



# **Analytics Case Study**

## **AtliQ Grands Hospitality Domain**

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# Business Objective

- AtliQ Grands is a company that owns multiple hotels across various cities of India.
- AtliQ Grands aims to regain its market share and revenue in the hotels, which has been declining due to strategic moves by competitors and ineffective decision-making..
- The goal is to leverage Business and Data Intelligence to make informed decisions, optimize operations, and improve market competitiveness.

# Project Scope

- **Data Analysis:** Analyze historical data provided by AtliQ Grands to extract meaningful insights and trends.
- **Metric Creation:** Develop key performance indicators (KPIs) and metrics that align with the business objectives and are required for decision-making.
- **Dashboard Development:** Design and create a dashboard based on the mock-up provided by stakeholders, ensuring it effectively visualizes the necessary metrics.
- **Insight Generation:** Identify and present additional insights beyond the given metric list that could help AtliQ Grands improve their strategic decision-making.

# Data Collection & Preparation

- There are 5 tables provided for tracking revenue, 3 dimension tables (date, hotel, room) and 2 fact tables (bookings, aggregated bookings)
- Power BI was the tool used for creating the visualization/dashboard
- The data was imported, analyzed and transformed as per necessity within Power Query
- The relationships between the tables were created within Power Pivot

# Data Cleaning/Transformation

Queries [6]

dim\_date

dim\_hotels

dim\_rooms

fact\_aggregated\_bookings

fact\_bookings

key\_measures

✕

✓

fx

= Table.RemoveColumns(#"Changed Type",{ "day\_type" })

date

mmm yy

week no

1	5/1/2022	5/22/2024	W 19
2	5/2/2022	5/22/2024	W 19
3	5/3/2022	5/22/2024	W 19
4	5/4/2022	5/22/2024	W 19
5	5/5/2022	5/22/2024	W 19
6	5/6/2022	5/22/2024	W 19
7	5/7/2022	5/22/2024	W 19
8	5/8/2022	5/22/2024	W 20
9	5/9/2022	5/22/2024	W 20
10	5/10/2022	5/22/2024	W 20
11	5/11/2022	5/22/2024	W 20
12	5/12/2022	5/22/2024	W 20
13	5/13/2022	5/22/2024	W 20
14	5/14/2022	5/22/2024	W 20
15	5/15/2022	5/22/2024	W 21
16	5/16/2022	5/22/2024	W 21
17	5/17/2022	5/22/2024	W 21
18	5/18/2022	5/22/2024	W 21
19	5/19/2022	5/22/2024	W 21
20	5/20/2022	5/22/2024	W 21
21	5/21/2022	5/22/2024	W 21
22	5/22/2022	5/22/2024	W 22
23	5/23/2022	5/22/2024	W 22
24	5/24/2022	5/22/2024	W 22
25	5/25/2022	5/22/2024	W 22
26	5/26/2022	5/22/2024	W 22
27	5/27/2022	5/22/2024	W 22
28	5/28/2022	5/22/2024	W 22

