

# LUXURY HOUSING SALES ANALYSIS - BENGALURU

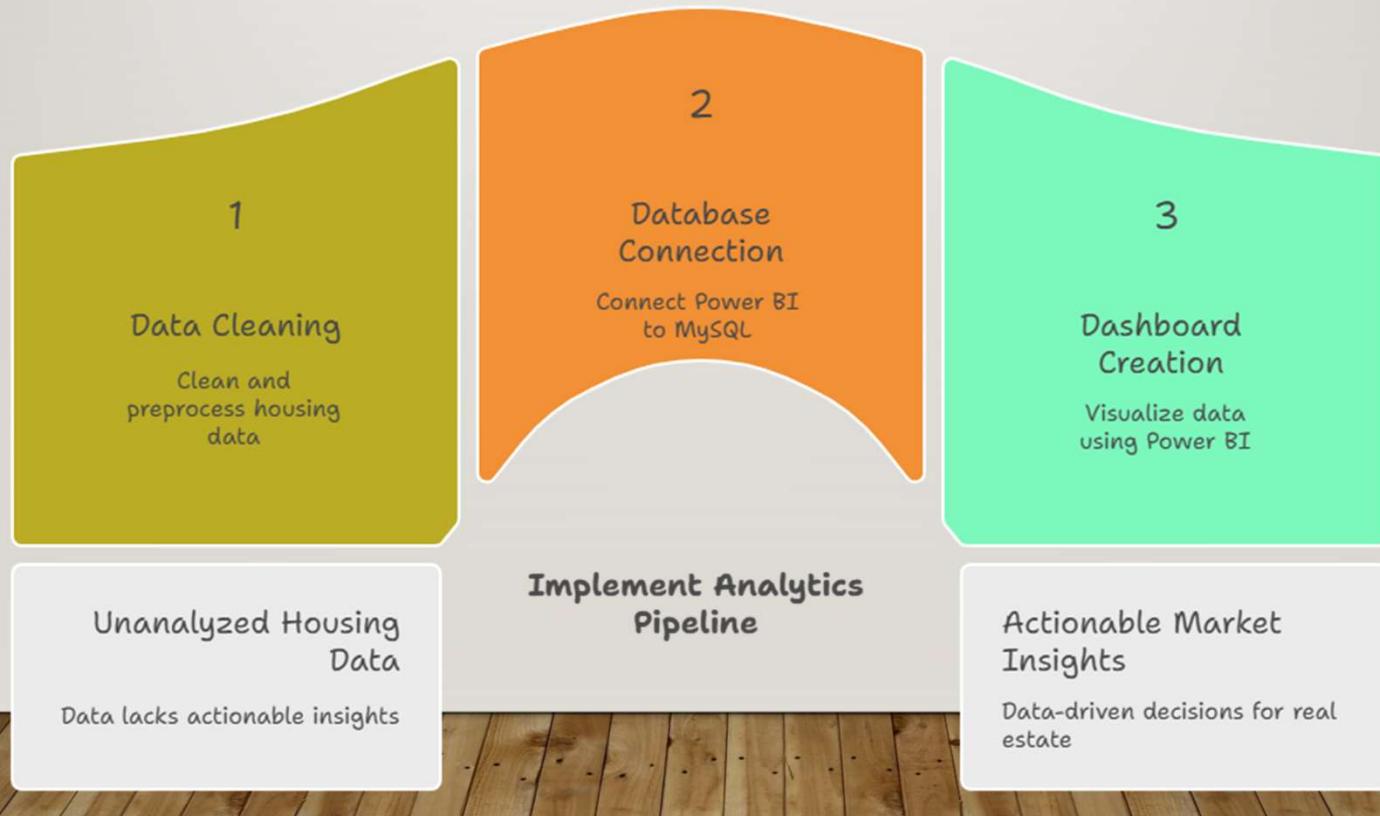
END-TO-END DATA ANALYTICS PROJECT (EDA · DATA PREPARATION · SQL · POWER BI)



BY PRAVEEN.....

