HOTEL BOOKING ANALYSIS REPORT

Problem Statement

The management of two popular hotels, City Hotel, and Resort Hotel, want to know and gauge the performance of their hotels with respect to some key performance indicators (KPIs) from 2018 to 2020. As the data analyst, I collected all necessary data on the two hotels that will be needed to answer and provide insights into these key performance indicators and help management make important data drive decisions in managing the two hotels.

Objective

To provide answers to management in helping gauge performance, some business-related questions were generated to guide my analysis and derive insights from the data collected. These questions were as follows:
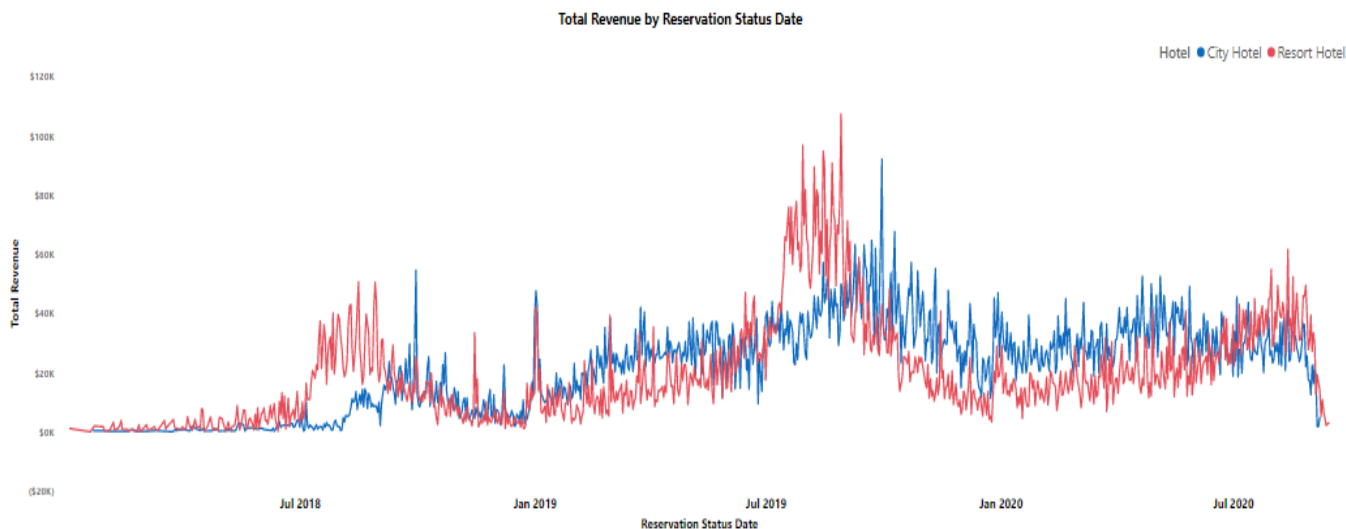
1. What is the total revenue generated by the two hotels from 2018 to 2020?
2. What is the revenue trend of both hotels year on year?
3. What is the total number of nights stayed in both hotels?
4. What is the total revenue of each hotel? What is the percentage contribution of each hotel's revenue with respect to the total revenue of both hotels combined?
5. Should the car parking space of the hotels be increased or not?
6. Which market segment generated more revenue for the two hotels? Which of the two hotels did this market segment record the highest revenue?
7. Which customer type generated the most revenue among the two hotels?

Findings of Analysis

The total revenue generated by the two hotels for the stated period is **$39,250,000**.
The revenue trend for both hotels showed that revenue for City Hotel showed a **1,150.55%** increase and Resort Hotel a **178.79%** increase. Both saw an upward trend between Tuesday, January 2, 2018, and Monday, September 14, 2020.
The most recent revenue anomaly was on Monday, August 17, 2020, when the Resort Hotel had a high of **$52,311.42**. Revenue for City Hotel started trending down on Wednesday, April 1, 2020, falling by 84.86% (**$26,696.41**) in **5.20** months.

Total Revenue by Reservation Status Date

Of the total revenue generated by both hotels, City Hotel generated a revenue of **$20,479,991.11** which accounted for **52.18%** of the total revenue. Resort Hotel generated a revenue of **$18,772,038.99** which accounted for **47.82%** of the total revenue. This showed that City Hotel generated the highest revenue of the two hotels from 2018 to 2020.

