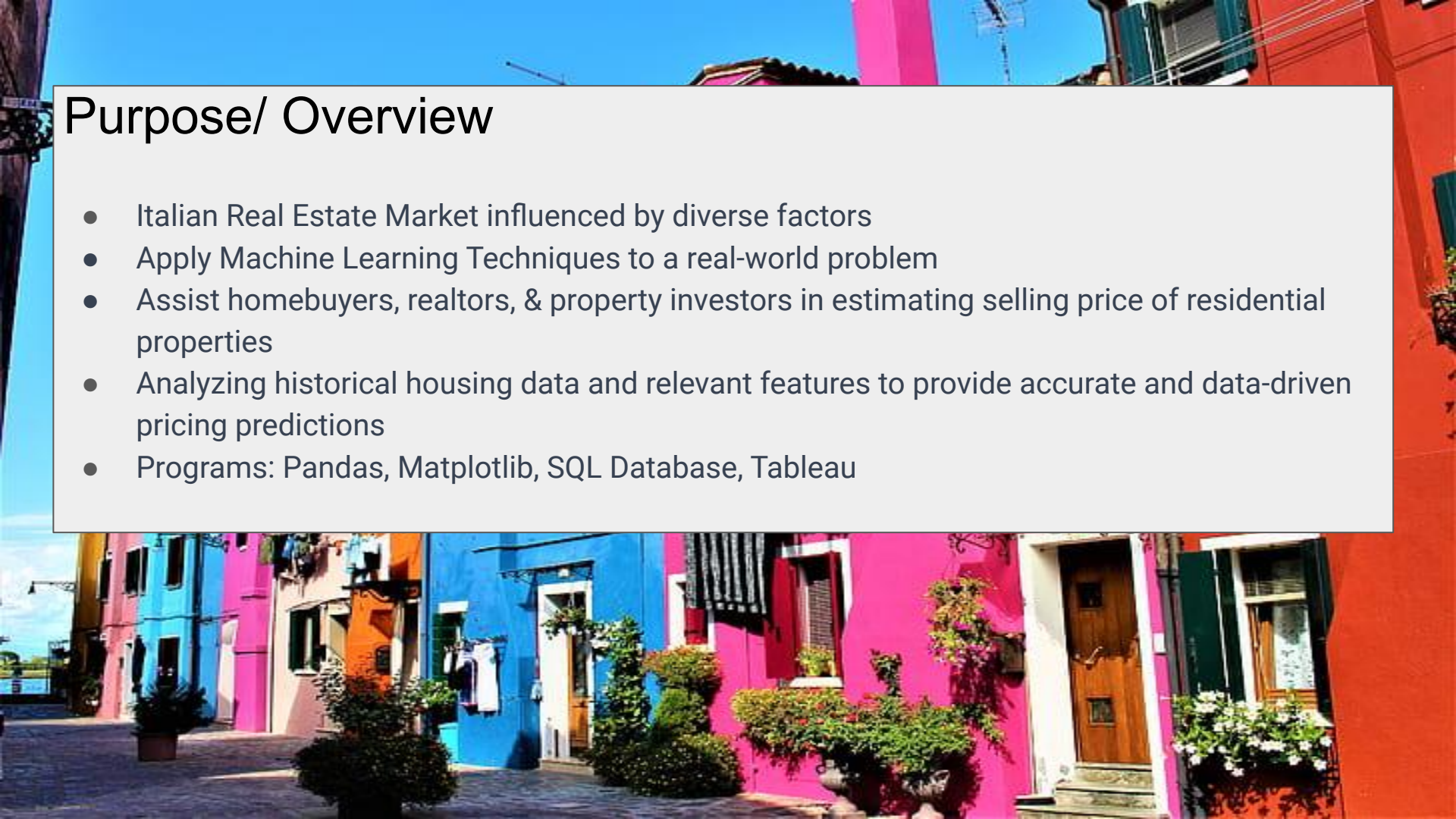

SELLING
SUNSET
In Italy



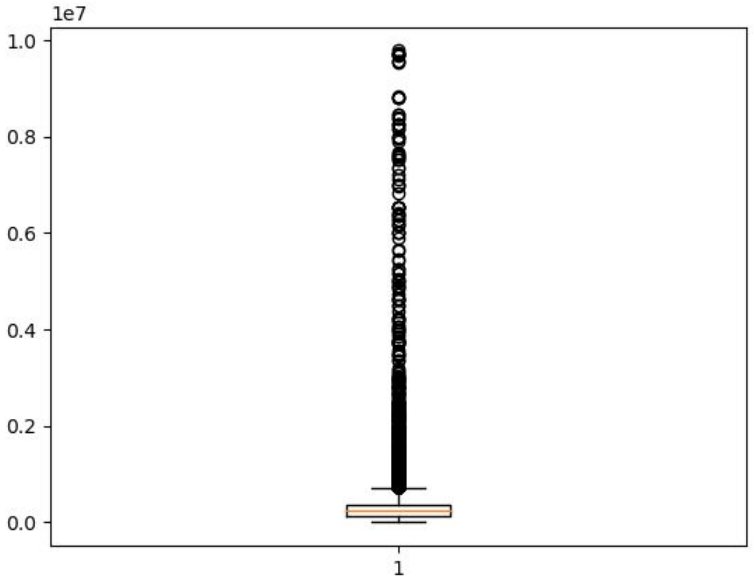
Purpose/ Overview

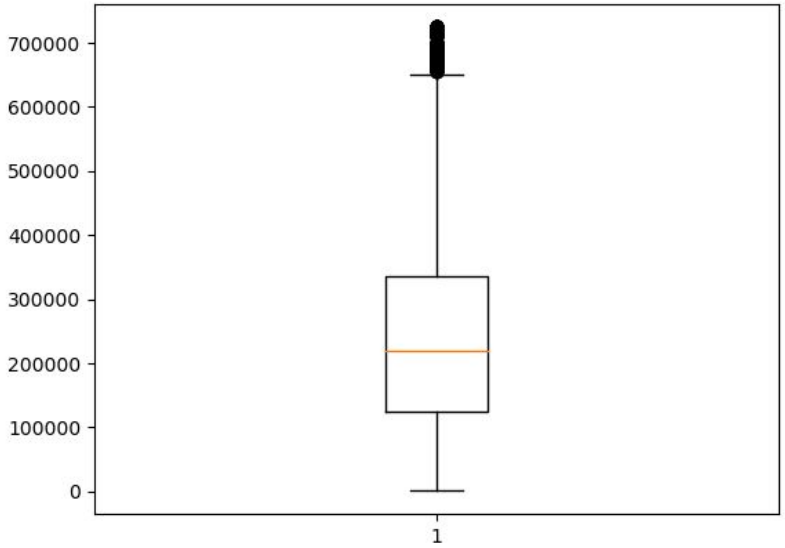
- Italian Real Estate Market influenced by diverse factors
- Apply Machine Learning Techniques to a real-world problem
- Assist homebuyers, realtors, & property investors in estimating selling price of residential properties
- Analyzing historical housing data and relevant features to provide accurate and data-driven pricing predictions