Query Settings

PROPERTIES

Name

dim\_date

All Properties

APPLIED STEPS

Source

Navigation

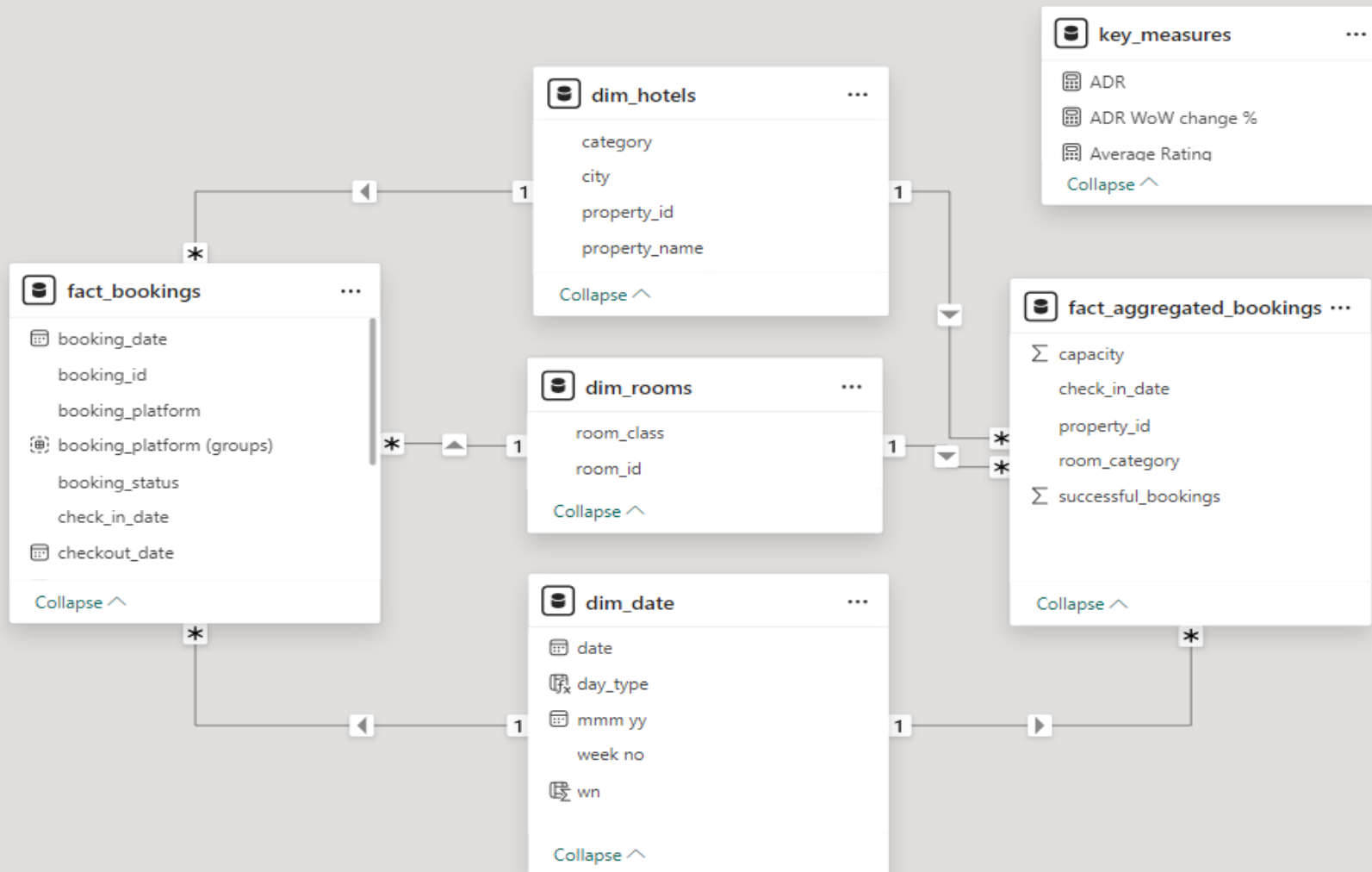
Imported CSV

Promoted Headers

Changed Type

Removed Column: day\_type

# Data Modelling



# Metric Development

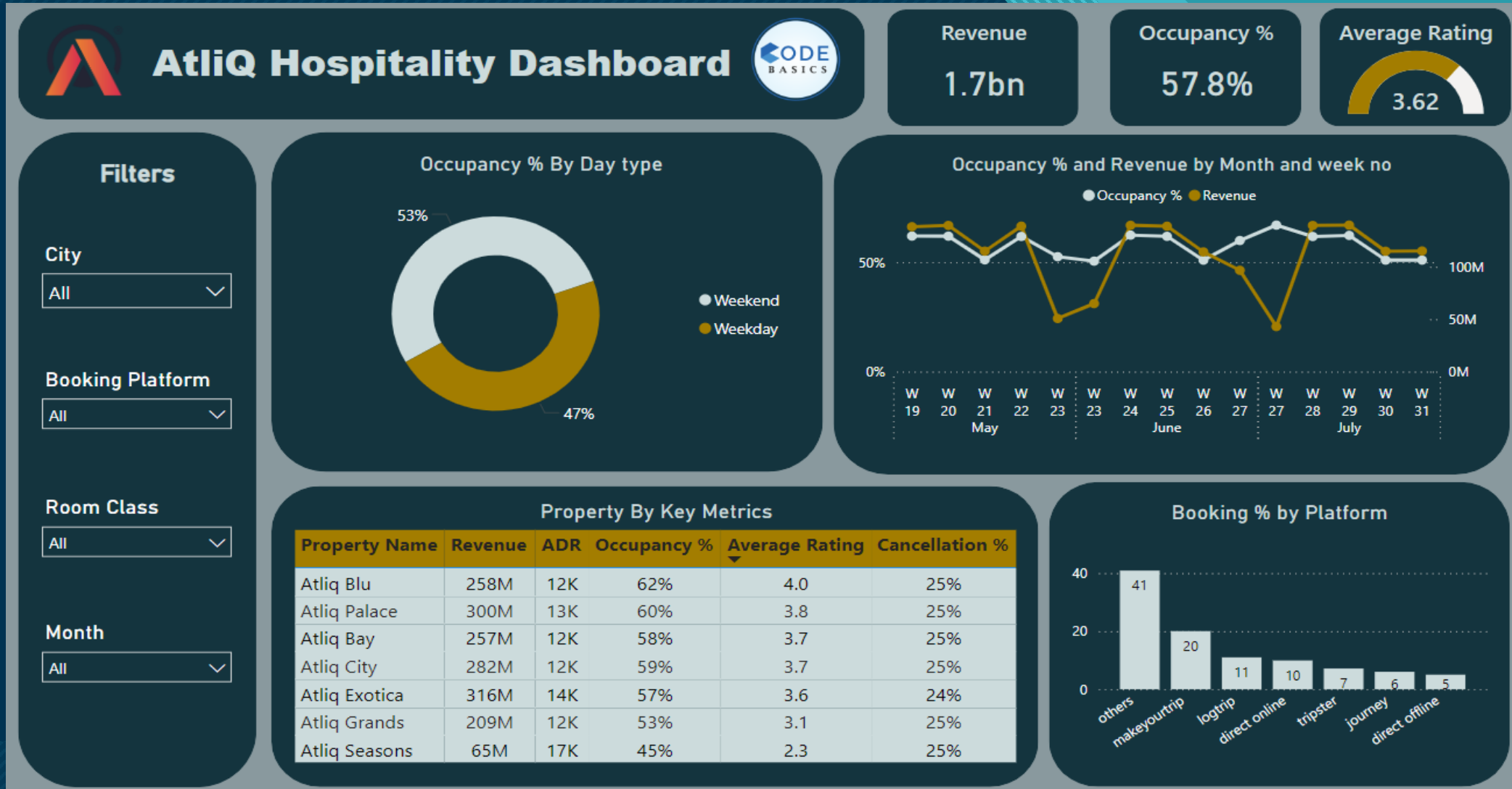
- A few metrics were created to calculate the KPIs as shown below:
  - **Revenue** = Sum of revenue\_realized from Bookings table (in Rs.)
  - **Total bookings** = Count of booking\_id from Bookings table
  - **Avg rating** = Average of ratings from Bookings table
  - **Total capacity** = Sum of capacity from Aggregated bookings table
  - **Total successful bookings** = Sum of successful bookings from Aggregated bookings table

