

Investigate Business Hotel using Data Visualization



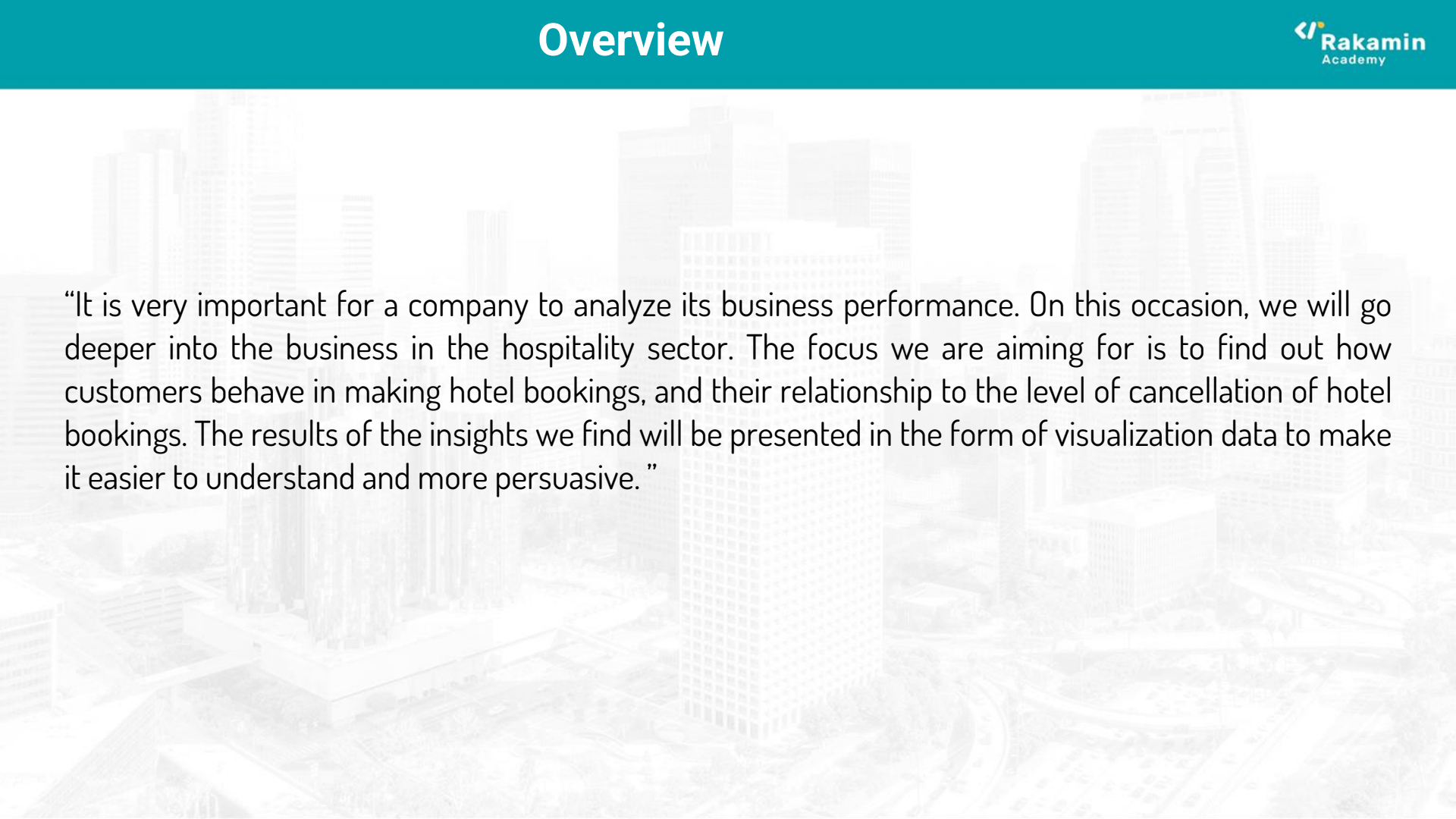
Created by:

Azzam Majduddin

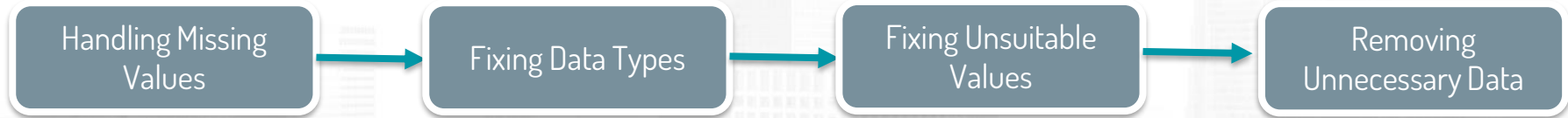
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An intellectually curious and self-motivated statistics graduate with passion for technology seeking a meaningful role to begin a career in data. I have also completed a 4 month data science course organized by Rakamin Academy. Skilled at Data Processing, Data Visualization, Data Exploration, Programming languages, Microsoft Office, and Statistical Software.