- Programs: Pandas, Matplotlib, SQL Database, Tableau

Scope

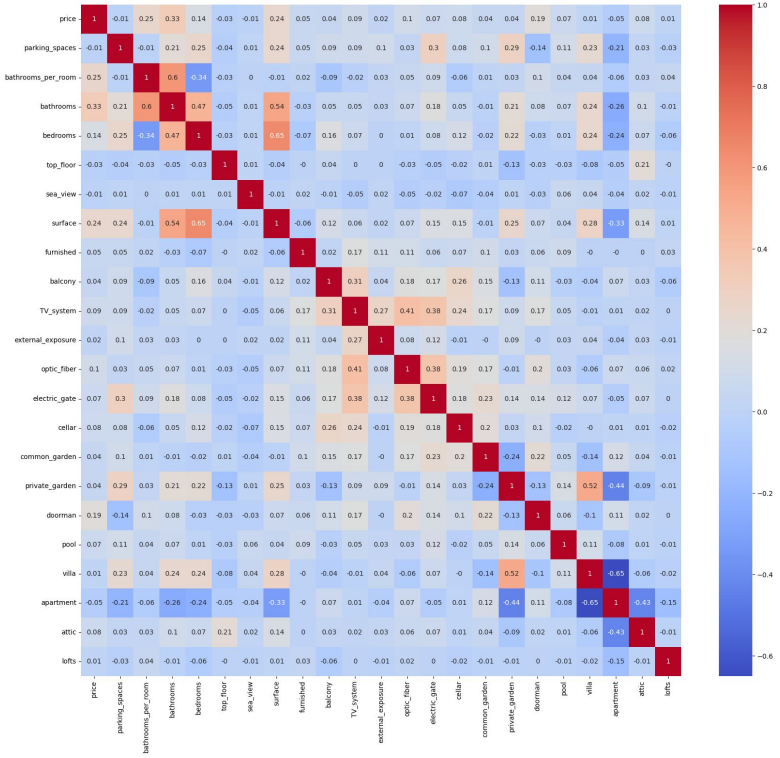
- Gather a dataset of residential properties that includes essential attributes such as (square footage, number of bedrooms and bathrooms, location, zip, neighborhood), amenities, historical sale prices, and other relevant features.
- Ensure data quality and accuracy
- Explore data sources, such as public real estate listings, government data, or real estate APIs