# PROBLEM STATEMENT

## Building a Data Analytics Pipeline



## SKILLS & TOOLS USED

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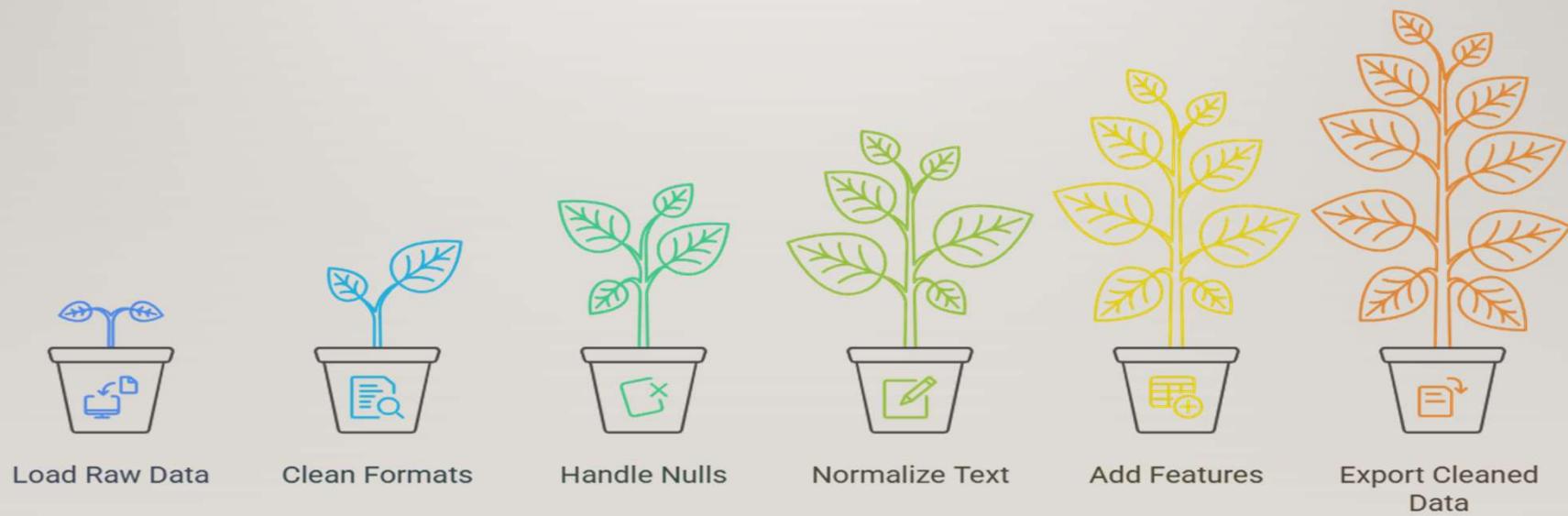
- Python: Pandas, NumPy for Cleaning & Preprocessing
- Real Estate Analytics & EDA
- MYSQL:
- Power BI: Live SQL Connection, Dashboard Creation
- Data Visualization



# STEP I: PYTHON — DATA CLEANING

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Data Cleaning Process



## STEP-2 : MYSQL – DATA LOADING & VALIDATION

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### Data Integration with SQL

