EXECUTIVE REPORT FOR WAZOBIA REAL ESTATE LIMITED

This Executive report aims to help Wazobia real estate limited understand trends in Real Estate and be able to accurately predict the price of houses in the current market. The dataset provided includes features of each house sampled. Features such as Location, Title (Type of the house), Number of bedrooms and bathrooms, Parking space, and the target variable which is the Price of the house.

There are 10 different types of houses and scattered around the 36 states in Nigeria. The houses sampled in this dataset are evenly distributed for the types of houses and the states it was sampled from. I created a new feature to separate the states into their different geo-political zones.

Exploring the dataset, I discovered that the average price of houses is generally higher in the Southern part of Nigeria, with South-south having the highest average house price (2.73M) with South-west following closely behind (2.6M). South-east (2.01M) had the third highest average house price then the Northern regions followed suit. Digging deeper, it is seen that Lagos state has the highest average house price (4.21M), followed by 4 South-south states (Bayelsa, Rivers, Akwa-Ibom, and Delta). Further investigation reveals that Lagos state is responsible for a significant increase in the average house price for the South-west zone. Although, it is not significant enough to displace it from being the zone with the second highest average house price.

The Northern states populate the top 10 states with the lowest average house price as expected. Abia and Ebonyi state from the South-east zone are the only southern state in this top 10 having 1.72M and 1.64M respectively as the average house price.

There is a strong correlation between number of bedrooms and the price of the house. As the number of bedrooms increases, the price of the house also increases. The same cannot be said for number of bathrooms and price as this correlation is weak when compared to the first.

As expected, the average house price increases as the house type gets bigger. The average price of a Mansion is more than that of a Duplex which is higher than that of a Flat and so on. Something interesting observed was the fact that although the Cottage was the smallest type of house in the dataset, ranking the most expensive houses of each house type does not place the Cottage at last position. The most expensive cottage (5.36M) is more expensive than the most expensive Flat (4.97M), Bungalow (4.7M), Apartment (4.16M) and Semi-detached duplex (4.99M). Further investigation showed that all these houses are located in Lagos. We can infer that the specific location in Lagos maybe be one of the factors that influenced the pricing of these houses.