



next
leap

Data Analyst Fellowship Project

Flipkart

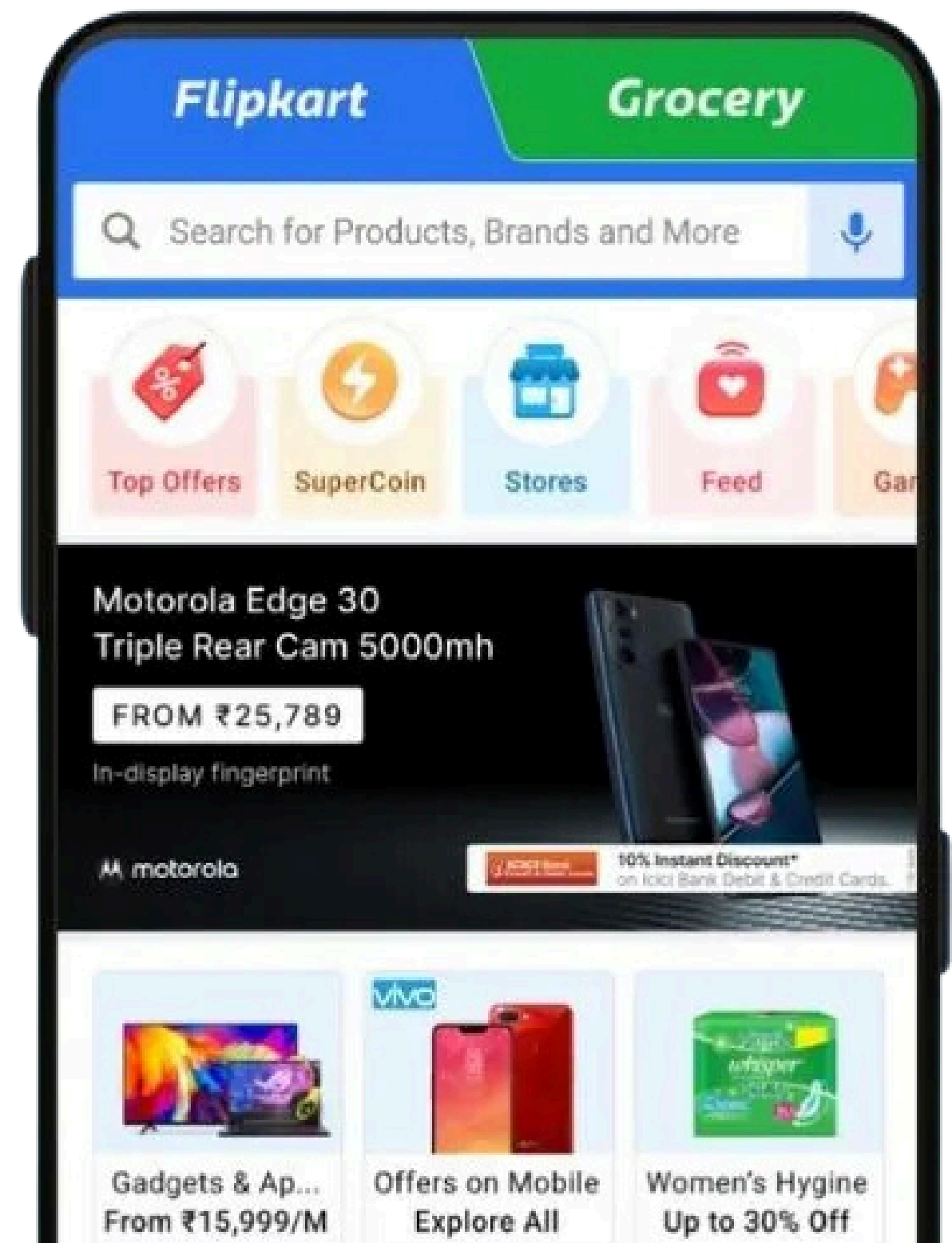
Arnav Anand

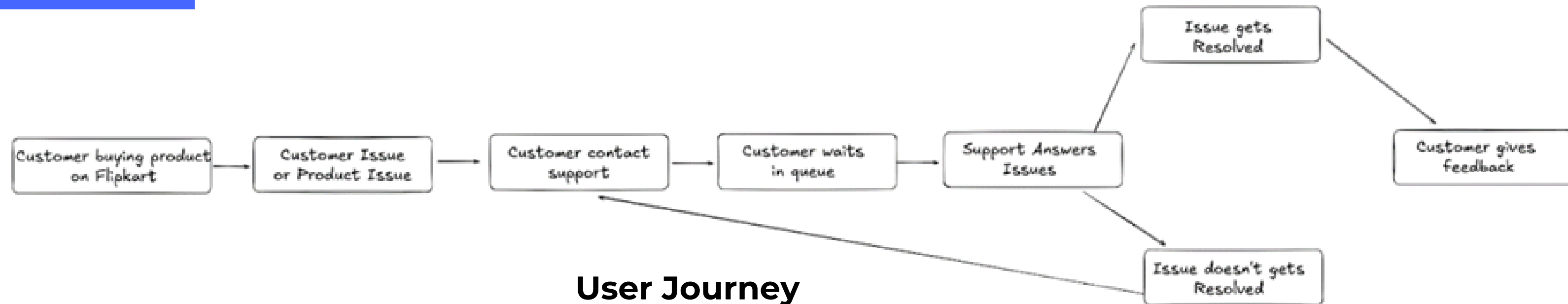
Objective

To analyse customer call data and assess various aspects of customer service performance to determine if and how it impacts customer retention.

