Grab of Cambodia





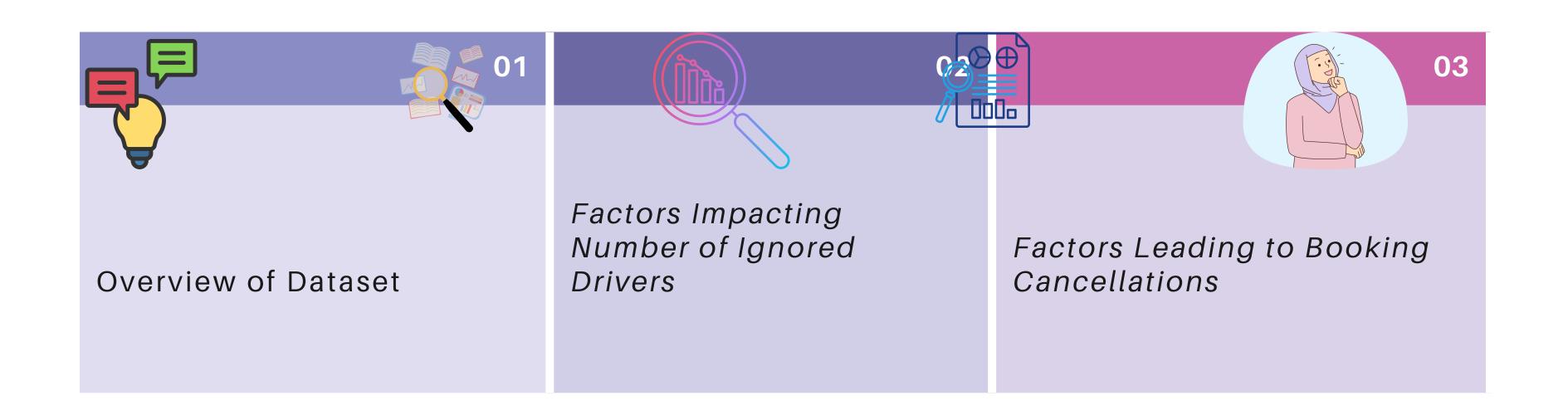
Grap Drivers Visualization

AUTHOR: SET SOPHY

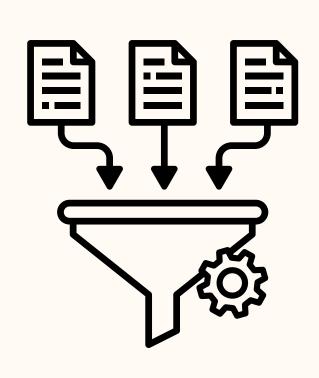
Date: 29/05/2024

PHNOM PENH, CAMBODIA

Table of Content



1. Dataset Overviews



Dataset Description

- Contains booking attempts in Phnom Penh on a Tuesday
- Includes variables such as booking time, pickup/dropoff areas, booking status, driver incentives, trip distance/time, ETA, and number of ignored drivers.



Objective

- Identify factors impacting the number of ignored drivers
- Determine reasons for booking cancellations

1. Dataset Overviews



	hour_local	driver_incentive_khr	trip_distance_km	trip_time_mins	eta_mins	ignored_drivers
count	9894.000000	9894.000000	9894.000000	9894.000000	9894.000000	9894.000000
mean	16.684657	578.183748	3.612268	12.345440	2.049284	4.546392
std	1.036781	233.306207	2.087999	6.789557	1.762848	0.617004
min	15.000000	300.000000	1.001000	3.066667	0.000000	0.000000
25%	16.000000	400.000000	1.957250	6.983333	0.683333	4.000000
50%	17.000000	510.000000	3.049000	10.600000	1.533333	5.000000
75%	18.000000	710.000000	4.784417	16.166667	2.933333	5.000000
max	18.000000	2410.000000	9.998000	36.000000	9.366667	6.000000

