



## ICMK352 Marketing Intelligence

Marketing Intelligence  
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# Introduction to R and RStudio

# Intro to Marketing Research & Business Innovation

Key topics for discussion

**01**

Business  
Innovation

**02**

Marketing  
research:  
purposes and  
process

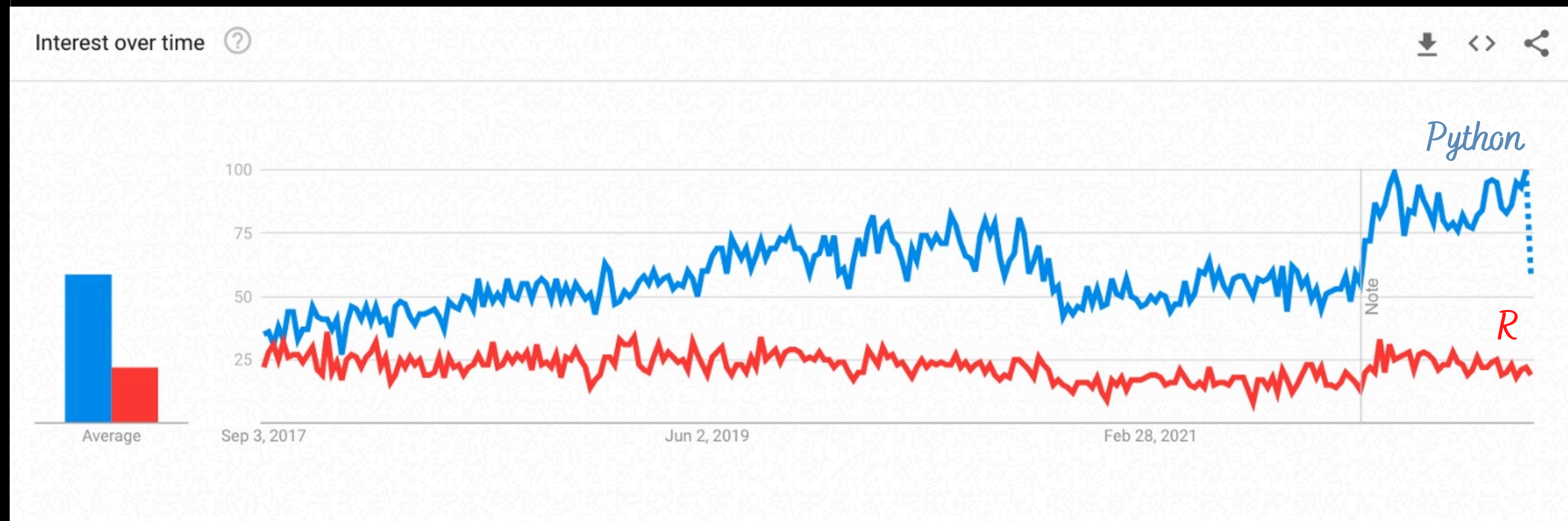
**03**

Business  
model  
development



# Why use R?

It's free!





# Why R?

The reasons why R has been popular

- It's free!
- It runs on a variety of platforms including Windows, Unix and MacOS.
- It provides an unparalleled platform for programming new statistical methods in an easy and straightforward manner.
- It contains advanced statistical routines not yet available in other packages.
- It has state-of-the-art graphics capabilities.





## Data Wrangling

80% of the work in data science is data manipulation. (Tidyverse)

## Data Visualization

ggplot2 is one of the best data visualization tool.



# Skills for Data Science



## Modelling and ML

when you're ready to start using (and learning) machine learning, R has some of the best tools and resources.



# About R

- R is an open source statistical programming language and environment for **statistical computing and graphics**
- Developed by Ross Ihaka and Robert Gentleman, University of Auckland, in 1995.
- Capability of R can be extended by **packages**. Basic functions are available by default. Other functions are contained in packages that can be attached to a current session as needed
- **Interactive process:** Run command > Results > Process > Run another command > Iterate > Done





# R Overview

- You can enter commands one at a time at the command prompt (>) or run a set of commands from a source file
- There is a wide variety of **data types**, including vectors (numerical, character, logical), matrices, dataframes, and lists
- Most functionality is provided through built-in and user-created functions and all data objects are kept in memory during an **interactive session**
- A key skill to using R effectively is learning how to use the **built-in help system**.