Outlier Detection

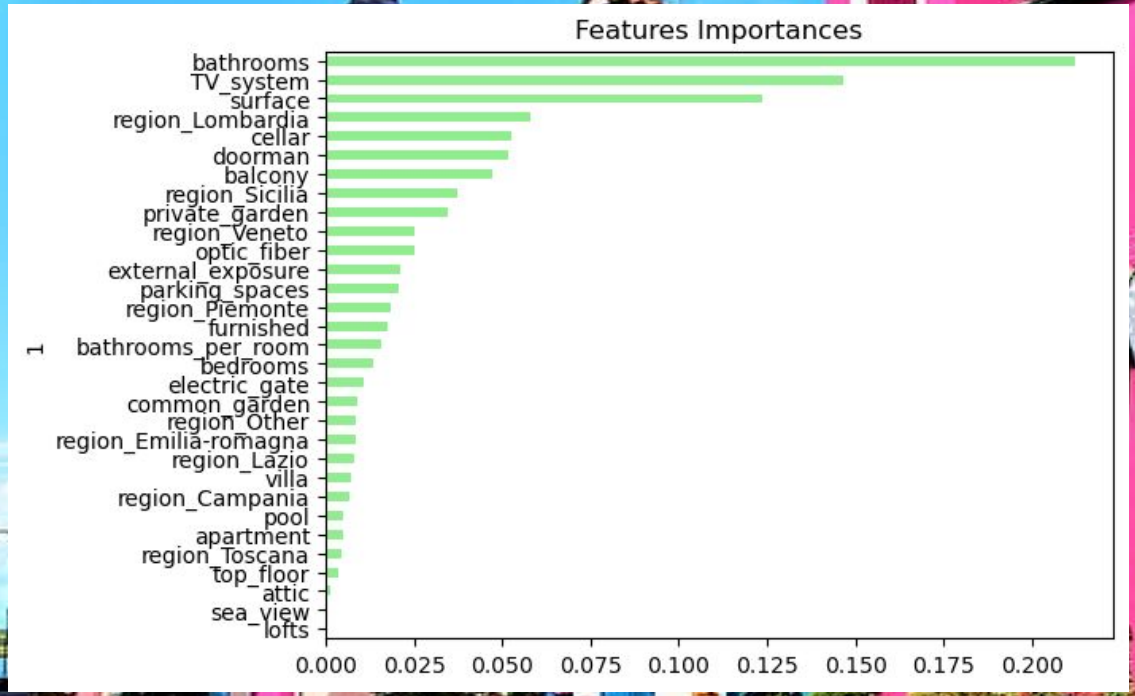


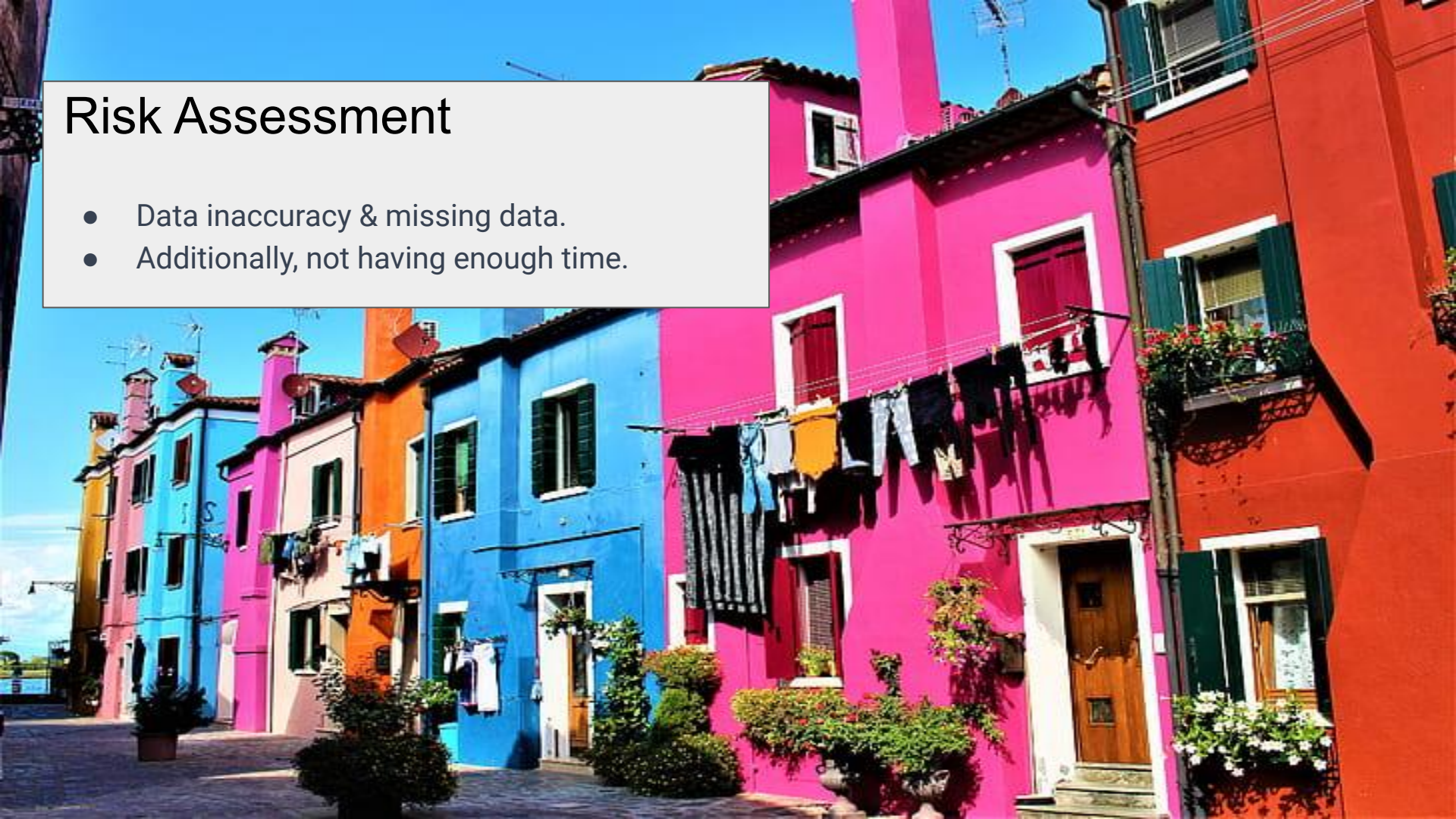


Heatmap Analysis - identify what impacts price



Features Importance





Risk Assessment

- Data inaccuracy & missing data.
- Additionally, not having enough time.

Conclusion

Created a user-friendly prediction tool, statistical insights, and interactive visualizations, we offer a comprehensive solution for accurately estimating house prices in the Italian real estate market. Our model's strong performance on testing and training data ensures its reliability in practical applications, benefiting a wide range of stakeholders in the real estate industry, while recognizing the inherent variability in real estate prices.

Disclaimer: Market conditions, economic factors, and other external forces can impact property prices. Therefore, our predictions should be considered as estimates based on historical data and property features. Users should exercise discretion and consult with real estate professionals to consider all relevant factors when making real estate decisions.

Further Details

- Model Selection - Random Forest
- Statistical Insights - Spark SQL
- Visualizations - Tableau