Data Analysis Cycle

Stat 133 with Gaston Sanchez

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Data Analysis?

"Data Analysis is the process by which data becomes understanding, knowledge and insight" Hadley Wickham

"Computing with data refers to activities in which data is acquired, managed, and processed for a great variety of purposes: organization, visualization, summaries, analysis,

John Chambers

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Last time ...

DATA: BY THE NUMBERS



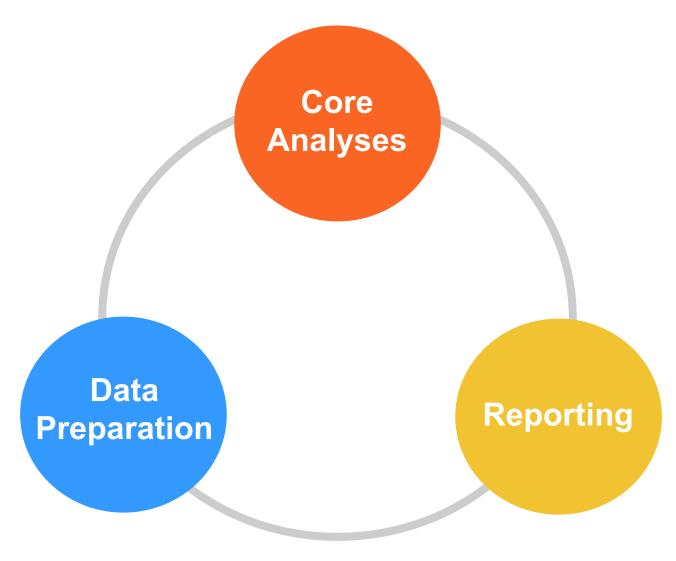






www.phdcomics.com

My vision of the Data Analysis Cycle



Cooking Metaphor

Data Analysis is a lot like Cooking



Cooking stages

- Get the food/ingredients (i.e. data)
- Washing, rinsing, soaking
- Peeling, cutting, chopping, slicing, dicing, blending, etc
- Boiling, simmering, sauteing, frying, roasting, toasting, grilling, baking, etc
- Mise-en-place, serving
- Eating & enjoying

