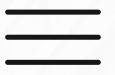




PARIS HOUSING PROJECT



INTRODUCTION



Paris City is facing many housing issues including affordability, supply and demand imbalances, escalating rent prices, and regulatory challenges.

The **SAKURA** group of investors is establishing a real estate firm in Paris with a primary focus on addressing the critical matter of affordable housing.

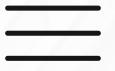


GOAL

To analyze existing data, draw meaningful insights, and guide strategic decisions that will lead to the provision of affordable housing solutions.



DATA UNDERSTANDING

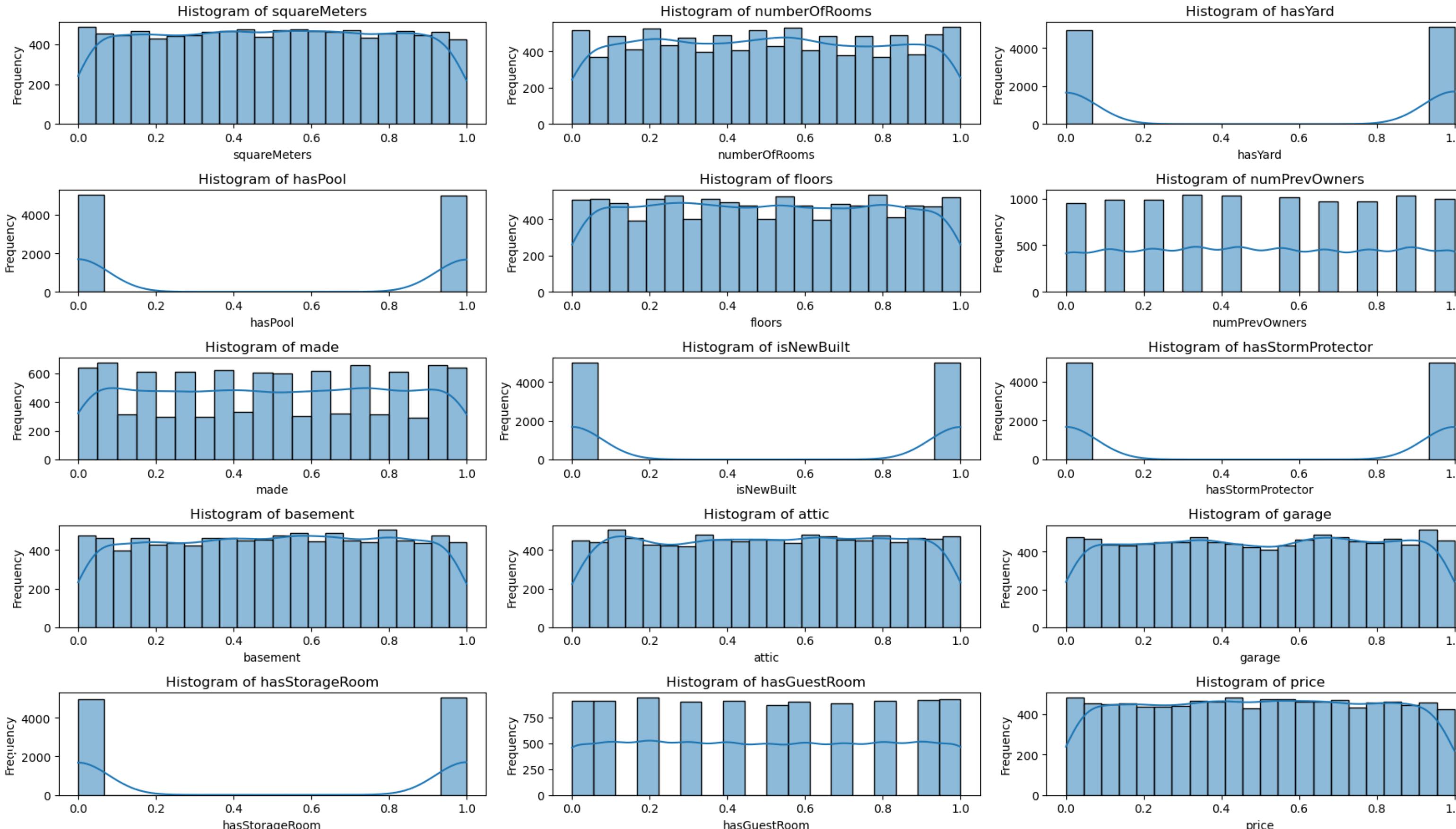


- Paris Housing.csv dataset has features: square Meters, Number Of Rooms, has Yard, has Pool, floors, city Code, city Part Range, num Previous Owners, made, is New Built, has Storm Protector, basement, attic, garage, has Storage Room, has Guest Room, price.
- The dataset has 10000 rows and 17 columns

