ABC CALL VOLUME

TREND ANALYSIS

Project Description

- We'll be diving into the world of Customer Experience (CX) analytics, specifically focusing on the inbound calling team of a company. You'll be provided with a dataset that spans 23 days and includes various details such as the agent's name and ID, the queue time (how long a customer had to wait before connecting with an agent), the time of the call, the duration of the call, and the call status (whether it was abandoned, answered, or transferred).
- A Customer Experience (CX) team plays a crucial role in a company. They analyze customer feedback and data, derive insights from it, and share these insights with the rest of the organization. This team is responsible for a wide range of tasks, including managing customer experience programs, handling internal communications, mapping customer journeys, and managing customer data, among others.

Tasks

- 1: Average Call Duration
- 2: Call Volume Analysis
- 3: Manpower Planning
- 4:Night Shift Manpower Planning

Assumptions

- Agent working day per week : 6
- Agent unplanned holiday per month : 4
- Agent working hours per day: 9 hours
- Agent lunch snack time per day :1.5 hours
- Agent actual working hours per day :7.5 hours
- Agent occupied in actual working hours per day : 60% of working hours.

2 Tech-Stacked Used

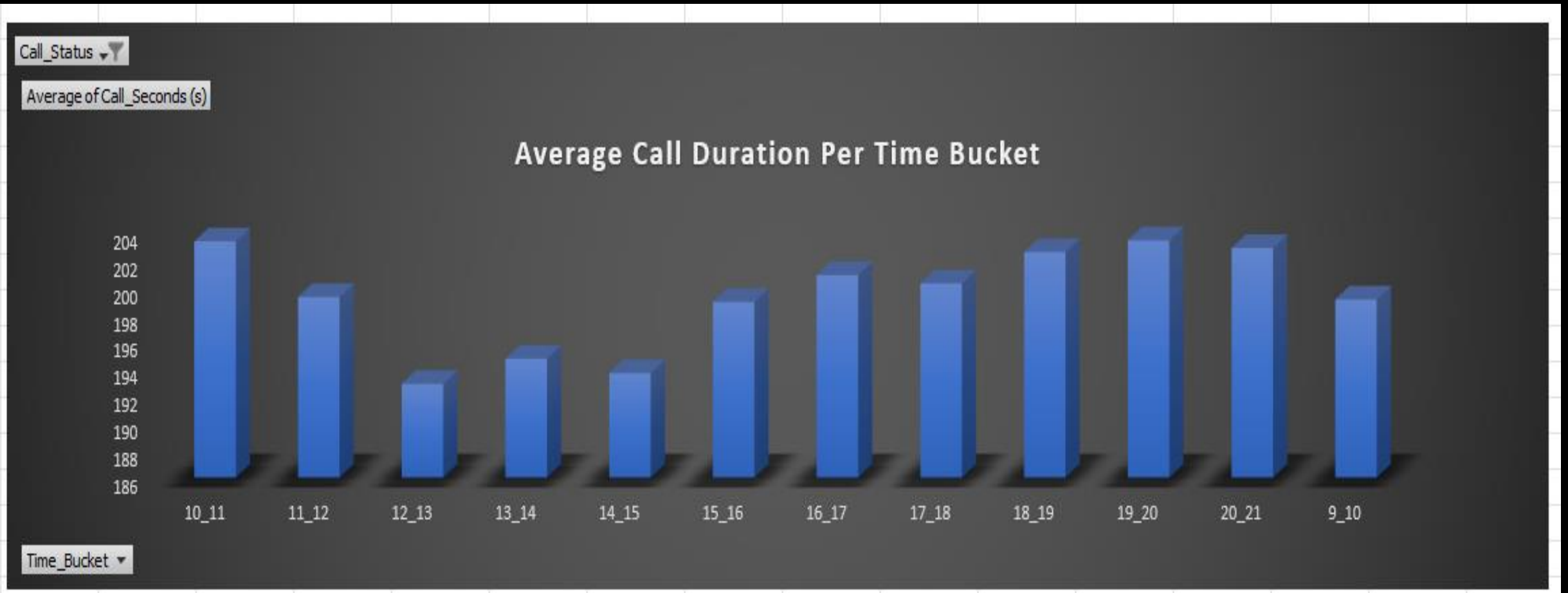
- Ms Excel 2021
- Power Point

Approach

- Understanding : Getting a thorough understanding of data and what impact does it have on the target.
- Cleaning : Handling irregularities in data for better analysis.
- Analysis : Analyzing the data to drew insights and conclusion.
- Visualization: visualize the analysis and create a dashboard.