Data Prep



Data Prep



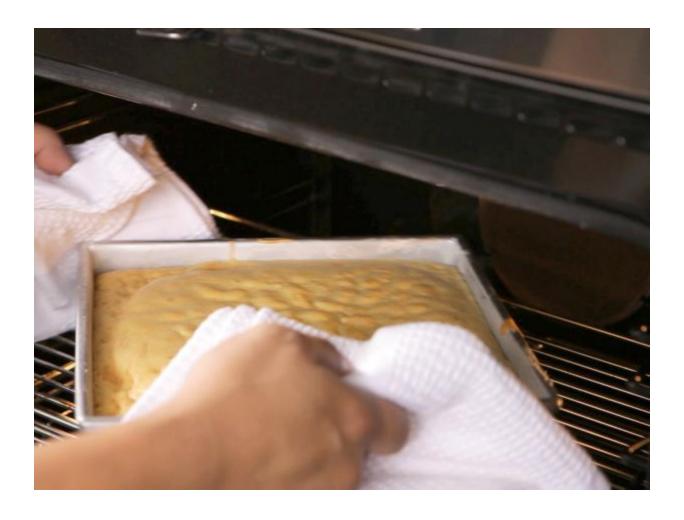
Data Prep



Core Analyses



Core Analyses



Communicating & Reporting



Communicating & Reporting



Other details



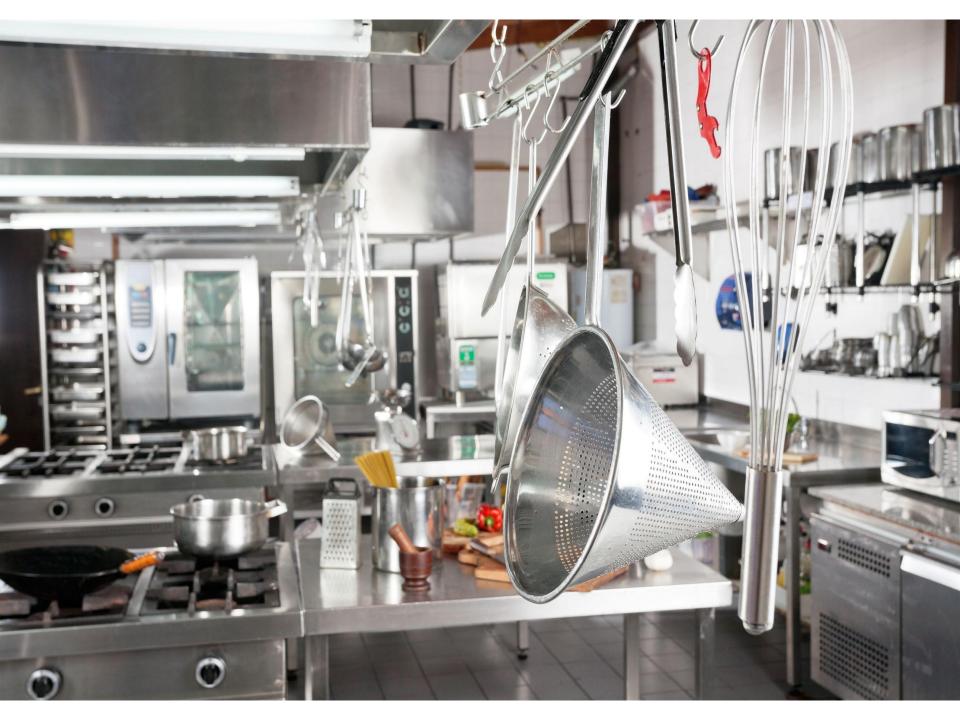
perfect ingredients















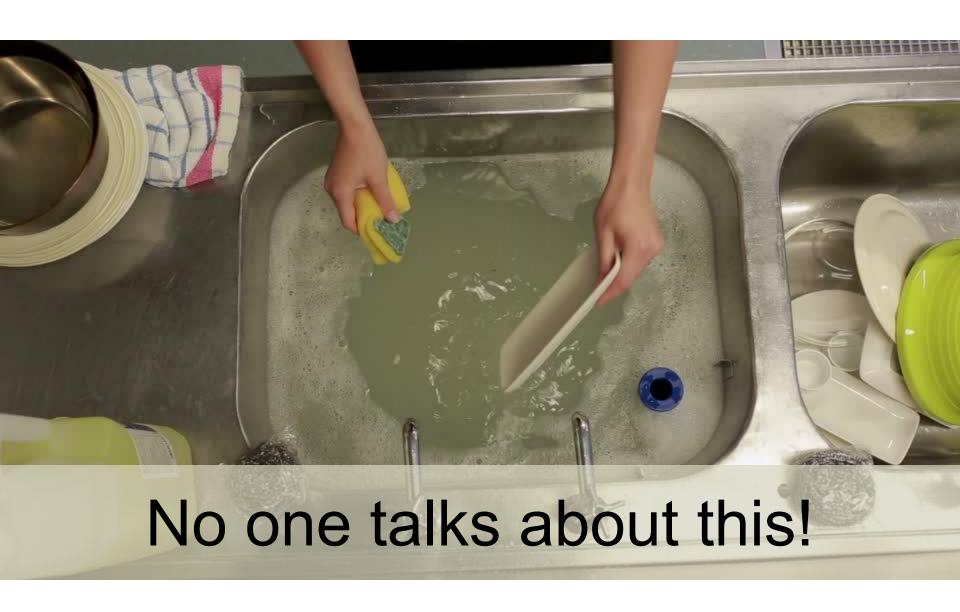
















miraculous devices?