



Kampus
Merdeka
INDONESIA JAYA

Kampus Merdeka

Capstone Project

Prepared and presented by



TEAM 9

Inovatif & Kolaboratif



Hotel Bookings

Dataset





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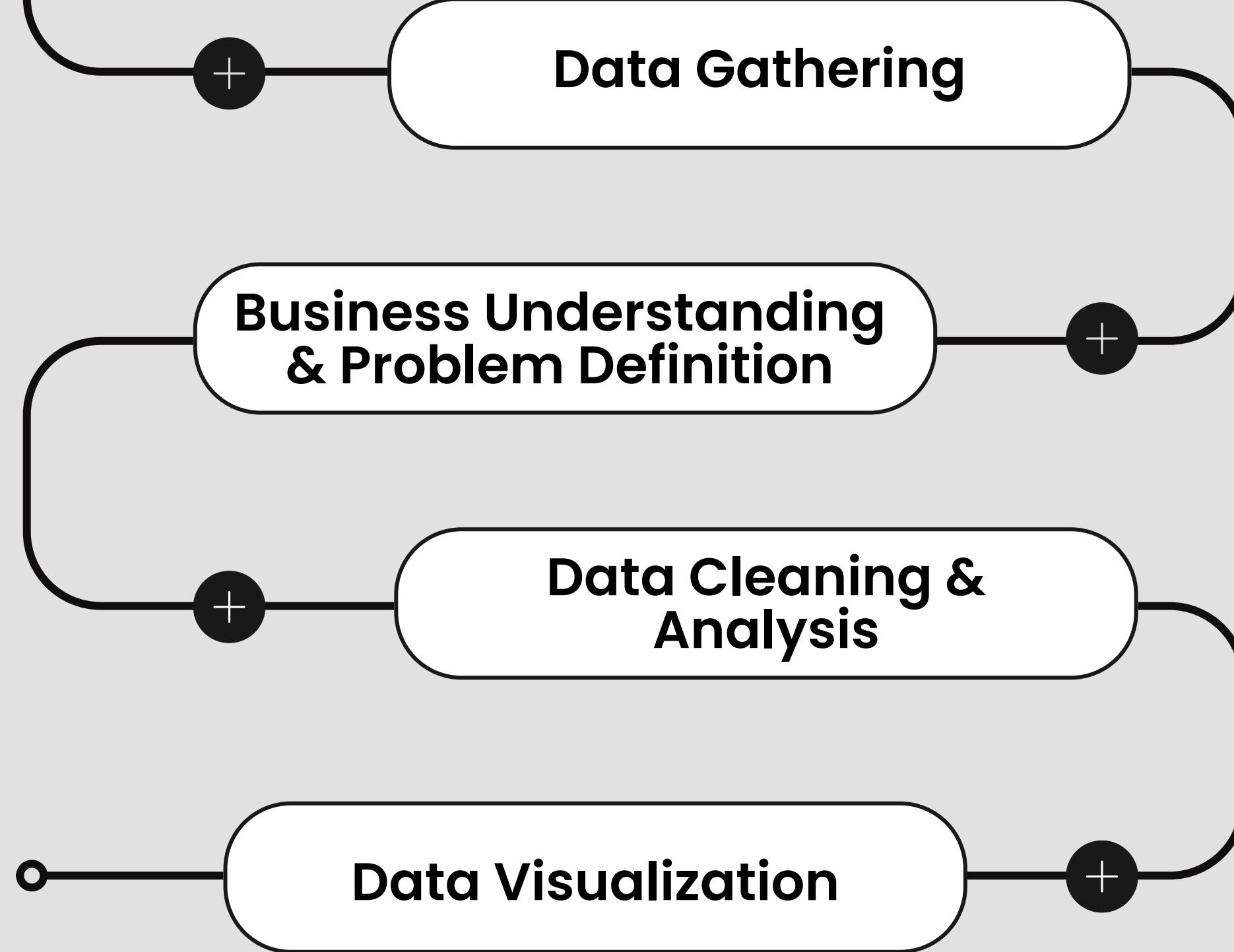
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Data Communication



