

# ABC CALL VOLUME TREND ANALYSIS

Final Project – 4

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# AGENDA

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# 01

# Problem Statement

- A Customer Experience (CX) team in a company aims to analyze customer feedback and data, derive insights from it, and share these insights with the rest of the organization.
- The CX team of ABC Insurance company is experiencing high customer engagement and facing difficulties to manage their customer calls.
- There are struggling to understand the trends and patterns of incoming customer calls, resulting in 30% of calls being rejected.
- As a data analyst, I am aiming to analyze their data set, find call volume trends and propose a manpower plan.



02

## Tech-Stack Used



MS Excel



PowerPoint



Capcut

## 03 Insights

**Q1. What is the average duration of calls for each time bucket?**

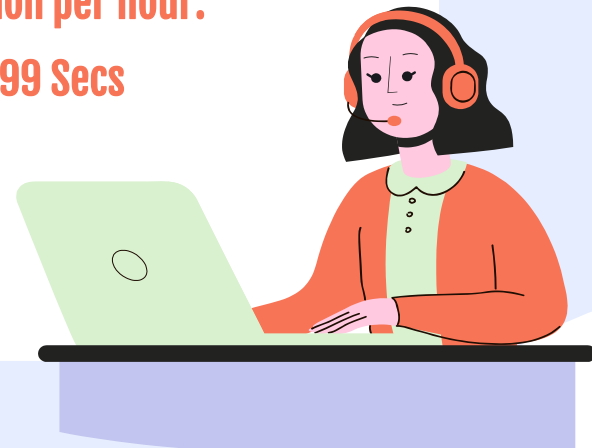
Time Bucket	Average duration of Call	Seconds (s)
10_11		203
11_12		199
12_13		193
13_14		195
14_15		194
15_16		199
16_17		201
17_18		200
18_19		203
19_20		203
20_21		203
9_10		199
Grand Total		199



- Average duration of calls is 199 secs considering entire day
- **Approach:** Pivot table is used to find out average duration for each time bucket. Data is filtered to 'answered' calls only.

➤ [Click to view the Excel Project file](#)

**Average Call  
Duration per hour:  
199 Secs**

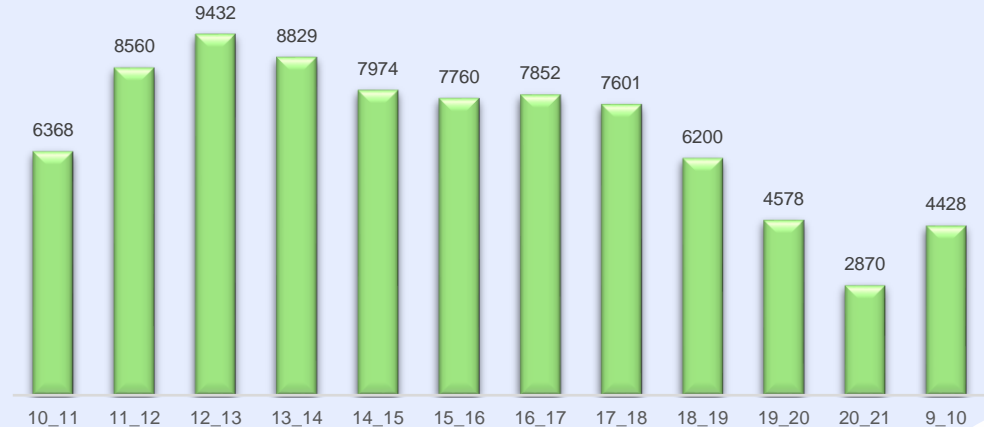


## Q2. Call Volume: Number of calls received in each time bucket?



- ✓ 11 am-2 pm is the busiest 3 hours in an entire day
- ✓ Highest number of calls is received during 12 pm-1 pm with 9432 calls

