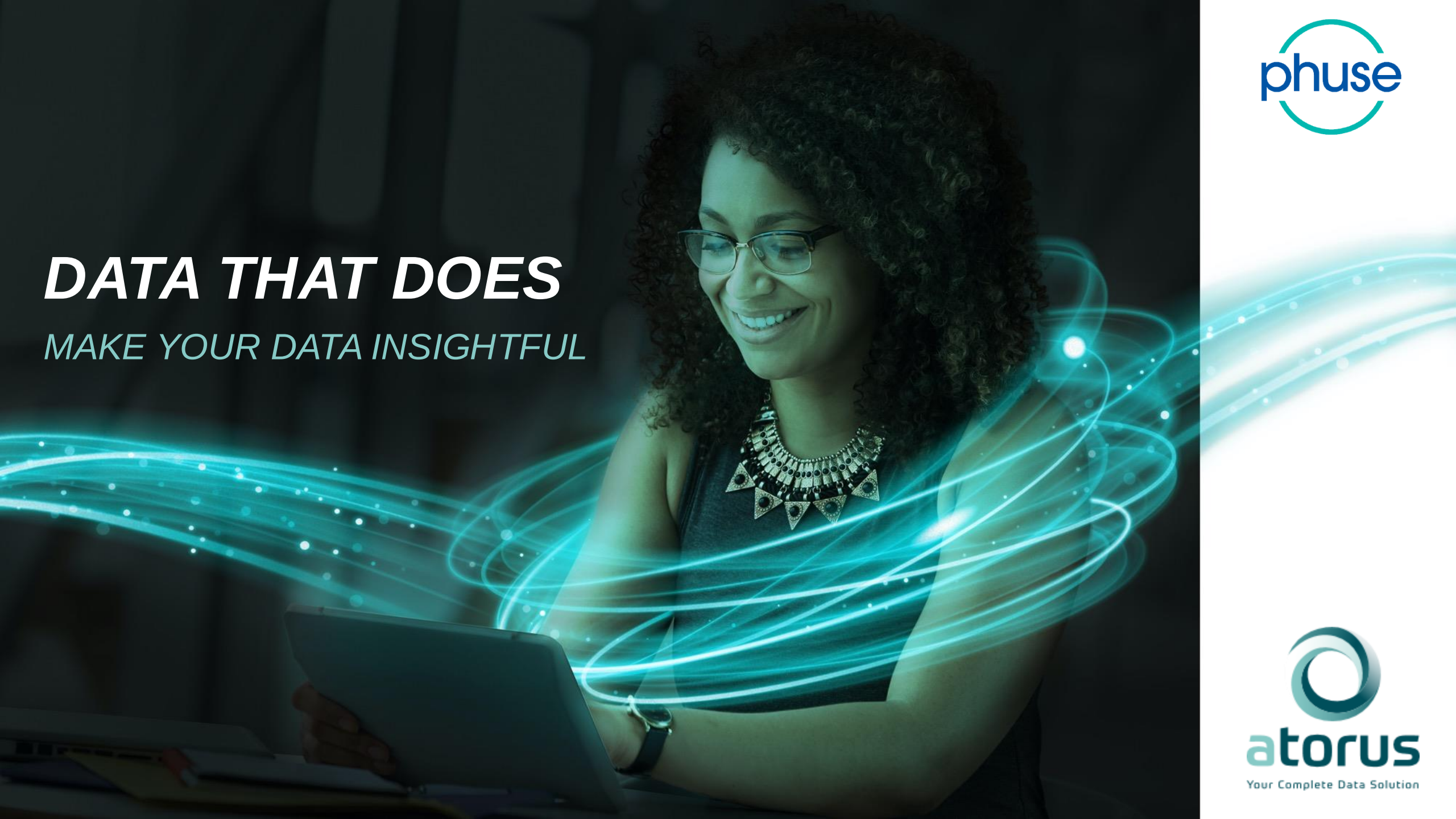




DATA THAT DOES

MAKE YOUR DATA INSIGHTFUL





Surviving A Sunset:

Being Resilient in the Face of Open-Source Disruption



About the Speaker



Frank Menius (he/him/his)

- Senior Trainer at Atorus Research
- Data Science and Data Standards SME
- 8 Years Statistical Programming and Clinical Research Experience
- Graduate of the University of North Carolina
- Post Graduate Applied Statistics and Data Management North Carolina State University
- Previous Career as a Law Enforcement Officer for the City of Raleigh, NC



Disruption



Are You Ready for Disruption?