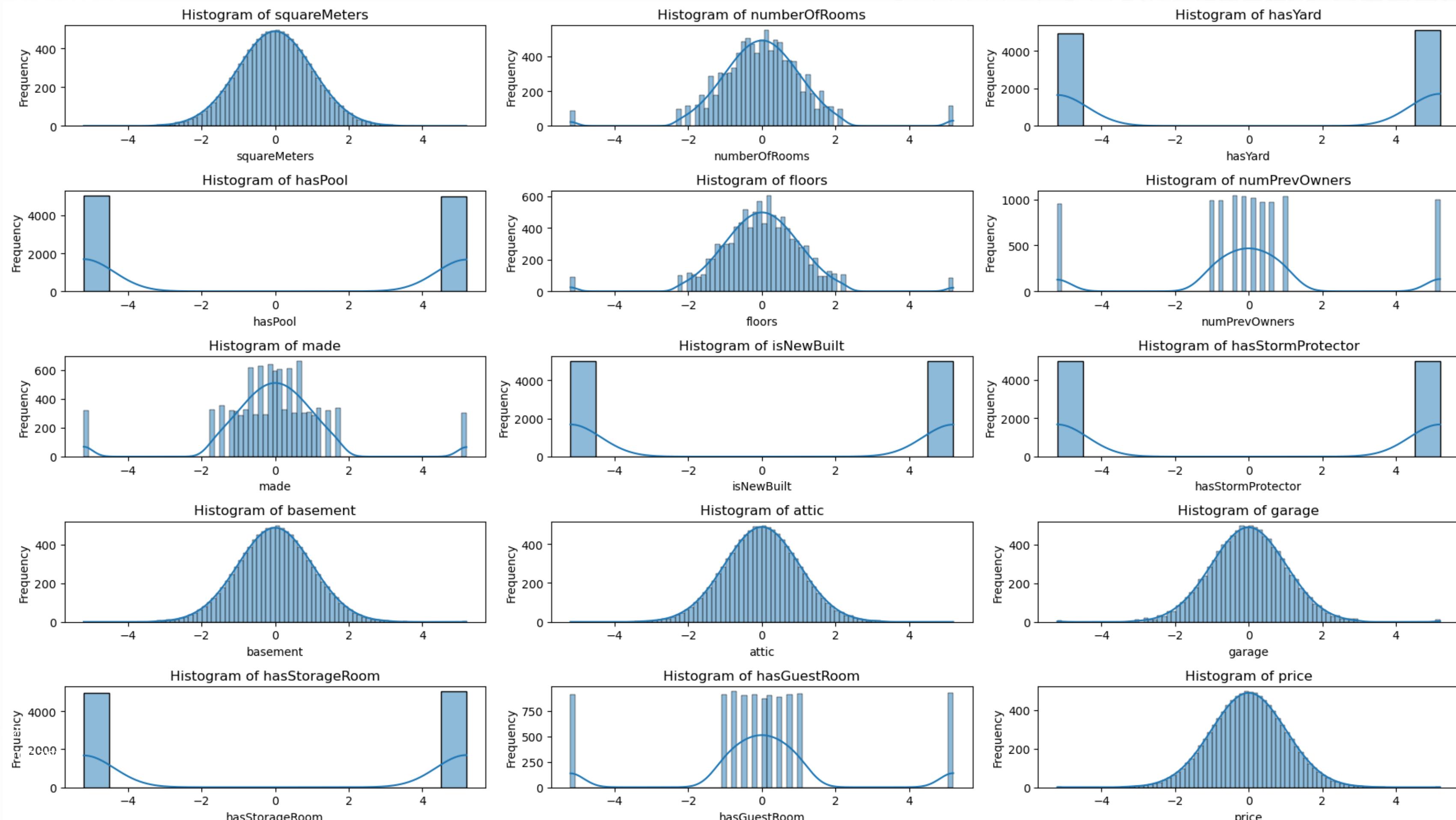


EXPLORATORY ANALYSIS

Distribution before transformation



Distribution after transformation

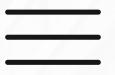


FINDINGS



1. Price Distribution

- The average price is 4.99 million, with prices ranging from 103K to 100 million
- 50% of properties are between 2.5 million and 7.5 million
- this indicates a skew, with more affordable prices but some extremely expensive properties

