

ALOFT HOTEL



DATA VISUALIZATION FOR ALOFT HOTELS



KPI DASHBOARD

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BUSINESS OBJECTIVE



- Aloft is a company that owns multiple hotel chains across various cities of India
- The Managing director / CEO of Aloft wants to incorporate 'Business and Data Intelligence' to identify and track the source of revenue for Aloft hotels
- Hence, it is decided to develop a KPI Dashboard for Aloft, using May-22 to July-22 data, which can help track its revenue sources and other relevant KPIs across various dimensions
- It'll help the management take strategic business decisions based on the insights generated from the dashboard



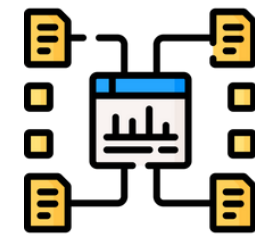
PROBLEM STATEMENT

- Identify the data sources pertaining to revenue management
- Clean and model the data as per requirement for analysis
- Create a revenue dashboard that measures important KPIs
- Relevant filters need to be provided to slice and dice the data
- The dashboard should depict both high level and granular insights

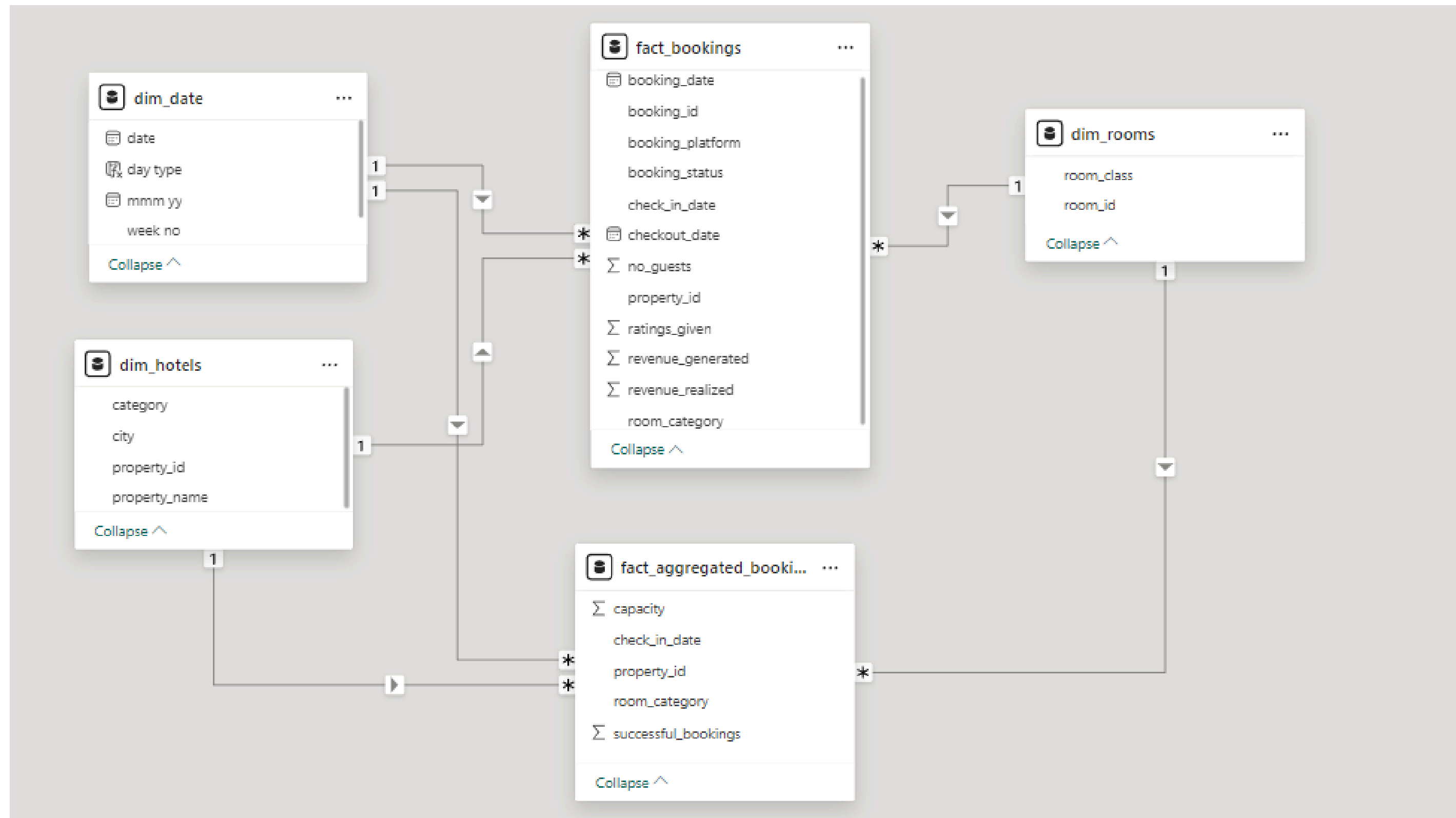


SOLUTION APPROACH

- 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, analysed and transformed as per necessity within Power Query
- The relationships between the tables were created within Model View



