

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

- 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

Data Cleaning Process



Load Raw Data



Clean Formats



Handle Nulls



Normalize Text



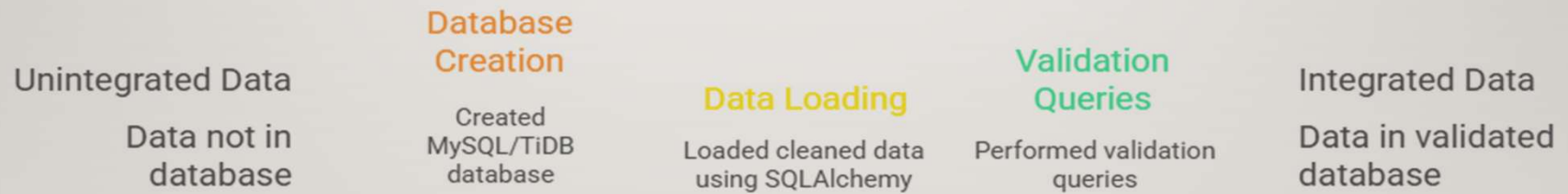
Add Features



Export Cleaned
Data

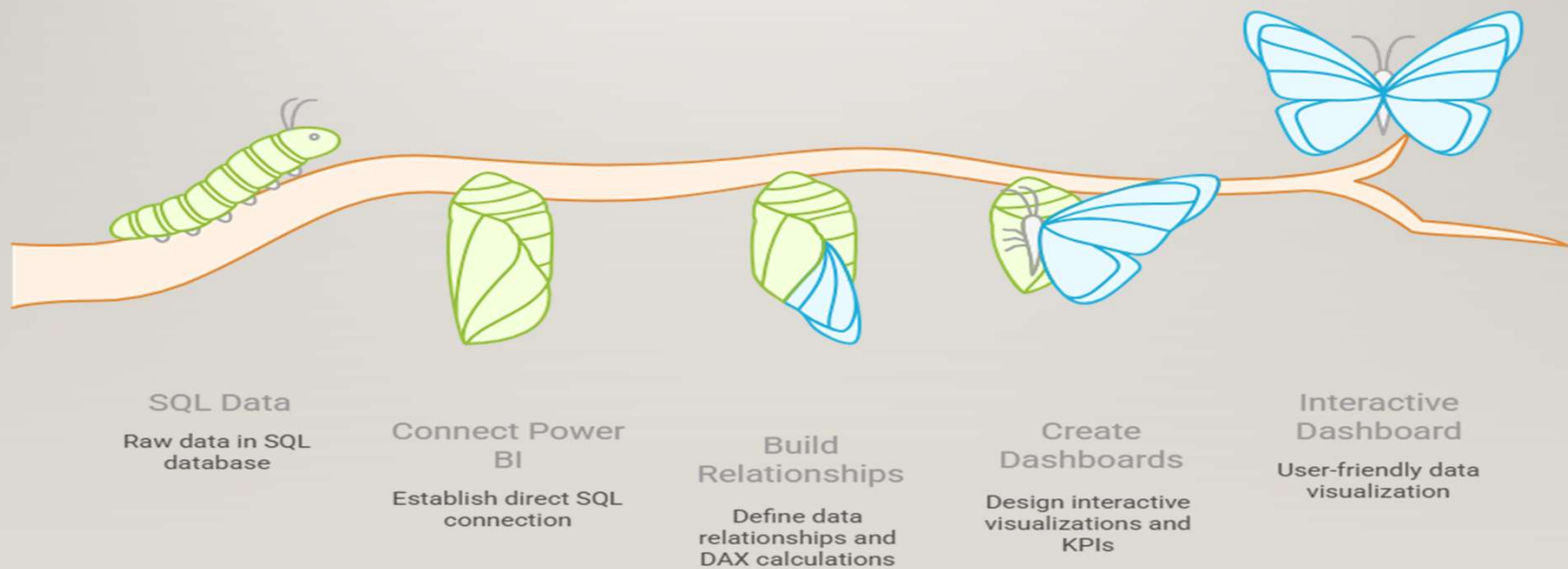
STEP-2 : MYSQL – DATA LOADING & VALIDATION

