What Can Color Tell Us: Progress Report

By Amy Olson

Data Sources:

- Pantone Color of Year Picks from 2000-2025: Year, Name, RGB values, CMYK values, Hex codes (manually created this dataset)
- Economic Data: GDP Growth, Inflation Rate, Unemployment Rate sourced from and then manually compiled into one csv file

Methods:
I have gotten. I've done scatterplots, heatmaps, line graphs galore to try to find correlations. I have my main dataset then I have my economic data lagged by 2, 3, 4, 5, 6 years to see how things change in relation to my K values. I have tried many models decision trees, random forest, but have settled on linear relationships being the best for my data and it's patterns.

Results:
I have found a correlation between K-values and GDP Growth with a 3 year lag (coincidentally following the hemline index's findings)- albeit a weak correlation at 0.36, but it is the highest. I have been training my linear regression model, it has a MAE of 15.22. After ridge regression my MAE comes in at 14.22 so my model was a little noisy, but I also have to set my alpha at 100 for this which feels wrong.

The Problems:
Small dataset in terms of color trends and economic indicators is affecting my success and performance. I'm getting weak correlations, high variance and I'm fighting overfitting tooth and nail. I'm at a point where I need more data, but I'm struggling to find publicly accessible data that follows my set up (ie. year by year not month to month or quarter by quarter).

The Future:
Expanding my data is my number one priority. I want to find more color data expanding out of Pantone's color of the year picks and I want more economic data. Possible stock market trends, consumer confidence, war or maybe (but I really don't want to do this) I'll consider including other countries' data- but I don't think that would solve my issue ultimately.