

# Liberate Your Time: Accelerate With R

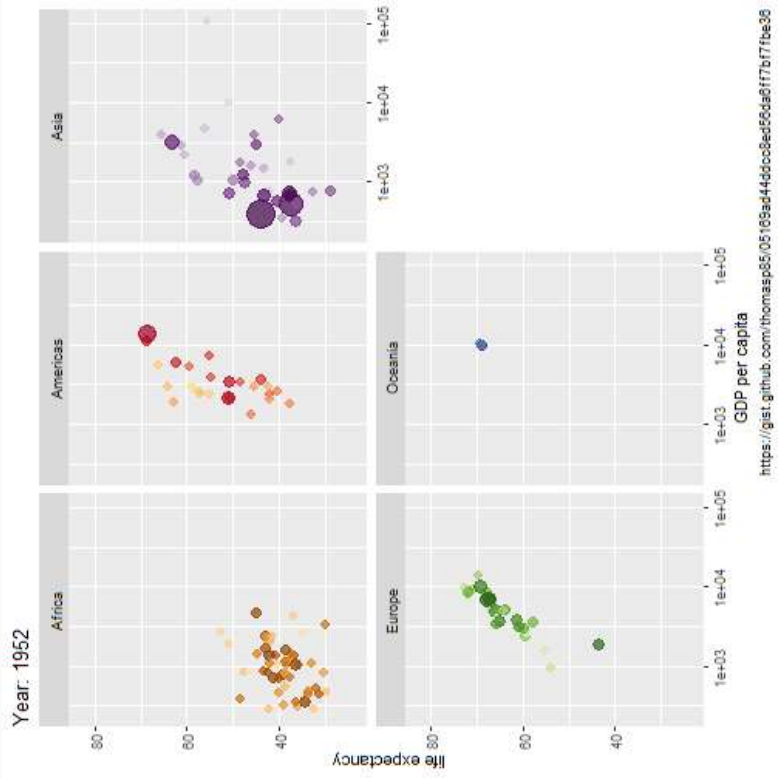
## Highlights and Examples

---

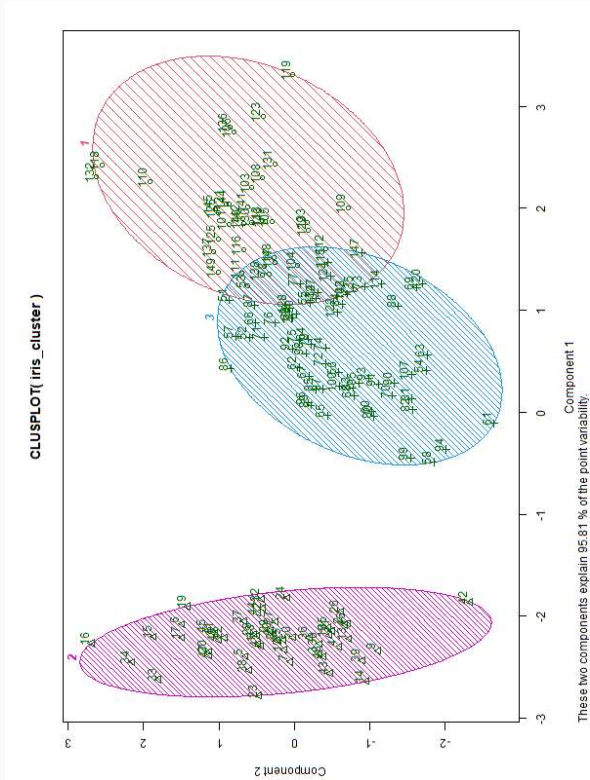
Thomas Sharpe, [thomassharpe@isu.edu](mailto:thomassharpe@isu.edu)  
AIR Forum: June 2023

# So Many Project Ideas, Not Enough Time!

Fancy Visualizations (gganimate)



Fancy Machine Learning (lots of R packages):



**It can be quite hard to find the time to explore and enhance**

# Objective

## Scope

- Demonstrate a few examples of leveraging a tool like R to speed up processes.
- Highlight key R packages and brief overview of the code flow.
- Spur curiosity and ideas.
- If you think, "Hey, I can do that better, or I might tweak that a bit." That's Great!

## Overview

- Getting Data
- Wrangling Data
- Text File Creation
- Excel File Creation
- Multiple HTML/PDF Files Creation
- Discussion and Q&A

3 / 8

# College of Southern Idaho (CSI)

## Analytics and Institutional Research (AIR) Team

- FTE: 2.5 to 3.0
- Scope: Decision support, business intelligence, data-related compliance. Teamwork with IT on data governance.

## Implemented Software

- Jenzabar EX ERP / SIS
- Microsoft SQL Server
- No Enterprise Data Warehouse
- Power BI

**These solutions should be agnostic to the software used at most institutions**

# Live Coding Session



5 / 8

# Notes

## Limitations

- Reporting requirement changes.
- Business process changes.
- Software changes.

## Outcomes

This work has allowed for... (team effort big time!!!)

- Implementation of fairly wide-spread business intelligence usage
- Promptly keeping up with new requirements (e.g. NWCCU disaggregation)  
<https://www.csi.edu/institutional-effectiveness/institutional-research/data-at-a-glance/default.aspx>
- Predictive analytics and implementation with stakeholders.
- Beginning of data literacy training.
- Improving institution-wide data documentation.

6 / 8

# Conclusion

<https://github.com/ThomasSharpeISU/AccelerateWithRAIR2023>



# Discussion and Q&A