



Codebasics Resume Project Challenge #1

Provide Insights to the
Revenue Team in the
Hospitality Domain

Domain: Hospitality
Function: Revenue





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” 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.





Objective:

- The objective of this comprehensive business insights dashboard is to provide stakeholders with a centralized platform to monitor and analyse key performance indicators.
- Metrics relevant to the hotel industry are implemented to provide relevant insights and facilitate data-driven decision-making, identify trends, and uncover actionable insights tailored for AtliQ Grand.



Database Info:

The dataset comprises of 5 csv files including , 3 dimension tables and 2 fact tables.

- **dim_date** : Dataset includes day type(weekday or weekend) , months (May 2022 – July 2022) ,week no. W19 –W32.
- **dim_hotels** : Dataset includes property id, property name, category and the cities.
- **dim_rooms** : Dataset includes room id, room class (Elite , Presidential) etc.
- **fact_aggregated_bookings** : Database stores information about hotel bookings including booking dates, booking platforms, no. of guests, revenue collection, check-in & out dates etc.
- **fact_bookings** : Database contains hotel id, successful bookings & capacity.

Database Categories:

Category

- Business
- Luxury

City

- Delhi
- Mumbai
- Bangalore
- Hyderabad

Day Type

- Weekday
- Weekend

Booking Platform

- Direct Offline
- Direct Online
- Logtrip
- Makeyourtip
- Tripster
- Others

Room Class

- Elite
- Standard
- Premium
- Presidential

Property Name

- AtliQ Exotica
- AtliQ Palace
- AtliQ City
- AtliQ Blu
- AtliQ Bay
- AtliQ Grands
- AtliQ Seasons

