ABC Call Volume Trend Analysis

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Project Description:

- This project involves analyzing the inbound calling data of ABC Insurance Company to gain insights into customer experience and improve service quality. The dataset spans 23 days and includes information such as agent details, queue times, call times, call durations, and call statuses (e.g., answered, abandoned, or transferred).
- The goal is to identify trends in call volume, calculate performance metrics, and propose manpower planning to enhance customer experience and reduce call abandonment rates.

Tools to Optimize Your Customer Experience

Social Media Listening Tools: Listen to what customers are posting about your brand.

Behavioral Analytics: Learn how customers react after visiting your website.

Surveys: Design questions that pertain to customers' unique journeys with your brand.

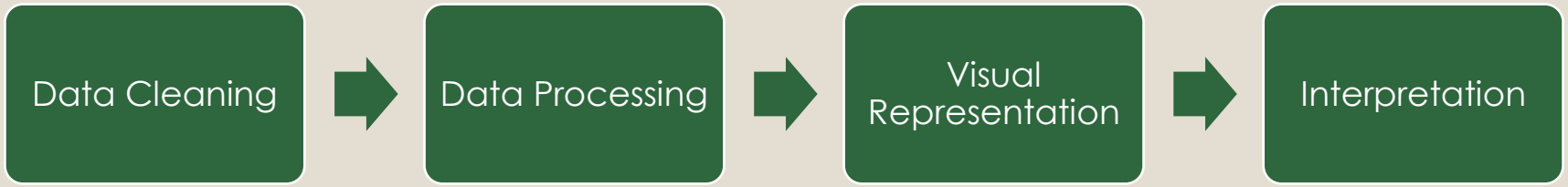
Suggestion Boxes: They don't have to be physical boxes, they can be an email address or a section of your support site.

Customer Relationship Management (CRM): Easily track and manage customer relationships throughout their journey.

Objective:

1. Determine the average call duration for each time bucket.
2. Analyze and visualize the total call volume across time buckets.
3. Propose a manpower plan to reduce the call abandon rate to 10%.
4. Develop a night shift manpower plan to ensure customer satisfaction during off-hours.

Approach:


Data Cleaning
Data Processing
Visual Representation
Interpretation

Tech-Stack Used:

- **Microsoft Excel 2019:** Data analysis, calculations, and visualizations.
- **Microsoft PowerPoint 2019:** Report Creation

Data Cleaning:

Total Observations: 117988

Total Columns : 13

Columns Needed to Clean: 3

Wrapped_by: 47877 blank entries

Agent_Name: 34198 N/A

Agent_ID: 34198 N/A

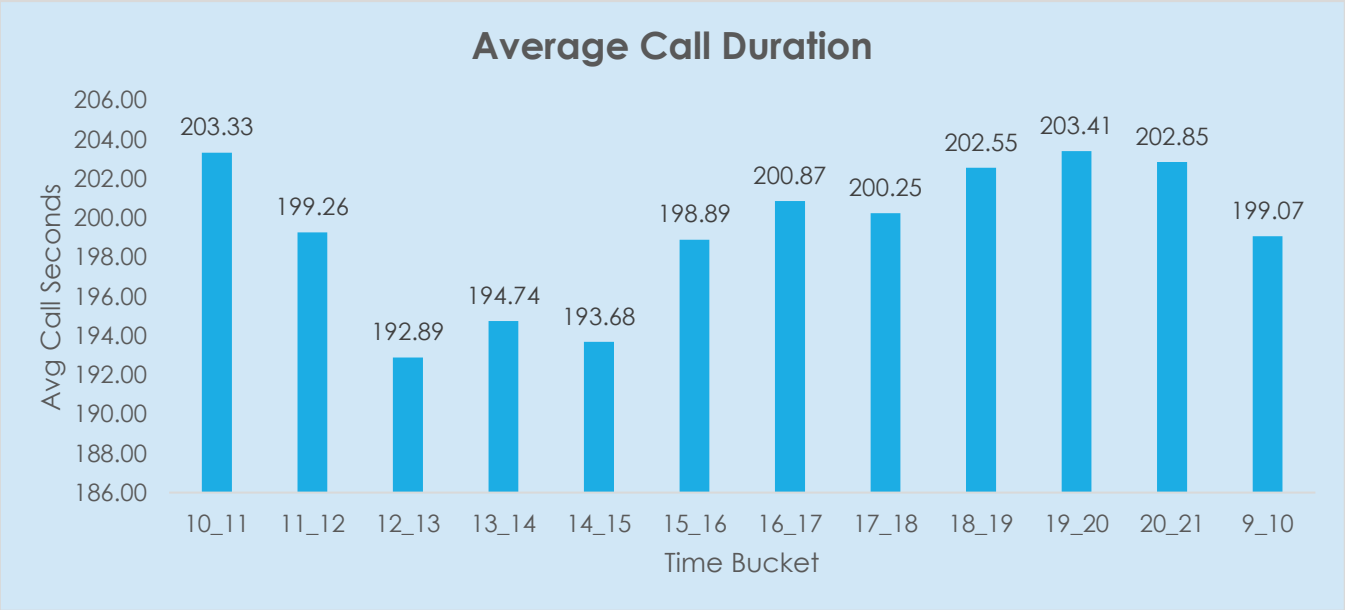
34003 abandoned, rest Agent(mode)

