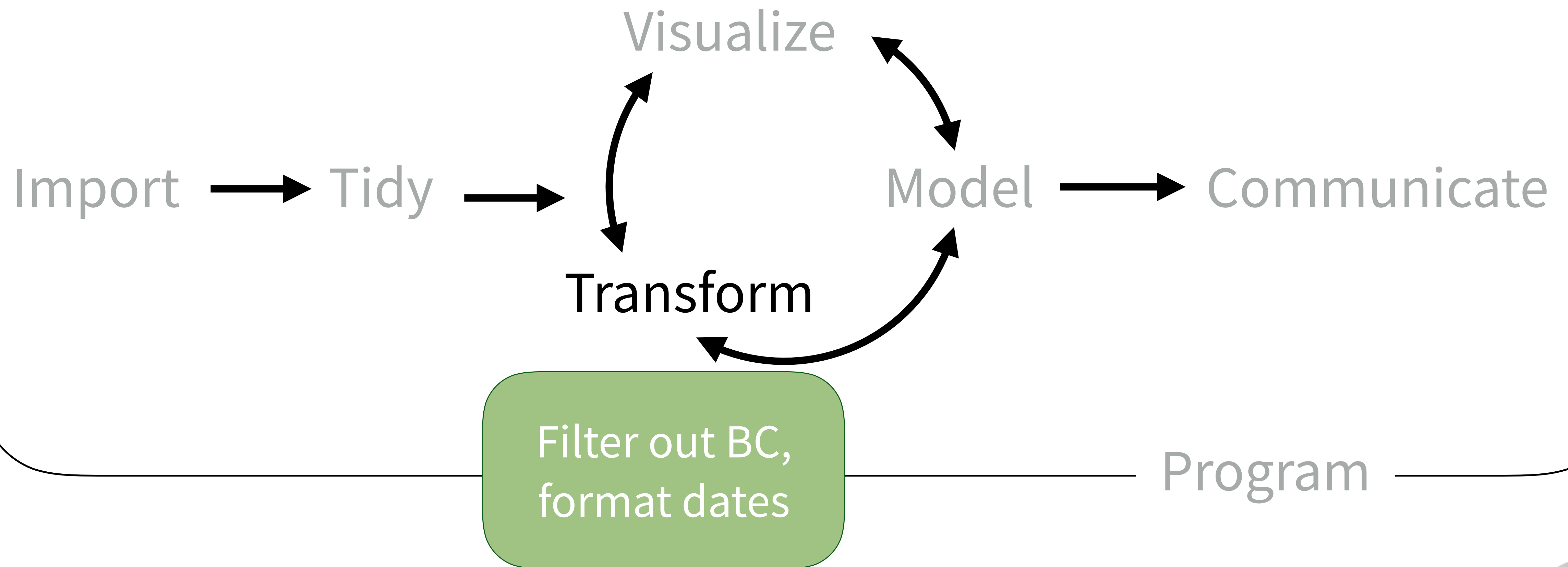




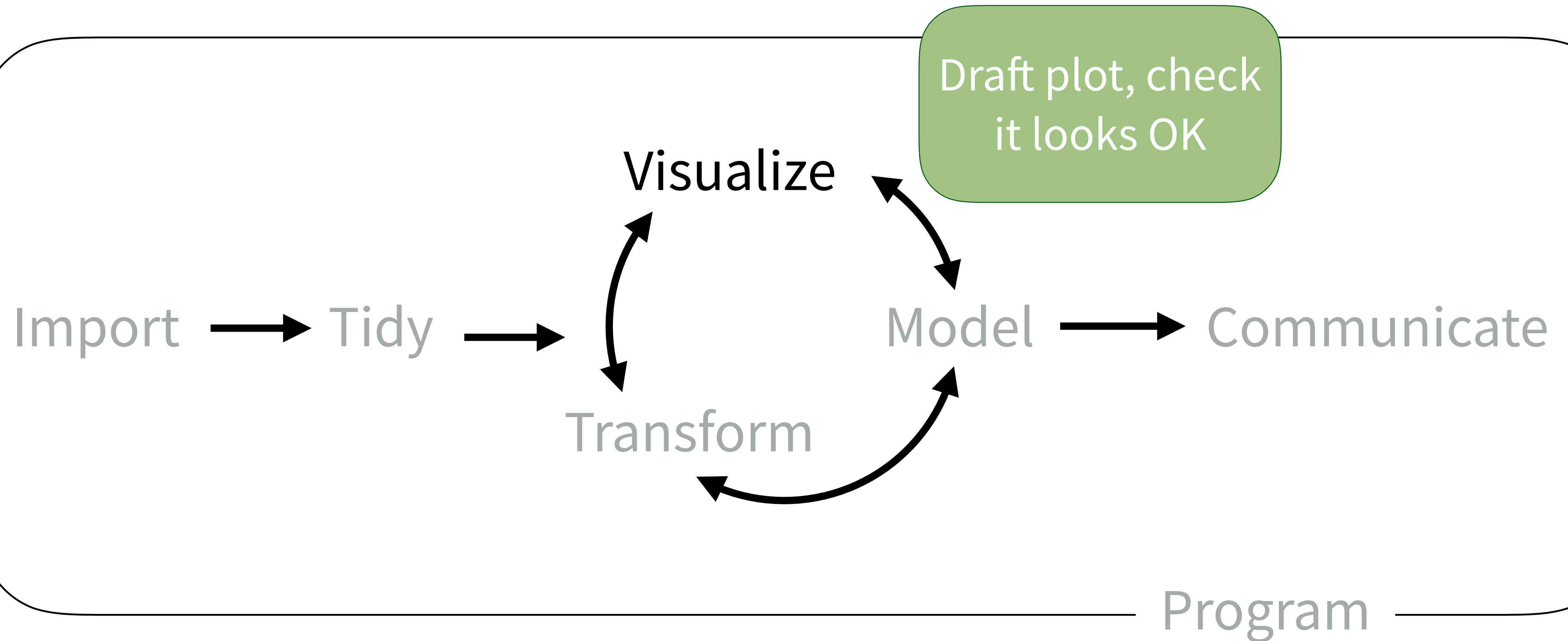
# (Applied) Data Science



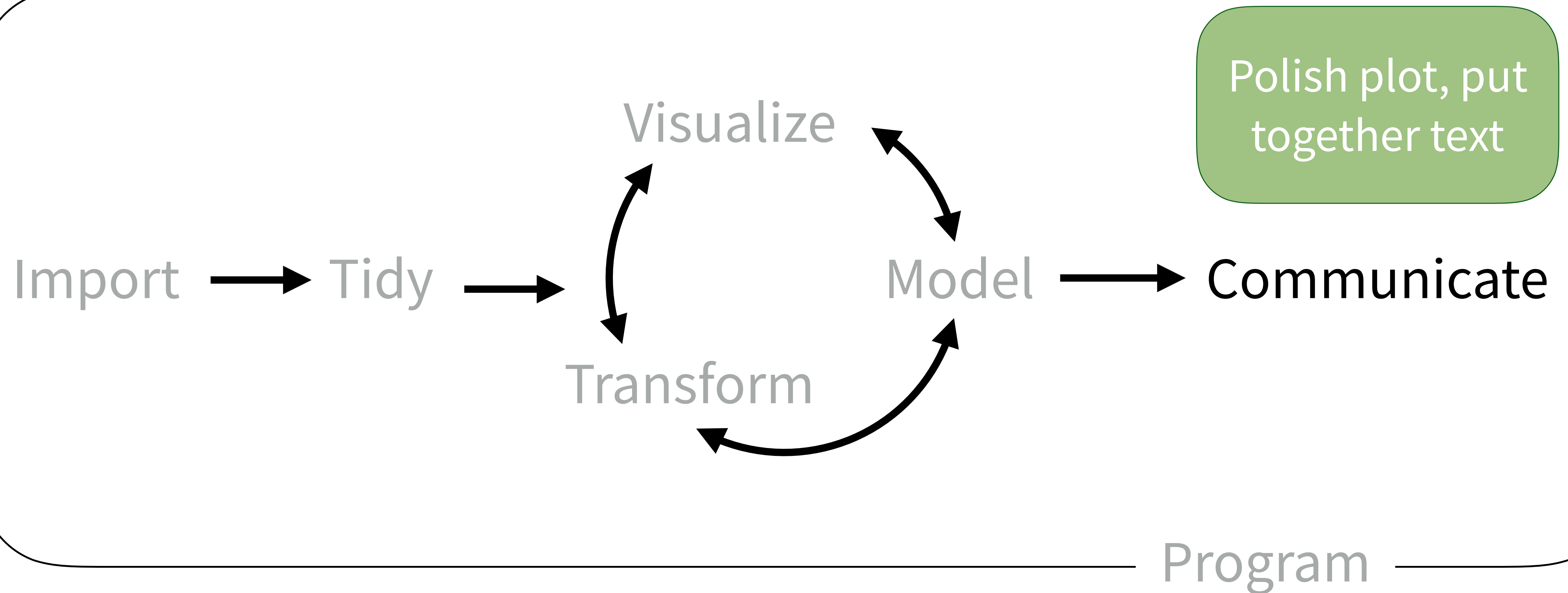
# (Applied) Data Science



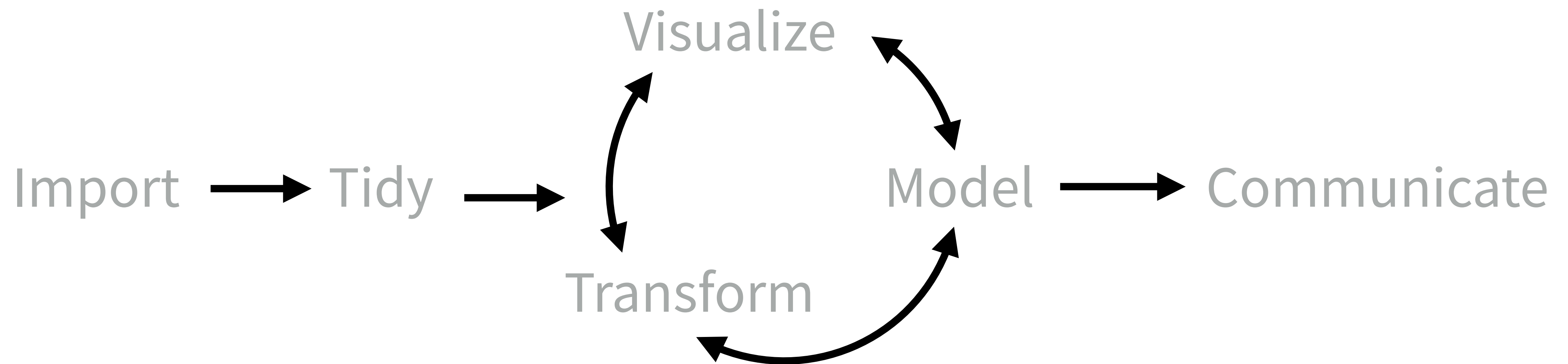
# (Applied) Data Science



# (Applied) Data Science



# (Applied) Data Science



Program

Do it all again next  
month

# Today

You'll:

- get familiar with RStudio
- learn some basic syntax rules
- explore tabular data structures in R

So, tomorrow we can dive into the tidyverse