TEAM

HOW HAVE PEOPLE'S HABITS CHANGED DURING THE PANDEMIC AND WHAT IS THE IMPACT ON UK SUSTAINABILITY TARGETS AS A RESULT OF THESE CHANGES?

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Define the question, decide on our aims and what kind of data we would like to explore.

STEP

Collect the data to analyse the pandemic's affect on indicators such as nitrogen oxide levels and stock prices.

STEP

Build a Database in Juypter using pandas/mySQL. Clean the data.

STEP

Explore the trends of the data with descriptive analyses. Use machine learning and AI to perform predictive analysis.

STEP

Communicate the results using data visualisation and interpretation using Matplotlib and Tableau. Provide summaries, future work and recommendations.

DATASETS USED



Google Mobility Data

UK Government Official

Statistics

UK Air Pollutant Data



Stock price data provided merged with sector data



Stringency data

WHY WE CHOSE THIS QUESTION

As the UK population adapts to a new way of life centred around the home, new habits, perceptions and priorities may form. Passionate about the environment and sustainability, we were keen to investigate how habits of the general population, consumers, investors and businesses changed in response to COVID-19, and the impact on the UK's sustainability targets. We investigate:

- Individual habits (transportation and air quality)
- Aggregate habits (investors, businesses and consumers)

TECHNIQUES









REGRESSION

Individual and aggregate habits have changed as a result of COVID-19

Public transport



levels in April 2020

Car use



below pre-COVID levels in April 2020

Nitrogen dioxide concentrations in London

64%

lower in April 2020 in comparison to April 2019 Automobile

Industry

ESG companies with good environment policies



one of the most impacted sectors



were resilient throughout the pandemic

Impact on sustainability targets

- 1. Reduction in key pollutant (nitrogen dioxide) and car usage positive step towards air quality targets.
- 2. Automobile sector highly impacted may help with moving towards the sale of new conventional petrol and diesel cars and vans by 2040.
- 3. Companies with good environmental policies were resilient throughout the pandemic. To meet the environmental targets, the government must work with businesses operating in the UK to ensure best sustainable practices. During these unprecedented times, businesses must be assured that good environmental, social and governance is worth pursuing, despite the economic impact of COVID-19.
- More people are getting outdoors meeting the target to engage with nature for wellbeing.