Revenue by hotel
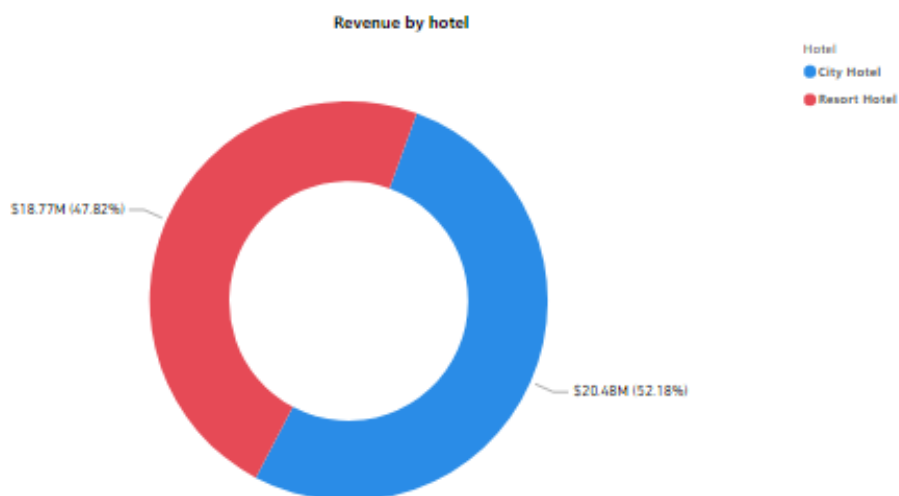
The total nights stayed for both hotels for the period of this analysis stood at **367,780**. Out of this total, City Hotel recorded a total night stay of **187,360** representing **50.94%**. Resort Hotel recorded a total night stay of **180,420** representing **49.06%**.

Both City Hotel and Resort Hotel operate in ten different countries namely; Portugal (PRT), Great Britain (GBR), France (FRA), Spain (ESP), Germany (DEU), Ireland (IRL), Italy (ITA), Belgium (BEL), Netherlands (NLD), Brazil (BRA). The total night stay for each hotel in these countries was compared to find out which of the two hotels had the most stays.

At **107719**, Portugal (PRT) had the highest total night stay and was **1,327.31%** higher than Brazil (BRA), which had the lowest Total Night Stay at **7547**. Of the total night stay recorded for both hotels in Portugal, Resort Hotel had the highest total night stay of the two, with a total night stay of **65,769** compared to **41,950** for City Hotel.
Across all 10 countries, total night stay ranged from **7547** to **107719**.

Total Night Stay by Hotel & Country
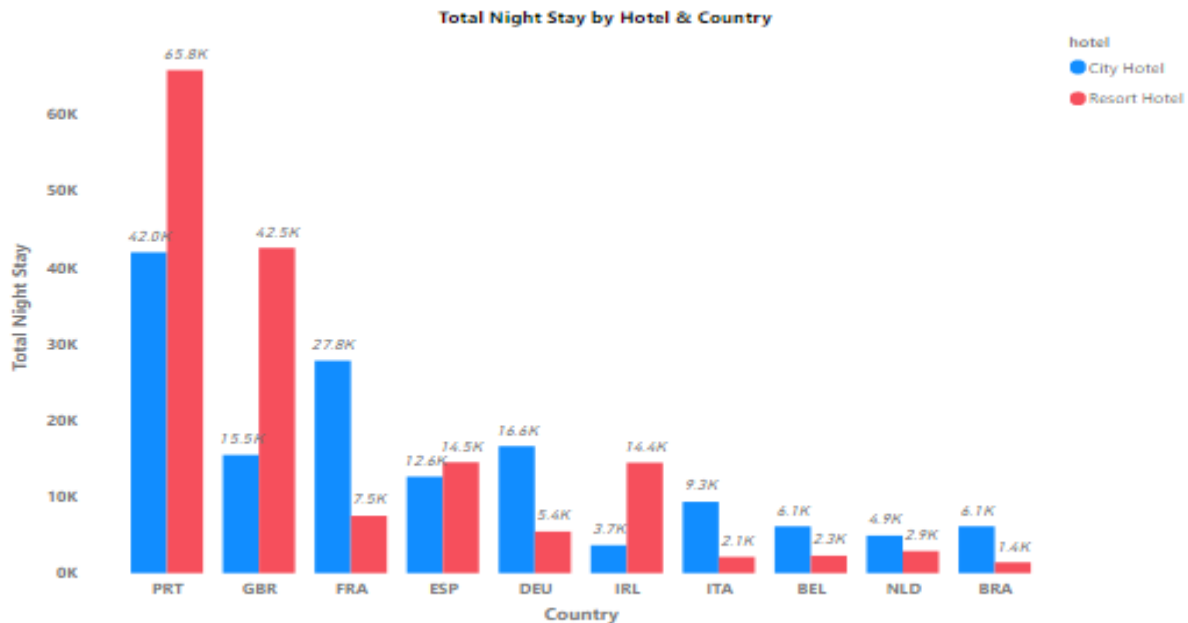
Management of the two hotels wanted to make plans to increase the car parking space for both hotels but needed sights from the data to aid in making the final decision. To better aid management in making their decision, an analysis was done to determine the total required car parking space for each hotel for each year from 2018 to 2020 and the corresponding percentage increase.

