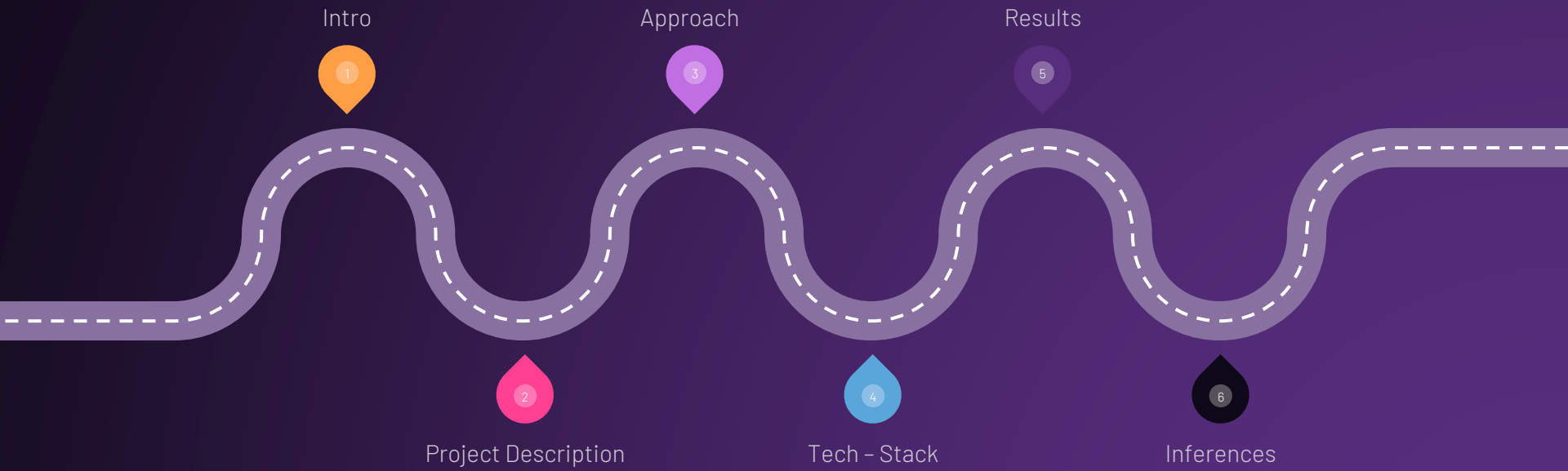
CALL TREND VOLUME ANALYSIS

ROADMAP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01.

PROJECT DESCRIPTION

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- Research shows that 68% of customers are likely to leave a company due to poor treatment. In the past, establishing a successful business required a strong network and significant capital. However, the business landscape has drastically changed over time, and now simply having a great idea and access to capital won't necessarily guarantee success.
- "Customer is king." Businesses must prioritise providing an exceptional customer experience throughout the entire customer journey - from pre-purchase to post-purchase. By doing so, businesses can turn potential customers into loyal advocates while reducing their cost of customer acquisition (COCA).
- I have been given a dataset containing various attributes to analyse the Customer Experience (CX) analytics for a company's inbound calling team.
- As a Data Analyst, my task was to create a manpower plan that would decrease the current abandonment rate from 30% to 10% for the organisation.

02.
APPROACH

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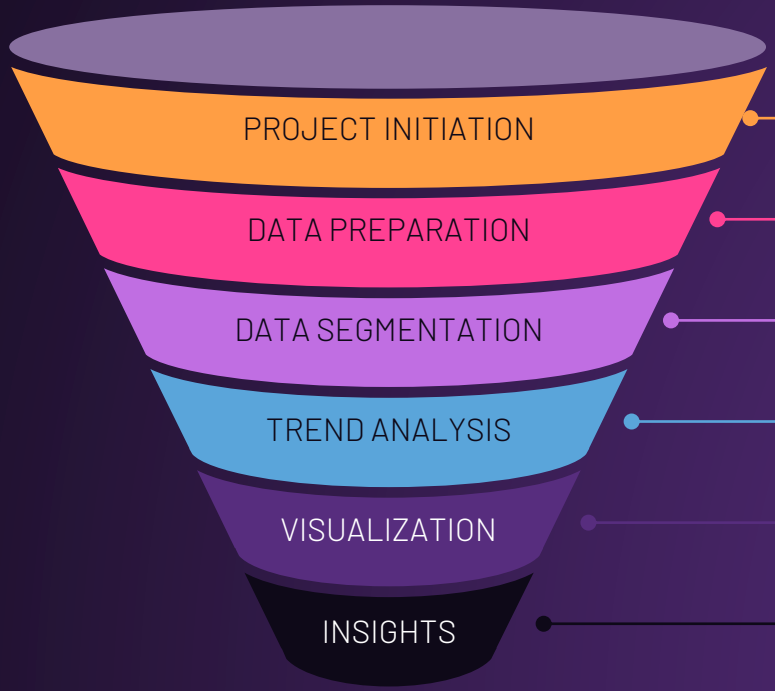

