AtliQ Hospitality Analysis Report

- By Aparna

Document Control

Date	Version	Description	Author
23/06/2024	1.0	Introduction, Problem Statement	Aparna
25/06/2024	1.1	Dataset Information, Architecture Description	Aparna
01/07/2024	1.2	Final Revision	Aparna

Table of Contents

1. Introduction

A well-known name in the hospitality industry, Atliq Grands has been a key player in the five-star hotel market across India for the past two decades. Known for its luxurious accommodations and superior service, Atliq Grands has been the hotel of choice for discerning travellers for many years. However, in recent years, the company has seen a decline in market share and revenue in the luxury and business hotel segment. This decline is due to strategic maneuvers by competitors and suboptimal decision-making within the management team.

The CEO of Atliq Grands recognised the urgent need to address these challenges and identified the integration of "business and data intelligence" as a key strategy to regain its market position. Despite the clear benefits of data-driven insights, Atliq Grands currently lacks a dedicated data analytics team that can provide the necessary analysis and recommendations. To fill this gap, Atliq Grands' revenue management team decided to hire an external service provider. This external expertise will leverage Atliq Grands' historical data to generate actionable insights to reverse declining market share and revenue, and re-establish Atliq Grands as a leader in the luxury hotel sector.

2. Problem Statement

Atliq Grands owns multiple five-star hotels across India. They have been in the hospitality industry for the past 20 years. Due to strategic moves from other competitors and ineffective decision-making in management, Atliq Grands are losing its market share and revenue in the luxury/business hotels category. As a strategic move, the managing director of Atliq Grands wanted to incorporate "Business and Data Intelligence" in order to regain their market share and revenue. However, they do not have an in-house data analytics team to provide them with these insights. Their revenue management team had decided to hire a 3rd party service provider to provide them with insights from their historical data.

3. Dataset Information

This file contains all the meta information regarding the columns described in the CSV files. we have provided 5 CSV files:

1. dim_date
2. dim_hotels
3. dim_rooms
4. fact_aggregated_bookings
5. fact_bookings

i) Column Description for dim_date:

1. date: This column represents the dates present in May, June and July.
2. mmm yy: This column represents the date in the format of mmm yy (monthname year).
3. week no: This column represents the unique week number for that particular date.
4. day_type: This column represents whether the given day is Weekend or Weekeday.

ii) Column Description for dim_hotels:

1. property_id: This column represents the Unique ID for each of the hotels.
2. property_name: This column represents the name of each hotel.
3. category: This column determines which class[Luxury, Business] a particular hotel/property belongs to.
4. city: This column represents where the particular hotel/property resides in.

iii) Column Description for dim_rooms:

1. room_id: This column represents the type of room[RT1, RT2, RT3, RT4] in a hotel.
2. room_class: This column represents to which class[Standard, Elite, Premium, Presidential] particular room type belongs.

iv) Column Description for fact_aggregated_bookings:

1. property_id: This column represents the Unique ID for each of the hotels.
2. check_in_date: This column represents all the check_in_dates of the customers.
3. room_category: This column represents the type of room[RT1, RT2, RT3, RT4] in a hotel.
4. successful_bookings: This column represents all the successful room bookings that happen for a particular room type in that hotel on that particular date.
5. capacity: This column represents the maximum count of rooms available for a particular room type in that hotel on that particular date.

v) Column Description for fact_bookings:

1. booking_id: This column represents the Unique Booking ID for each customer when they booked their rooms.
2. property_id: This column represents the Unique ID for each of the hotels
3. booking_date: This column represents the date on which the customer booked their rooms.

4. check_in_date: This column represents the date on which the customer check-in(entered) at the hotel.

5. check_out_date: This column represents the date on which the customer check-out(left) of the hotel.

6. no_guests: This column represents the number of guests who stayed in a particular room in that hotel.

7. room_category: This column represents the type of room[RT1, RT2, RT3, RT4] in a hotel.

8. booking_platform: This column represents in which way the customer booked his room.

9. ratings_given: This column represents the ratings given by the customer for hotel services.

10. booking_status: This column represents whether the customer cancelled his booking[Cancelled], successfully stayed in the hotel[Checked Out] or booked his room but not stayed in the hotel[No show].

11. revenue_generated: This column represents the amount of money generated by the hotel from a particular customer.

12. revenue_realized: This column represents the final amount of money that goes to the hotel based on booking status. If the booking status is cancelled, then 40% of the revenue generated is deducted and the remaining is refunded to the customer. If the booking status is Checked Out/No show, then full revenue generated will goes to hotels.

4. Architecture