*Project DVT*

*Boston Condo*

Data Visualization Using Tableau

By

Aniket Gurubaxani

Project Objective:

The objective of this project is to optimize the performance of the House Recommendation System and enhance sales effectiveness by refining pricing strategies, targeting key market segments, and leveraging property attributes to maximize customer satisfaction and revenue generation.

Dataset Overview:

|  |  |
| --- | --- |
| Name | Description |
| Sales\_ID | Serial No of transaction |
| Sale Price | Price at which the house was sold for (USD) |
| Property\_ID | Address |
| Street Number | Street number |
| Street Name | Street name |
| Unit | The unit number of the house (Taken from the address) |
| Area | Area / Locality |
| First Price | Upper limit of price range put up by the seller (USD) |
| Last Price | Lower limit of price range put up by the seller (USD) |
| First Date | Date at which the condo first became available for sale |
| Close Date | Date at which the condo was sold |
| Interior(Sq Ft) | Sq. Feet of condo (Total) |
| # of Bed | No of bed rooms |
| # of Bath | No of bathrooms |
| # of Rooms | Total number of rooms |
| Condo Fee | The fee associated for maintenance, public common property etc |
| Tax | Property tax (USD) |
| RC | This is a Boolean value. RC -0 allows home owners to strictly use the condo for residential purposes only  RC - 1 allows home owners to use the property as residential as well as Small commercial establishments (Like having a boutique, florist, boulangere/Bakery in their home) |

URL:

<https://public.tableau.com/app/profile/aniket.gurubaxani/viz/BostonCondoProjectDVT_17153288695930/PropertySalesStrategyStory?publish=yes>

Insights:

Data analysed on the basis of various numeric variables of dataset like sale price, tax, first price, maintenance fee which could be dependent on the fields like interior area of property, locality, no. of rooms or whether it is given for residential purpose only or for both residential and commercial use. After analysing various conclusions made which are as follows:

1. The properties whose first price is high have low last price but properties whose first price is low have mostly same last price.

2. Most of the properties are sold below their last price, which means it was sold less than lower limit of price range set by seller. 875000 USD is the highest amount at which a property was sold but the last price of this property is 945000 USD.

3. Most of the properties are having 4 to 5 no. of rooms and very less are having 6 or 7 rooms.

4. Maximum properties are in M area. Highest average price of the properties is in E area.

5. The properties was sold in very less time of about 3 – 4 months in areas like AG, RS, PS, AH whose average price is not much high. It means that people like to buy properties having moderate price.

6. The properties in area C took about 11 months to get sold.

7. It can be seen that no. of rooms are not in good correlation with sale price. There is not much effect of rooms on sale price.

8. Tax Price and Interior area of property are highly correlated with each other which increase in area will increases tax amount.

9. If we consider Property type, the sale price and tax are comparably low for the properties which can be used for both residential and commercial purposes then the properties which can be used only for residential purpose.

10. In each area mostly the properties are bought for residential and commercial purpose. This is due to low sale price and tax price of these properties.

Recommendations:

**1. Pricing Strategy Optimization: Set better starting price, because i**f a property starts with a high price, it often sells for less in the end. But if it starts with a low price, it usually sells for about the same in the end.

2. **Review Price Range:** Management should review and potentially revise the price range set by sellers to ensure that properties are not consistently sold below their last price.

3. **Targeted advertising and Promotions:** Recognizing that properties with 4 to 5 rooms are most common, management can focus marketing efforts on this segment. However, they should also consider strategies to attract buyers for properties with 6 or 7 rooms.

4. **Time-to-Sell Analysis:** Understanding that properties in certain areas sell faster, management should analyse the factors contributing to this trend.

5. **Addressing Long Selling Times:** For properties in area C that took longer to sell, management should investigate the reasons behind the delay. Adjustments to pricing, marketing, or property presentation may be necessary to reduce selling times.

6. **Rethink Room-to-Price Correlation:** The weak correlation between the number of rooms and sale price, management should explore other factors that may influence pricing decisions, such as property condition or location, and adjust pricing strategies accordingly.

7. **Understanding Tax and Interior Area Correlation:** Recognizing the high correlation between tax price and interior area, management should communicate this relationship to potential buyers and consider leveraging it as a selling point, especially for properties with larger interior areas.

**8. Highlight Versatility of Mixed-Use Properties:** Since properties with both residential and commercial potential tend to have lower sale prices and taxes, management could focus on promoting the flexibility and cost-effectiveness of these properties to attract buyers.

9. **Highlight Dual Usage:** Most houses are bought for both living and business purposes. This is because they're affordable and can serve different needs. It's good to let buyers know about this flexibility.