**Approach:** Used Pivot table and Column chart to prepare this result. Data is filtered based on 'Answered' calls only

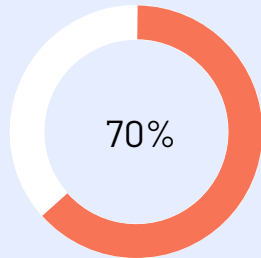


**Q3. What is the minimum number of agents required in each time bucket to reduce the abandon rate to 10%?**

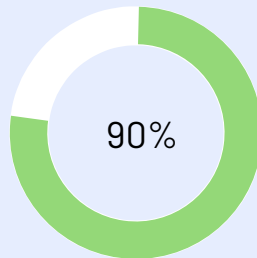
## Current Numbers

### Working Days: 23

Currently Received Calls



Target Received Calls



### Hourly Calls Received/ Agent : 18

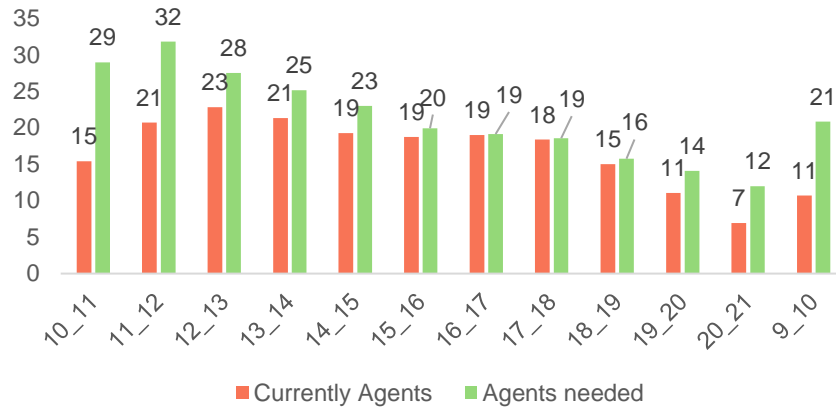
Assumptions	Values
Actual working hours of agents	7.5
% of time spend in calls	60%
Total Actual working hours	4.5
Total Actual working in seconds	16200
Average duration of received calls(in seconds)	199
No of calls received by 1 Agent	81
No of calls received by 1 Agent in 1 hour time bucket	18

# Manpower Planning

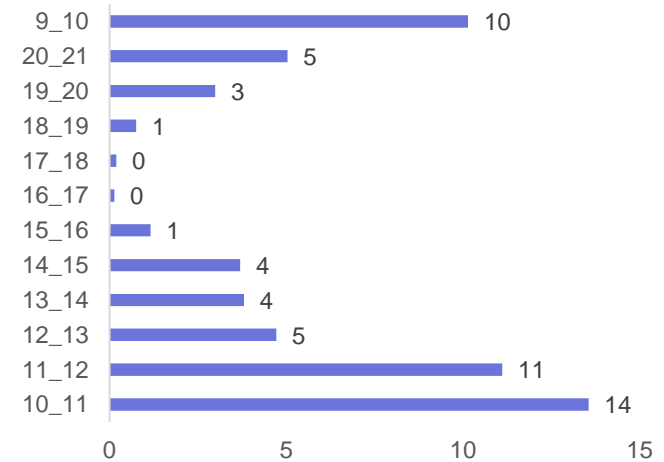


- 9am-10am and 10am-11am are two time slots that require the most number of new agents.