In 2018, City Hotel recorded a total required car parking space of 185 representing a 0.95% increase, Resort Hotel recorded a total required car parking space of 1098 representing a 3.43% increase.

For 2019, the total required car parking space of City Hotel was 1384 representing a 1.29% increase, while Resort Hotel had a total required car parking space of 3777 representing a 3.80% increase.

In 2020, City Hotel recorded a total required car parking space of 185 representing a 0.95% increase, Resort Hotel recorded a total required car parking space of 1098 representing a 3.43% increase.

Of the two hotels, Resort Hotel had the highest total required car parking space which can only mean Resort Hotel had the most visits or bookings. Therefore, if there should be a planned increase in car parking space in any of the two hotels, it should be for Resort Hotel.

Year	hotel	Total Revenue	Total Required Car Parking Space	Parking Percentage
2018	City Hotel	$1,759,171.01	185.00	0.95%
2018	Resort Hotel	$3,180,534.25	1,098.00	3.43%
2019	City Hotel	$11,251,293.33	1,384.00	1.29%
2019	Resort Hotel	$9,681,389.68	3,777.00	3.80%
2020	City Hotel	$7,469,526.77	532.00	0.88%
2020	Resort Hotel	$5,910,115.06	1,716.00	3.51%
Total		$39,252,030.10	8,692.00	2.36%

Both Hotels recorded an average percentage increase of 2.36% from 2018 to 2020.

The market segments from which the hotels generated revenue from were captured into 8 categories. These categories were;

1. Online TA

2. Offline TA/TO

3. Direct

4. Groups

5. Cooperate

6. Aviation

7. Complementary

8. Undefined

Of the eight market segments, Online TA recorded the highest revenue of $24,537,001.80. Of the two hotels, City Hotel made the highest total revenue of $14,611,394.50

from this market segment. Resort Hotel made a total revenue of $9,925,606.58 from this market segment. The market segment which recorded the lowest or least revenue was a segment

categorized as undefined with total revenue of just $96.00 for City Hotel. This must be an anomaly and will have to be investigated further.