DATA MODELLING





MAJOR KPI



A few measures 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
- **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 %)



MAJOR KPI



A few measures were created to measure the KPIs as shown below:

- **RevPAR** - Revenue per available room
- **DSRN** - Daily sellable room nights
- **ADR(Average Daily Rate)** - It is the measure of the average paid for rooms sold
- **DBRN** - Daily Booked Room Nights
- **DURN** - Daily Utilized Room Nights
- **Revenue WoW change %** - To get the revenue change percentage week over week.
- **Revpar WoW change %** - To get the RevPar change percentage week over week.
- **Realisation %** - The succesful checked out percentage over all bookings happened.



DASHBOARD



Filter by City ▼ Filter by room class ▼ Filter by Platform ▼

All ▼ All ▼ 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
1.69bn
↑ 0.2%

RevPar
7,337
↑ 0.2%

DSRN
2528
↑ 0.2%

Occupancy %
57.8%
↑ 0.0%

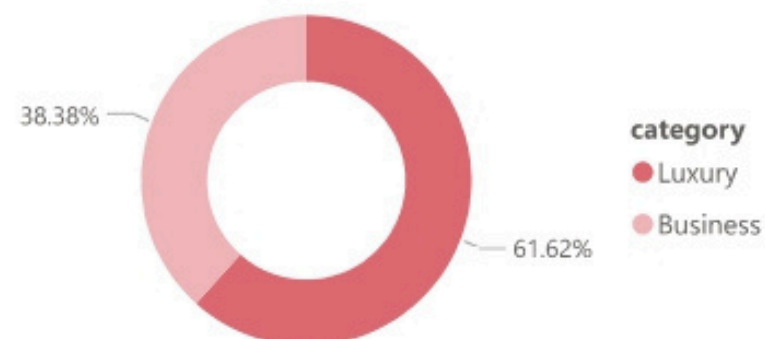
ADR
12.70K
↑ 0.2%

Realisation
70.1%
↓ -0.0%

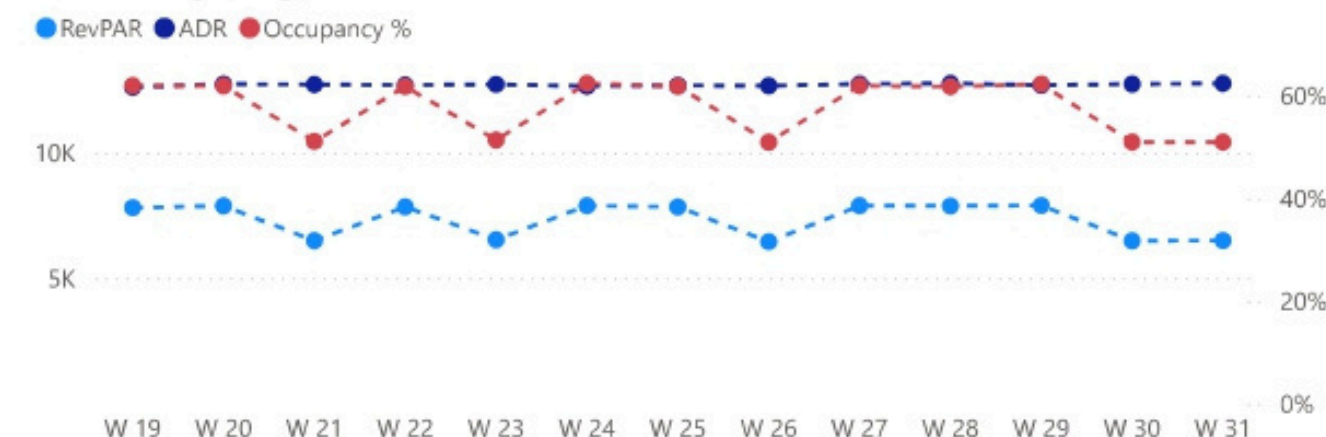
% values in bottom are Week on Week Change

Day Type	RevPAR	Occupancy %	ADR	Realisation %
Weekend	7,972	62.6%	12,725	70.6%
Weekday	7,083	55.8%	12,682	69.9%
Total	7,337	57.8%	12,696	70.1%