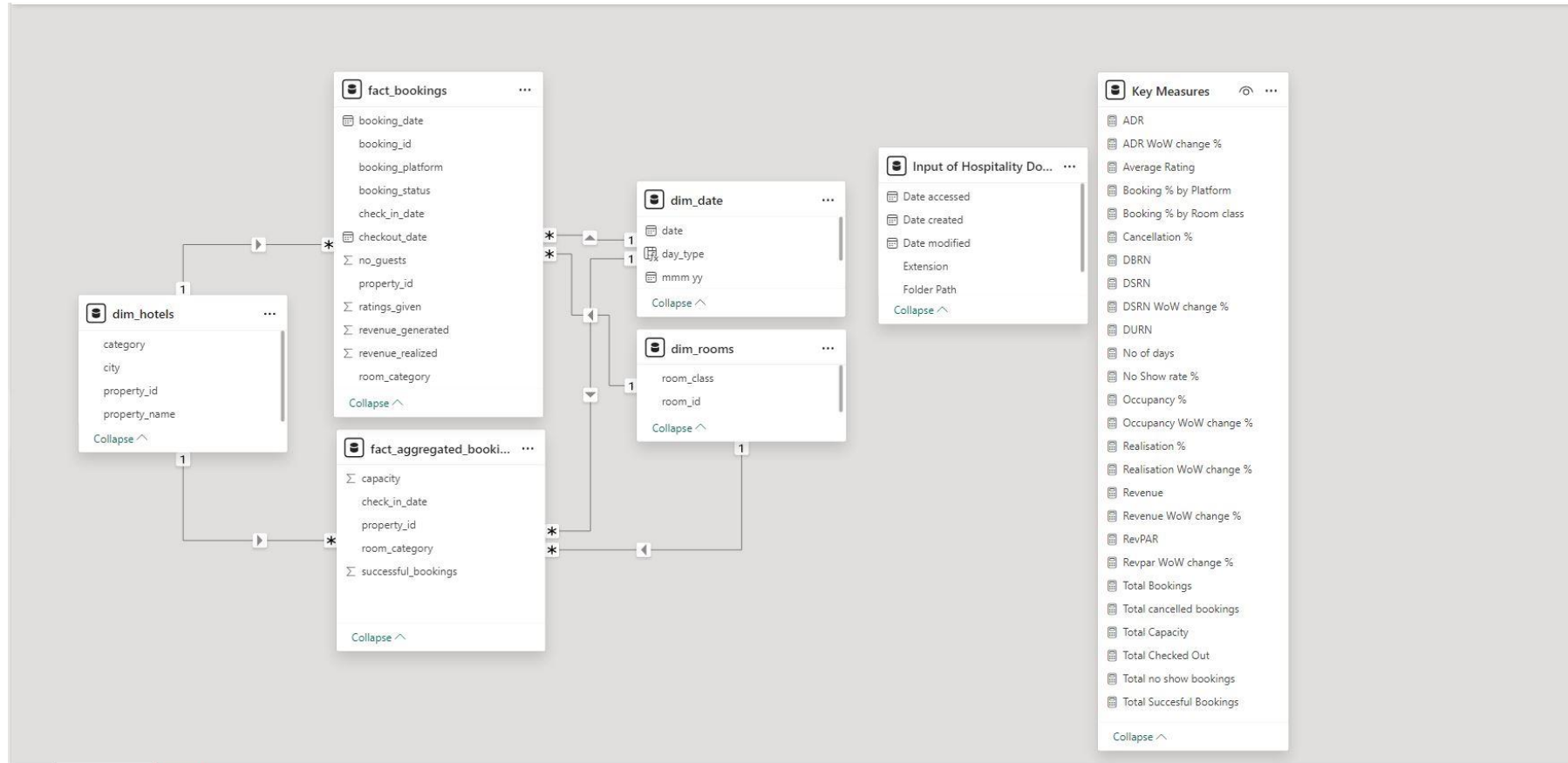


Industry Specific Measures:

- **Average Daily Rate (ADR):** The percentage of revenue to all rooms sold or reserved. a measurement of the typical price received for rooms sold over a specific duration.
- **Realization%:** The percentage of successfully "checked out" reservations across all reservations.
- **Revenue Per Available Room (RevPAR):** Regardless of whether a room is occupied, RevPAR shows the amount of money made per available room. It gauges revenue-generating efficiency to set hotel prices precisely. Hotels can assess their performance by comparing it to other properties or brands using RevPAR.
- **Daily Booked Room Nights (DBRN):** This indicator indicates the average number of rooms reserved for a given time frame in a given day.
- **Daily Sellable Room Nights (DSRN):** Taking a time period into account, this indicator indicates the average number of rooms that are available for sale in a given day.
- **Daily Utilized Room Nights (DURN):** Based on a time period, this indicator indicates the average number of rooms that guests successfully use in a given day.



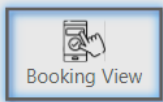
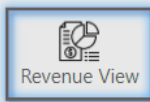
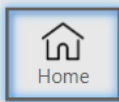
Data Model:





SNAPSHOTS





AtliQ Hospitality Dashboard



Filter by city

All

Filter by room type

All

May 22

Jun 22

Jul 22

W 19

W 20

W 21

W 22

W 23

W 24

W 25

W 26

W 27

W 28

W 29

W 30

W 31

Revenue

1.71bn

↓ -81.74%

RevPAR

7,347

↑ 27.84%

DSRN

2,528

○ 0.00%

Occupancy %

57.87%

↑ 28.11%

ADR

12,696

↓ -0.21%

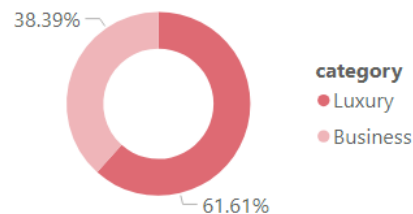
Realisation %

70.15%

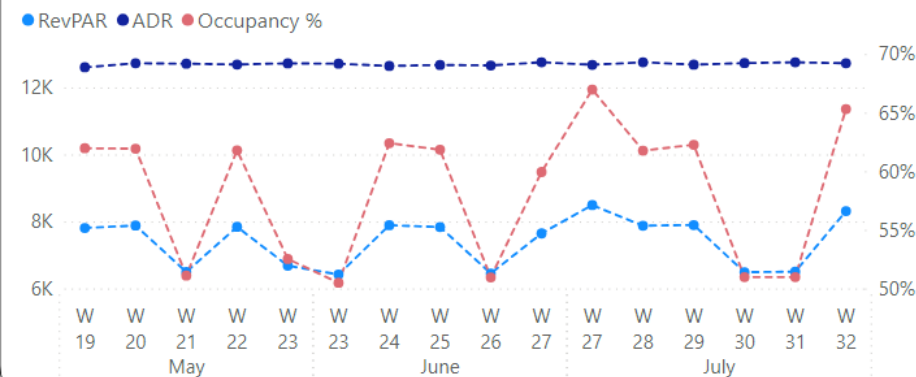
↑ 0.64%

	RevPAR	Occupancy %	ADR	Realisation %
Weekday	7,101.15	55.99%	12,683.18	69.95%
Weekend	7,971.63	62.64%	12,725.49	70.59%
Total	7,347.15	57.87%	12,696.12	70.15%

% Revenue by category

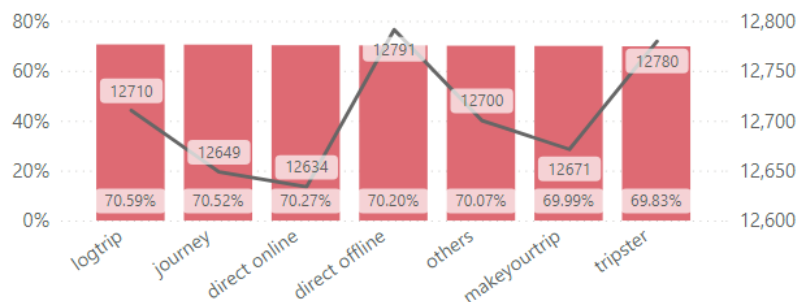


Trend by Key Metrics



Realisation % and ADR by booking_platform

● Realisation % ● ADR



Property by Key Metrics

property_y_id	property_name	city	Revenue	RevPAR	Occupancy %	ADR	DSRN	DBRN	DURN	Realisation %	Cancellation %	Average Rating
19558	AtliQ Grands	Bangalore	54M	5,536	44%	12,467	107	48	33	70%	25%	2.36
17564	AtliQ Seasons	Mumbai	66M	7,410	45%	16,606	97	43	31	71%	25%	2.29
18559	AtliQ Exotica	Hyderabad	48M	4,063	45%	9,103	128	57	40	71%	24%	2.33
17562	AtliQ Bay	Mumbai	52M	6,799	45%	15,162	83	37	26	70%	25%	2.36
18563	AtliQ Palace	Hyderabad	45M	5,025	53%	9,484	97	51	36	70%	26%	3.07
17560	AtliQ City	Mumbai	88M	7,776	53%	14,634	123	65	45	70%	25%	3.04
19561	AtliQ Blu	Bangalore	73M	6,778	53%	12,720	117	62	44	70%	25%	3.08
18558	AtliQ Grands	Hyderabad	46M	5,524	53%	10,334	91	49	34	70%	25%	3.07
16562	AtliQ Bay	Delhi	56M	6,260	53%	11,709	98	52	36	69%	25%	2.07
Total			1709M	7,347	58%	12,696	2,528	1,463	1,026	70%	25%	3.62

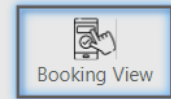


RevPAR - Revenue per available room | DSRN - Daily Sellable room nights | DBRN - Daily Booked room nights | DURN - Daily Utilized room nights | ADR - Average Daily Rate