Task 1

- Calculate the average duration of calls received for each time bucket

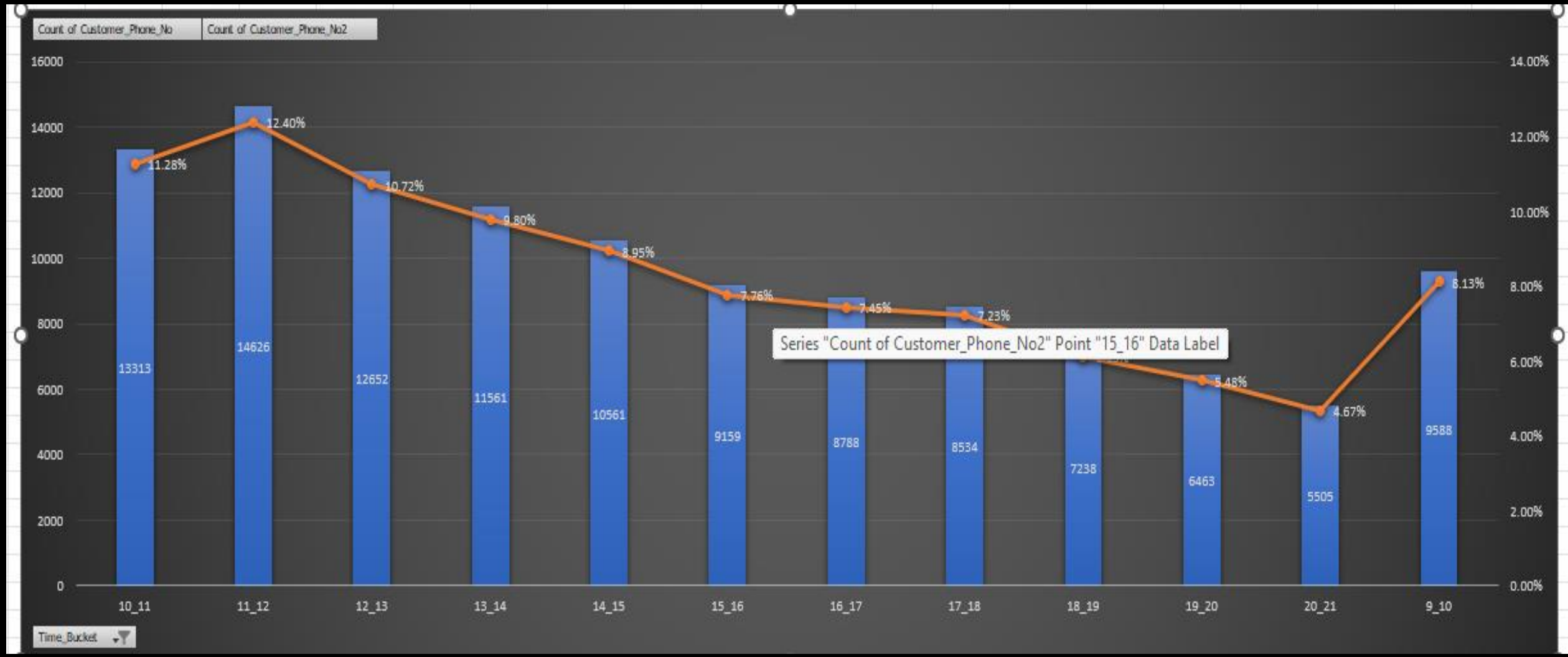


Insights:

The highest average call duration is observed between 4pm to 9 pm and leasr between 12 pm to 2pm

Task 2: Call Volume Analysis:

- Visualize the total number of calls received.
- This should be represented as a graph or chart showing the number of calls against time.