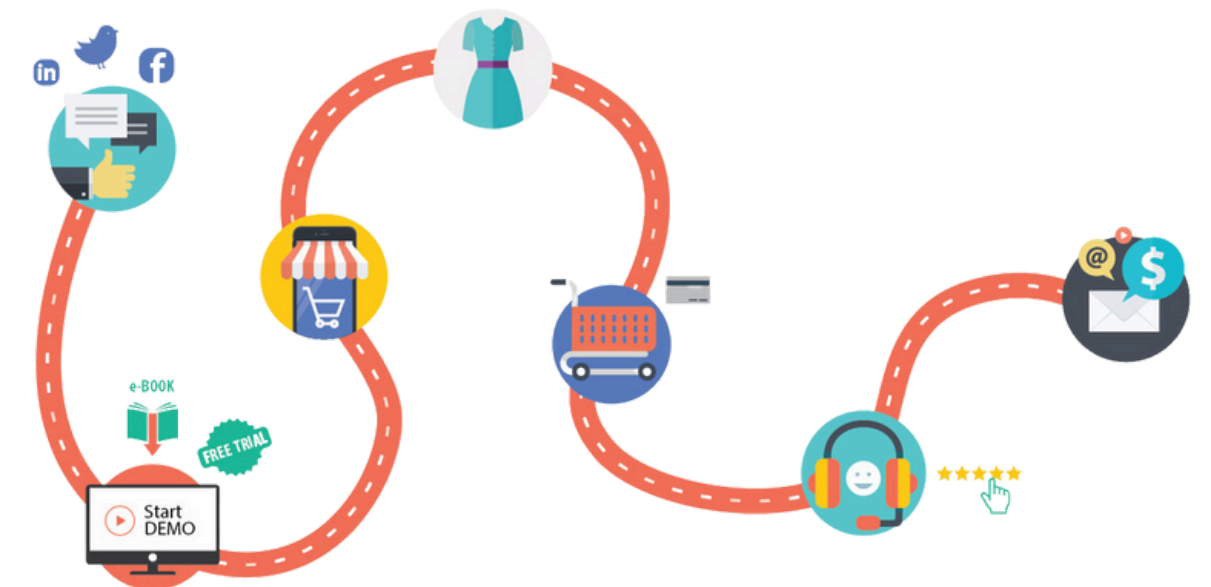
Goal

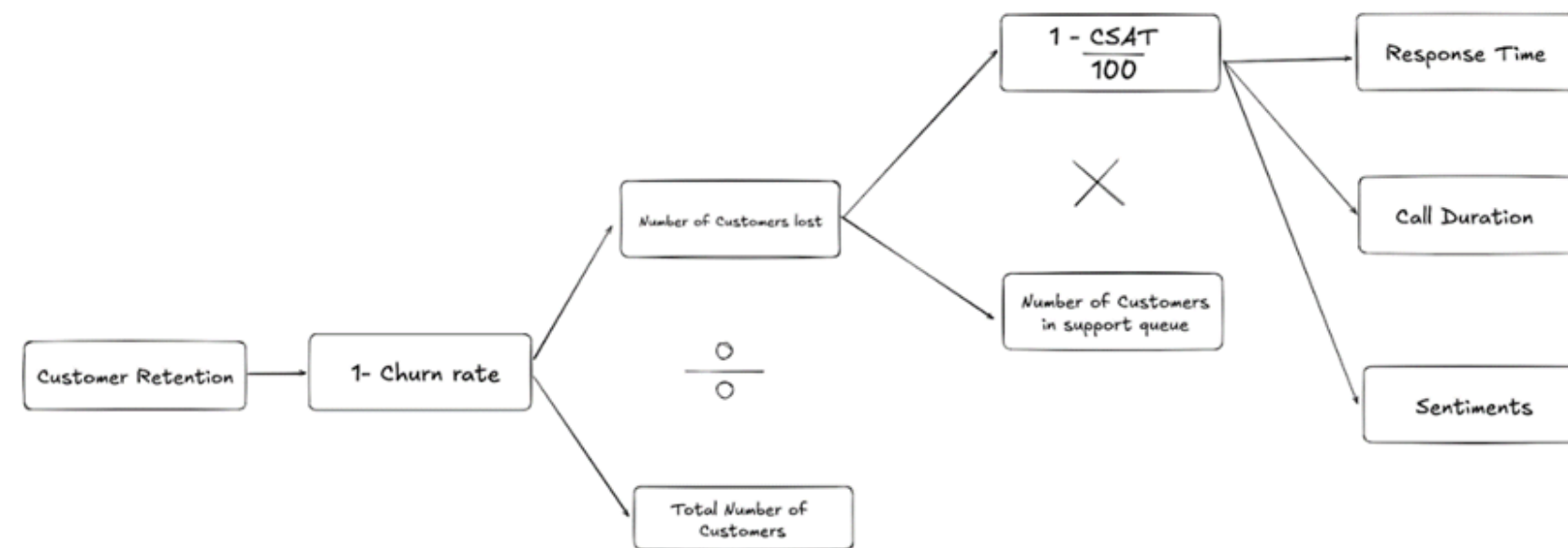
To identify specific issues within customer service operations that may be affecting customer satisfaction and retention rates.





- The customer goes on Flipkart to buy a product.
- The customer faces an issue with few things.
- The customer contacts Flipkart's support team via available channels.
- Customer service works on helping the customer by focusing on:
 - Reducing Response Time
 - First Contact Resolution
 - Improving Sentiment score and CSAT score





Metric Tree

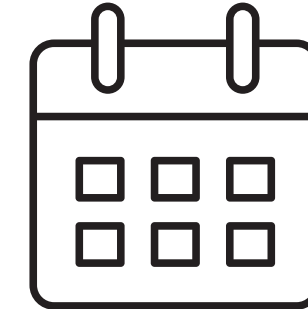
Details on Metric Tree

- Customer Retention
- Churn Rate calculation
- Number of customers lost
- Impact on CSAT Score

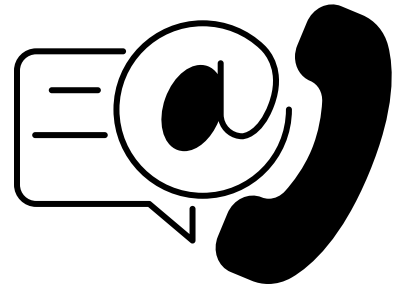
Key Metrics

- CSAT Score: Measures how satisfied customers are with the support they receive.
- Sentiment Score: Measures the feedback rating on provided service.
- Percentage of responses within SLA: Shows the percentage of customer support responses that meet the Service Level Agreement (SLA) time limits.
- Duration to resolve issues: How quickly customer issues are resolved.
- Percentage of issues resolved in one contact: Indicates the percentage of customer issues that are resolved during the first contact with support.

- There are specific days when the number of certain issues reported are significantly higher, impacting CSAT scores.
- The day of the week influences the CSAT score due to varying service demand and availability.



