

Power BI Report

Project Title: Dubai House Price

Objective:

Create an interactive Power BI dashboard using Dubai house price dataset and to find meaningful insights.

Dataset Summary

Dataset dubai_house_price.csv contains 50000 rows and 6 columns.

Dataset fields:

- **square_feet:** Size of property (in sqft)
- **bedrooms:** Number of bedrooms
- **bathrooms:** Number of bathrooms
- **neighborhood:** Area Type (Rural, Suburb, Urban)
- **year_built:** Year the property was built
- **price:** Selling price of the property

Task Perform:

Step 1: Data Preparation (Using Power Query)

1. Clean missing and incorrect values.
2. Remove Duplicates.
3. Create the following calculated columns:
 - $\text{Price_per_sqft} = \text{price} / \text{size}$
 - $\text{Property_age} = 2025 - \text{year_built}$
 - $\text{Listing_category} = \text{Budget/Mid-Range/High-End (based on price)}$

Step 2: Create Power BI Dashboard

Section 1: Key Matrices (KPI Cards)

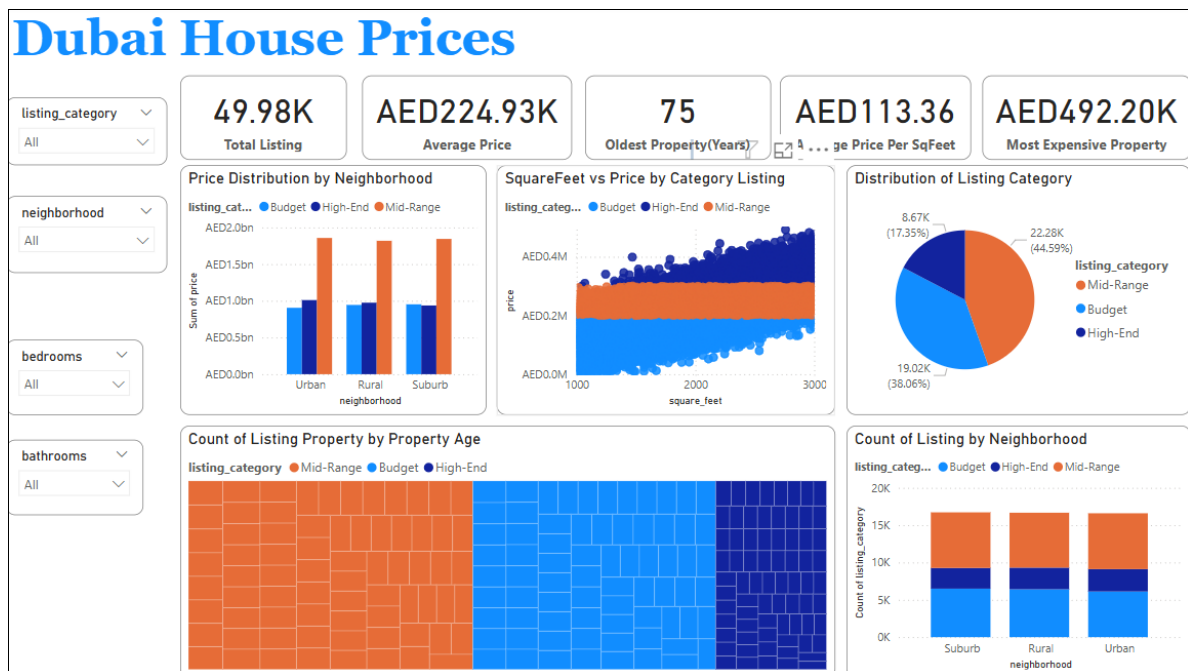
- Total Listing
- Average Listing Price
- Most Expensive Property
- Average Price Per Square Feet
- Oldest Property

Section 2: Visual Analytics (Charts)

- **Bar Chart:** Count of listing by Neighbourhood
- **Pie Chart:** Show the distribution of listing category
- **Scatter Plot:** Show the Square feet vs Price by Listing Category
- **Clustered Column Chart:** Price distribution by Neighbourhood
- **Treemap:** Show number of property in different Property Age and in Neighbourhood

Section 3: Slicer for Interactivity

- Filtering by Neighbourhood
- Filtering by Listing Category
- Filtering by Bedrooms
- Filtering by Bathrooms



Insights:

- **49.98K** total number of listings, **AED 224.93K** average price of listing, **AED113.36** average price per square feet of listing, most expensive property price **AED492.20K**, oldest property age is **75** years.
- **44.59%** Mid-Range listings, **38.06%** Budget listings, and **17.35%** High-End listings.
- Suburb Neighbourhood has, **7446** Mid-Range listings, **2774** High-End listings, and **6496** Budget listings.
- Rural Neighbourhood has, **7355** Mid-Range listings, **2901** High-End listings, and **6412** Budget listings.

- Urban Neighbourhood has, **7482** Mid-Range listings, **2996** High-End listings, and **6116** Budget listings.
- The total listing price is summarized by category (Budget, Mid-Range, High-End) for each neighbourhood.
- Visualized the distribution of square feet and total price by listing category to identify trends in property size and pricing.
- Explored how the number of listings varies by property age and listing category to identify trends in newer vs. older properties.