All calls were abandoned.

All calls were abandoned.

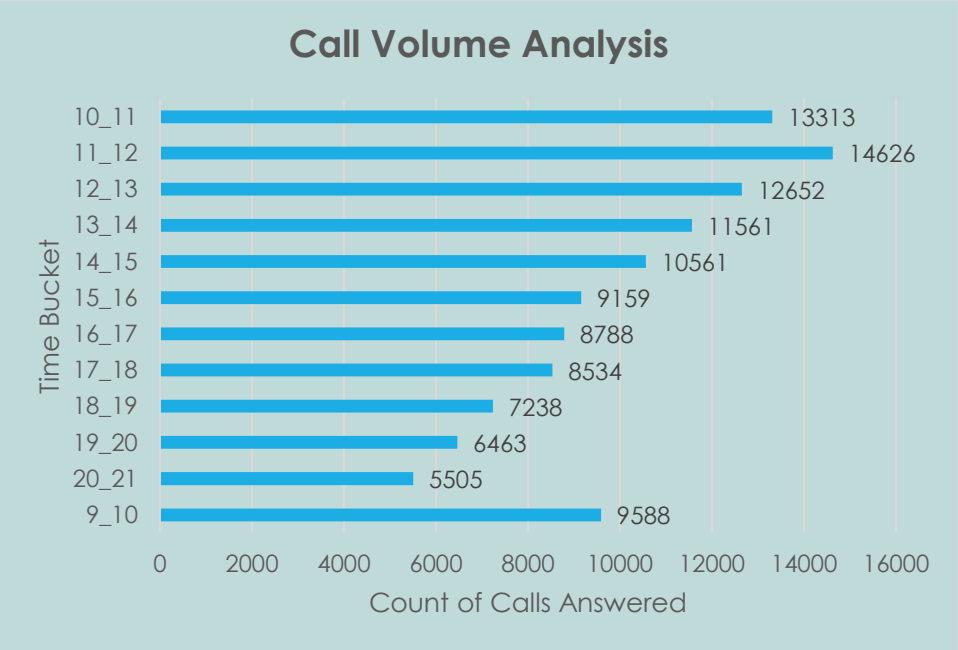
Average Call Duration

- The average call duration varied across time buckets, with peak durations observed during late morning and evening hours.