Data Integration with SQL



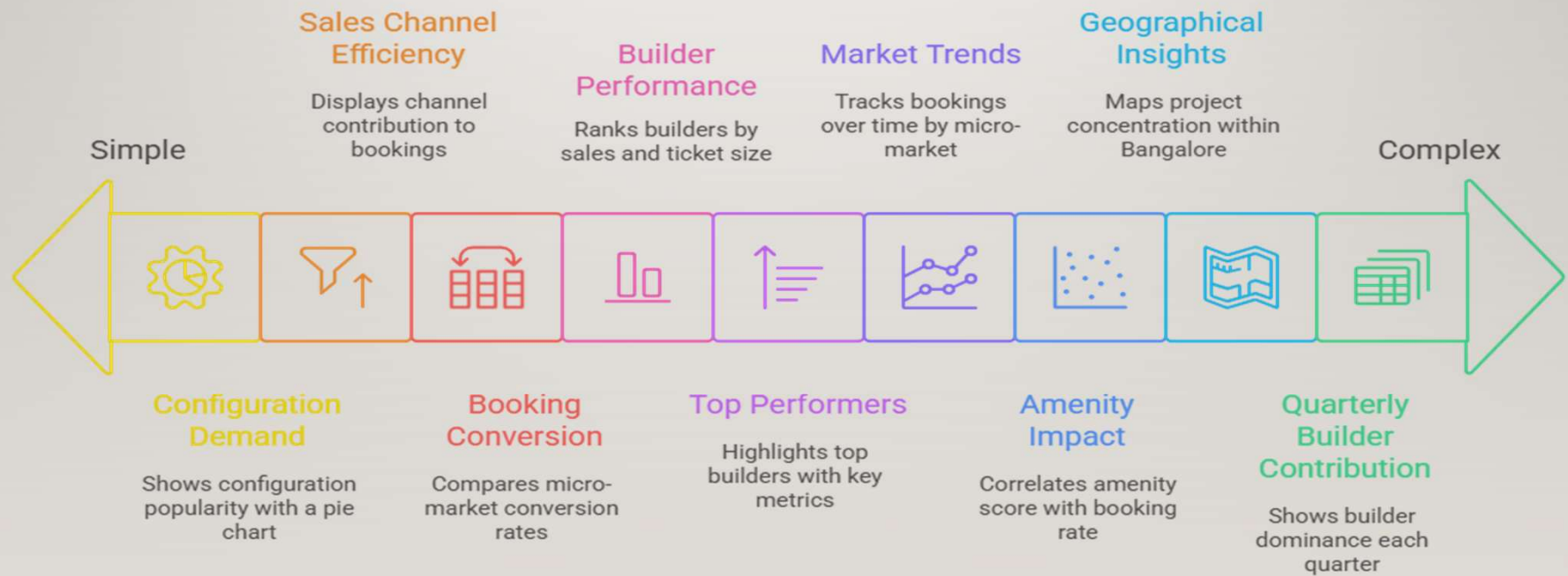
STEP 3: POWER BI — VISUALIZE VIA DIRECT SQL CONNECTION

