

Airbnb Tableau Project

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Overview

This assignment was given by an investor who wants to invests in Airbnb, however, he is struggling to identify which properties to invest in and which ones have the best ROI. My job is to do an analysis on the area gaining key metric to assist him which is decisions through data visualisation and visual storytelling.



Properties within specific zip codes = more ROI

Investing in specific zip codes can significantly improve ROI because certain areas consistently generate higher average property values and rental income.

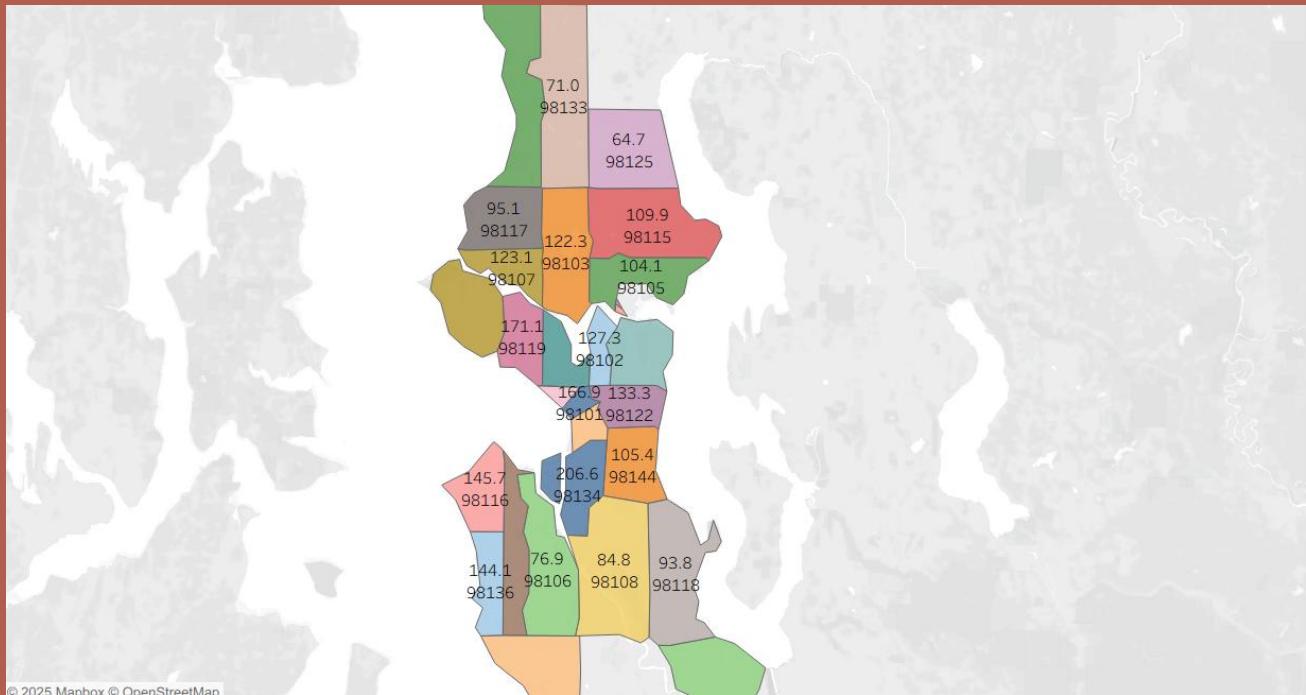
Based on the visual analysis:

- Zip code 98134 delivers the highest value for money, with an average revenue of £206, making it the most profitable area in this dataset.
- Zip codes with lower expected returns, such as 98102 and downward, show reduced revenue potential and greater volatility.
- These lower-performing areas are more likely to produce smaller profit margins due to weaker revenue, making them higher risk for investment.

Investors should prioritise properties in high-ROI zip codes such as 98134, as these deliver stronger and more predictable returns. Zip codes below £150 average revenue present higher risk and lower profitability, so they should be avoided."



Map View: High-value zip codes



- Zip code 98134 is positioned at the center of the city where majority of retail and entertainment activity is located.
- This strategic location likely contributes to its top revenue performance of £206, which is 42% above the city average.
- However, this central location also comes with higher property costs. But if investment aligns with market demand, this area still provides the highest estimated ROI among all zip codes.

