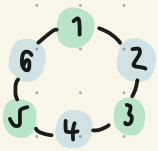
Week 1

The Six Data Analysis Phase

1) Ask
- to define a problem to be solved.
- to help focusing on the actual problem and avoid any distractions.
- to make sure you fully understand the stakeholder's expectations.

2) Prepare
- what mettics to measure?
- locate data in your database.
- create security measures to protect that data (policy agreement)

3) Process
- to clean up your data (get rid of possible errors, inaccuracies, and inconsistencies)
- to use spreadsheet functions to find incorrectly entered data.
- to use SQL functions to check for extra spaces.



4) Analyze
- to perform calculations.
- to combine data from multiple sources.
- to create table with your results.

5) Share
- to make more informed decisions via Graphs or Dashboards.
- to share results with stakeholders.

6) Act
- to act on your data.
- to provide your stake holders with recommendations based on your findings.

Six Problem Types

Data Analysts typically work with these:

1. Making Predictions
2. Categorizing things → assigning items to categories
3. Spotting sth. unusual
4. Identfying themes → grouping them into broader themes (In a User study, examples of themes)
5. Discovering connections
6. Finding Patterns

SMART Questions

Week 2

19/12/2022

Data

Small Data
- specific metrics, short defined time
- usually organized and analyzed in spreadsheets.

Big Data
- large, less-specific, cover longer time period
- usually organized and analyzed in Databases

* needs to be broken into smaller pieces in order to be organized & analyzed effectively

3V
- Volume: Amount of data
- Variety: Different kinds of data
- Velocity: How fast data can be processed
- Veracity: Quality and Reliability of the data ⇝ Some data analysts consider a fourth V.

Report vs. Dashboard

Pros
- represents high-level historical data
- easy to design
- pre-cleaned & sorted data

Cons
- Lack of continual maintenance
- no visual appealing
- Static

Pros
- Dynamic, Interactive
- suitable when sharing information across many peoples promptly

Cons
- Labor-intensive design (a lot of effort)
- Can lead to misunderstanding (if it's not well-designed)

Metric
↳ a single, quantifiable type of data that is used for measurement.

Return on Investment (ROI)
↳ cost of an investment to the net profit over a period of time.

Week 3: Spreadsheets
Ask Questions