Revenue by Hotel & Market Segment
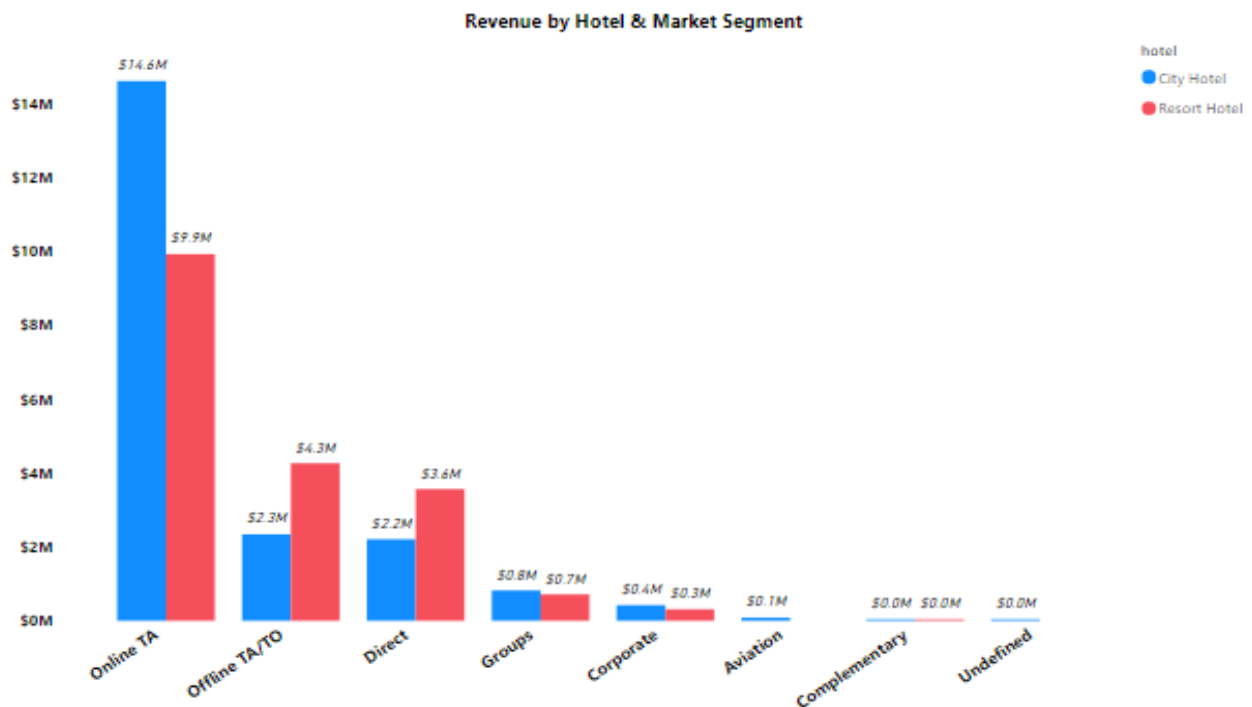
Apart from the categorization of the hotels market segment, guests or customers who booked and stayed at the two hotels were also categorized into four customer types. These customer types were;

1. Group

2. Contract

3. Transient

4. Transient-Party

Each of these guests or customer types contributed to the revenue made by the hotels. For each hotel, from 2018 to 2020 management wanted to know how much revenue was made with respect to each of the guests or customer types.

For the two hotels, transient guests generated the most revenue, meaning most bookings were made by that guests or customer type. Transient guests are guests who book at non-group and non-negotiated rates. They typically book short stays within a relatively small booking window and may be travelling for either business or leisure purposes. Meaning they may book a few days in advance, be walk-in guests or book same-day online reservations.

For City Hotel, transient guests generated a total revenue of $17,185,270.62 making up 83.91% of the hotel's total revenue. This was followed by transient-party guests who generated a total revenue of $2,270,274.99 making up 11.09%, contract guests generated $930,151.46 making up 4.54% and group guests generated $94.294.04 making up 0.46%.

For Resort Hotel, transient guests generated a total revenue of $15,385,411.59 making up 81.95% of the hotel's total revenue. This was followed by transient-party guests who generated a total revenue of $1,835,680.56 making up 9.78%, contract guests generated $1,470,865.31 making up 7.84% and group guests generated $80,081.53 making up 0.43%.