Price and strategy optimization for peak periods

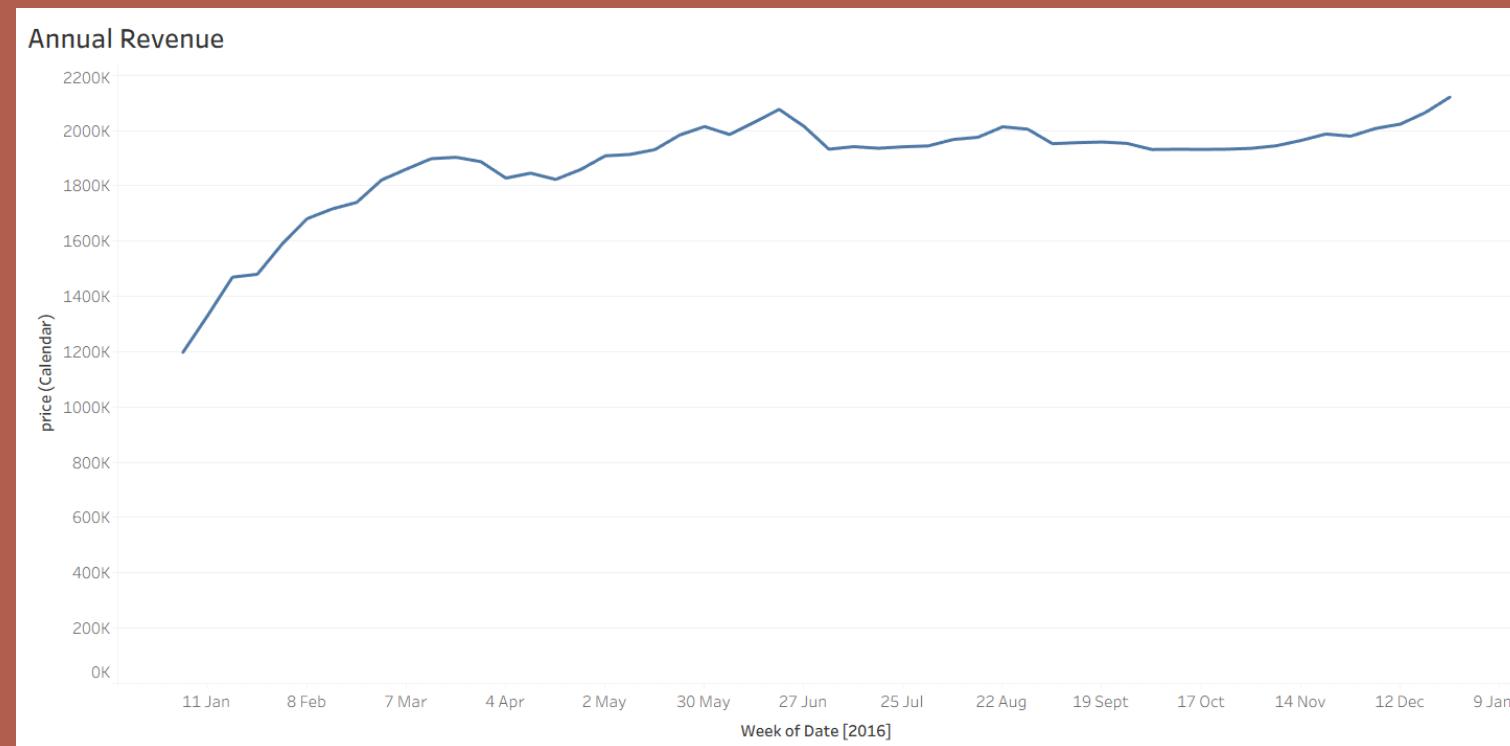
- Observation
- The annual revenue chart clearly shows repeated spikes during school holiday periods (easter, summer, winter)
- These patterns indicate seasonal demand

Insights

- During these periods, there is also a noticeable increase in the number of listings, creating more competition in the market
- However, properties that differentiate themselves through better amenities, reviews, or pricing strategy maintain higher revenue despite competition