Revenue
1.71bn

Occupancy %
57.87%

Average Rating
3.62



FILTERS

Filter by category

All

Filter by city

All

Filter by status

All

Filter by platform

All

Filter by month

All

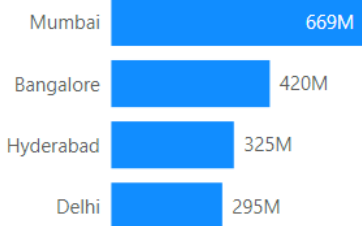
Filter by week no

All

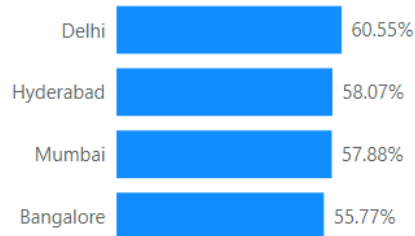
Filter by day type

All

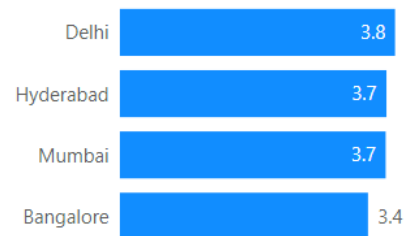
Revenue by city



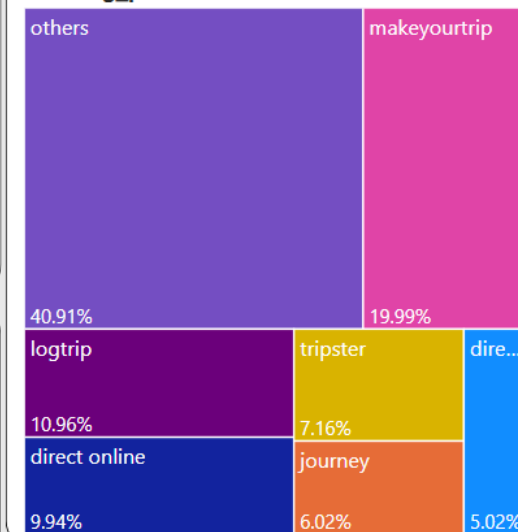
Occupancy % by city



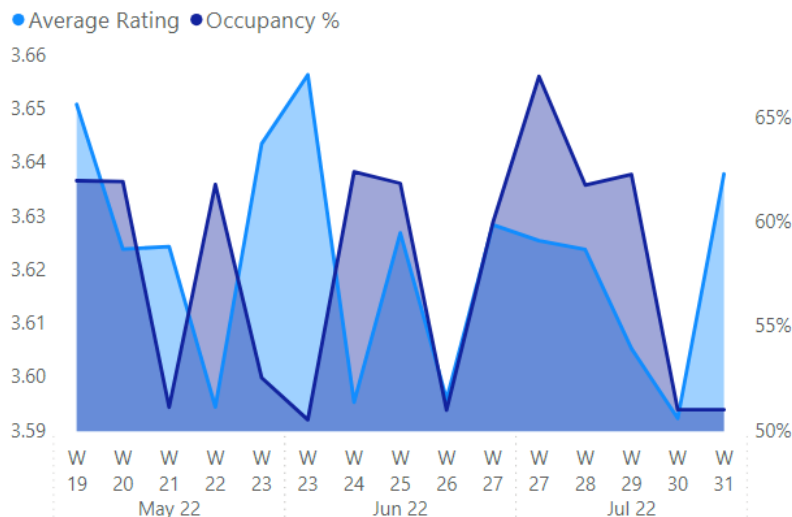
Average Rating by city



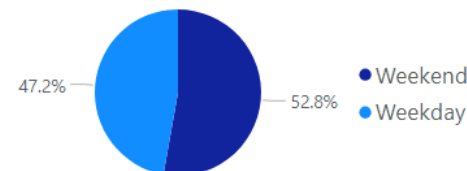
Booking % by Platform by booking_platform