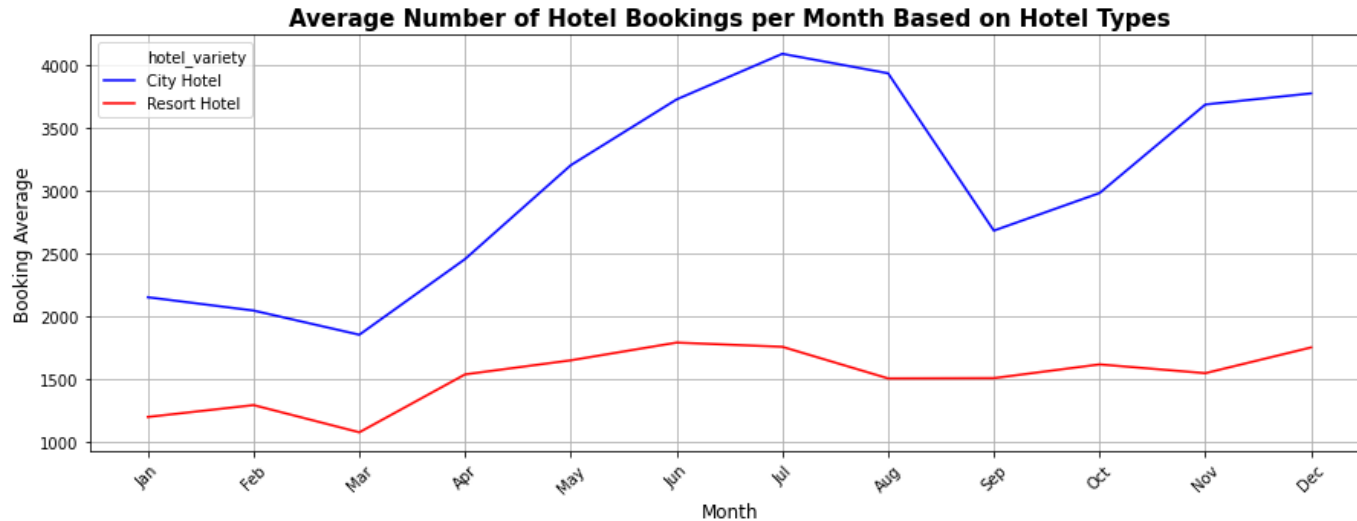
A faded, light-colored background image of a city skyline with various skyscrapers and buildings, serving as a backdrop for the text.

“It is very important for a company to analyze its business performance. On this occasion, we will go deeper into the business in the hospitality sector. The focus we are aiming for is to find out how customers behave in making hotel bookings, and their relationship to the level of cancellation of hotel bookings. The results of the insights we find will be presented in the form of visualization data to make it easier to understand and more persuasive.”



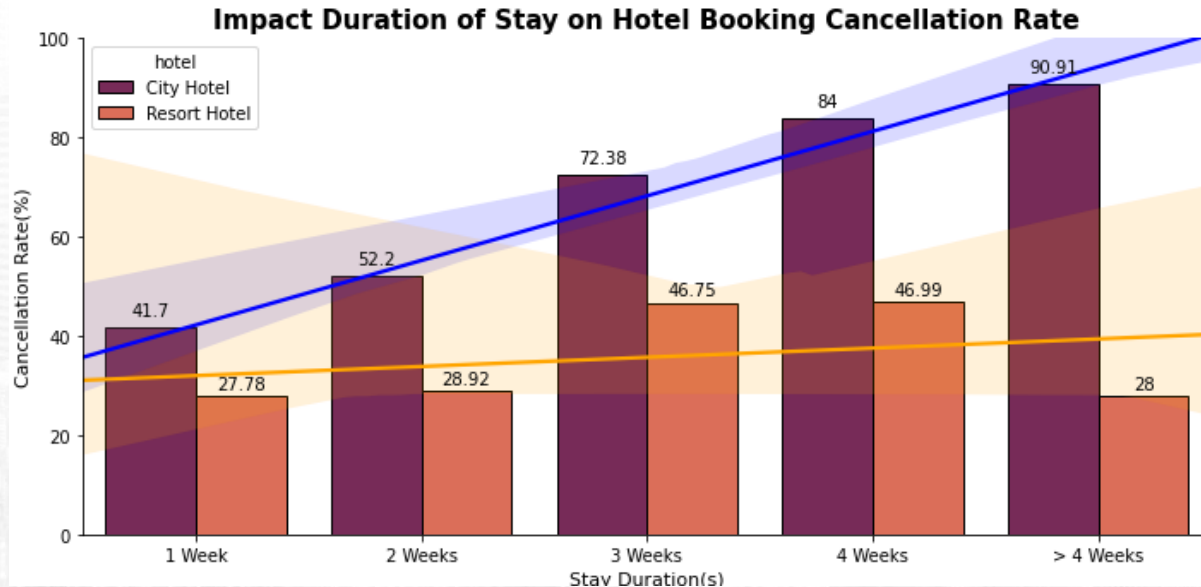
- There are 4 features/columns that contain missing values; agent, children, city, and company. For the children column, I replaced the missing values with 0 because the missing values on children column could indicate that the customers doesn't have any children. Then for the city column, I replaced the missing values with "Unknown" means that the origin of the customers are unknown. Then for the rest I replaced the missing values with 0, which means that the bookings was not made from the company or agent.
- Fixing agent, children, company data types to integer.
- Fixing unsuitable values from meal column where "Undefined" values replaced by "No Meal".
- Removing data rows containing 0 total_guests and 0 stay_duration.

