Hotel bookings in Portugal Project

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Description of the dataset

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Building dashboard to present data insights to benefit the Vinpearl operation teams

About the dataset

Transaction
Reservation date, arrival date of each booking, reservation status: Canceled, Check-Out, Other

Market segments
Market segment designation: Travel Agents/Tour Operators

Distribution channel
Booking distribution channel.

Customer Profile
Nationality, No of adults/ children/ babies, repeated customer,...

Booking information of City Hotel and Resort Hotel

EDA Process Using Python

Import Libraries

importing libraries required for performing EDA: pandas, datetime

Load dataset

Read the data from CSV file into a Pandas DataFrame

Check datatype

Check datatype of each column

Modify wrong datatype

- Modify some column datatype: reservation_status_date, children, agent, country

- Merge 3 column to arrival_date

Check missing value

Check null value of each column

Replace missing value

Fillna in column: country

Visualization: LINK

Booking insights

Some hotel metrics and customer profile.

Market segment

Main market segments using in 2 hotels in Portugal
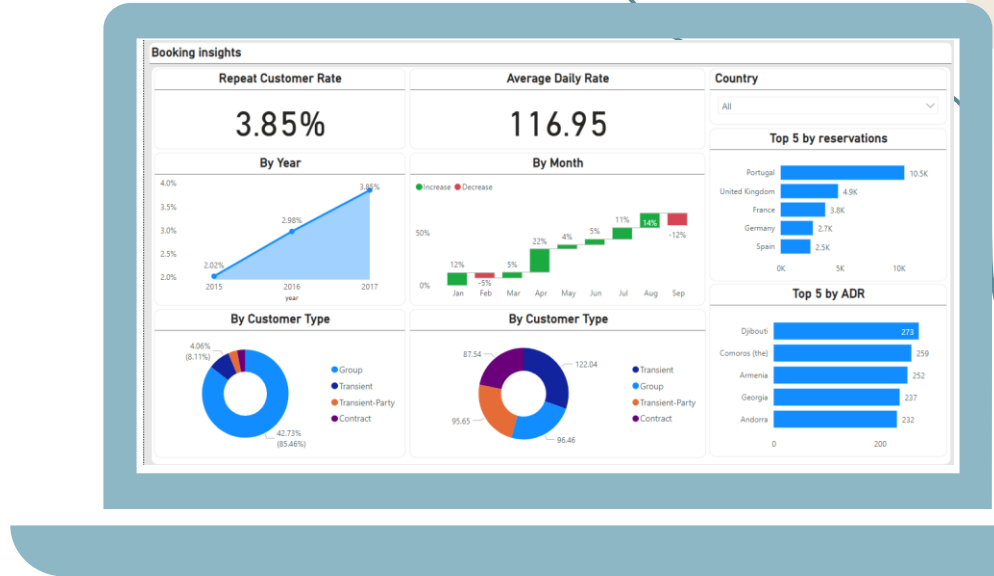
Distribution channel

Main distribution channel using in 2 hotels in Portugal

Booking Insights

Hotel KPIs:

- Repeat Customer Rate (RCR): the proportion of the customers who have booked at least twice in a year.

- Average Daily Rate (ADR): the average paid for rooms sold in a year.

We can see:

➤ RCR, ADR trend during period 2015-2017 of each hotel

➤ RCR, ADR by customer type >> Identify target customer groups

➤ RCR, ADR by Country >> Identify target market

Market segment – Distribution channel

Market segment

Proportion of each market segment in hotel bookings in Portugal

>> focus on right segment with each type of room
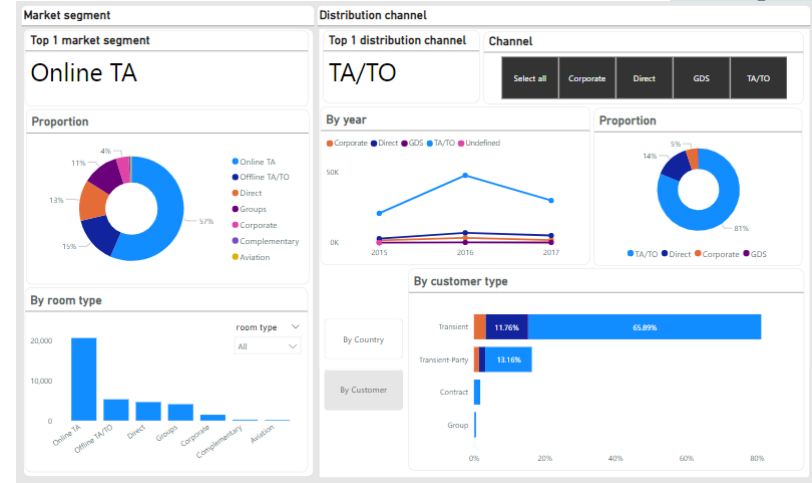
Distribution channel

Distribution channel based on customer type/ country

>> target on right distribution channel for each customer groups/ country

Thank you