Implication

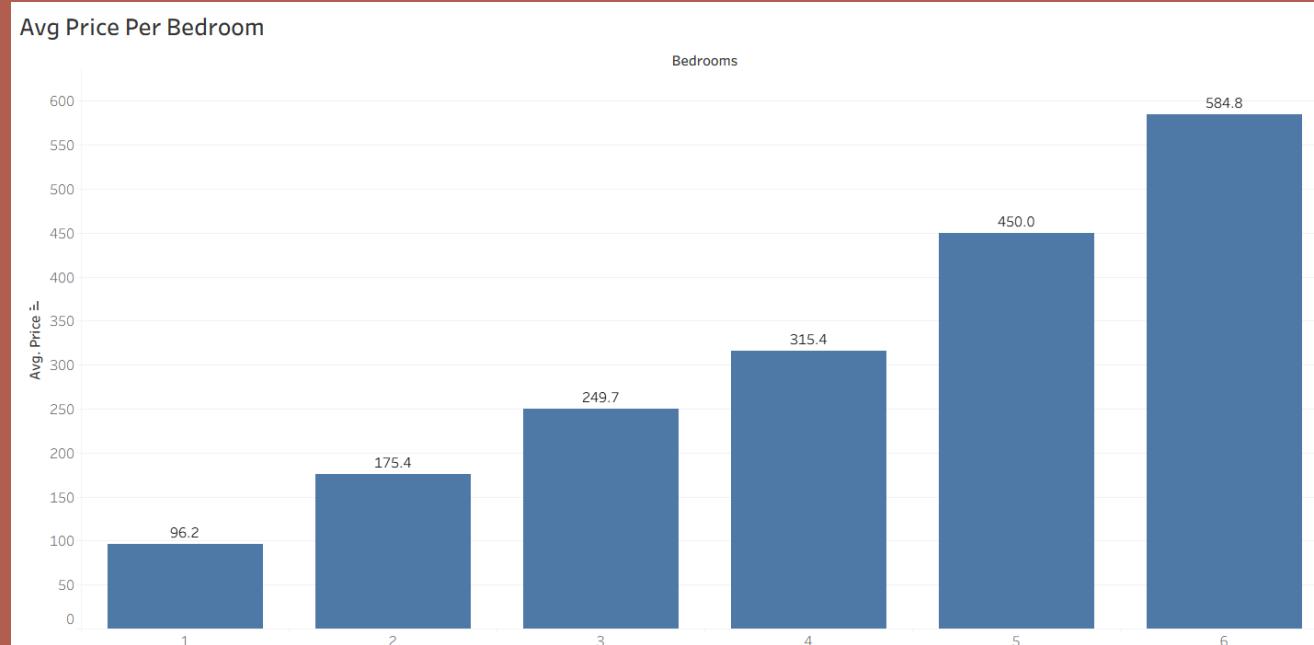
- To maximise earnings, property owners should target peak demand periods with strategic pricing (higher rates during holiday spikes)
- Peak-season pricing can be set 20-30% higher without affecting demand.
- A well positioned property can still outperform the market, making these periods the most profitable times of the year



Optimal Number of Bedrooms for Profitability

Strategically targeting 1-3 bedroom properties provides the best balance between affordability and profitability.

Although larger homes generate higher nightly prices, these units represent a smaller portion of the market and come with higher upfront costs and more operational risk.



This distribution shows that smaller properties dominate the market, and mid-sized properties (1-3 bedrooms) hold the largest potential because they are:

- In highest supply
- Most frequently booked by singles and small families
- Less expensive to acquire and maintain
- Still capable of strong nightly pricing

Distinct Count

Bedrooms	Count
1	1,811
2	483
3	206
4	55
5	20
6	5

Strategic Decisions



1. Investment Prioritisation

Based on the ROI analysis, the investor should prioritise development in the areas demonstrating the highest return on investment. These locations outperform the rest of the city by a significant margin, indicating strong demand and reduced financial risk. Focusing early investment here will maximise profitability and accelerate project payback.

2. Market Positioning Strategy

The demographic breakdown suggests that these neighbourhoods attract a high concentration of young professionals and students. Positioning future developments toward this segment (such as modern, affordable units with flexible amenities) will increase occupancy rates and long-term revenue consistency.

3. Amenities and Experience Enhancement

The high score in entertainment and activity categories indicates that lifestyle amenities strongly influence area desirability. Integrating additional leisure, dining, and green-space features within new developments will strengthen the area's competitive edge and increase market value.

4. Risk Mitigation and Diversification

Although the highlighted area shows strong performance, the organisation should avoid overconcentration. Complementary investment in medium-performing but emerging zones will balance risk and capture long-term growth opportunities as the city evolves.