

Hotel Data Analysis

Business Problem :

Hotel management faces challenges in:

- Tracking revenue generation vs realization (actual payments).
- Understanding platform-wise booking performance.
- Analyzing room category performance.
- Monitoring key KPIs like occupancy, cancellation, and ratings.

Objective :

Develop a Power BI dashboard to provide:

- Comparative revenue vs realization analysis.
- Platform and room-wise booking insights.
- Key KPIs to aid strategic decisions.

Details About Data :

The dashboard is built using data extracted from 5 CSV files. These CSVs form the metadata and fact data repository:

1. dim_date:

- Contains dates from May to July.
- Fields include: date, mmm yy, week no, and day_type (Weekend/Weekday).

2. dim_hotels:

- Contains property details: ID, name, category (Luxury/Business), and city.

3. dim_rooms:

- Contains room_id and associated room_class (Standard, Elite, Premium, Presidential).

4. fact_aggregated_bookings:

- Daily aggregated room bookings per property, including capacity and success counts.

5. fact_bookings:

- Detailed booking records: booking IDs, guest details, booking and stay dates, room category, booking platform, rating, status, revenue generated, and revenue realized.

Dashboard Highlights :

1. Revenue vs Realization:

- Shows weekly revenue generation vs realization with difference.
- Business Value: Identifies payment lags.

2. Revenue Share and Realization % by Room Category:

- Displays each room category's contribution and realization efficiency.
- Business Value: Highlights profitable room types.

3. Room Category Share (%):

- Visualizes booking distribution by room type.
- Business Value: Reveals guest preferences.

4. Booking Platform Share %:

- Shows % bookings from each platform.
- Business Value: Identifies top-performing channels.

5. KPI Cards:

- Avg_Rating, Revenue, Bookings, Occupancy%, Cancelled%.
- Business Value: Instant performance snapshot.

Data Insights :

1. The total revenue generated from May to July(92 days) is around 2008millions.
2. Revenue realization is 85% of total revenue generated.
3. Total number of bookings are 135k and 25% of bookings got cancelled and 5% people didn't show up.
4. The Average rating of hotel is 3.62.
5. Most of the people prefer RT2 category of rooms and it generates the highest revenue.

6. 41% of the bookings are being done by methods other than the registered ones followed by makeyourtrip.
7. Hotel Aroma Palace generates Highest revenue and Aroma Seasons the least.
8. Bangalore unit tops the revenue generation list followed by Hyderabad.