Available agents vs Agents needed



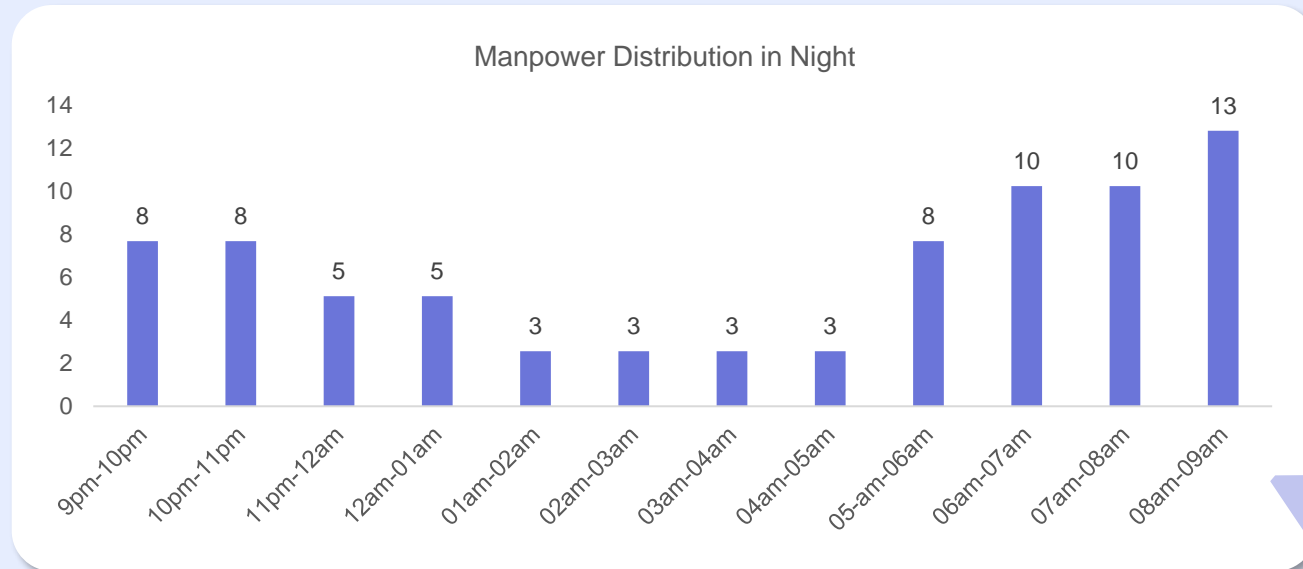
Additional Agent needed



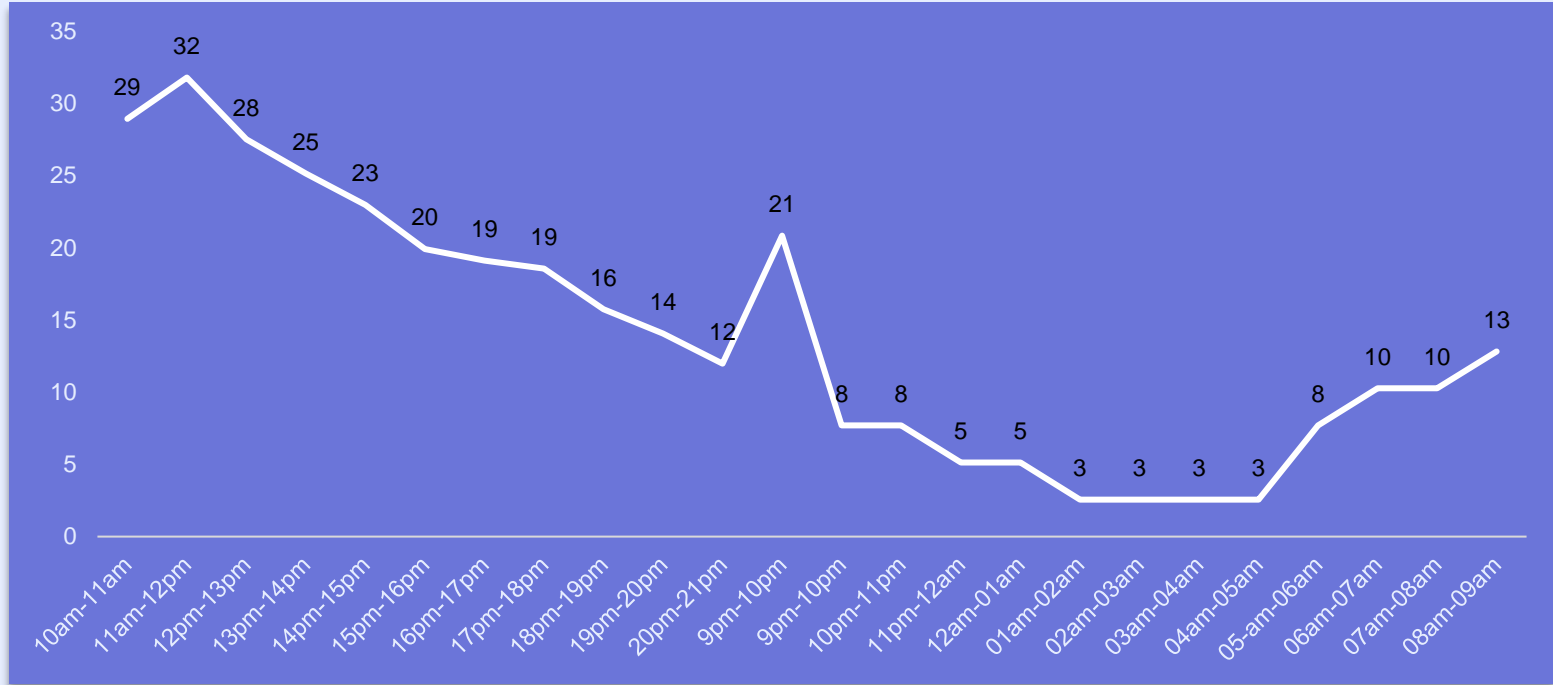


## Q4: Manpower planning for night, to maintain abandon rate at 10%.

- Early morning time i.e. 6 am-9 am requires more agents to improve customer service.
- A total of 33 agents are required to reduce abandoned calls in these time slots.



# MANPOWER PLANNING FOR ENTIRE DAY



## 04 Results and Recommendations

- It is found that less number of agents are active during the 9 am – 11 am time bucket. It could be because some agents are coming to the office late or agents are being busy with other tasks
- A considerable amount of customers calling during the night, may be because of different time zone. To improve customer experience globally, at least 77 employees should be recruited.
- Also management can influence the existing agents to change their shift by giving them extra perks like free dinner or extra night shift allowance etc.



# Thank You