Findings

• Total Bookings: 9894

• Average Trip Distance: 3.61 km

• Average Trip Time: 12.35 mins

• Average Driver Incentive: 578.18 KHR

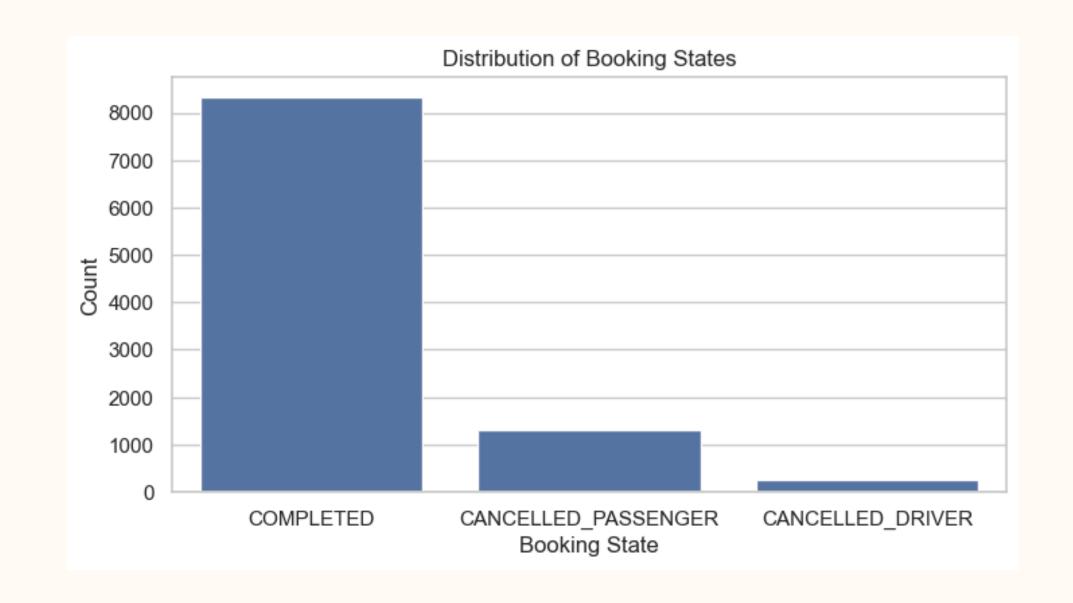
• Average ETA: 2.05 mins

• Average Ignored Drivers: 4.55

1. Dataset Overviews



Findings



We can see the frequency of distribution of booking states, that show that drivers cancel less than passenger

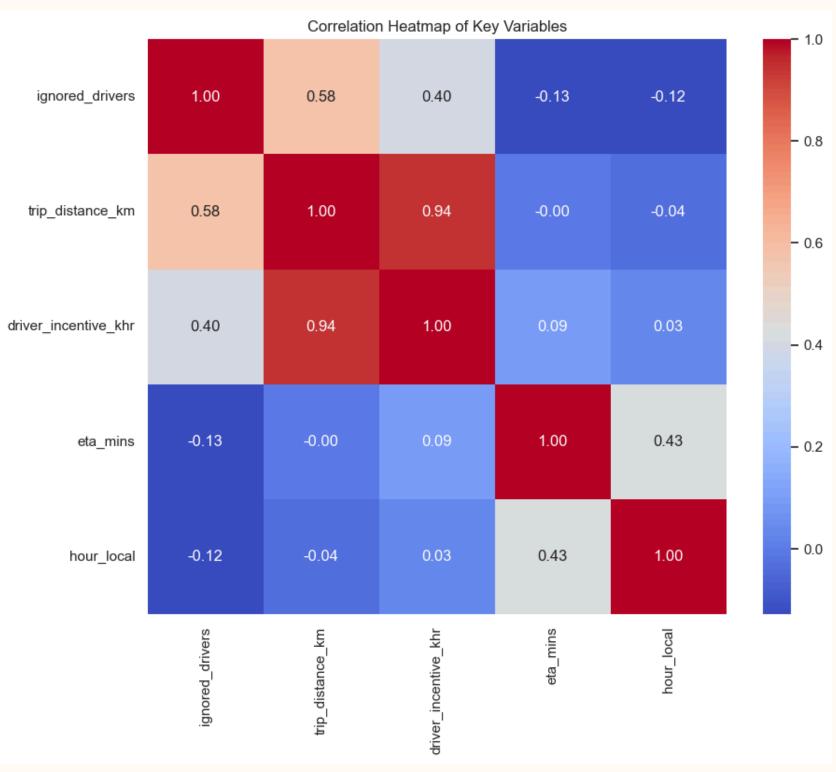
2. Factors Impacting Number of Ignored Drivers Correlation Heatmap of Key Van

