# AbsentData Hotel Data Analysis

Server used: MS SQL Server Developer

Client/GUI used: MS SQL Server Management Studio (SSMS)

Dataset used: https://www.absentdata.com/hotel\_revenue\_historical\_full/

File Ref: hotel\_revenue\_historical\_full.xlsx

Data Viz Tool used: Power BI Desktop

The Goal:

Develop a Database to Analyze and Visualize Hotel Booking Data and Trends

We need to prepare a dashboard using Power BI for presenting the KPIs to the stakeholders.

The Requirements:

Given below are some of the requirements from the stakeholders

"Is our hotel revenue growing by year?"

Suggestion: We have two hotel types so it might be a good idea to analyze the revenue by hotel types.

"Should we increase our parking lot size?"

Suggestion: We want to understand if there is a trend in guests with personal cars

"What are the other trends that we can see in the data?"

Suggestion: We can focus on the average daily rate and guests to explore seasonality.

If possible, project analysis with respect to Country and Customer Segments.

Data Analysis Project Pipeline:

Given below are the steps of the project pipeline:

**Step 1:** We need to build a Database from the spreadsheet dataset using MS SQL Server Management Studio (SSMS) & MS SQL Server Developer

File Ref: hotel\_revenue\_historical\_full.xlsx

**Step 2:** We need to make use of SQL queries to analyze and retrieve the required data within SSMS.

SQL Script File Ref: AbsentData\_Hotel\_Data\_Analysis\_SQL\_Script.sql

**Step 3:** Connect Power BI to the built database via the “Get Data 🡪 SQL Server” option

**Step 4:** Visualize to get more insights into the major questions asked by the Stakeholders.

**Step 5:** Summarize the findings in a Top-Level Dashboard for presenting to the Stakeholders.

For further details please refer to the below mentioned files

File Ref: AbsentData\_Hotel\_Data\_Analysis.pbix

File Ref: AbsentData\_Hotel\_Data\_Analysis.pdf

Lessons Learnt:

1. Building a SQL database from a spreadsheet using the Import Data option in SSMS.
2. Analyze and retrieve data within SSMS to briefly check the stakeholder requirements.
3. Connecting Power BI to the built SQL database via the “Get Data 🡪 SQL Server” option
4. Building various visuals that give insights to the stakeholder requests.
5. Building a Top-Level Dashboard for presenting the KPIs along with contextual views to support the KPIs.