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Module 2: Occupancy & Revenue Metrics

1. Introduction

Module 2 focuses on evaluating hotel performance using key occupancy and revenue metrics. This module analyzes how efficiently hotel rooms are utilized, how effective the pricing strategy is, and how well revenue is generated over time.

By using industry-standard KPIs such as Occupancy Percentage, Average Daily Rate (ADR), and Revenue per Available Room (RevPAR), along with detailed trend and booking channel analysis, this module supports data-driven revenue and operational decision-making.

2. Data Tables Used

2.1 TblBooking

The *TblBooking* table contains booking-level and stay-date details, including:

- BookingID, CustomerID, RoomTypeID, BranchID
- Check-in and Check-out dates
- StayDate, Weekday, and Day Type (Weekday / Weekend)
- Revenue and DayRevenue

Usage:

This table is used for daily-level performance analysis, weekday vs weekend occupancy comparison, and booking behavior analysis.

2.2 TblCalculation

The *TblCalculation* table is a derived calculation table created to support KPI computation and time-based analysis.

It includes:

- Room Booked count
- Total Rooms available
- Occupancy %
- ADR
- RevPAR
- Month, Quarter, Week, Season, and Day Type

Usage:

This table supports daily, weekly, monthly, seasonal, and quarterly trend analysis, as well as KPI reporting.

Dax Formula :-

TBL _ Calculation table formulas

TotalRevenue =

```
CALCULATE(
    SUM(TblBookings[DayRevenue]),
    FILTER(TblBookings, TblBookings[StayDate] = tbl_Calculation[StayDate])
)
```

```
Season = SWITCH(
    TRUE(),
    MONTH([StayDate]) IN {12, 1, 2}, &quot;Winter&quot;,
    MONTH([StayDate]) IN {3, 4, 5}, &quot;Spring&quot;,
    MONTH([StayDate]) IN {6, 7, 8}, &quot;Summer&quot;,
    MONTH([StayDate]) IN {9, 10, 11}, &quot;Autumn&quot;,
)
```

```
Season = SWITCH(
    TRUE(),
    MONTH([StayDate]) IN {12, 1, 2}, &quot;Winter&quot;,
    MONTH([StayDate]) IN {3, 4, 5}, &quot;Spring&quot;,
    MONTH([StayDate]) IN {6, 7, 8}, &quot;Summer&quot;,
    MONTH([StayDate]) IN {9, 10, 11}, &quot;Autumn&quot;,
)
```

Weekday = FORMAT([StayDate], "dddd")

Week = WEEKNUM([StayDate])

MonthStart = DATE(YEAR([StayDate]), MONTH([StayDate]), 1)

Month = FORMAT([MonthStart], "MMMM")

Quarter = "Q" & FORMAT([StayDate], "Q") & " "
& FORMAT([MonthStart], "YYYY")

2.3 MasterData

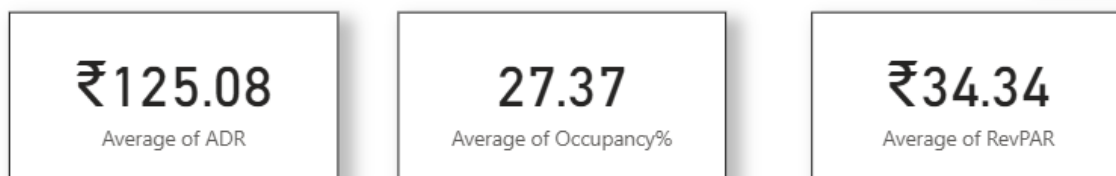
The *MasterData* table contains aggregated monthly performance information such as:

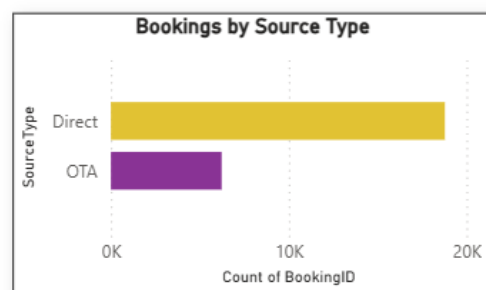
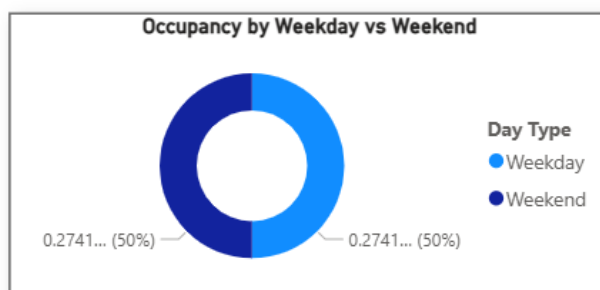
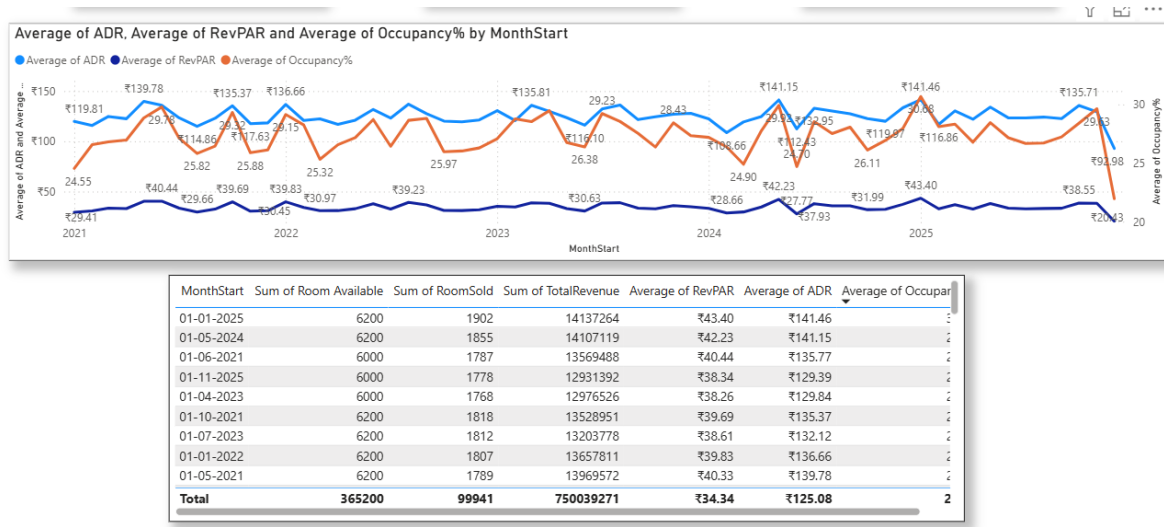
- Room Available and Room Sold
- Monthly Occupancy %
- ADR and RevPAR
- Total Revenue
- Month and Year details

Usage:

This table is used for monthly and year-wise performance analysis and long-term revenue evaluation.

Visualization & Analysis (Output)





The analysis is presented using an interactive Power BI dashboard.

- KPI cards display Average Occupancy %, Average ADR, and Average RevPAR for quick performance assessment.
- Line charts analyze daily, weekly, seasonal, and quarterly trends, helping identify peak periods and demand fluctuations.
- A weekday vs weekend occupancy comparison highlights demand variation across different day types.
- Booking source analysis compares Direct and OTA bookings, helping evaluate channel dependency.
- Monthly and yearly performance trends support long-term revenue and capacity planning.

Insights and Learning from Module 2

- Occupancy %, ADR, and RevPAR together provide a comprehensive view of hotel performance.
- Weekday vs weekend analysis reveals demand behavior patterns useful for pricing and staffing decisions.
- Trend analysis highlights seasonality and recurring demand cycles.
- Channel comparison identifies opportunities to reduce commission costs.
- Aggregated monthly data enables accurate long-term performance evaluation.

Conclusion

Module 2 establishes a strong analytical foundation by integrating booking-level, stay-level, and aggregated performance data. By combining KPIs, trend analysis, and booking channel insights, this module supports data-driven pricing, demand forecasting, and revenue optimization decisions.