- Identifying the KPIs to be analyzed
- Cleanse & Normalize the Data
- Segmentized the data based on relevant criteria
- Employed statistical methods and time series analysis to identify patterns and trends
- Crafted Visual representations using Graphs & Charts
- Generated insights regarding call volume fluctuations and their potential causes

03.

TECH – STACK USED

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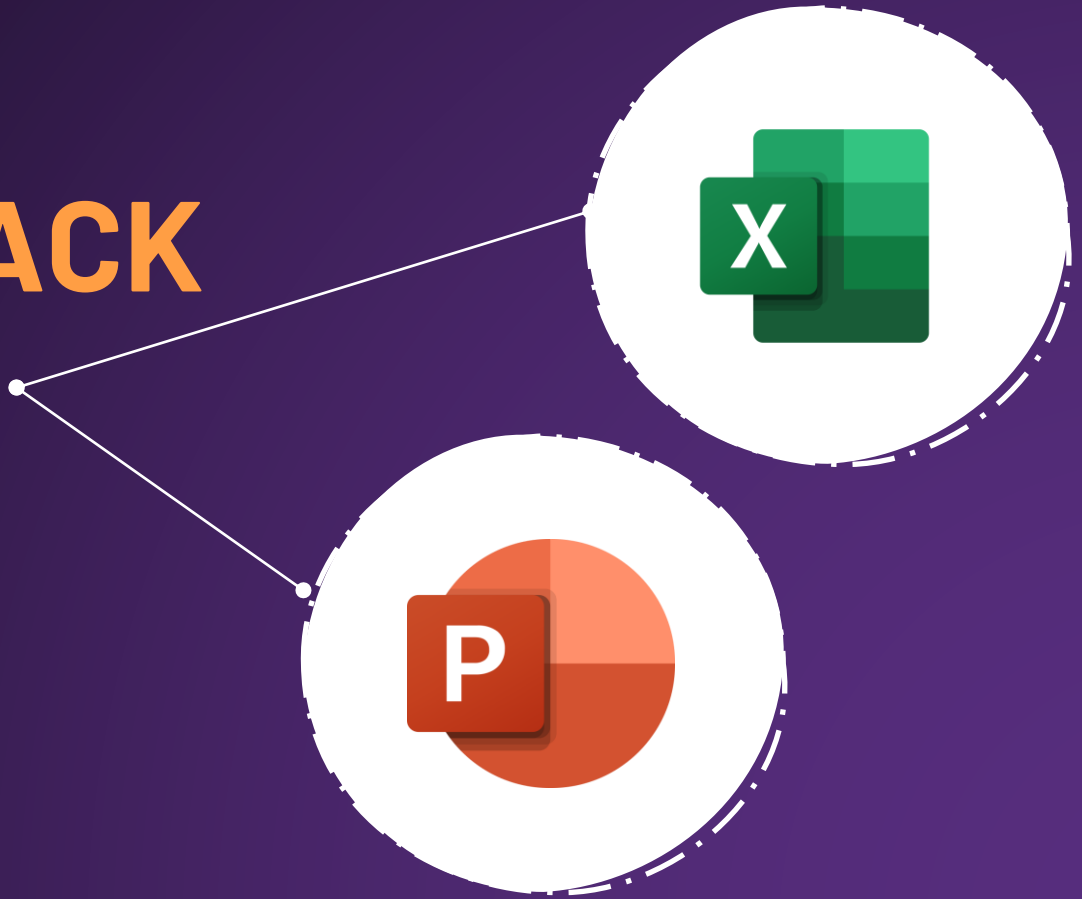
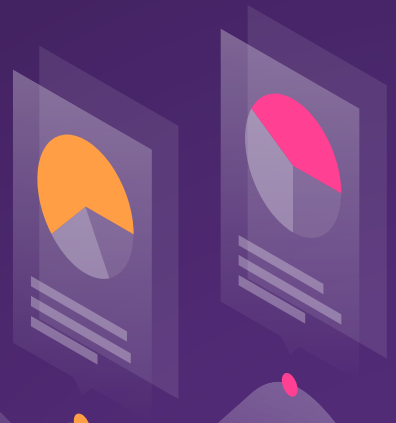


