Business Analytics Practicum (MGT 4803)

Zhaohu (Jonathan) Fan

Information Technology Management Scheller College of Business Georgia Institute of Technology February 27, 2024

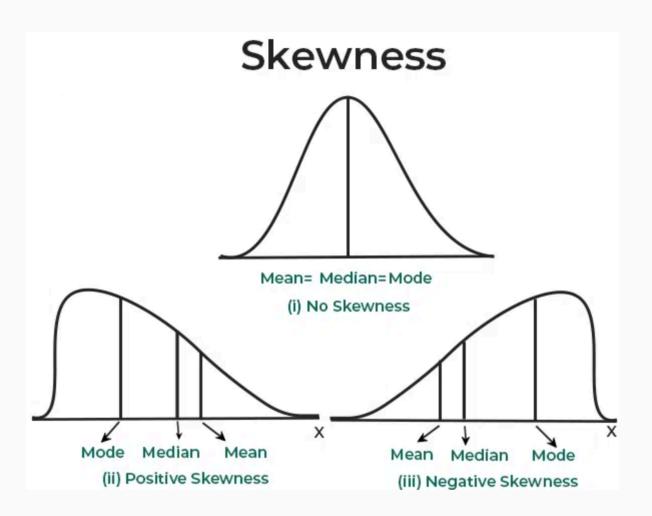
Logistical updates: Sparck Technology (Demo Day)

- Company site visit for undergrad business analytics practicum project
 - When: March 1st (Friday)
 - 10:00 AM 1:00 PM (with a maximum duration of 3 hours)
 - Catering by Sparck during the visit
 - Where: 3025 Chastain Meadows Pkwy NW, Suite 800, Marietta, GA
 30066
 - How to proceed? Signing the GT waiver (which can be found in Module 6, Week 5)

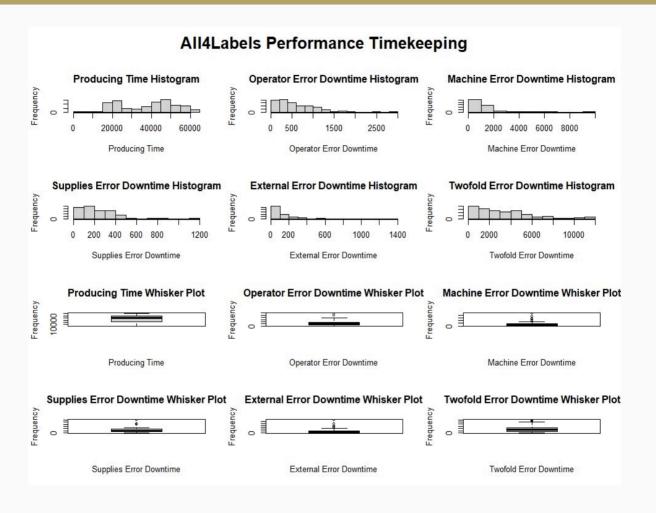
First presentation (Data Exploration and Visualization)

- **When**: 5:00PM 6:15PM, March 7th (Thursday)
 - Where: Scheller College of Business 203
 - More details? Please refer to the Team Mid-Point Presentation
 - Canvas->Modules-> Assignments ->Team Mid-Point Presentation
 #1: (Data Exploration and Visualization)

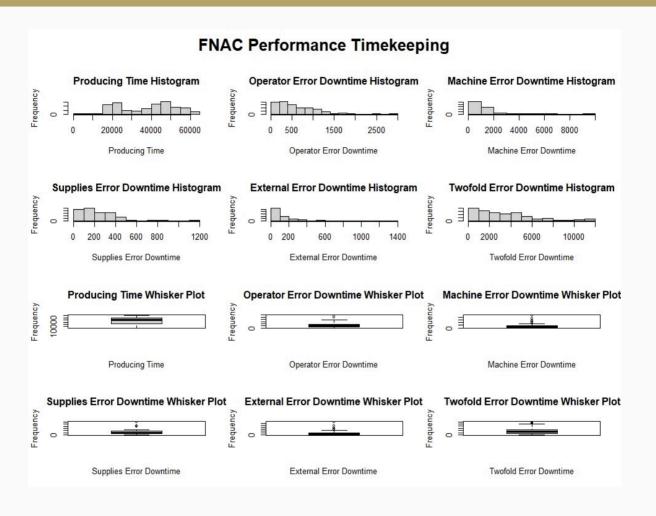
PowerBI and Tableau Demonstration



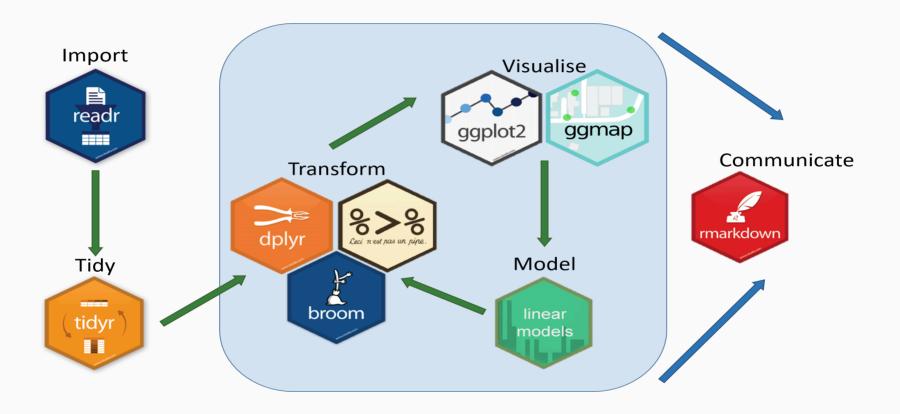
Sparck- All4LabelsV7.1



Sparck-FNAC V6.9



Workflow



Are there statistically significant differences between the means of two groups?

Comparing Group Means in R Using a T-test

• **Objective**: To determine if there are statistically significant differences between the means of two groups.

Methodology:

- **Data Simulation**: Create two sets of data, group1 and group2, representing different conditions.
- **Example**: group1 and group2 are randomly generated using the rnorm function to simulate normal distributions with different means.

Comparing Group Means in R Using a T-test

Methodology:

- **Data Simulation**: Create two sets of data, group1 and group2, representing different conditions.
- **Example**: group1 and group2 are randomly generated using the rnorm function to simulate normal distributions with different means.

T-test Execution:

- Use the t.test() function in R.
- Syntax: t_test_result ← t.test(group1, group2).

Results Interpretation:

- Focus on the p-value from the t-test output.
- A p-value less than 0.05 typically indicates a statistically significant difference between group means.

R Demonstration