Findings

The trip distance (`trip_distance_km`) has a strong positive impact on the number of ignored drivers. Longer trips are significantly more likely to be ignored. This could be due to drivers preferring shorter, quicker trips over longer ones that might take more time and potentially involve more traffic or other challenges.

Recomendation

Since ETA does not significantly impact ignored drivers, the dispatch algorithm can prioritize other factors such as trip distance and incentives over minimizing ETA, potentially leading to more efficient driver allocation.



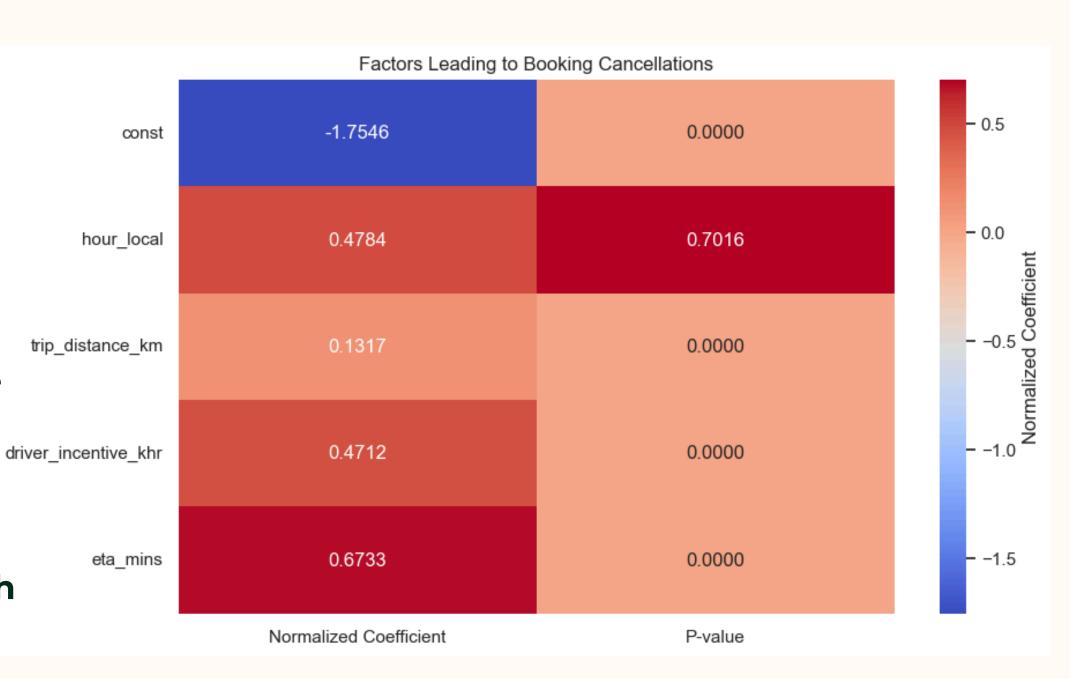
3. Factors Leading to Booking Cancellations



Higher ETA significantly increases the likelihood of cancellations. Passengers are more likely to cancel if the driver's arrival time is longer.

Recomendation

Implement strategies to reduce ETA, such as optimizing driver allocation and improving traffic prediction models, to decrease the likelihood of cancellations.



THANK