Day Factors



Support Channel Effectiveness

- Some support channels (e.g., phone, chat, email) are more effective at resolving issues, leading to higher CSAT scores.
- The effectiveness of different support channels varies by call centre, impacting overall CSAT scores.

- Certain types of issues (e.g., payment, billing issues) are associated with lower CSAT scores.



Issue Type and CSAT

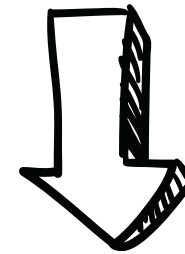
Call Centre Performance



- Certain call centres have consistently lower CSAT scores compared to others.
- Call centres with higher response times tend to have lower CSAT scores.
- Call centres with higher call durations have lower CSAT scores.
- Call centres with lower sentiment score have lower quality of service.

EDA Steps

- Data Import: Import the customer support data into Excel.
- Data Cleaning and Preparation: Address missing values, remove duplicates, and standardize data formats.
- Data Processing: Create new columns if necessary.



- Standardised data formats and call_timestamp column has been made uniform.
- Very few missing values are there which is not affective customer support analysis aspect.
- No duplicate values were found.
- Two new columns have been formed: 'sentiment_score', 'call_day'.

Analysis

The call-centre and web mode of customer support appears as most effective channel. Focusing on these two modes while improving others will improve customer retention.

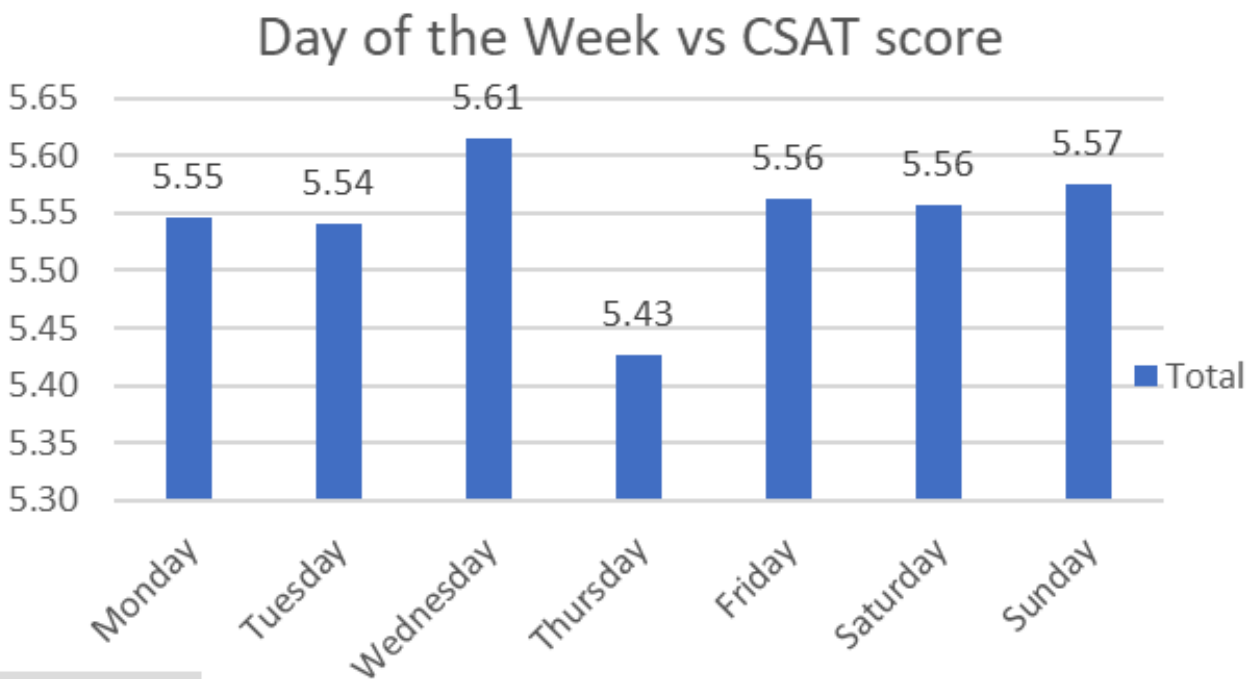
The employee at all call centre and web channel needs to be trained which can improve customer service, CSAT score based on location are high for these channels.