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Data Communication

Process



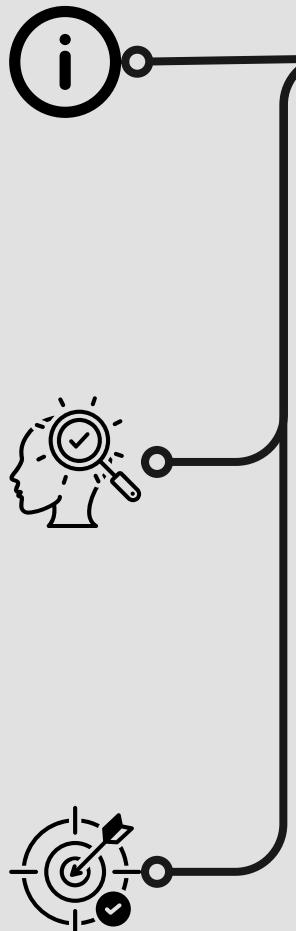


Project Background

A hotel is an establishment that provides lodging. The business process of a hotel is to **attract** and **retain** guests optimally.

Understanding **occupancy rates**, **distribution channels**, and **all about customers** from a business standpoint are important.

This project focuses on analyzing **hotel booking demand** in city hotel at **Lisbon, Portugal**.





Project Goals

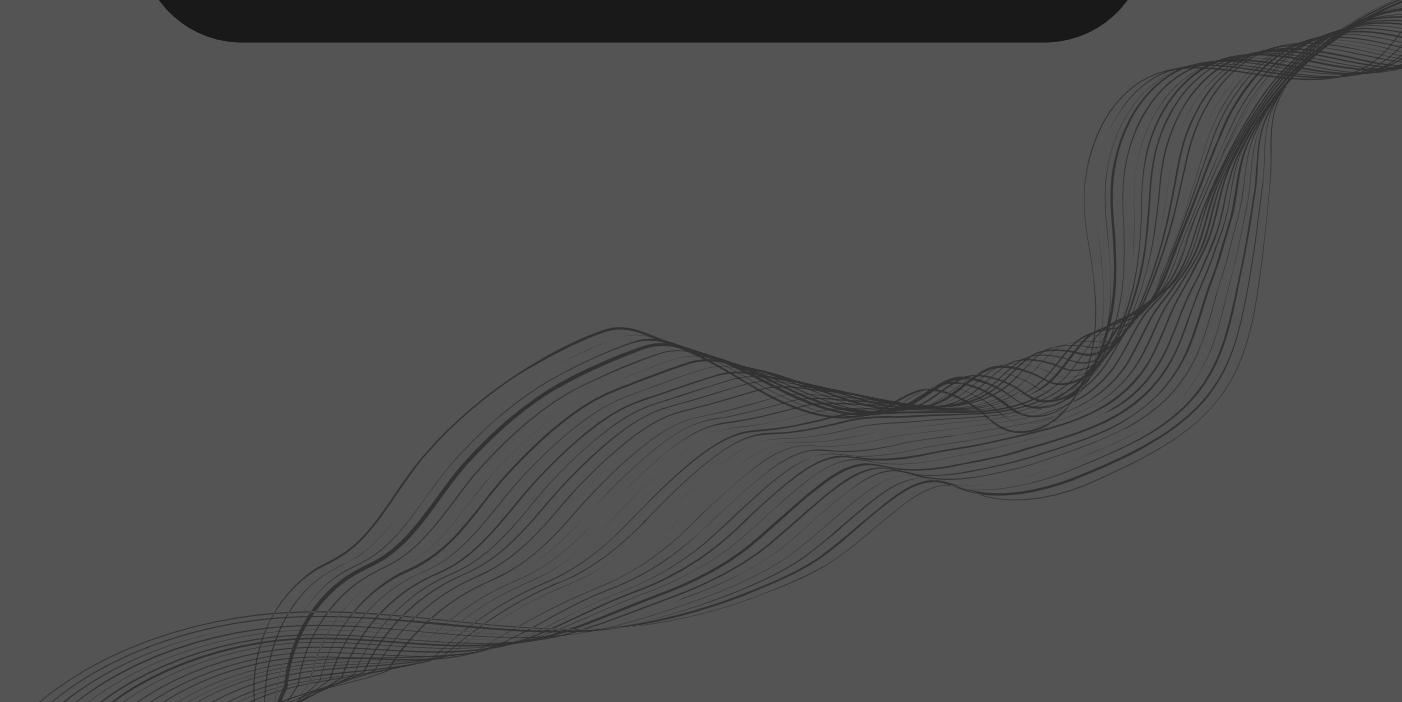
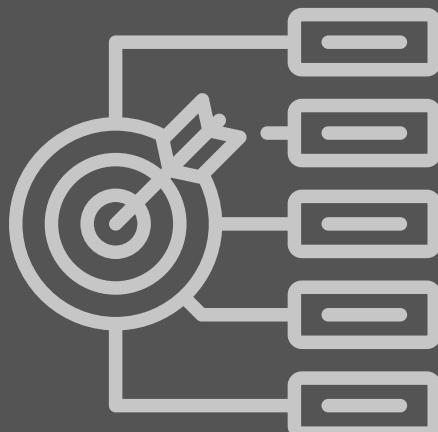


