OPTIMIZATION FINAL REPORT

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READ ME

Optimization Report_Team 13 (.pdf)

See this report for our analysis of Flugel production and our recommendations for XYZ Manufacturing.

Model Formulation_Team 13 (.pdf)

See this document for our written model of the problem in summation notation including decision variables, constraints, and the objective function. Includes definitions of all components for reference.

Final Project Code_Team 13 (.py)

See this Python file for our 201 lines of code, which models this minimization problem and produces an optimal cost solution, using the Gurobi optimization package.

Final Project Model_Team 13 (.lp)

See this file for a written output of our objective function and constraints with specific coefficient values, which were calculated from our Python code.

Final Project Data_Team 13 (.xlsx)

See this Excel spreadsheet to observe total changes in demand, resource, and cost data over the 10-year period. This data is the same as that stored in the lists created by our for loops in Python, but Excel provides for easier visualization and quick look up of specific values.

Final Project Values_Team 13 (.xlsx)

See this Excel spreadsheet for optimal values for all decision variables in the model. These values were utilized to make our recommendations on how many flugels to produce and distribute.