Monthly Hotel Booking Analysis Based on Hotel Type



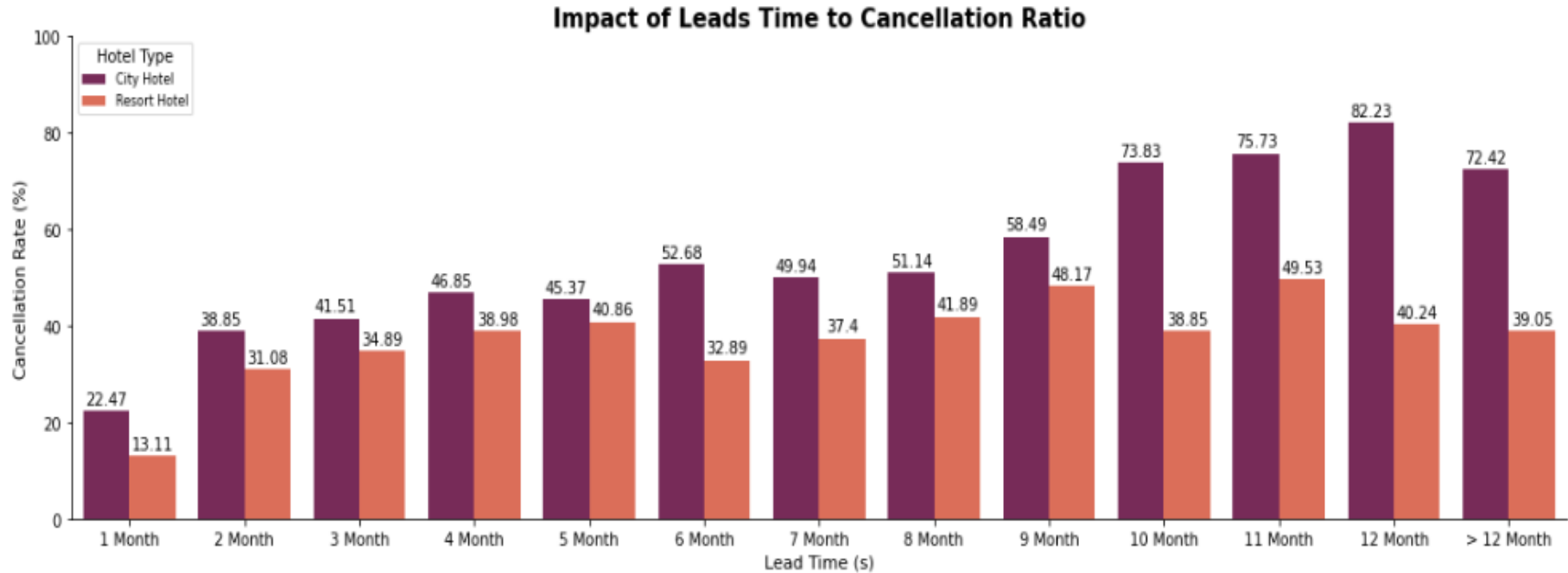
- June and July are the months with the highest hotel bookings for each type of hotel. This happens because that month is the holiday season for student in Indonesia.
- There is another growth of hotel bookings of both hotel types in December. This is caused by several events such as Christmas, New Year, and school holidays.
- The lowest hotel bookings occurred in the period January - March. This happened because the holidays is over (students are returned to the school and workers are returned to work)

Impact Analysis of Stay Duration on Hotel Bookings Cancellation Rates



- There is positive trend of cancellation rate of hotel bookings per stay duration based on hotel types. The higher the duration of stay, the higher the cancelled hotel bookings.
- There are many possibilities this could happen, such as cancelled vacation plan due any reasons or choosing wrong hotel.

Impact Analysis of Lead Time on Hotel Bookings Cancellation Rate



- Both types of hotels with the lowest cancellation rates of bookings are on 1 month lead time
- Both types of hotels with the highest cancellation rates of bookings are on 12 month lead time