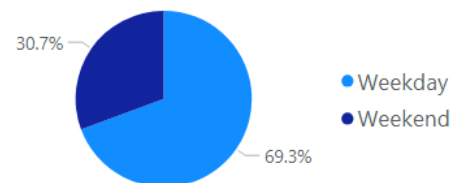
Average Rating and Occupancy % by month and week no



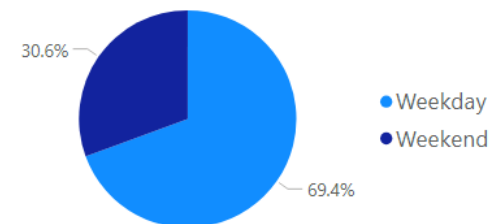
Occupancy % by day_type



Revenue by day_type



Total Bookings by day_type



RevPAR - Revenue per available room | DSRN - Daily Sellable room nights | DBRN - Daily Booked room nights | DURN - Daily Utilized room nights | ADR - Average Daily Rate



Booking Dashboard

Revenue

1.71bn

Occupancy %

57.87%

Average Rating



Home



Overall View



Revenue View



FILTERS

Filter by category

All

Filter by city

All

Filter by status

All

Filter by platform

All

Filter by month

All

Filter by week no

All

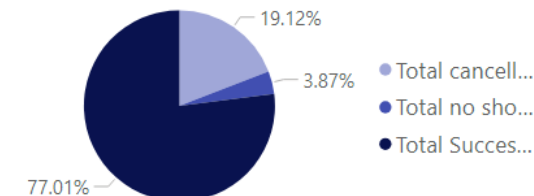
Filter by day type

All

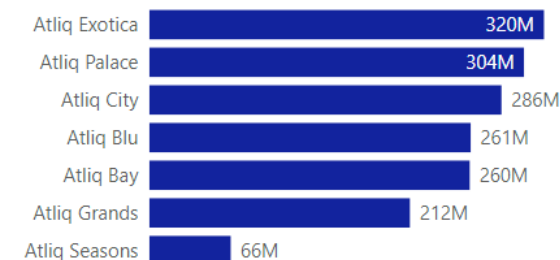
Property by Key Metrics

property_id	property_name	city	Revenue	RevPAR	Occupancy %	ADR	DSRN	DBRN	DURN	Realisation %	Cancellation %	Average Rating
16563	Atliq Palace	Delhi	89M	8,281	66%	12,472	117	78	54	70%	25%	4.27
17561	Atliq Blu	Mumbai	74M	9,452	66%	14,262	85	56	39	70%	25%	4.30
17563	Atliq Palace	Mumbai	102M	10,609	66%	16,019	104	69	49	71%	24%	4.29
18560	Atliq City	Hyderabad	61M	6,084	66%	9,191	109	72	51	71%	24%	4.26
17559	Atliq Exotica	Mumbai	94M	10,116	66%	15,304	101	67	47	71%	24%	4.32
16559	Atliq Exotica	Mumbai	118M	10,640	66%	16,142	121	80	56	70%	25%	4.32
16558	Atliq Grands	Delhi	36M	7,538	66%	11,437	52	34	24	70%	25%	4.25
18562	Atliq Bay	Hyderabad	69M	6,221	66%	9,444	121	80	56	70%	25%	4.30
19562	Atliq Bay	Bangalore	82M	9,335	66%	14,185	96	63	45	70%	24%	4.28
16561	Atliq Blu	Delhi	58M	8,626	66%	13,113	73	48	34	70%	26%	4.28
19560	Atliq City	Bangalore	82M	8,989	66%	13,694	99	65	45	69%	26%	4.28
18561	Atliq Blu	Hyderabad	56M	5,693	66%	8,678	107	70	49	70%	24%	4.25
19559	Atliq Exotica	Bangalore	60M	6,868	54%	12,757	95	51	36	71%	24%	3.05
16560	Atliq City	Delhi	55M	6,285	54%	11,705	95	51	36	71%	24%	3.01
17558	Atliq	Mumbai	75M	7,964	54%	14,839	102	55	38	70%	26%	3.05
Total			1709M	7,347	58%	12,696	2,528	1,463	1,026	70%	25%	3.62