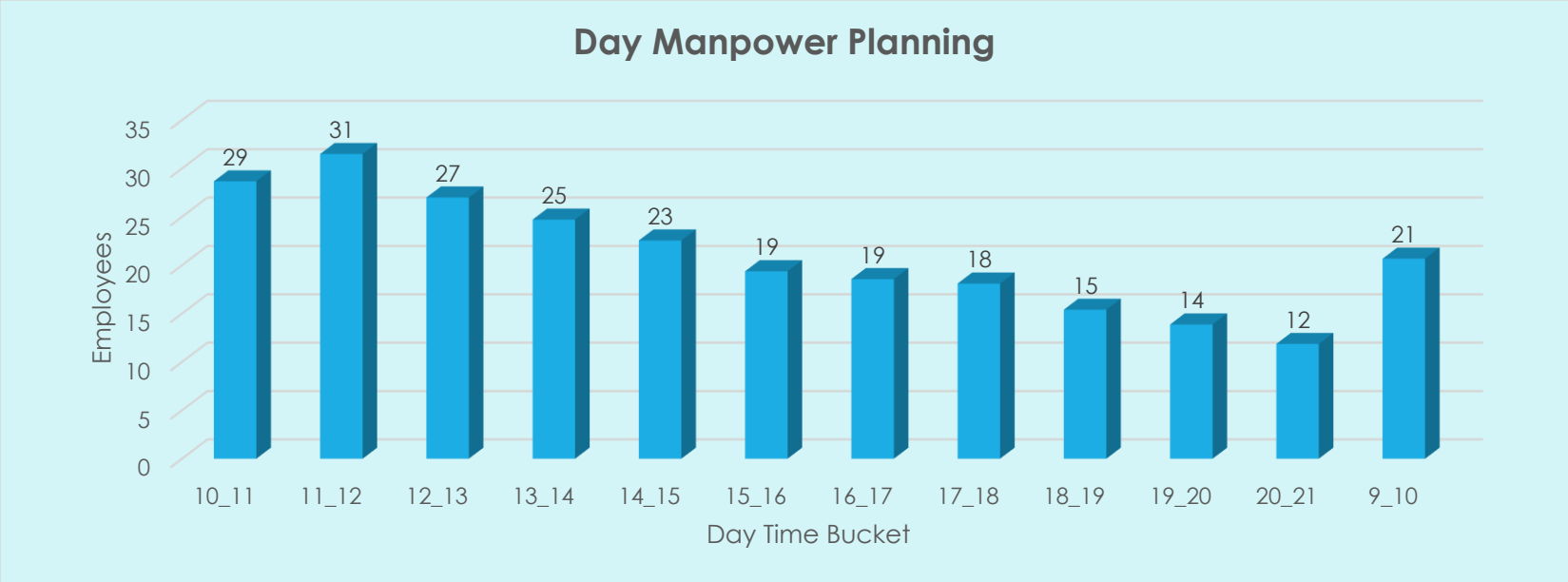
Call Volume Trends

- High call volumes were observed between 10 AM and 2 PM, indicating peak customer engagement periods.



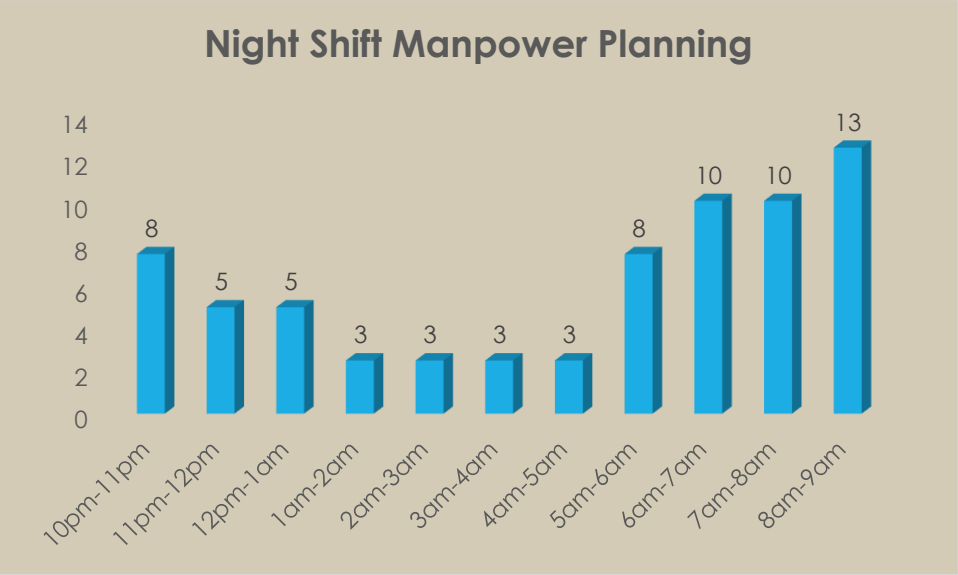
Manpower Allocation:

- Strategic manpower planning can reduce call abandonment rates to 10%, enhancing customer satisfaction.