Unintegrated Data

Data not in  
database

#### Database Creation

Created  
MySQL/TiDB  
database

#### Data Loading

Loaded cleaned data  
using SQLAlchemy

#### Validation Queries

Performed validation  
queries

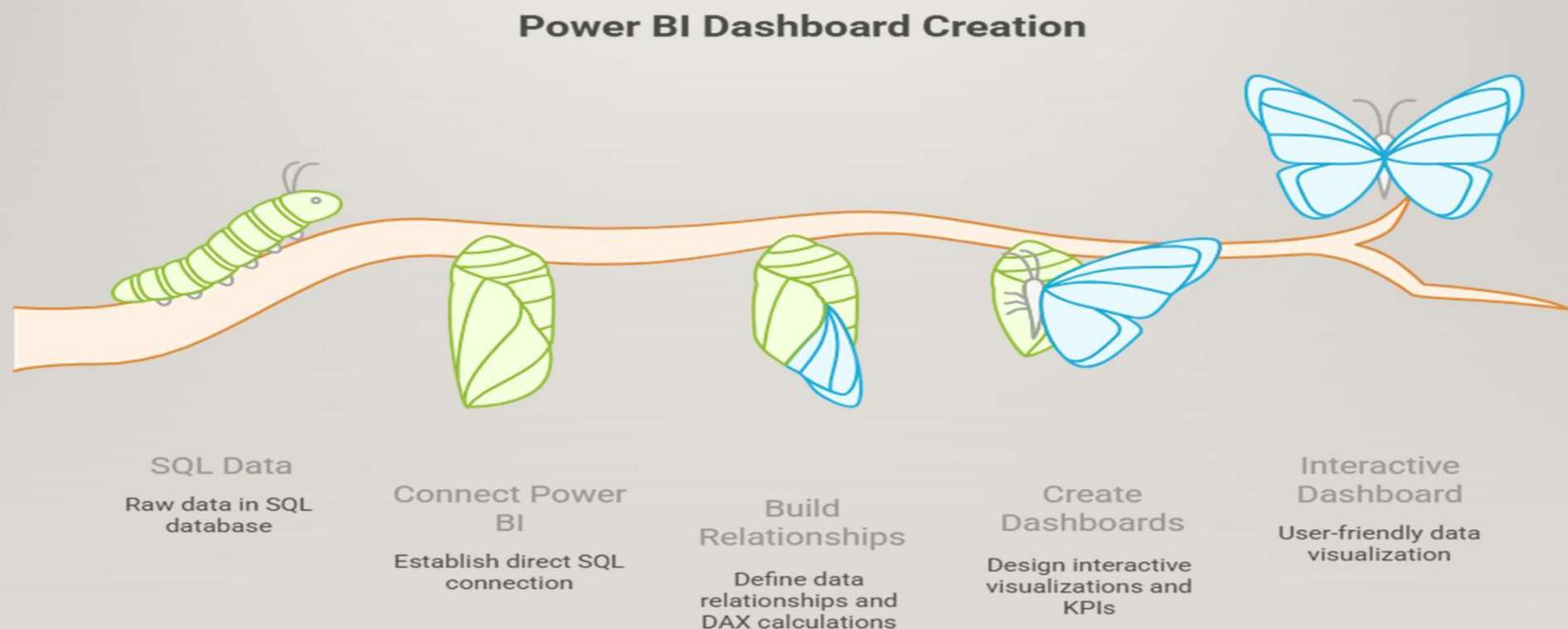
Integrated Data

Data in validated  
database



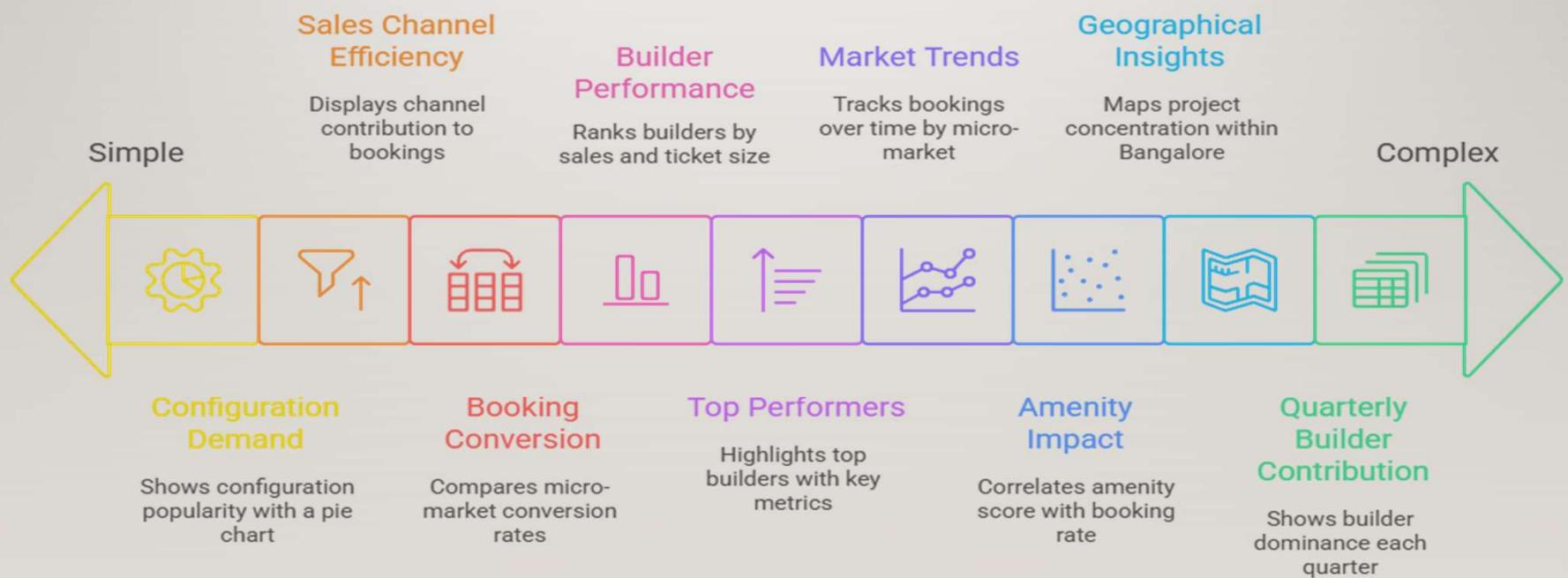
## STEP 3: POWER BI — VISUALIZE VIA DIRECT SQL CONNECTION

