16/04/2020

Project Title: “Energy Management”

**Team Members**

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1. Project Description/Outline

We are going to analyze the data for Food Process Factory that produce product A and B, where we are going to find whether the climate variables has any impact on the production, energy consumption (efficiency variables) and the cost of production through a year.

1. Research Questions to Answer:
2. What are the main climate variables that affect the factory production?
3. What are the main climate variables that affect the energy consumption?
4. How is it correlated the production and the energy consumption?
5. Define the energy consumption curve for each month of the year.
6. Define the energy consumption curve for each season of the year.
7. For each group of devices, find the best.
8. Base line for each device.
9. Make production recommendations, based on the optimal production.
10. Datasets to Be Used:
11. Energy consumption by device (CSV Data frame).
12. A & B Production (CSV Data frame)
13. World Weather API
14. CFE Tariffs
15. Rough Breakdown of Tasks
16. ELT
    1. Energy dataset
    2. Production dataset
17. CFE Tariff
    1. Create dataset
18. Test API
    1. Get data
19. Plot the data
    1. Production vs Weather
    2. Energy Consumption vs Weather
    3. Correlation
       1. Energy
       2. Weather
    4. Plot energy consumption for each device
       1. Month
       2. Season
20. Rank the devices based on the previous step
21. Consumption and its associated cost
22. Conclusions
    1. Recommendations based on the graphs