Objective

The goal is to optimize occupancy rates city hotel in September 2017.

Project Scope

Focusing on key aspects such as booking transactions, guest segmentation, and reservation details.





Business Questions

01 How much the occupancy rate have grown between September 2016 and September 2017?

02 What are the top 5 countries that visited the city hotel in September 2016?

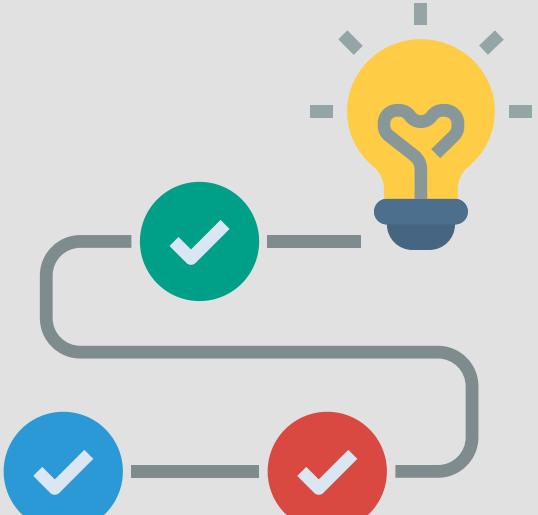
03 What are the top 5 distribution channels, customer type, and booking packages in September 2016?



Problem Statement

Increasing occupancy rate by **6%** in September 2017.

