

An aerial night view of a city skyline, likely New York City, with the Freedom Tower prominently visible in the center. The image is overlaid with a semi-transparent white rectangular box that contains the title text. The text is arranged in four lines, with the first two lines in dark blue, the third in blue, and the fourth in green. The background shows a dense urban landscape with illuminated buildings and streets.

Forecasting Real Estate Capital Gains

Team Project

Team 7

Core Message

Where's the best place to invest?

Questions & Motivations

Data Availability

Always interesting to know where to invest?

Is Real Estate a good investment?

Is there a relationship between real estate prices and education level?

The application/impact our model could have in the long term if we push it further

Data Extraction | Case Study Benito Juárez

Where?

Metros cúbicos

INEGI: 2020 & 2010 Demographic Census

Municipality Geometry

SIGCDMX

Google API

How?

Scrapping the prices from Metros Cúbicos

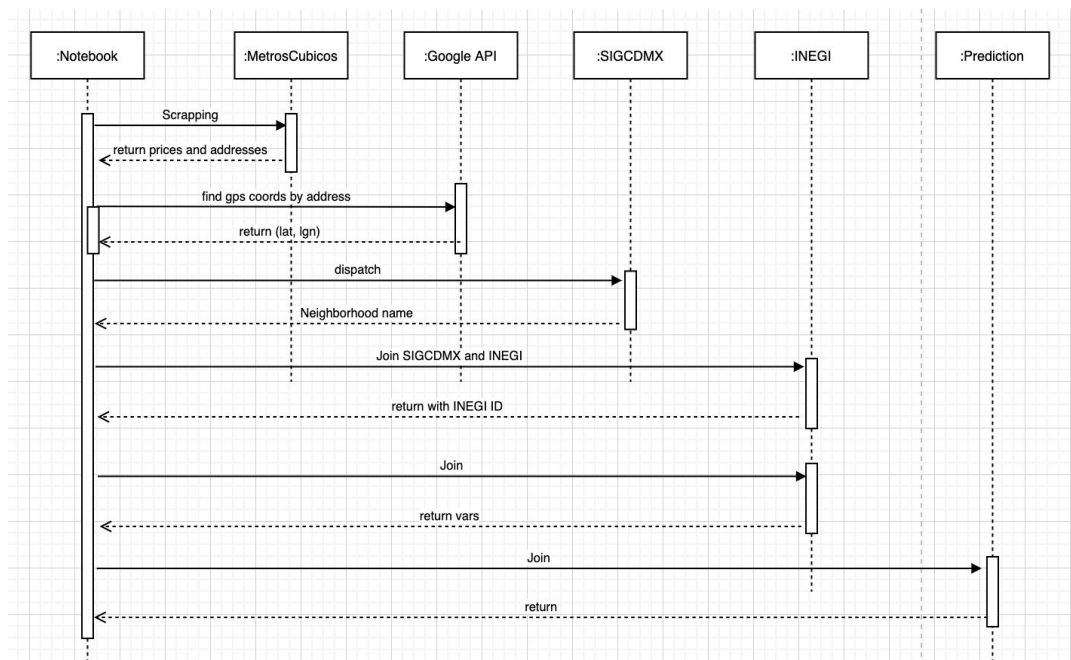
Pulled Demographic & Municipality Geometry

Census from INEGI

Geolocation information from SIGCDMX

Coordinates from Google API

How did we intertwine it?





1

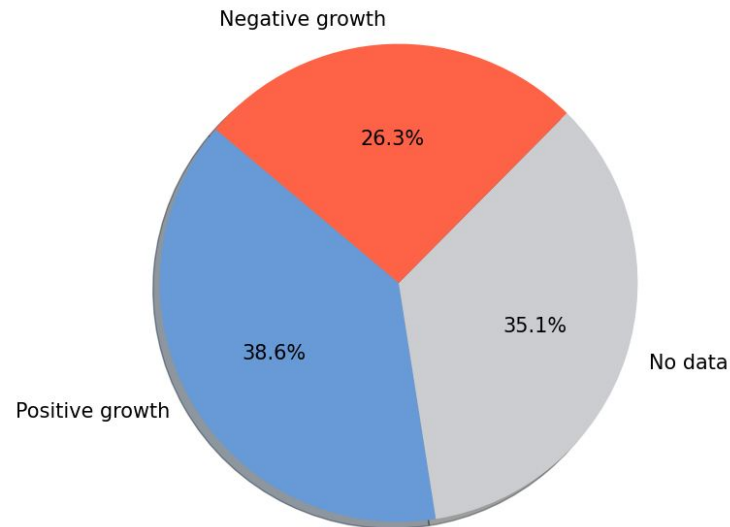
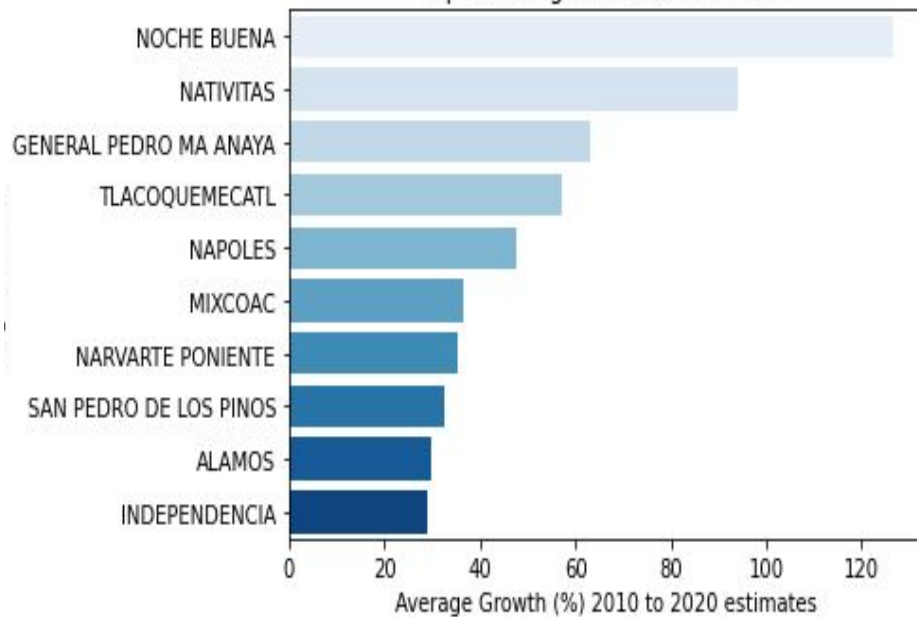
Exploration & Cleanup process