Are You Ready for Disruption?

Traditional

- One Programming Language
- Focused and Siloed
- Expertise is internal

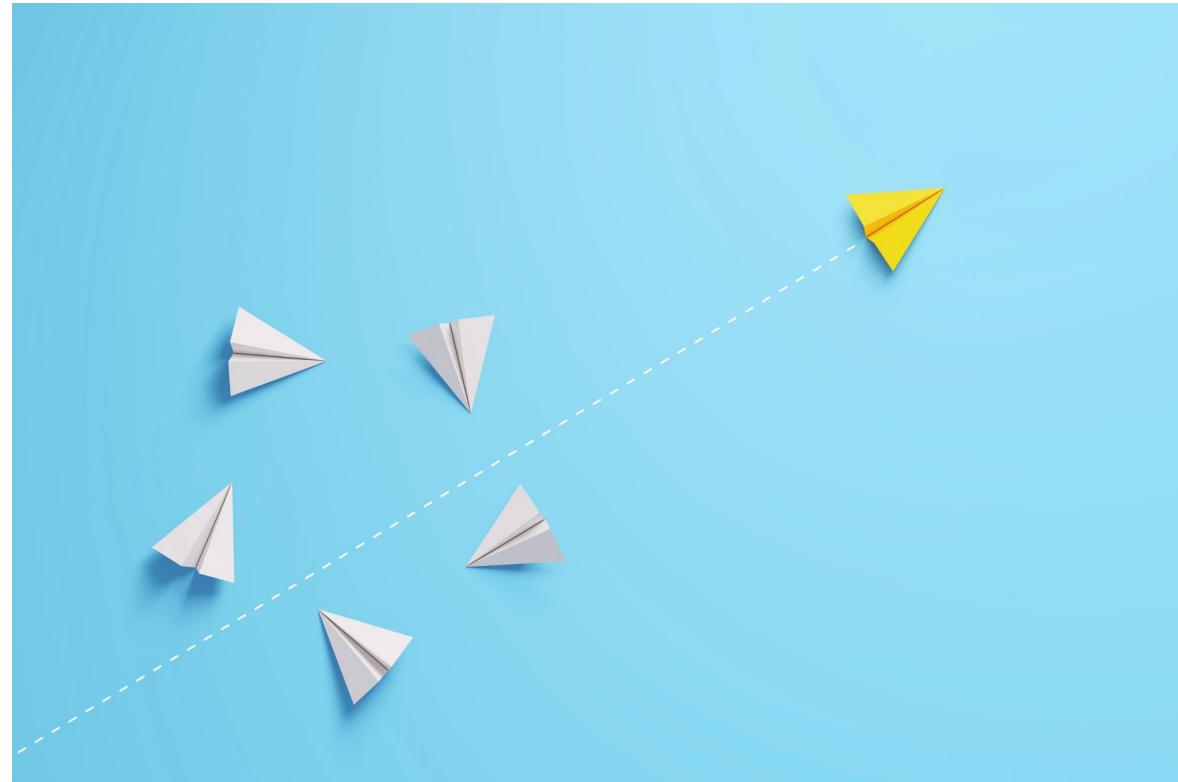


Are You Ready for Disruption?



