

ABC Call Volume Trend Analysis

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PROJECT DESCRIPTION

- This project mainly focuses on Customer Experience (CX) analytics, specifically focusing on the inbound calling team of a company. The dataset spans over 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). The aim is to analyze customer feedback and data, derive insights from it, and share these insights with the rest of the organization. One of the key roles in a CX team is that of the customer service representative, also known as a call center agent. These agents handle various types of support, including email, inbound, outbound, and social media support. The goal is to attract, engage, and delight customers, turning them into loyal advocates for the business.

Approach and tech used

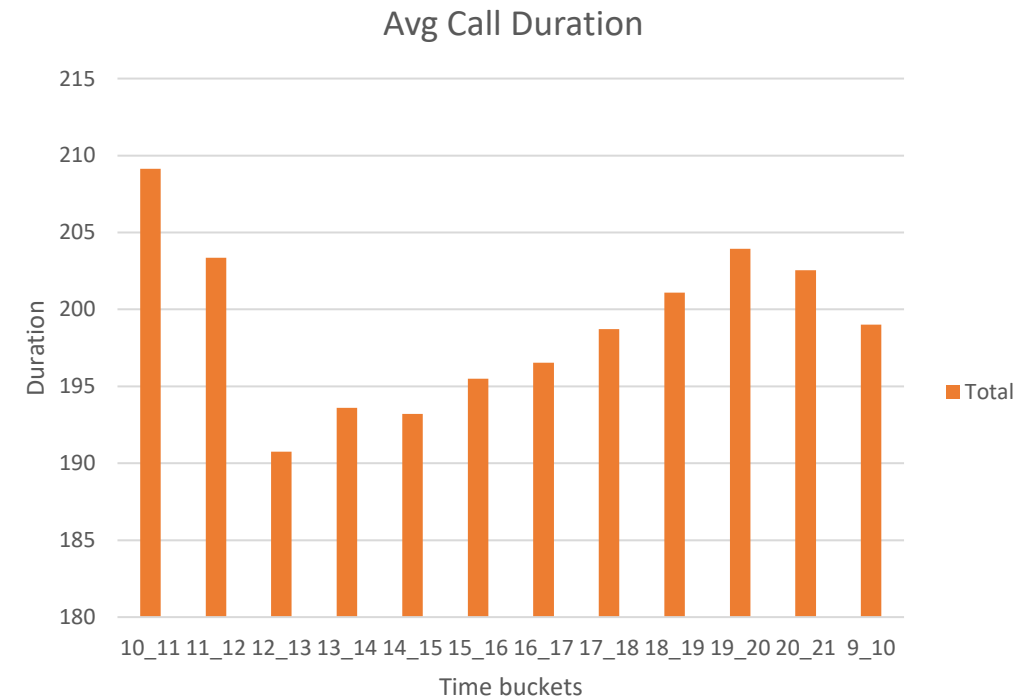
The approach here to first clean the data. I have then tried answering the questions to provide insights that can drive decision-making. I have done analysis –

- Average Call Duration
- Call Volume Analysis
- Manpower Planning
- Night Shift Manpower Planning

The tech used here is excel. Excel is a versatile tool for data analysis due to its user-friendly interface and widespread accessibility. Its array of functions and features allows for quick data manipulation, facilitating easy organization and visualization. For straightforward analyses or initial data exploration, Excel's pivot tables, charts, and formulas provide a solid foundation. While it may have limitations for handling large datasets or complex statistical analyses compared to specialized software, Excel remains an efficient and practical tool for basic data analysis and quick insights.