2

Analysis Process - Making the Model & Plotting Growth

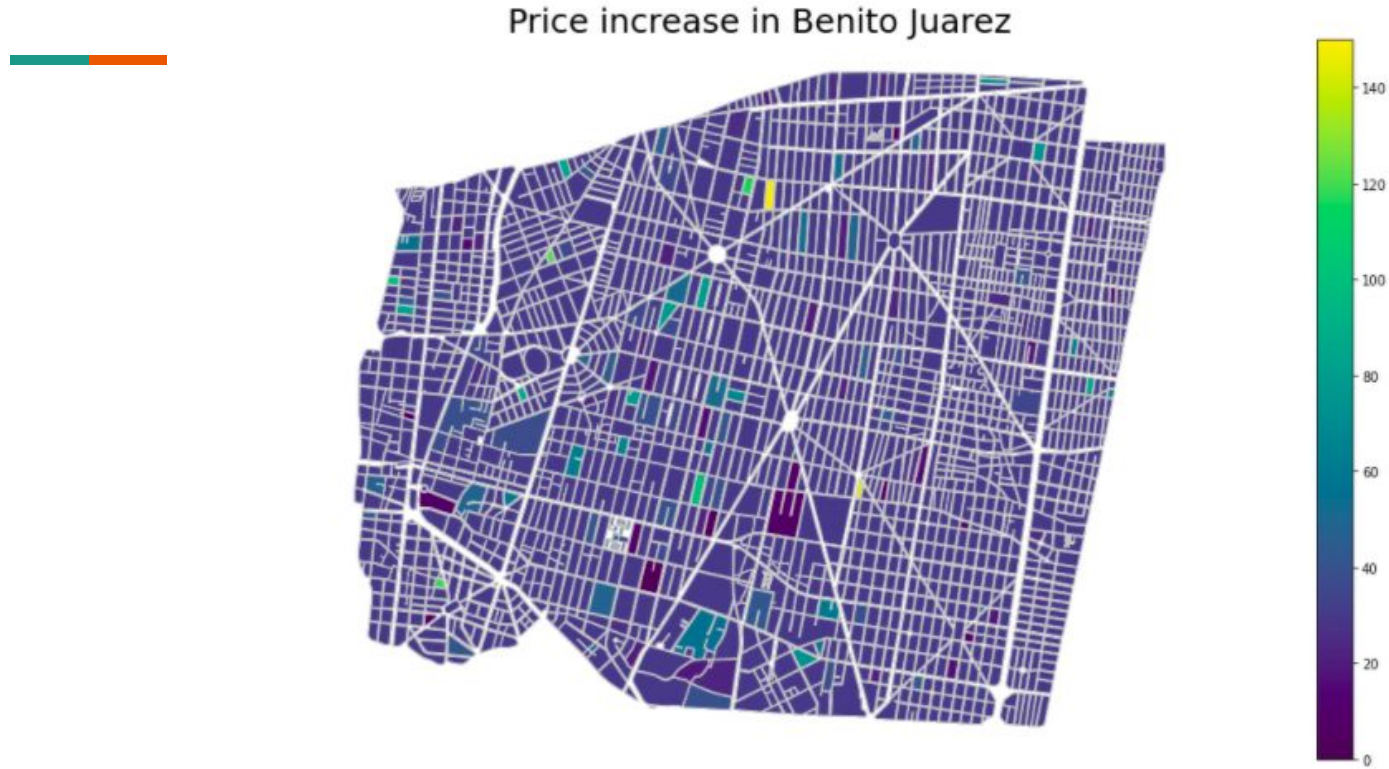
Executive Summary

Top 10 Neighborhoods to invest



Benito Juárez Change in Growth

Benito Juárez | Heat Map



Key Takeaways

1

Model

- PC ownership, highest academic level achieved, whether there was a woman active in the workplace and car ownership were the features used to predict real estate prices. Has to be improved i.e add other timeframes & optimize hyperparameters
 - These predictions can be applied in every city where metrosucubicos is popular and widely used.
-

2

Project

- The most difficult part was finding relevant demographics from 2010.
 - COVID has affected the real estate market considerably. This variability could help explain why some neighborhoods in a highly populous city had a decline in value
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3

Further Analysis

- Something interesting we could do is add data points such as business licenses expedited, construction, average home income, or remodeling permits today and make the same analysis in five years.
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Team 7



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