

Hotel Booking Analysis

The objective of this document is to analyze and find important KPIs from our dataset. We begin with a comprehensive understanding of the dataset required for the analysis.

MECE BREAKDOWN OF KEY INSIGHTS

Once we loaded, cleansed, modelled and Analyzed the data, we could now proceed to observe and define important KPIs required to derive data-driven decision making.

KPIs could be of many possibilities and of different types, in order to detect some of the important one we first classify the types of KPIs and then select the relevant KPI as per our context.

1. Quantitative KPIs
2. Efficiency metrics.
3. Top performers.
4. Statistical.
5. Underperformers.

(These MECE breakdown is defined with the help of data available to analyze, although there are many more aspects in business process for instance financial, sustainability impact, resource specific. However these were not included since we didn't have the required data.)

Once we have divided our expected and required KPIs classifications we could now define some of the KPIs.

Quantitative

Quantitative KPIs includes all the basic metrics, which gives us the overview of the current situation of the business or bookings.

The following can be some of the examples of it.

1. Number of total bookings.
2. Number of bookings that were not cancelled.

3. Total number of bookings from existing customer's.
4. Number of bookings/month.

Efficiency metrics

After getting an overview of current situation of business we could now analyze metrics that defines the efficiency of hotel bookings.

For instance,

1. Average awaiting days.
2. Total special requests.
3. Number of customer who required a parking space.
4. Preferred room type.
5. Total Refundable deposits.

These metric either directly or indirectly improves the hotel efficiency to handle customer requirement and to deliver excellent customer experience.

Top performers

These numbers can be key to analyze the performance, opportunities and focus on the key aspect of business. For instance, if there is any special occasions or vacations, the top performing branches could be given more priority and made ready for all the upcoming demand.

Let us define some of the metrics

1. Top 3 countries to have highest bookings.
2. Which customer_type has the maximum bookings.
3. Market segment with maximum bookings.
4. Top 100 Customers who have highest bookings.

The top performers help us realize what are our strengths and where should be our focus remain. Now we could further enhance our understanding and uncover major insights using statistical analysis.

Statistical

Statistical measurements are important part of any research and analyzation, these statistics help us recognize any major variation or anomalies. Some of the KPIs are

1. Standard deviation of booking through a year.

2. Average lead time.
3. Co-relation between month and bookings.
4. Co-efficient of variance for number of days reserved.
5. Skewness of number of bookings throughout the year.

These are important to take data-driven decision and also to infer future predictions

Underperformers

These numbers give us data about aspects of improvements or underperformance, which can be crucial to detect the factors affecting the overall performance and take necessary actions,

some of the aspects of negative readings are,

1. Number of reservations that were cancelled.
2. Market segment with Lowest booking.
3. Number of customers who didn't showed up.
4. Churn rate.
5. Max Await time.
6. Country with lowest booking.

Conclusion

These KPI's can be some of the indicators of performance of a hotel booking company based on the data which was used to analyze, these KPIs can be picked depending upon the need of problem statement and predictions requirements.

KPIs can be redundant and specific, but the aspect of this document is to exhaustively define different types of KPIs and their application.

With the help of this analysis one can development more ambience indicator combining or deriving from some of basic KPIs.