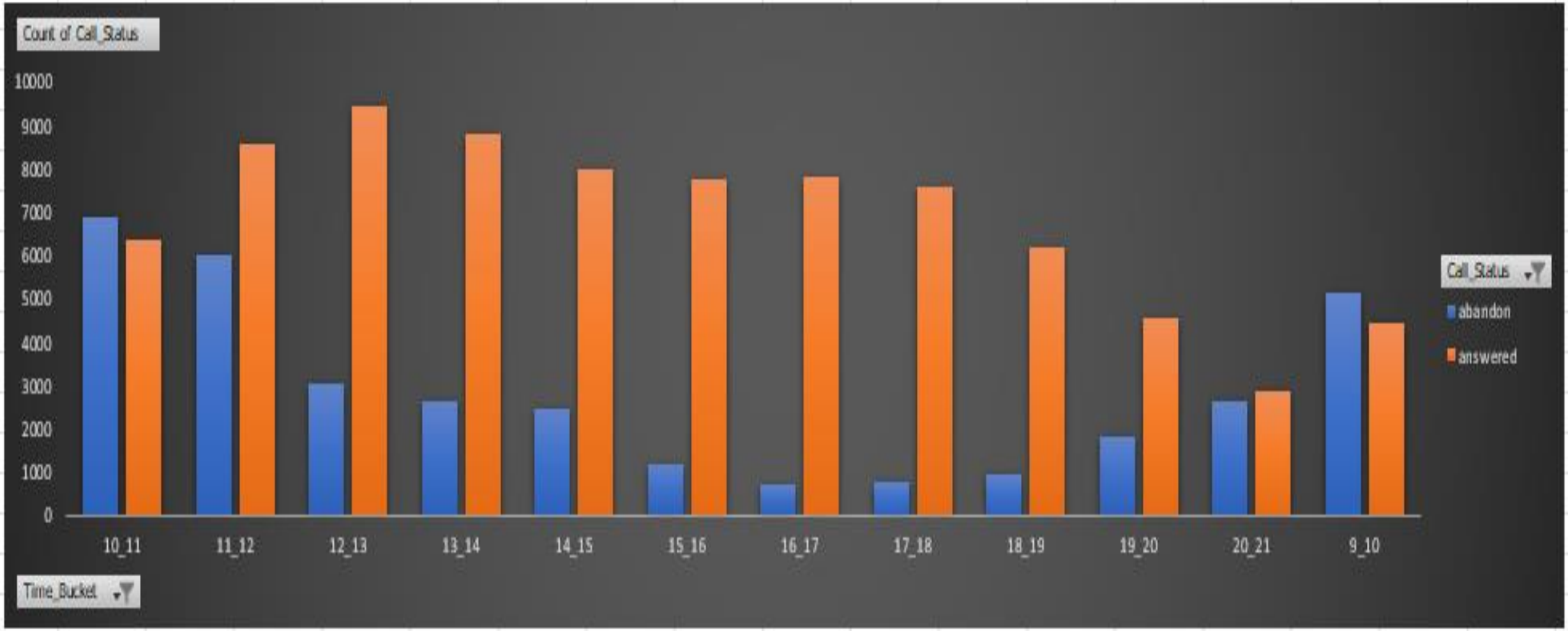


Insights:

From the chart we can observe that between 10 am to 2pm the highest number of calls are received from the customer.

Task 3: Manpower Planning:

- What is the minimum number of agents required in each time bucket to reduce the abandon rate to 10%?



Insights:

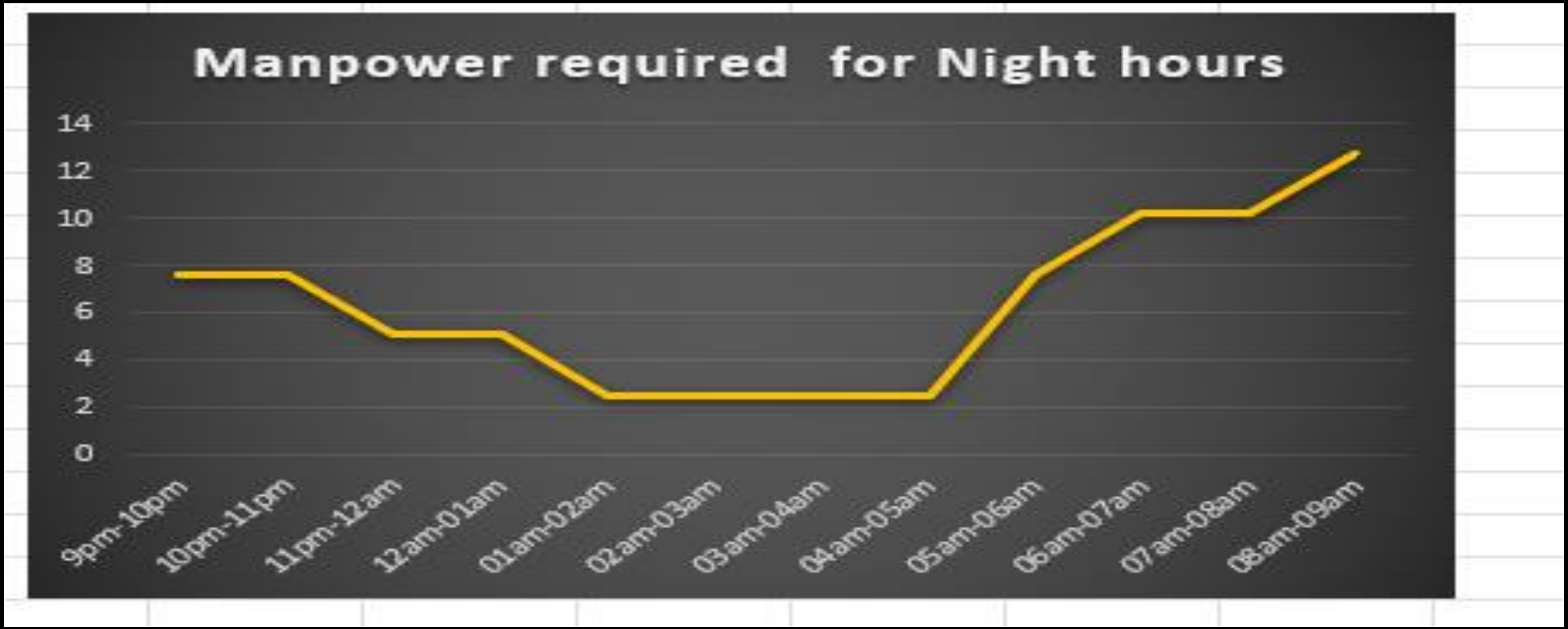
From the chart we can see that from 11 am to 2pm more number of calls are answered.

From the chart we can see that the abandon rate is highest at the beginning and at the end of the day shift.

Insights:
Agent needed are in orange color , Agent working are represented using blue color.
During 8 pm to 9 pm less number of agent were working also requirement was also low.

Task 4: Night Shift Manpower Planning

- Propose a manpower plan for each time bucket throughout the day, keeping the maximum abandon rate at 10%.


Manpower required for Night hours
14
12
10
8
6
4
2
0
9pm-10pm
10pm-11pm
11pm-12am
12am-01am
01am-02am
02am-03am
03am-04am
04am-05am
05am-06am
06am-07am
07am-08am
08am-09am

Insights:


Manpower requirement For Entire Day
35
30
25
20
15
10
5
0
9am-10am
10am-11am
11am-12pm
12pm-01pm
01pm-02pm
02pm-03pm
03pm-04pm
04pm-05pm
05pm-06pm
06pm-07pm
07pm-08pm
08pm-09pm
9pm-10pm
10pm-11pm
11pm-12am
12am-01am
01am-02am
02am-03am
03am-04am
04am-05am
05am-06am
06am-07am
07am-08am
08am-09am

INSIGHT:

- At the beginning and toward the end of the shift, the agents call abandonment rate is particularly high. The management needs to take a close look at if the agents aren’t being managed correctly, team meetings or some other factors is to blame for the high abandon rate.

Excel Sheet Link:

- https://docs.google.com/spreadsheets/d/1SOVbd5d6v97wpDYTftQ2eb3XH8CzvksS/edit?usp=drivesdk&ouid=113826139200146158008&rtpof=true&sd=true

Video Link :

- https://drive.google.com/file/d/1SQq3XPeMSQKyv6v9XeJ4hWcRaCGVPHUI/view?usp=drivesdk