Power BI Dashboard Creation



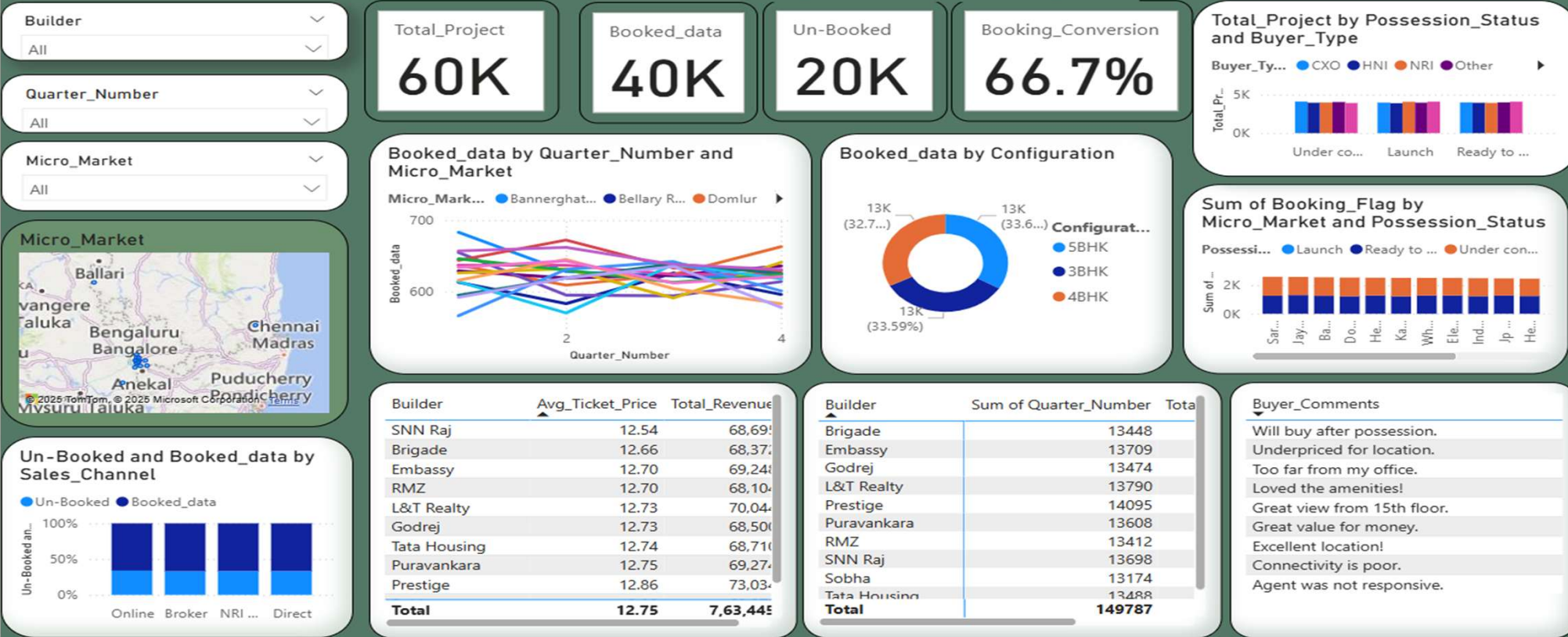
POWER BI VISUALIZATION

Power BI visualizations range from simple to complex analysis.



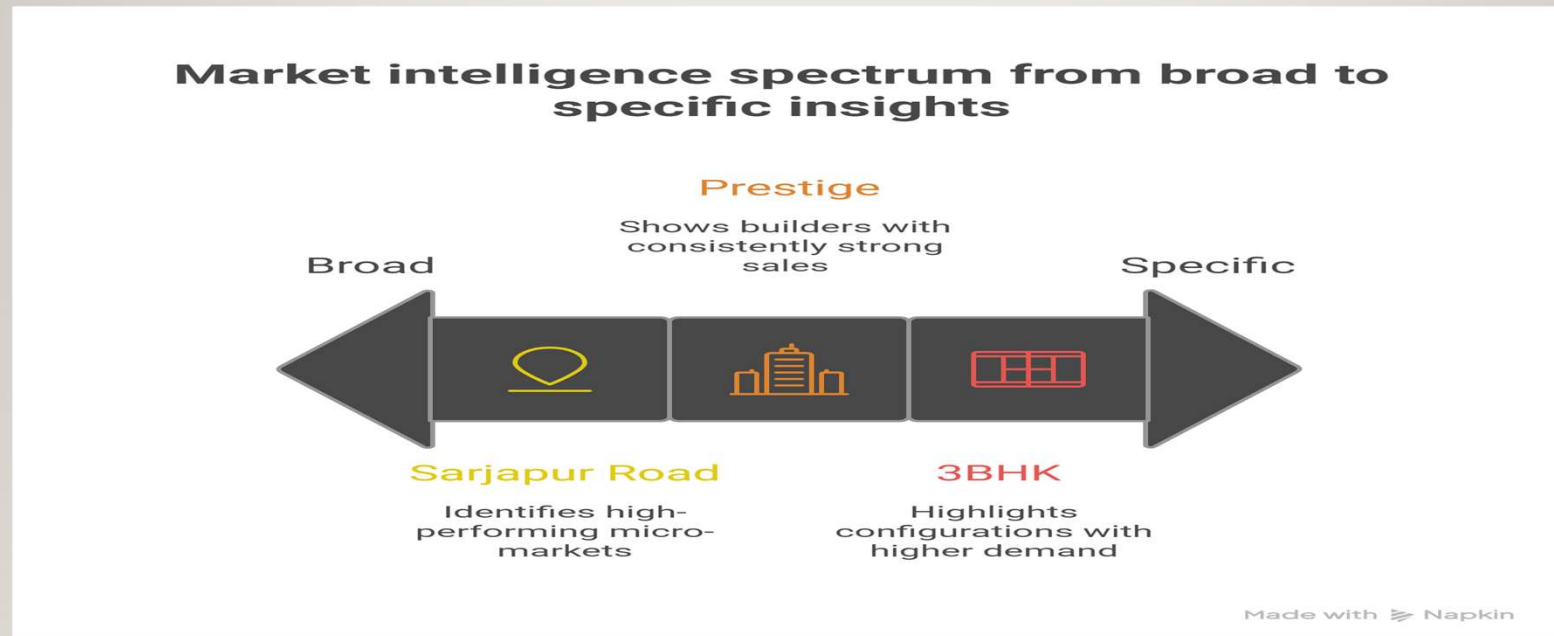
POWER BI - DASHBOARD

Luxury Housing Sales Analysis – Bengaluru



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

- 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

- **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

- 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

- 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

- 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