Methodology



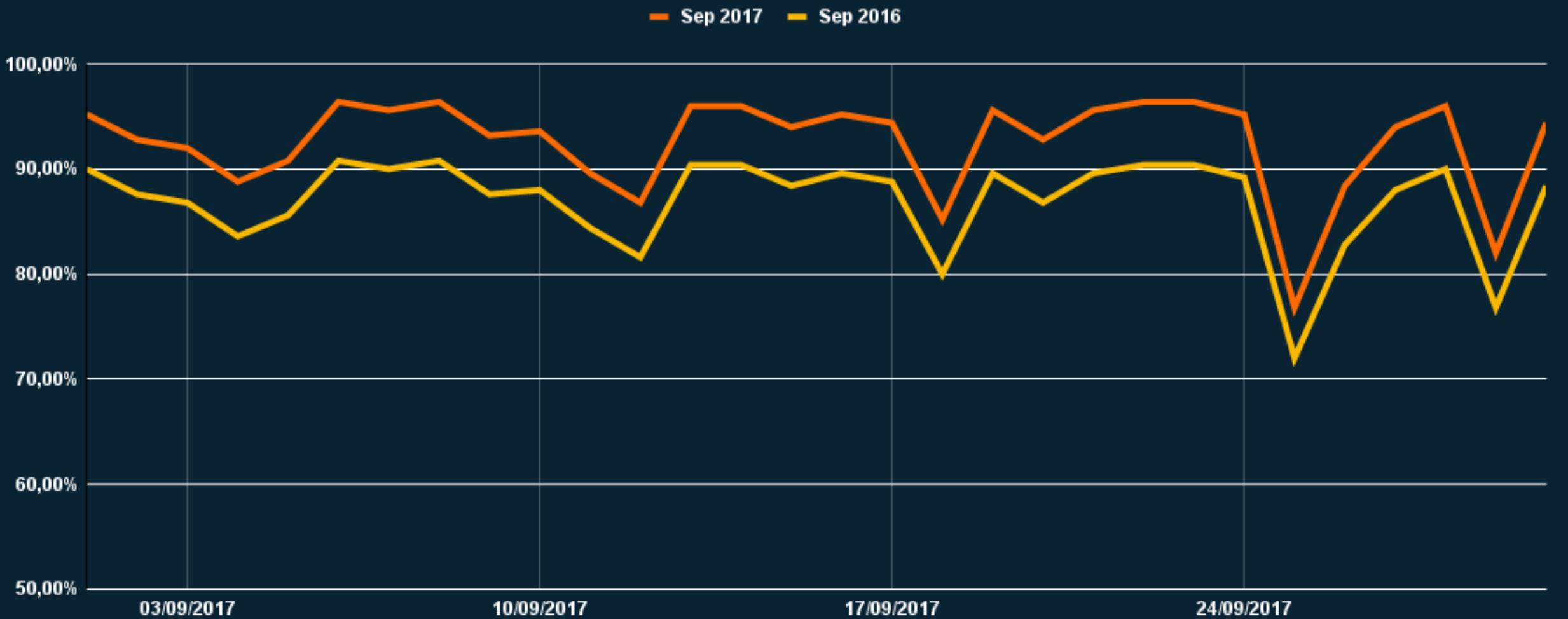
**Using historical data to predict Occupancy Rate in
September 2017**





Occupancy Rate Growth Comparison: September 2016 vs. September 2017

Occupancy Rate Grow



Based on the analysis results, it is shown that the City Hotel's **occupancy rates** are projected to **improve significantly** in **September 2017 compared to September 2016**, with an **average increase of 6%**.



Calculation of Occupancy Rate

Average occupancy
rate September 2016

86,59%

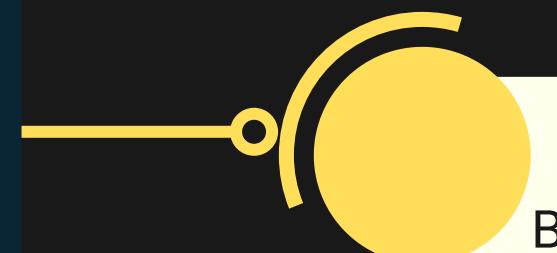
Predict average
occupancy rate
September 2017