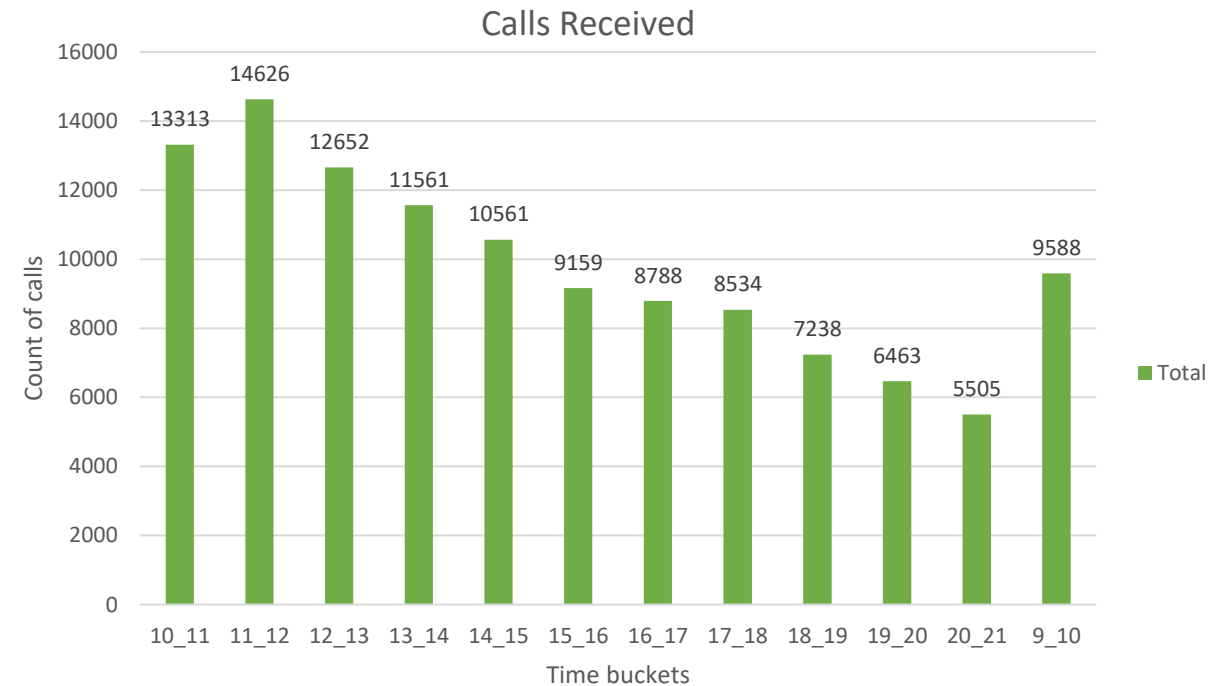
Insights : Average Call Duration

- I have determined the average duration of all incoming calls received by agents. This should be calculated for each time bucket.
- Between 10-11 the average duration is maximum upto 209.
- Lowest average duration of calls are received between 12-13.
- 19-20 and 11-12 have received calls of almost same average duration.



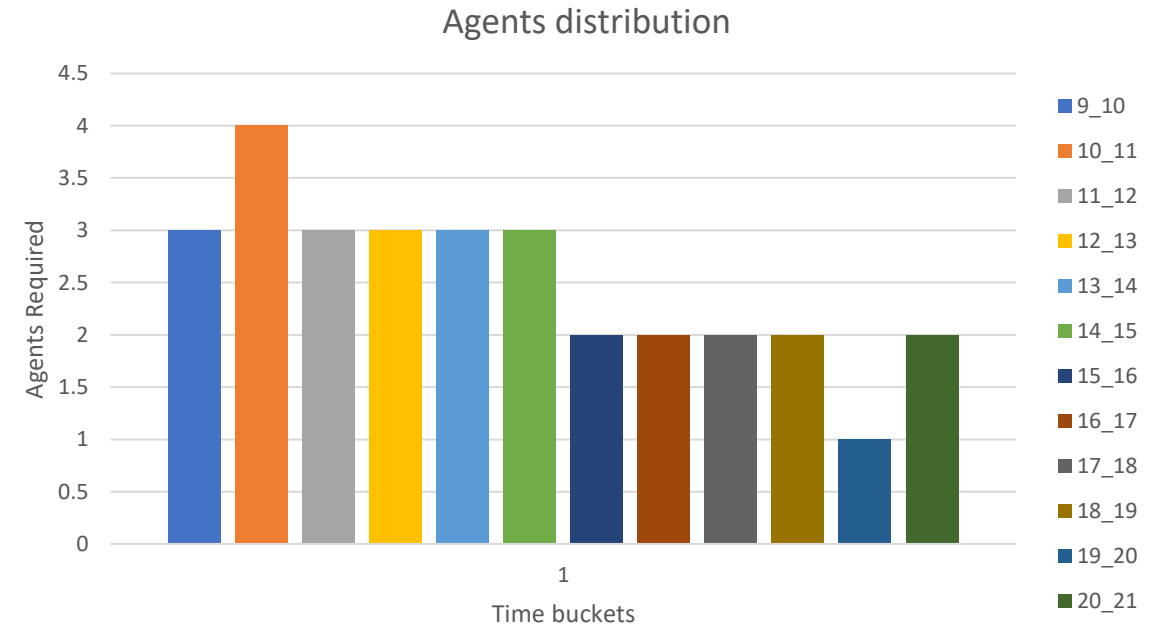
Call Volume Analysis

- Next I have visualized the total number of calls received.
- The calls received between 11-12 are highest with the count 14626.
- 5505 calls are received between 20-21 which the least amount of calls received throughout the day.
- The peak time is between 11-12.



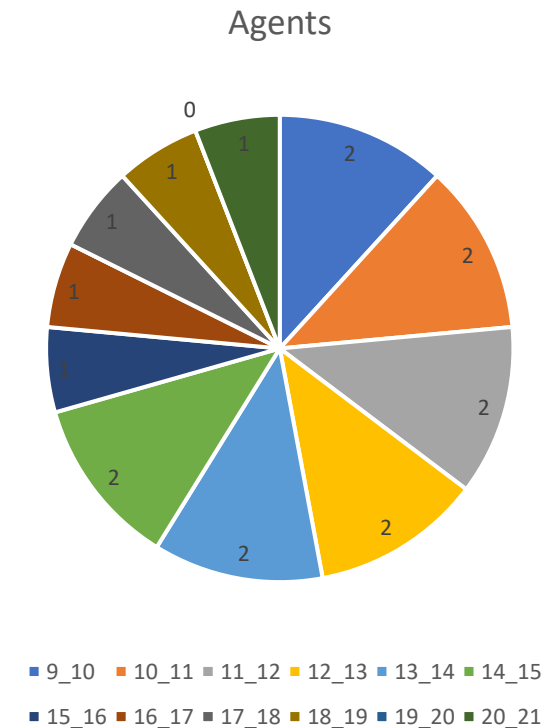
Manpower Planning

- I have then found the minimum number of agents required in each time bucket to reduce the abandon rate to 10%.
- 10-11 require maximum number of agents compared to other time intervals.
- 19-20 require very less number of agents that is 1 agent required to bring the rate to 10%.



Night Shift Manpower Planning

- Customers also call ABC Insurance Company at night but don't get an answer because there are no agents available. This creates a poor customer experience. Assume that for every 100 calls that customers make between 9 am and 9 pm, they also make 30 calls at night between 9 pm and 9 am.
- Most of the night time buckets require 2 agents.



The link to the excel sheet - [LINK](#)

Thank you