R in Consulting

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Who am I?

- Director of Insights and Analytics at Lenati
 - Marketing and Sales strategy consulting firm
 - Team of 6 data scientists of varying skill levels
 - Team didn't exist last year
- Recovering academic
 - BS & MS in Math from Worcester Polytechnic Institute
 - PhD in Industrial Engineering from Arizona State University
- Learned R 5 years ago for a contracting job, never looked back
- Won season 3 of the reality TV show King of the Nerds

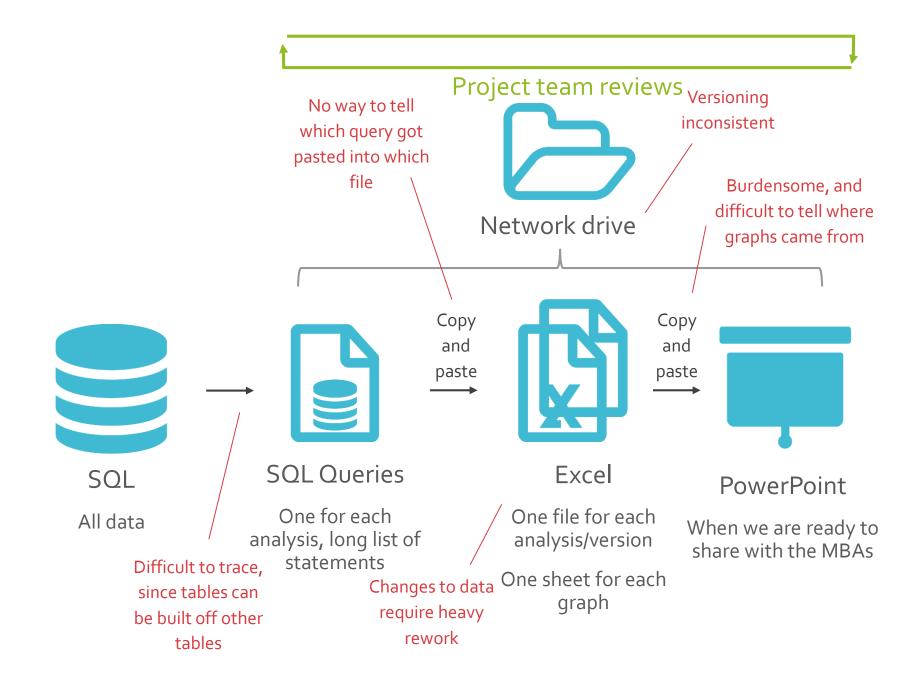
Consulting

- Projects are 3-4 months
 - We are embedded on teams with mostly MBAs
 - Care highly about the "so what," little about the how
 - Extremely fast turn around times
 - Everything is a PowerPoint
- Data comes from clients, often:
 - 4ogb CSVs
 - Vague Excel files
- We are
 - Decision scientists trying to use data to prove a point
 - Not data scientists not building systems that will continuously run in production

Workflow design objectives

- Minimize time between business question and PowerPoint answer
 - Must be accurate
 - Must be robust to change requests
- Feedback loop running throughout the project

Traditional consulting workflow



Project team reviews Spend a lot of Analytics team reviews time on these up front GitHub Don't include code because it's too difficult to navigate Azure Data that can't fit in memory Our approach R markdown R scripts Word Docs PowerPoint One to create For each set of Use Lenati When we are Dropbox each data frame questions we are template ready to share with the MBAs trying to answer Data that isn't worth Copy and paste the effort to clean the best parts nicely Have a config.json for Make each chunk analyst to specify paths Store originals independent of Rarely modify outside R each other