92,52%

The difference

92,52% - 86.59%

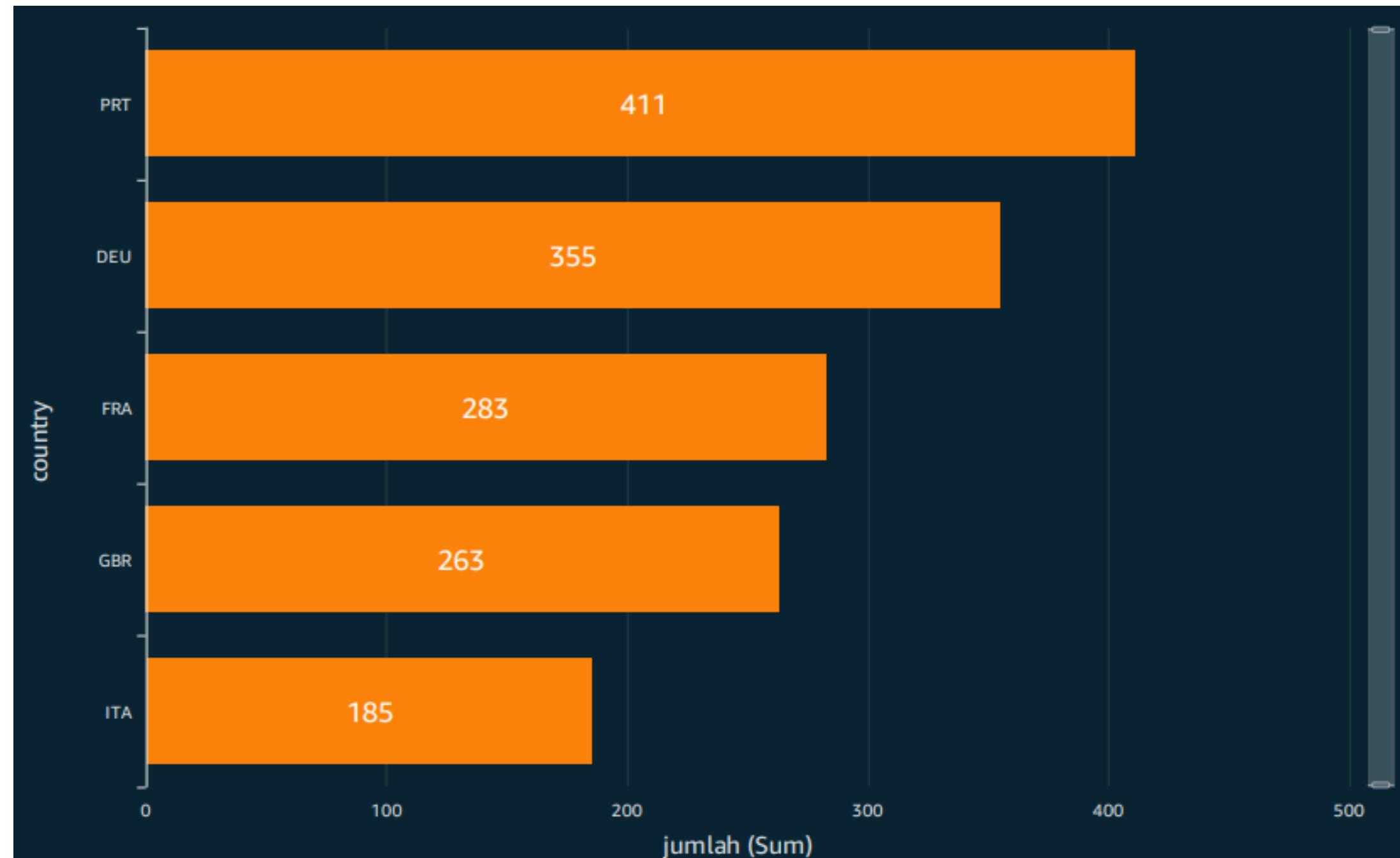
5.57% -> 6%



Based on this calculation, we
round up the difference to **6%**.
So our **goal** is to **increase the
occupancy rate in September
2017 by 6%**



Top 5 Countries Visiting the City Hotel in September 2016



Based on the analysis results, the **top 5 countries visiting** the City Hotel in **September 2016** were **Portugal (411), Germany (355), France (283), United Kingdom (263), and Italy (185)**.



Top Distribution Channel Based on Country in September 2016

Country	Distribution Channel	jumlah
DEU	TA/TO	322
FRA	TA/TO	268
PRT	TA/TO	239
GBR	TA/TO	235
ITA	TA/TO	178



Based on this table, it can be observed that in **September 2016**, **guests** from various countries **made bookings** at City Hotel through travel agents and tour operators.