Average sentiment score of each location is below 3, which suggests to focus also on analysing other aspects of customer journey, apart from customer support.

More efficient chatbot needs to be used immediately replacing old ones. Billing related queries need to be addressed more efficiently which will improve CSAT scores.

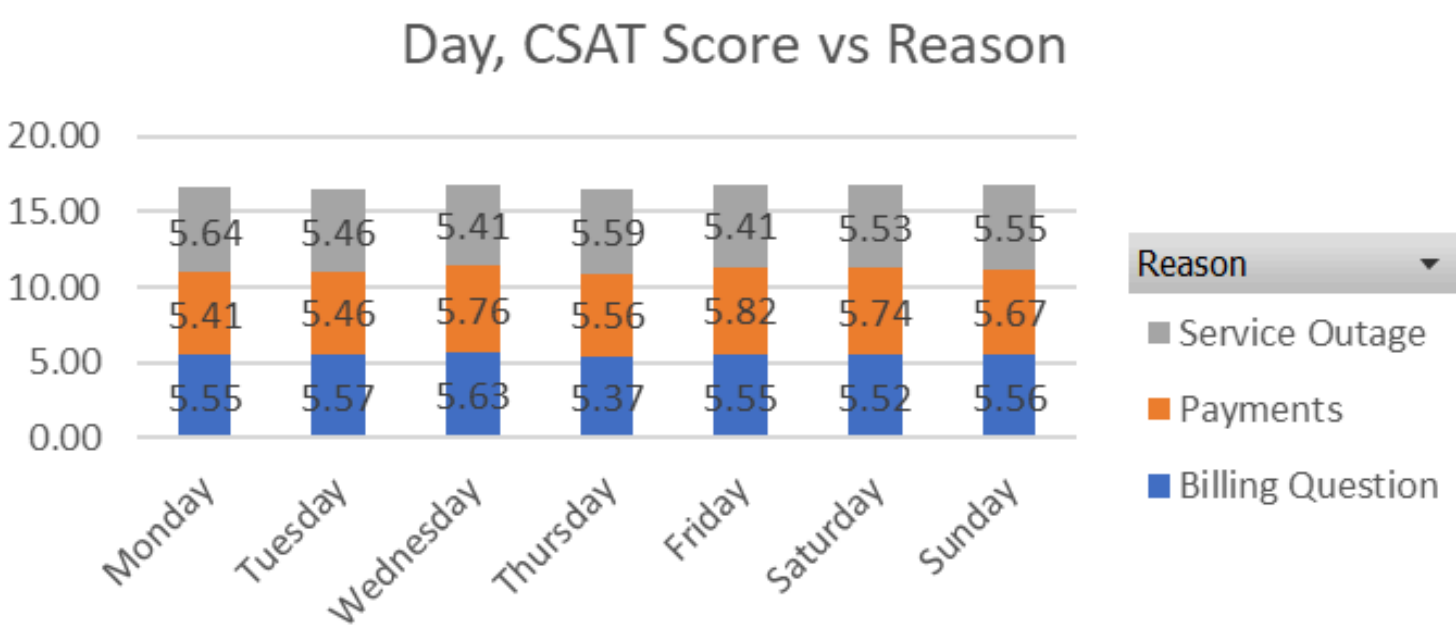
Total Customer
30,000

