

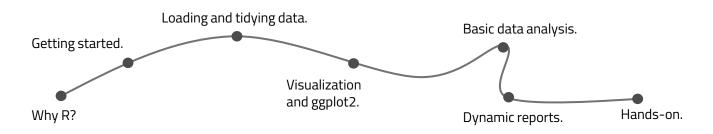
### summeRworkshop

Thursday, Jul 25, 2019 10:00 - 16:00 UL-FRI, Lecture room 03



University of Ljubljana Faculty of Computer and Information Science





Gregor Pirš Jure Demšar Erik Štrumbelj

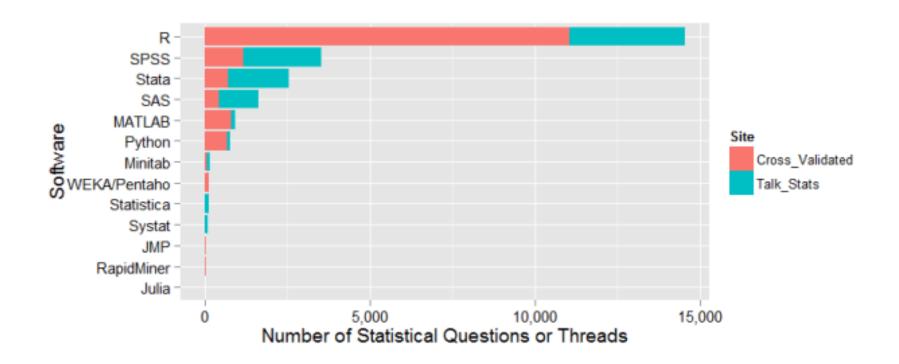
## What is R?

- R is software for statistical computing and graphics.
- R is an interpreted and dynamically typed programming language.

# Advantages of R

• It's free.

- Tailored to data manipulation and analysis.
- Large community.
- Extensive 3<sup>rd</sup>-party libraries (packages).
- Integration (MSSQL, SAS, Tableau, LaTeX...).



https://r4stats.com/2015/10/19/using-discussion-forum-activity-to-estimate-analytics-software-market-share/

# Disadvantages of R

- Relatively slow.
- Clunky object oriented programming.
- Less than ideal memory management.
- Bottom line: Not something that one would use for production-level software development.

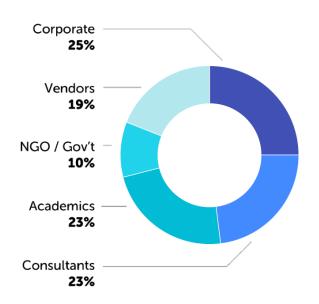
## Should I learn R?

- A professional in the field of data analysis should be fluent in R.
- If analyzing data is important to your work and you'll learn only 1 programming language in your life, learn R.
- If you already know other programming languages or work in less-statistical areas (machine learning, engineering), R might not be the best first choice.

### 2017 Data Science Survey: Overview



- 8<sup>th</sup> survey since 2007
- 67 questions
- 10,000+ invitations emailed & promoted by newsgroups, vendors and bloggers
- Respondents: 1,123 analytic professionals from 91 countries
- Data collected in first half of 2017

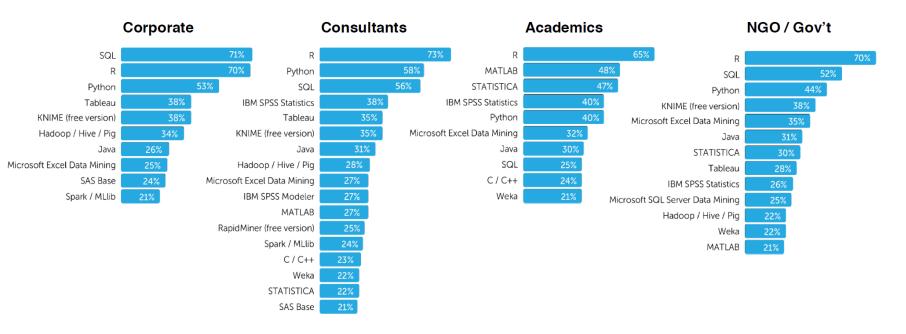


#### Most Data Scientists use Multiple Tools





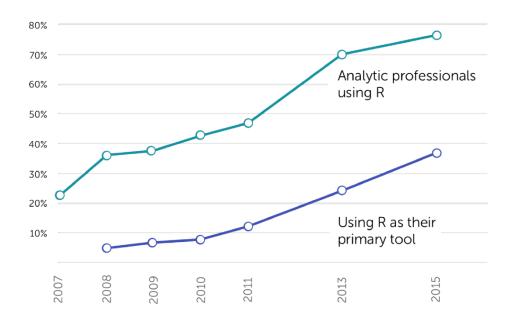
What data science / analytic tools, technologies, and languages did you use in the past year?



#### A Decade of Dramatic Growth in the Use of R



The biggest change in tool adoption we've seen over the past decade has been the dramatic growth in the use of R



### R in the job market