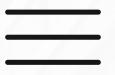


2. Number of rooms

- Average of 50 rooms, ranging from 1 to 100
- More rooms generally indicate larger, more expensive properties

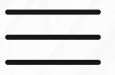
3. Square Meters

- Larger square per meter sizes are likely to have higher prices
- Sizes range from 89 to 99,999 square meters
- 50% of properties are 25,098 to 74,610 sq meters



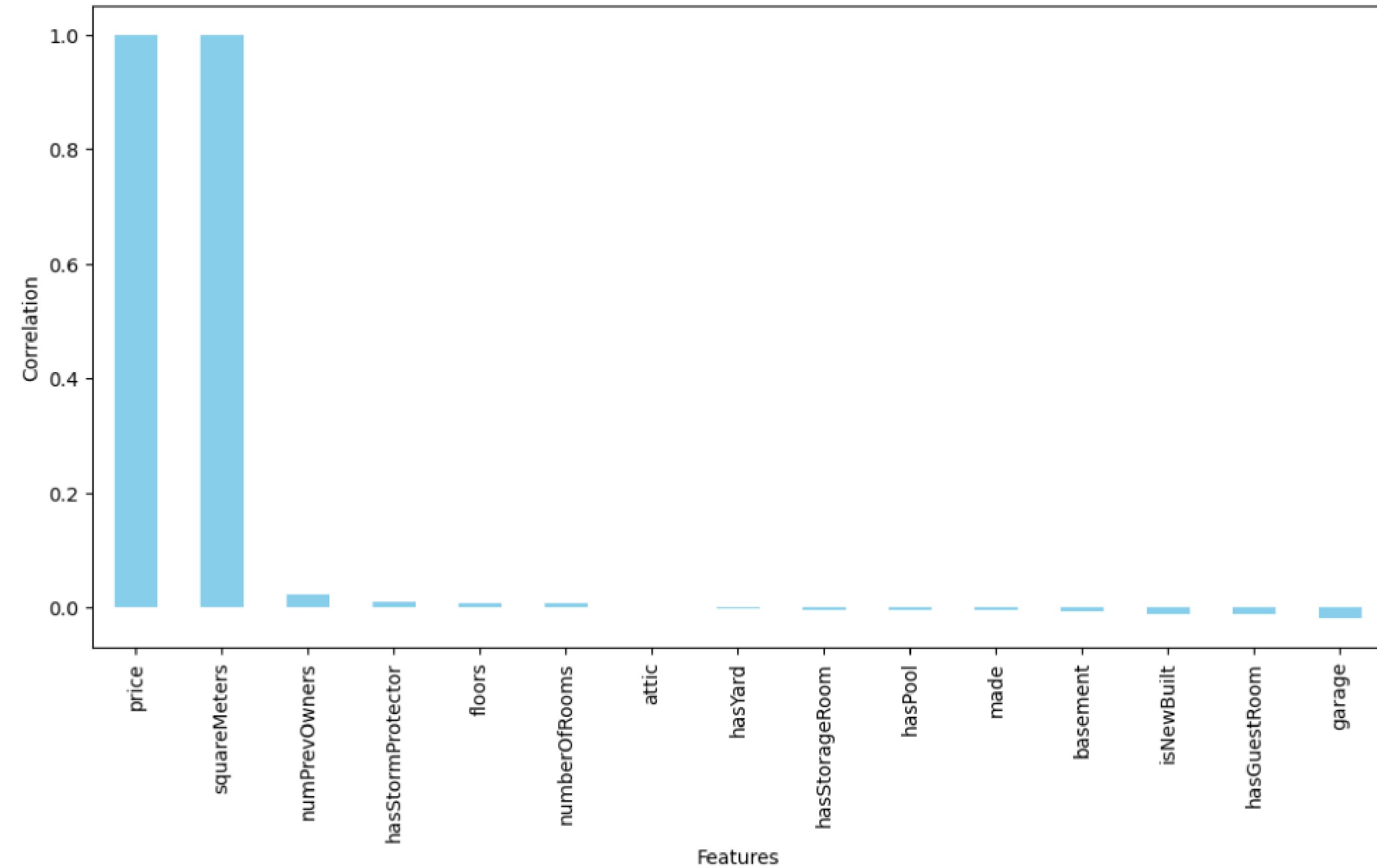
FINDINGS SUMMARY

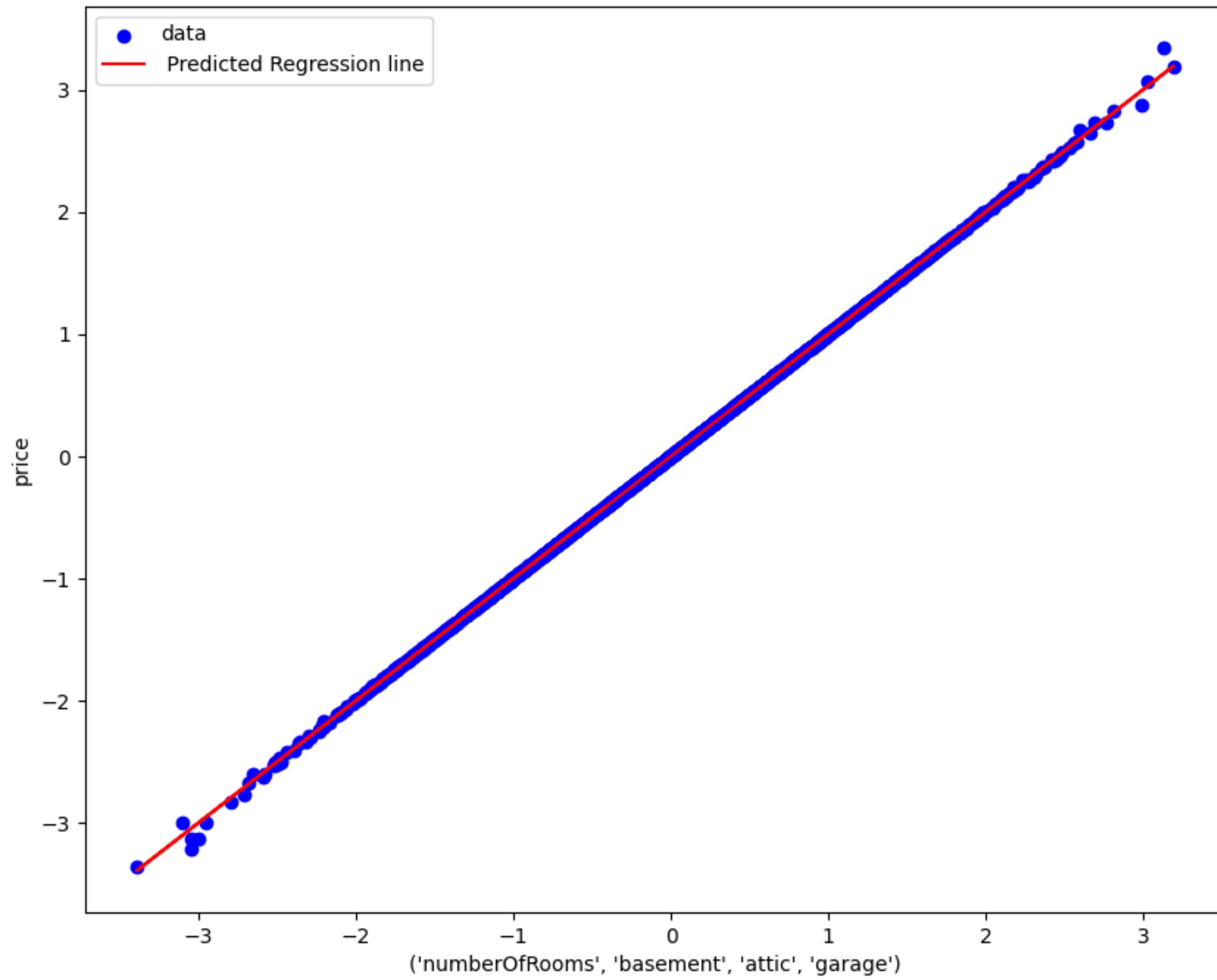
- There is a wide range in property sizes, prices and number of rooms
- Newer, larger properties with more rooms tend to be more expensive
- There appears to be an opportunity to provide smaller, more affordable housing options