Open-Source

- Multilingual
- Datasets, TLFs, Shiny Applications... more
- Expertise is Global and not centralized



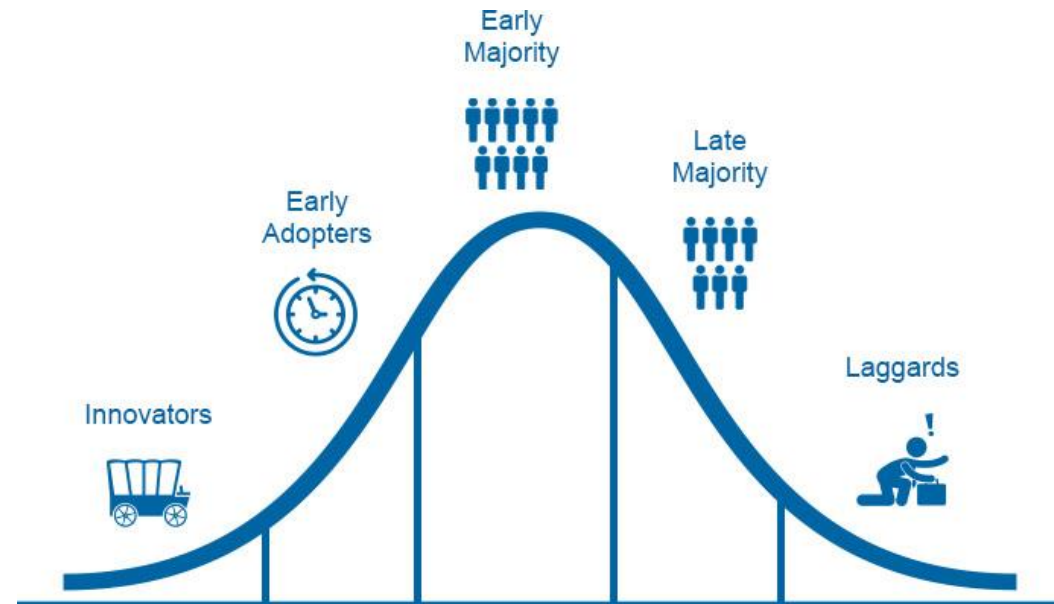
How Can You Survive Disruption?



Engage Early



- Motivated
- Enhancement vs. Detriment
- Competitive Advantage
- Leaders and SMEs



Embrace a Diversity in Skills

- Become multilingual
- Adapt to changes



Find Training



- Sign Up
- Ask for it
- Find your own
 - Paid and Free available
 - Self paced and structured
 - Books

Hands-On Programming with R - Garrett Grolemund

R for Data Science - Hadley Wickham

R Programming for Data Science - Roger D. Peng

Efficient R Programming: A Practical Guide to Smarter Programming - Colin Gillespie

Advanced R- Hadley Wickham

Modern Statistics with R - Måns Thulin

R Graphics Cookbook: Practical Recipes for Visualizing Data - Winston Chang

Ggplot2 - Hadley Wickham

Think Python: How to Think Like a Computer Scientist – Allen B. Downey

Automate the Boring Stuff with Python: Practical Programming for Total Beginners – Al Sweigart

Python for Everybody – Dr. Charles Russell Severance

Invent Your Own Computer Games with Python – Al Sweigart

The Hitchhiker's Guide to Python: Best Practices for Development – Kenneth Reitz



Don't be Married to the Process

- “We’ve always done it this way”
- Don’t forget the reason for the work
 - Getting Life Saving Therapies to Patients
- Embrace Efficiency
- Focus on the Output Over the Process



Learn to Find Help

- Expertise is External
- Community Forums
 - Posit Community
 - Reddit r/Rstudio, r/programming, r/datascience,
 - Stack Overflow
 - GitHub
 - YouTube
 - Professional Groups and Clubs
 - phuse, R Ladies



Learn to Find Help

- Join one of the communities and ask within that environment
- Search Engines like Google, Bing, DuckDuckGo, etc.
 - Use Quotes to get an exact match
 - Search within a specific site by adding “site:<the website you want to search>” before your question
 - Exclude results by putting - Infront of them in the search
 - Use the wildcard * if you are unsure about a term in your query and let the engine search for relevant replacements
 - Combine searches with OR, AND logic
 - Filter out searches with AFTER:, BEFORE: or . .
- When it comes to AI search results – Trust but Verify
- Know Your SOPs, Don't Share Sensitive Data

Be Resilient



You can Adapt

You can be Successful

You are not Alone

Seize the Opportunity from Change





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