Apart from the contract guests, which generated less revenue for the City Hotel as compared to Resort Hotel, all other guests or customers types for City Hotel generated more revenue than the guests or customer types for Resort Hotel.
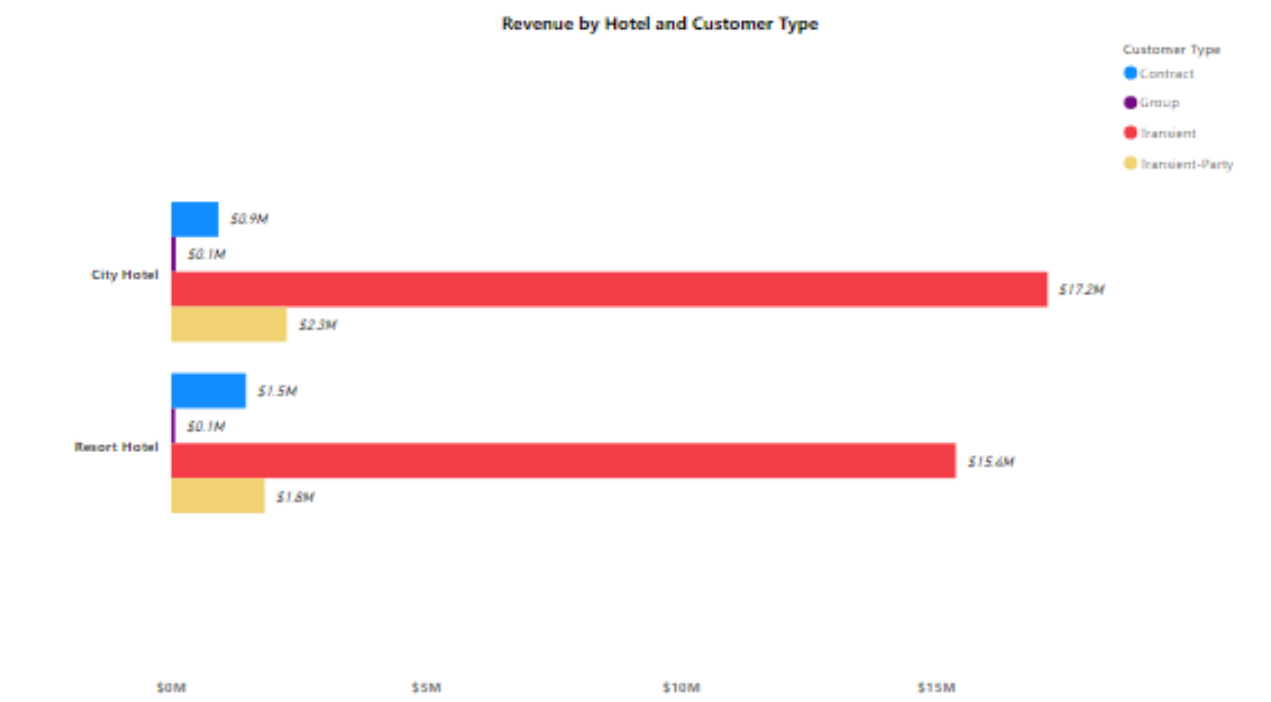
Conclusion

Both City hotel and Resort Hotel generated significant revenues from 2018 to 2020. The highest revenue was generated by City Hotel which accounted for **52.18%** of the total revenue generated from the two hotels (**$39,250,000**).

The total nights stayed in both hotels was **367,780.** Of this figure, the total nights stayed was analysis further to determine which of the two hotels had the highest total nights stayed with respect to the countries they operated in. The two hotels operated in ten countries, with Portugal recording the highest total nights stayed of **107,719**. Of this total, Resort hotel had the highest total nights stay of **65,769** making **61.06%** and City Hotel recorded **41,950** making **38.94%** of

the total nights stayed for both hotels in that country. The Resort Hotel in Brazil had the least total nights stayed with as low as **1,417.** City Hotel recorded its lowest total nights stayed in Ireland with as low as **3,652.**

Recommendation

In deciding which of the two hotels required an expanded car parking space, it is recommended that the car parking space of the Resort Hotel be expanded as they had the highest required total car parking space of the two hotels year on year for the period of this analysis.

From the analysis, the market segment of the hotel that generated the most revenue for both hotels were the online segment with City Hotel generating the most revenue from this segment. It is advised that the management of the hotels intensify their online presence through social media campaigns and advertisements. Management should also invest in the following;

1. Maximizing the online experience of their guests and potential customers by enhancing the user interactivity of their booking websites.

2. Introduce discounts on rates for their high value (revenue generating) guests and customers.

3. Introduce promotions for their frequent guests or customer type (Transient) but most importantly for the least revenue generating customer type (Group).

4. Increase the quality of service (rooms and amenities) on offer to the group customer category to boost the revenue generated for the customer segment or type.