Hospitality Domain Analysis

🗺 Problem Statement:

"Atliq Grands, encountered challenges driven by outdated Excel-based analytics. In response, the company's visionary leadership opted for a strategic decision to embark on a data analytics initiative.

🔚 Project Goal :

"The primary mission of this project was to craft a holistic report that offers an insightful overview of All Properties performance and KPI.

Data Collection:-

We have been provided six csv datasets comprising a total of six tables. The names of these tables are as follows;

-dim_date.csv**: Contains date dimensions for time series analysis.

- dim_hotels.csv**: Details of various hotels within the study.

- dim_rooms.csv**: Specifications and categories of room types.

- fact_aggregated_bookings.csv**: Aggregated booking data for advanced analytics.

- fact_bookings.csv**: Individual booking records with associated details.

- new_data_august.csv**: The latest booking data updated for the month of August.

ETL:-

Imported data from csv.

Subsequently, data cleansing procedures were conducted on all tables to identify and remove duplicates, correct naming errors, and address outliers .

Data Modeling:-

fact_aggregated_bookings (check_in_date) is related to dim_date (date)

fact_aggregated_bookings (property_id) is related to dim_hotels (property_id)

fact_aggregated_bookings (room_category) is related to dim_rooms (room_id)

fact_bookings (check_in_date) is related to dim_date (date)

fact_bookings (property_id) is related to dim_hotels (property_id)

fact_bookings (room_category) is related to dim_rooms (room_id)

Data Exploration:-

Creating function in python to calculate Industry KPI.

Occupancy %- Occupancy means total successful bookings happened to the

total rooms available(capacity).

ADR -Average Daily rate.

Realisation %-It is nothing but the succesful ""checked out"" percentage over all bookings happened.

RevPAR -RevPAR represents the revenue generated per available room, whether or not they are occupied. RevPAR helps hotels measure their revenue generating performance to accurately price rooms. RevPAR can help hotels measure themselves against other properties or brands."

DBRN-This metrics tells on average how many rooms are booked for a day considering a time period.

DSRN -This metrics tells on average how many rooms are ready to sell for a day considering a time period.

DURN-This metric tells on average how many rooms are succesfully utilized by customers for a day considering a time period.

Link of Dashboards:-Hospitality Domain