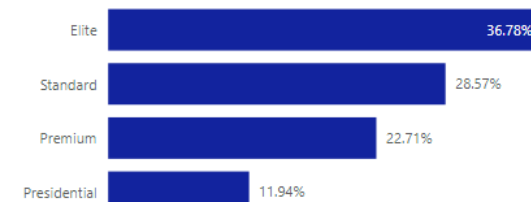
Total Bookings



Revenue by property_name



Booking % by Room class by room_class



RevPAR - Revenue per available room | DSRN - Daily Sellable room nights | DBRN - Daily Booked room nights | DURN - Daily Utilized room nights | ADR - Average Daily Rate

Key Insights:

- Three months' total revenue from all hotels combined is **1.71 billion**, with an average rating of **3.62**.
- **Mumbai City** generates **39.1% (669M)** of all revenue.
- **Delhi** brings in the least amount of money, **17.2% (295M)**.
- Over the time period of May 2022 to July 2022, there have been **134,59K** total bookings and **57.87%** occupancy.
- **Delhi** has the highest average ratings (**3.78**) and occupancy rate (**60.55%**).
- Out of all the hotels, **Hotel AtliQ Blu** has the highest rating. The hotel has an average rating of 3.96 & **Hotel AtliQ Seasons** has the lowest rating (2.29).
- The **Elite (RT2 class)** room category generates the highest revenue of any category which is **560.27M**.
- Occupancy rates on weekends are **consistently higher** than on weekdays. The ADR for weekdays and weekends is not significantly different.



Key Insights:



- The standard, elite, premium, and presidential rooms have average daily rates of **8.05K, 11.32K, 15.12K, and 23.44K**, respectively.
- In comparison to other booking systems, straight offline booking offers a greater Average Daily Rate (ADR).
- **Delhi** has the highest average ratings (**3.78**) and occupancy rate (**60.55%**).
- Of all the booking sources, **40%** come from **other** travel platforms and channels. These are the main sources of reservations and revenue whereas the second best booking source is makeyourtrip (20%). Finally, Direct offline booking contributes the least to bookings and revenue generation, with 5%.
- The majority of reservations and income come from the **Luxury** room category. The largest income contributor is Mumbai City, which is followed by Hyderabad, Bangalore, and Delhi.
- Average ratings and revenue are **correlated** in that higher ratings typically translate into higher revenue.





Recommendations:



- Using dynamic pricing techniques, especially raising prices on weekends and during peak days when demand is high, can help AtliQ Grands to increase revenue generation.
- Differential pricing techniques should be investigated by AtliQ Grands in order to boost bookings and revenue on offline booking platforms. This entails introducing promotions and marketing initiatives that are specifically designed to draw in clients, sometimes from a new market niche.
- AtliQ Grands should pay more attention to client feedback and ratings in order to further raise customer satisfaction. Resolving the important issues raised in these reviews demonstrates a dedication to improving the client experience as a whole.
- Investigating ways to boost direct bookings through the hotel website can help decrease dependency on outside online booking services. To encourage clients to book directly and avoid commission fees, AtliQ Grands may think about providing incentives, special promotions, or other benefits.





End Note:



- By using Power BI for data analysis, important insights into several aspects of managing the AtliQ Grands Hotel have been discovered. The findings and recommendations drawn from this process have the potential to maximize work productivity, improve client happiness, and stimulate income development. The hotel will continue to be successful if important metrics are consistently tracked and analyzed.



THANK YOU!

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