Top Booking Package Based on Country and Customer Type in September 2016

Country	Customer Type	Booking Package	Total
PRT	Transient	BB	241
GBR	Transient	BB	172
DEU	Transient	BB	139
FRA	Transient	BB	136
ITA	Transient-Party	HB	127

Based on this table, it can be observed that **most guests** from **Portugal, the United Kingdom, Germany, and France** prefer **the bed and breakfast (BB) package**, while guests from **Italy** prefer **the half board (HB) package**.

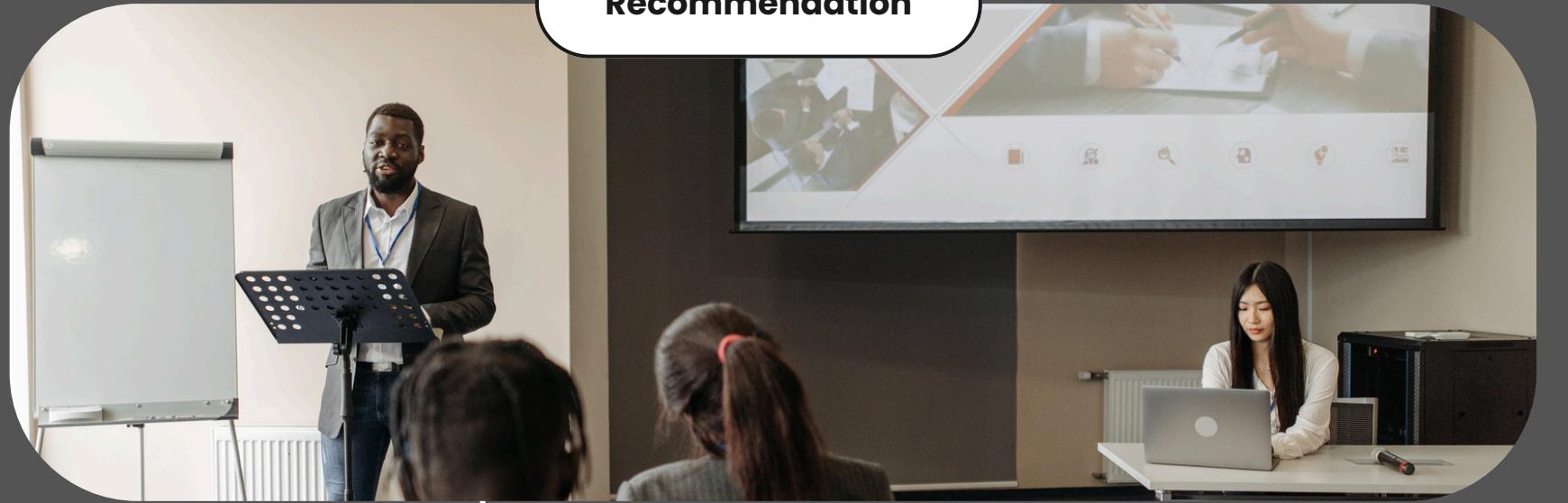
Transient: Individual guests booking short stays.
One or two nights

Transient Party: A group of transient guests **booking together**, such as friends, family, or colleagues, for short stays. **One or two nights**

Conclusion

- The City Hotel is expected to see a **6% increase in occupancy rates** in September 2017 compared to the previous year, indicating revenue hotel also increased.
- Based on the analysis results, **Portugal, Germany, France, the UK, and Italy** are the top countries that visited City Hotel.
- Based on the analysis results, **Portugal, the UK, Germany, and France** are the countries with the highest number of **transient guests** with the majority of them preferring **BB packages** (Bed and Breakfast).
- Meanwhile, guests from **Italy** are mostly **transient parties** who prefer the **HB package** (Half Board).

Recommendation



01 Implement targeted discount campaigns

02 Enhance partnerships with TA/TO

03 Improve the hotel's website

04 Create targeted advertising campaign

Recommendations





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Appendix

kaggle



Source :
<https://www.kaggle.com/datasets/jessemostipak/hotel-booking-demand/data>



Source :
https://github.com/Rr-Diajeng/capstone_revou





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Thank You



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Cendekian RevoU 2024