# Metric Development

- A few metrics were created to measure the KPIs as shown below:
  - **Occupancy rate** = Total successful bookings / Total capacity (in %)
  - **Total cancelled bookings** = Count of booking\_id with status = 'cancelled' from Bookings table
  - **Cancellation rate** = Total cancelled bookings / Total bookings (in %)
  - **ADR (Average Daily Rate)** = the measure of the average paid for rooms sold in a given time period
  - **Booking Rate by Platform** = contribution of each booking platform for bookings in hotels



# Dashboard



# Features of Dashboard

- The following visuals were provided:
  - **Occupancy Rate By Day Type** = Donut chart shows the percentage of rooms occupied by weekend and weekday
  - **Occupancy Rate and Revenue by Month and week no** = Line chart shows the distribution of revenue and occupancy rate by month and week no
  - **Bookings Rate By Platform** = Column chart shows the distribution of percentage of bookings based on booking Platform
  - **KPI Table** = A matrix visual (pivot table) showing the various KPIs across each property

# Features of Dashboard

- Card visuals were placed in to show the values of important KPIs
- The following filters were provided to slice and dice the data:
  - City
  - Booking platform
  - Room Class
  - Month
- The theme of the dashboard is based on the hospitality industry
- The visuals are interactive in nature
- Tooltips pop-up when hovering over a visual for more information about the data point

# Insights & Recommendations

- Improve Occupancy Rate:
  - Since weekend occupancy rates are higher (53%) than weekdays (47%), consider offering weekday promotions or discounts to increase occupancy during slower periods.
  - Properties like **AtliQ Seasons** with a low occupancy rate (45%) should be analyzed to identify the reasons. Consider targeted marketing or improving facilities to attract more guests.

# Insights & Recommendations

- Enhance Customer Experience:
  - **AtliQ Seasons** has the lowest average rating (2.3). Investigate customer feedback and implement improvements in service quality, cleanliness, or facilities to boost customer satisfaction.
  - **AtliQ Blu** and **AtliQ Exotica** have relatively good ratings (4.0 and 3.6, respectively). Continue to focus on customer service in these properties to maintain or improve these ratings.

# Insights & Recommendations

- Optimize Revenue Management:
  - **AtliQ Exotica** has the highest ADR (14K) but only 57% occupancy. Consider adjusting pricing strategies during low-demand periods to balance occupancy and revenue.
  - Properties like **AtliQ Palace** and **AtliQ Blu** are generating high revenue. Explore opportunities to upsell or introduce premium services in these high-performing properties.

# Insights & Recommendations

- Diversify Booking Platforms:
  - **Direct online** and **offline** bookings are relatively low. Invest in marketing strategies to encourage more direct bookings, which typically have lower commission fees compared to third-party platforms.
  - Continue strong partnerships with top-performing platforms like "Others" (41%) and "Makeyourtrip" (20%). Consider negotiating better terms or increased visibility on these platforms.

# Insights & Recommendations

- Reduce Cancellation Rates:
  - All properties show a cancellation rate of 25%. Understanding the reasons behind cancellations could help in implementing policies to reduce this rate, such as more flexible booking options or cancellation penalties.



# Insights & Recommendations

- Monitor Trends and Make Data-Driven Decisions:
  - The dashboard shows fluctuating trends in occupancy and revenue. Regularly monitor these trends to adjust marketing strategies, staffing, and pricing in response to demand changes.

# Conclusion

- The dashboard highlights key performance indicators for AtliQ Hospitality, showing strong overall revenue and occupancy rates.
- Increase bookings on weekdays, especially in underperforming properties like AtliQ Seasons.
- Improve services in properties with lower ratings to boost guest satisfaction.
- Investigate and reduce high cancellation rates across all properties.
- Adjust pricing in properties with high ADR but low occupancy to balance revenue.
- Focus on increasing direct bookings while maintaining strong partnerships with top-performing platforms.
- Regularly track occupancy and revenue trends to make data-driven decisions for sustained growth and efficiency.



**THANK YOU!**