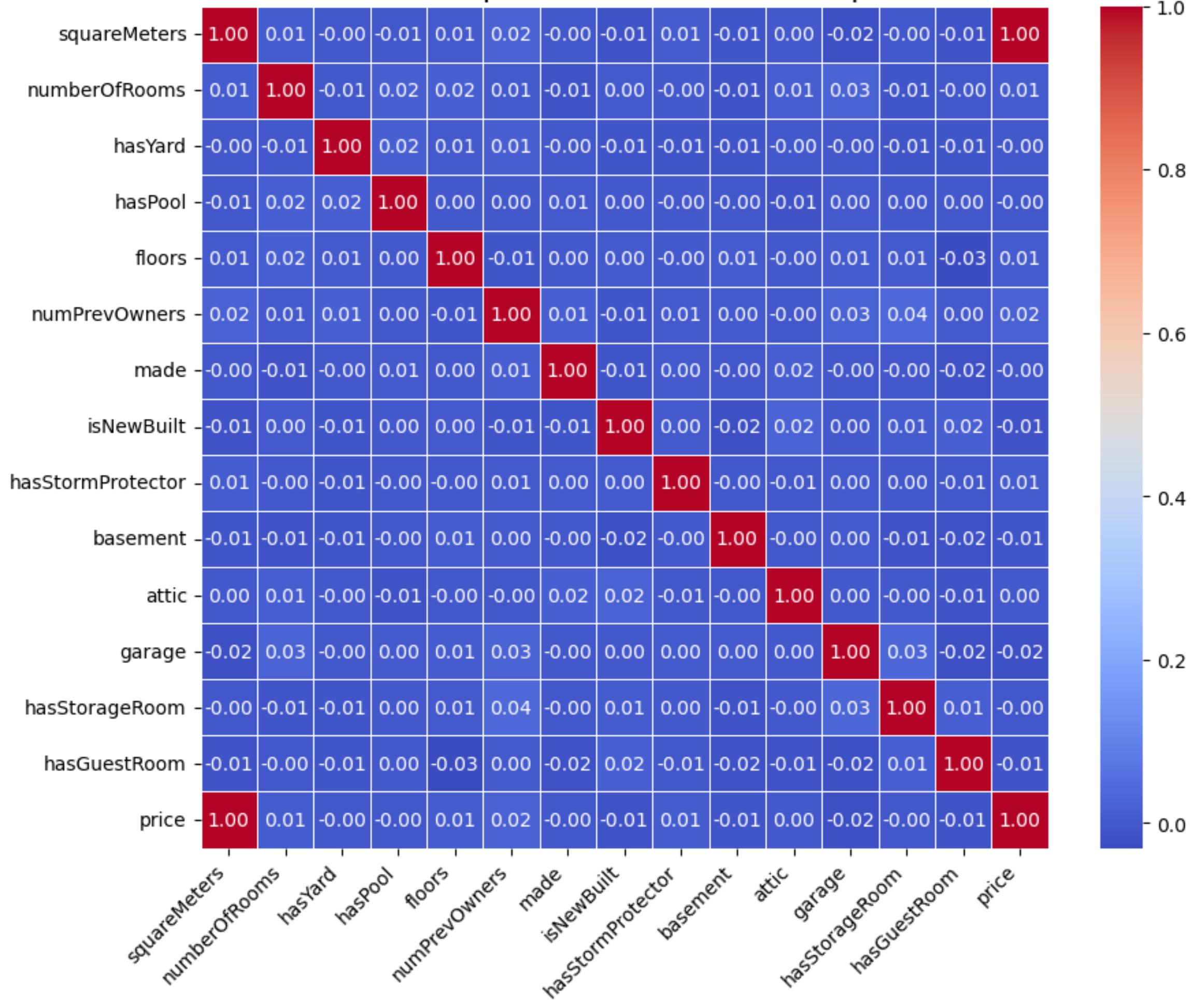
VISUALIZATIONS

Correlation with Price





Heatmap of Variable Relationships





SUMMARY

- The exploratory data analysis on properties in Paris uncovered key insights to guide the real estate investment strategy towards affordable housing, amidst challenges like rising prices and shortages.

RECOMMENDATIONS

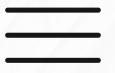


Focus on smaller properties: Target smaller properties under 25,000 sq meters to provide affordable housing options. Smaller sizes directly translate to lower prices.

Offer housing with fewer rooms: Similarly, properties with fewer rooms tend to be more affordable. One-bedroom and studio units can offer lower-income residents cheaper rents.

Purchase older buildings for redevelopment: The data showed newer buildings built after 1990 appear more expensive. Purchasing older buildings built before 1990 and renovating them into affordable units can control costs. Can qualify for tax credits and subsidies for affordable housing redevelopment projects.

Set maximum price targets: Set a maximum target price of 3 million or less for affordable housing projects to control costs passed onto residents. Maintain affordable rents through price limits paid per square meter



Here is a Github link to the project file:
[click](#)





COLLABORATOR

- Lee Ndungu
- Sarah Karanja
- Moschini onyango
- Brandon Muraya
- Dennis Kipyegon
- Dennis Njogu