Average of CSAT_Score



Call_Day

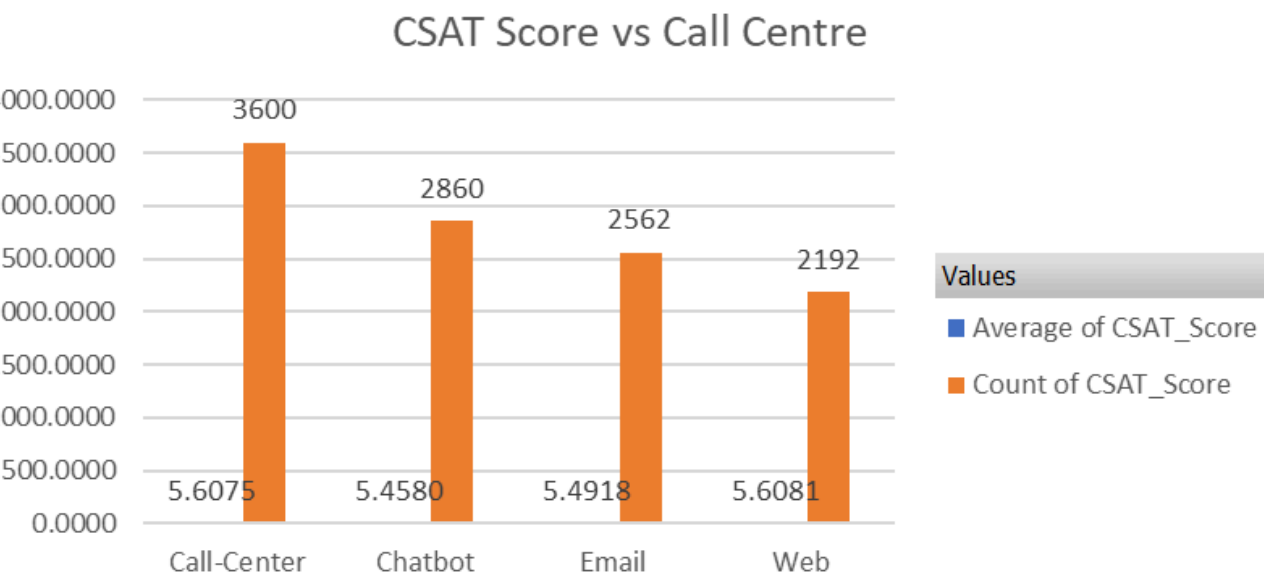
Average of CSAT_Score



Call_Day

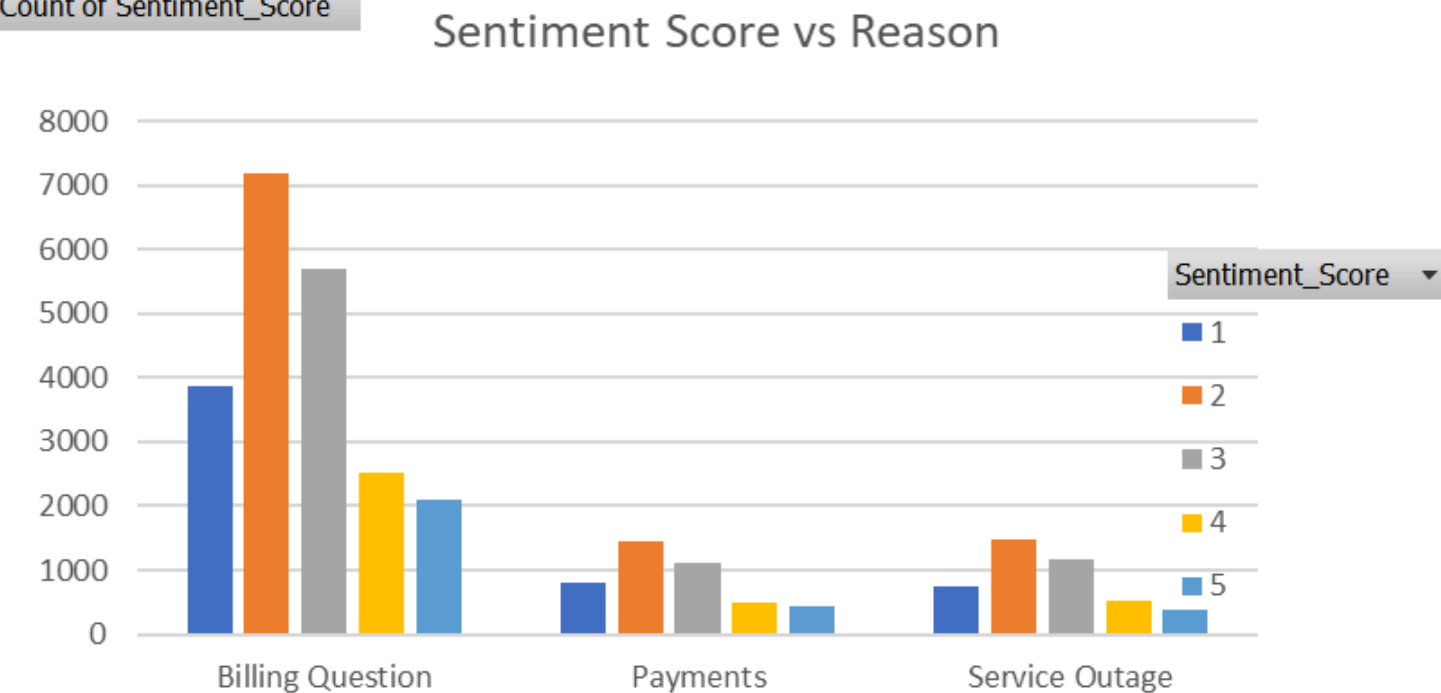
Average of CSAT_Score

Count of CSAT_Score



Channel