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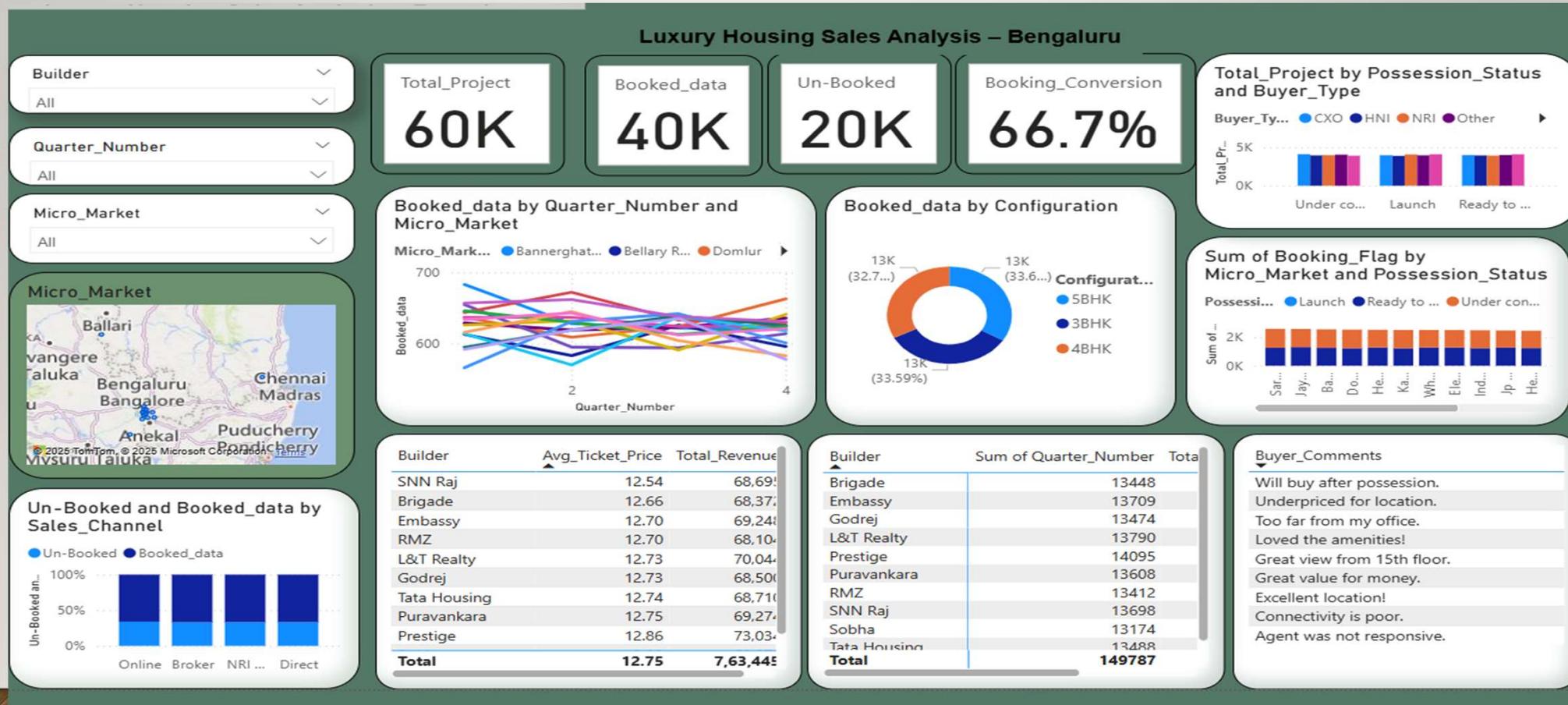


# POWER BI VISUALIZATION

Power BI visualizations range from simple to complex analysis.