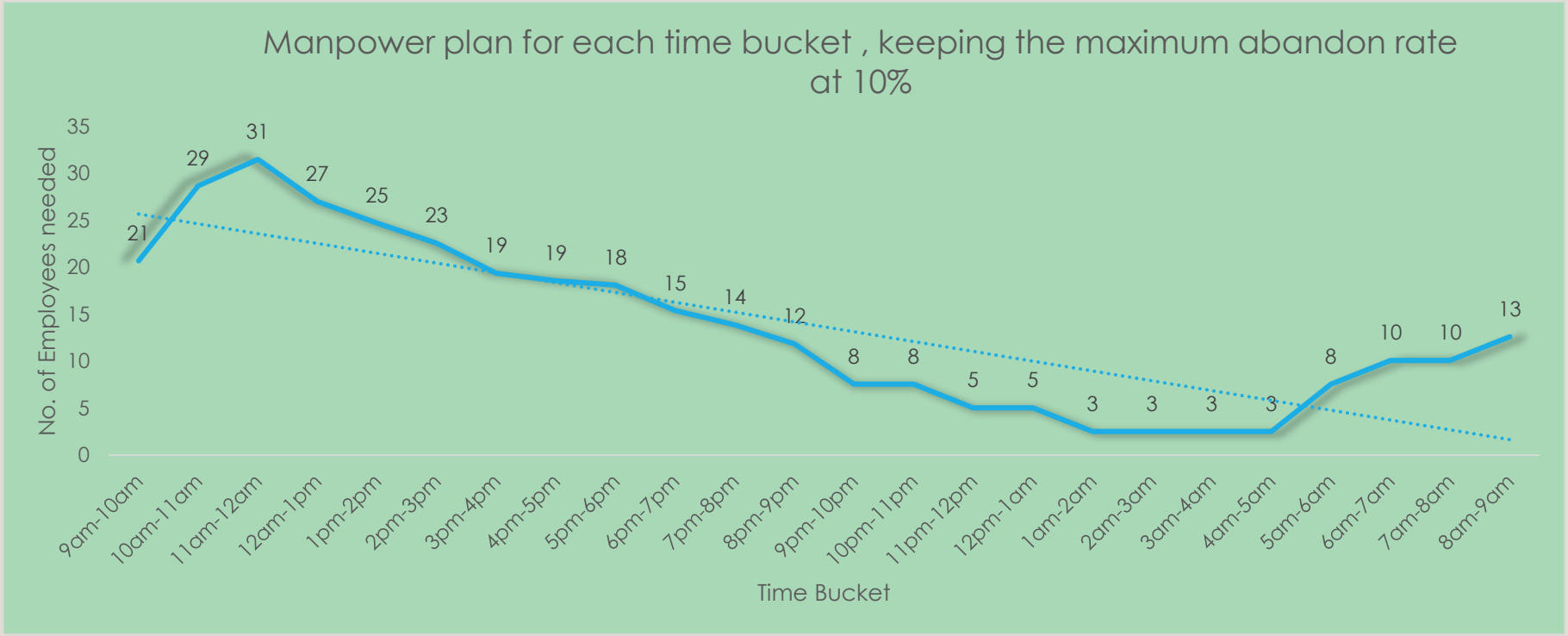
Night Shift Considerations:

- Implementing a night shift team is crucial to address calls made during off-hours and improve the overall customer experience.
- Calls start to surge after 5 o'clock, so most attentions need to employ people for early morning shifts.



Combined Manpower

- Calls surge after 5 o'clock, peaking between 11 and 12 noon. After that, they gradually decline, reaching a low after 9 PM, with the lowest point occurring between 1 AM and 5 AM.



Drive Link

- Presentation
- Excel