% Revenue by category



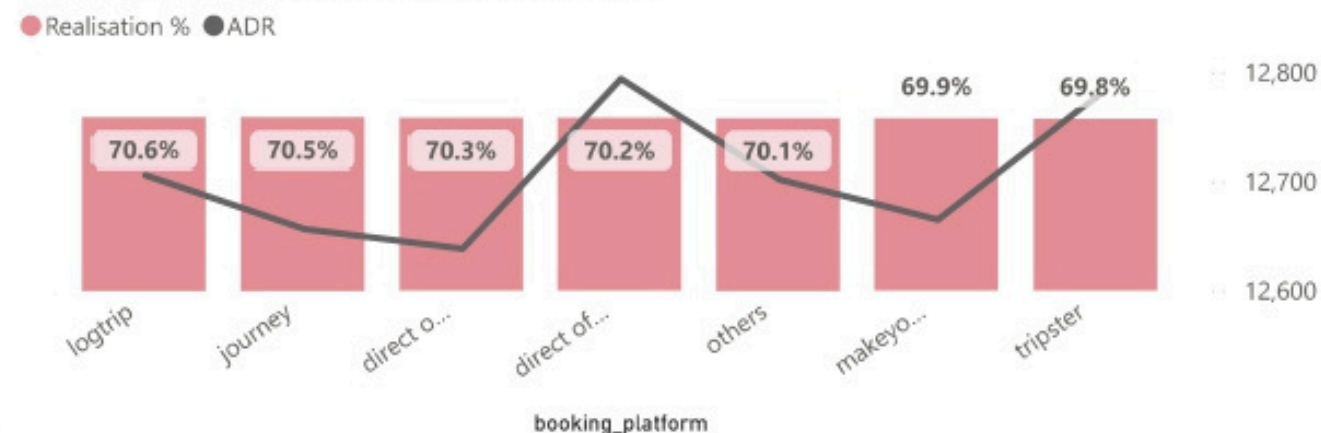
Trend by Key Metrics



Property by Key Metrics

property_id	property_name	city	Revenue	Total Bookings	RevPAR	Occupancy %	ADR	DSRN	DBRN	DURN	Realisation on %	Cancellation %	Average Rating
19558	Atliq Grands	Bangalore	54M	4316	5,527	44.3%	12,468	107	47	33	70.1%	24.5%	2.37
17564	Atliq Seasons	Mumbai	65M	3934	7,397	44.6%	16,597	97	43	31	70.6%	24.8%	2.30
18559	Atliq Exotica	Hyderabad	47M	5192	4,061	44.6%	9,111	128	57	40	70.6%	24.3%	2.33
17562	Atliq Bay	Mumbai	51M	3388	6,803	44.9%	15,167	83	37	26	69.6%	25.4%	2.37
18563	Atliq Palace	Hyderabad	44M	4669	5,014	52.9%	9,480	97	51	36	69.6%	26.0%	3.07
17560	Atliq City	Mumbai	87M	5940	7,763	53.1%	14,629	123	65	45	69.5%	25.1%	3.04
19561	Atliq Blu	Bangalore	72M	5669	6,774	53.2%	12,722	117	62	43	69.8%	24.6%	3.08
18558	Atliq Grands	Hyderabad	46M	4420	5,514	53.4%	10,331	91	49	34	69.7%	25.1%	3.06
16562	Atliq Bay	Bangalore	56M	4762	6,354	53.4%	11,712	88	52	36	69.3%	25.3%	2.87
Total			1688M	132939	7,337	57.8%	12,696	2528	1461	1025	70.1%	24.8%	3.62

Realisation % and ADR by Platform





FEATURES OF DASHBOARD



The following 5 visuals were provided:

- **Revenue by category** = Dough nut chart shows the revenue generated across various room category
- **Realization %** = Bar chart shows the realization % for different type of Platform
- **Key Metric trends** = Line chart shows the trends of key metrics over weeks
- **Average Daily Rate** = Line chart shows the variation of ADR across different booking platform
- **KPI table** = A matrix visual showing the various KPIs across cities and hotels in each city



FEATURES OF DASHBOARD



- A bunch of card visuals were placed in the top left to show the values of important KPIs
- The following filters were provided to slice and dice the data:
 - a. Month
 - b. Week
 - c. City
 - d. Room class
 - e. Booking platform
- The visuals are interactive in nature
- Tooltips pop-up when hovering over a visual for more information about the data point



BUSINESS OUTCOMES



The following are some important business insights derived from the revenue dashboard:

- Mumbai generates highest revenue and Delhi the least revenue during May to Jul 2022. Company need to focus on increasing the revenue in Delhi.
- The occupancy rate is higher during weekends across all cities, months and booking platforms.
Leverage this insight to increase revenue generated during weekends.
- 70% of the bookings are checked out across all cities and booking platforms which means 70% of bookings generate revenue for Aloft hotels. Identify and analyze the reasons for cancellations and try to reduce them.



BUSINESS OUTCOMES



The following are some important business insights derived from the revenue dashboard:

- Avg 60% of rooms are Luxury and 40% are business category while revpar of business category is more than luxury. Focus on business category to increase the overall revenue of company
- Occupancy rate is highest at Delhi with 60+ % for all months though generates least revenue compared to other cities. Identify the reason for higher occupancy and use that to drive the revenue growth.



THANK YOU

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