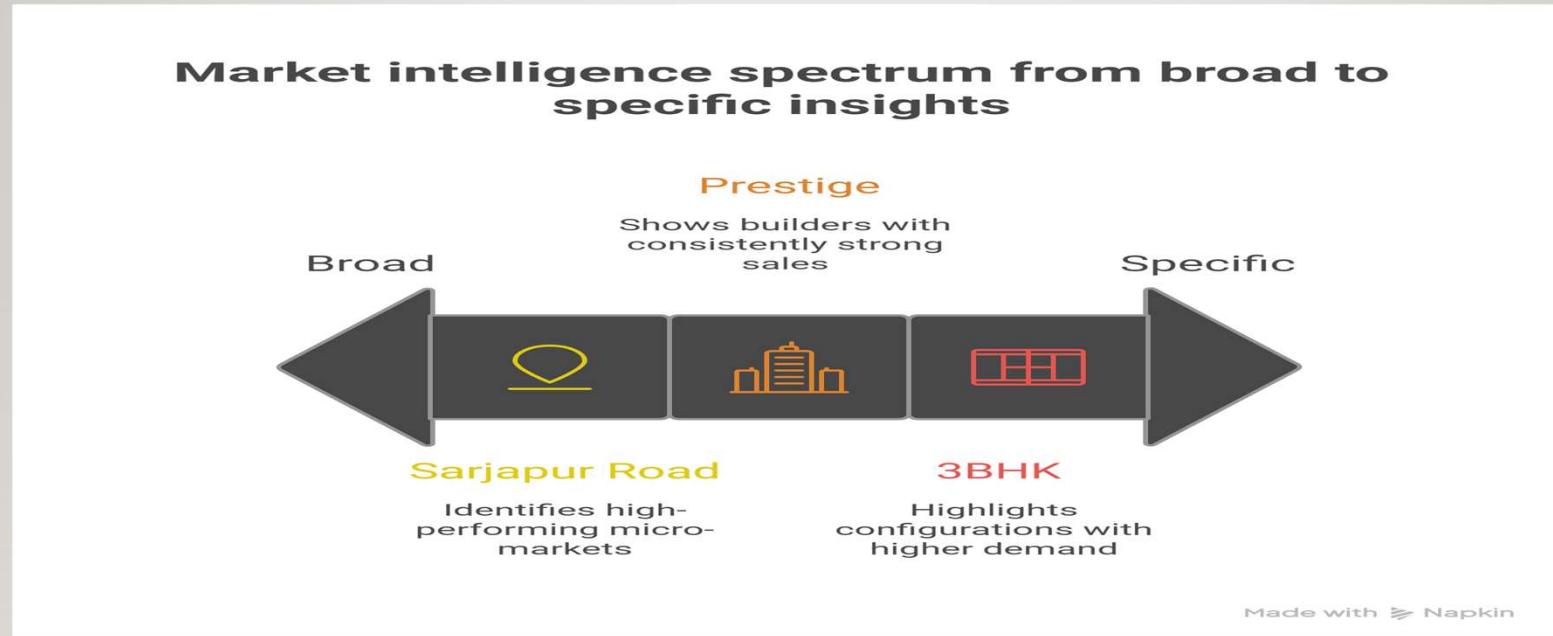


# POWER BI - DASHBOARD



## Business Use Cases

### I. Market Intelligence — Solution & Insights



#### Business Value:

Helps management decide **where to focus new launches**, increase marketing spend, and prioritize profitable locations.

## 2. SALES OPTIMIZATION — SOLUTION & INSIGHTS

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- Drop-offs mainly occur in markets with **poor connectivity** or **delayed possession**.
- Properties with lower **amenity scores** show more unbooked units.

### **Business Value:**

Sales teams can optimize conversion by improving **agent responsiveness**, providing **virtual tours**, and focusing on **high-conversion channels**.



### **3. BUYER PERSONA INSIGHTS — SOLUTION & INSIGHTS**

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- **NRI and HNI** buyers prefer premium locations and amenities.
- Comments show interest in **view quality, amenities, and value for money**.
- Negative sentiment mostly comes from **distance to office, poor connectivity, and agent responsiveness issues**.
- **Business Value:**  
Marketing can create **targeted campaigns** for NRI/HNI buyers and improve communication around location, travel time, and amenities.



## **4. COMPETITIVE PRICING ANALYSIS — SOLUTION & INSIGHTS**

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- Builders offering units with **Price per Sqft aligned to area benchmarks** get more bookings.
- Undervalued properties like **Bannerghatta Road** saw higher demand.
- Premium builders like **Prestige & L&T Realty** maintain higher ticket prices but still achieve strong booking rates.

### **Business Value:**

Helps pricing teams set **competitive yet profitable** pricing and adjust rates based on **market performance**.



## 5. AMENITY IMPACT ASSESSMENT — SOLUTION & INSIGHTS

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- Higher **Amenity Scores** are directly linked to **better booking conversion rates**.
- Projects with strong amenities (clubhouse, security, green space) attract the majority of bookings.
- Low-amenity projects receive more negative comments.
- **Business Value:**  
Builders can **prioritize high-demand amenities** in upcoming projects to increase sales and customer satisfaction.



## 6. QUARTERLY TREND TRACKING — SOLUTION & INSIGHTS

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- Strong booking performance observed in **Q1 & Q4**.
- Some micro-markets show **seasonal demand**—festive quarter spikes.
- Consistent year-over-year growth in premium markets.
- **Business Value:**  
Management can plan **marketing budgets, launch timelines, and inventory releases** based on quarterly demand cycles.

# THANK YOU

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