10Alytics
data & strategy

SUNSHINE RESORT
Case Study

BACKGROUND

Sunshine Resort is a luxurious beachfront hotel management company that caters to leisure and business travelers alike. As part of its commitment to exceptional customer service and continuous improvement, the hotel management team wants to gain deeper insights into their reservation data. To achieve this, they have collected and organized data related to bookings, cancellations, customer preferences, and revenue.

Objective: The resort they aims to gain actionable insights and data-drivenrecommendations to enhance guest experiences, optimize hotel operations, and maximize revenue.

Data Dictionary

hotel: Type of hotel (e.g Resort Hotel).

is_canceled: Binary variable indicating if the reservation was canceled (0 = Not canceled, 1 = Canceled).

lead_time: Number of days between the booking date and the arrival date.

arrival_date_year: Year of arrival date.

arrival_date_month: Month of arrival date.

arrival_date_week_number: Week number of the arrival date.

arrival_date_day_of_month: Day of the month of the arrival date.

stays_in_weekend_nights: Number of weekend nights (Saturday or Sunday) the guest stayed.

stays_in_week_nights: Number of weeknights (Monday to Friday) the guest stayed.

adults: Number of adults included in the reservation.

children: Number of children included in the reservation.

babies: Number of babies included in the reservation.

meal: Type of meal booked (e.g., Bed and Breakfast).

Data Dictionary

country: Country of origin.

market_segment: Market segment designation (e.g., Direct).

distribution_channel: Distribution channel designation (e.g., Direct).

is_repeated_guest: Binary variable indicating if the guest is a repeated guest (0 = Not repeated guest, 1 = Repeated guest).

previous_cancellations: Number of previous bookings that were canceled.

previous_bookings_not_canceled: Number of previous bookings that were not canceled.

reserved_room_type: Code of the room type reserved.

assigned_room_type: Code of the room type assigned.

booking_changes: Number of changes made to the booking.

deposit_type: Type of deposit made for the reservation.

agent: ID of the travel agency making the booking.

company: ID of the company/entity making the booking.

days_in_waiting_list: Number of days the booking was on the waiting list.

customer_type: Type of booking (e.g., Transient).

adr: Average daily rate (price per room).

required_car_parking_spaces: Number of car parking spaces required by the guest.

total_of_special_requests: Number of special requests made by the guest.

reservation_status: Reservation status (e.g., Check-Out).

reservation_status_date: Date when the reservation status was set.

ANALYSIS

1. How many customers are in the hotel resort database?

2. What is the average length of stay for guests at Sunshine Resort for weekend and weekday nights?

3. What is the distribution of guests by country?

4. How many customers come through agents?

5. Which months experience the highest number of bookings?

6. Which room types are most frequently reserved by guests at Sunshine Resort?

7. How often do guests make changes to their bookings, and what types of changes are most common?

8. Do guests who make more changes tend to have longer or shorter stays?

9. What are the preferred type of deposits usually made?

10. How many visitors are repeated guests?

11. Filter Dashboard by hotel column and/or customer type