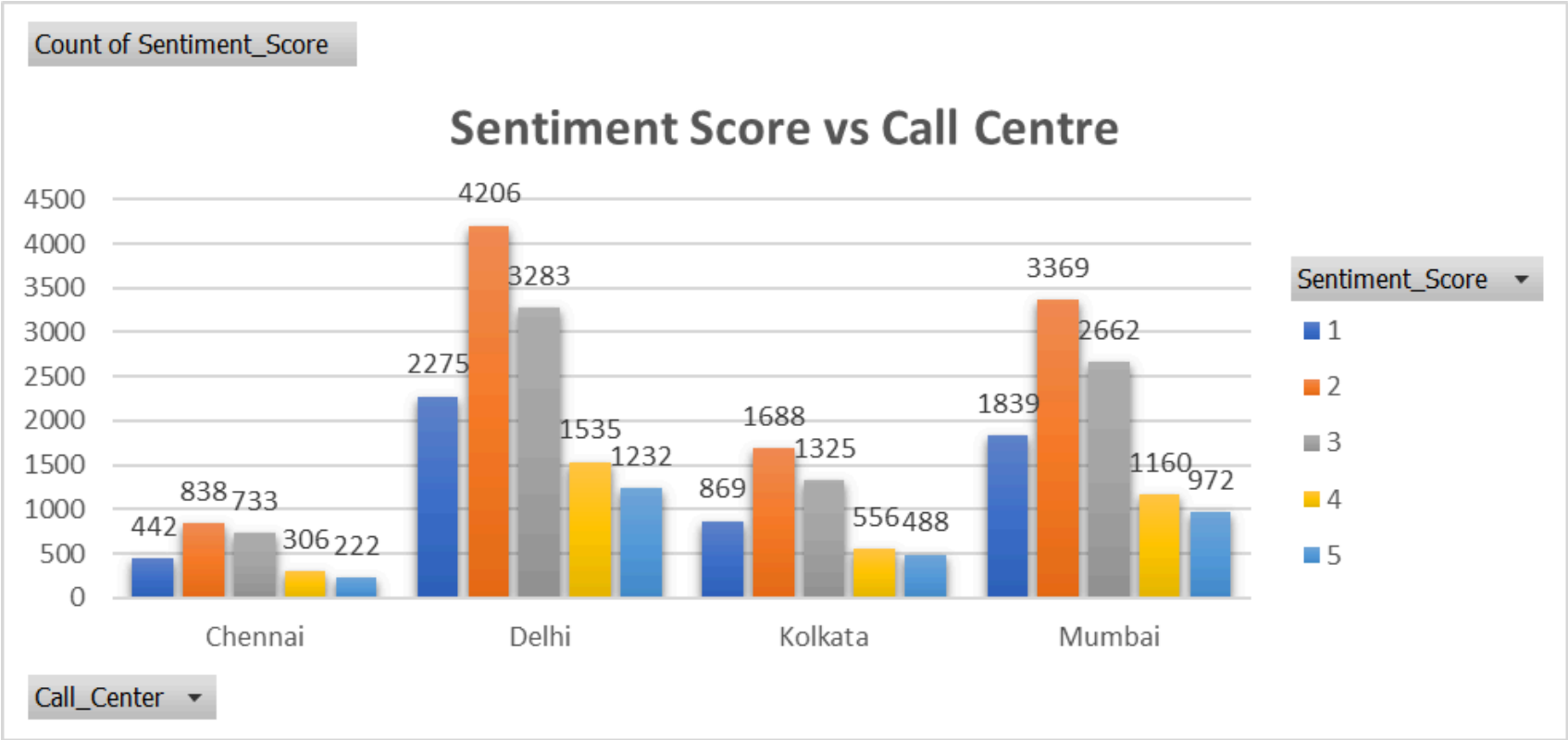
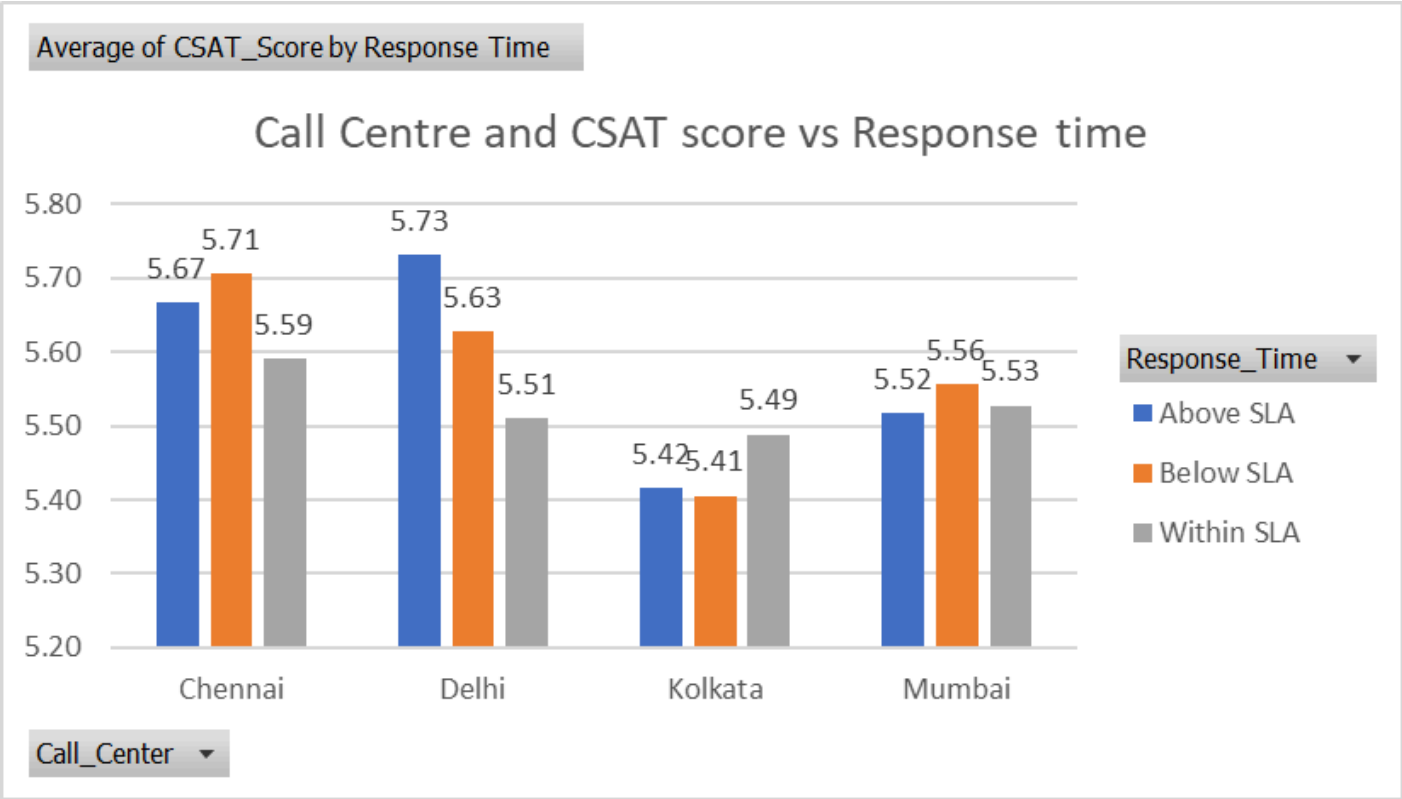
Count of Sentiment_Score



Reason

\$ 465K

\$ 789K



THANK YOU!



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