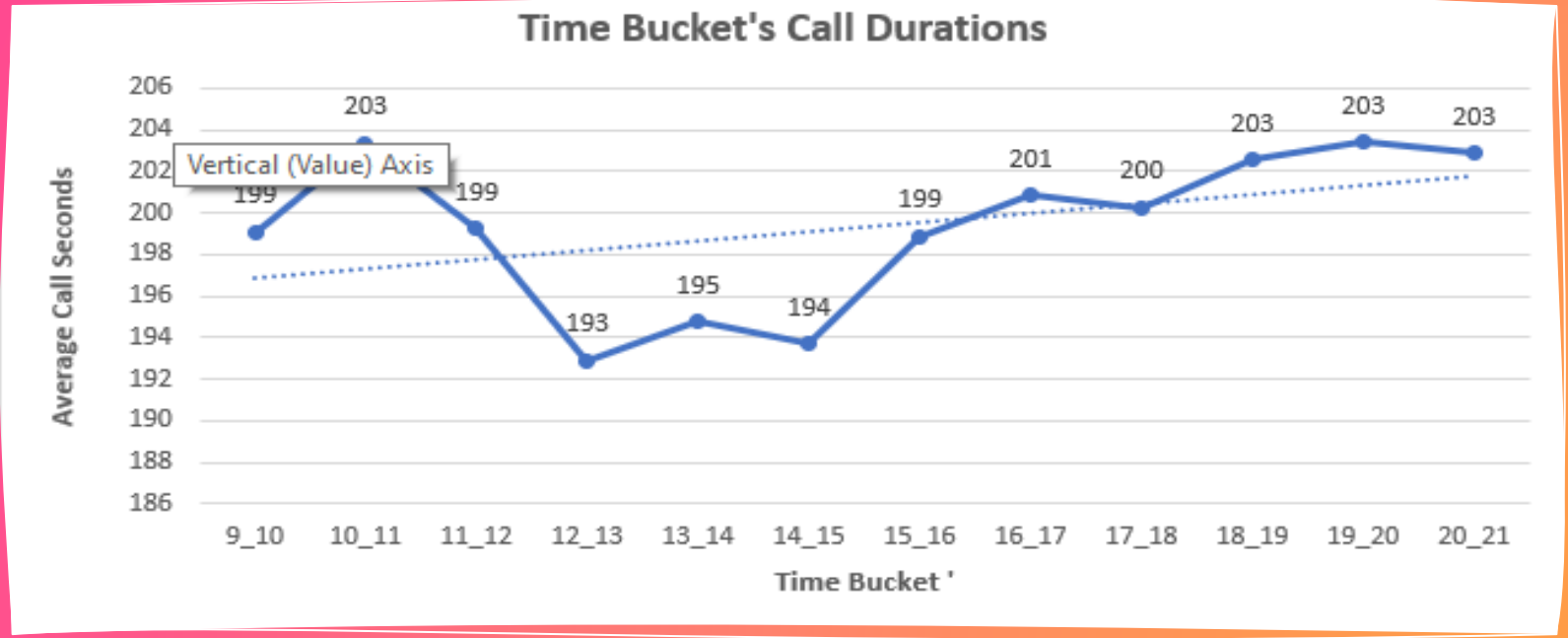
04.

RESULTS



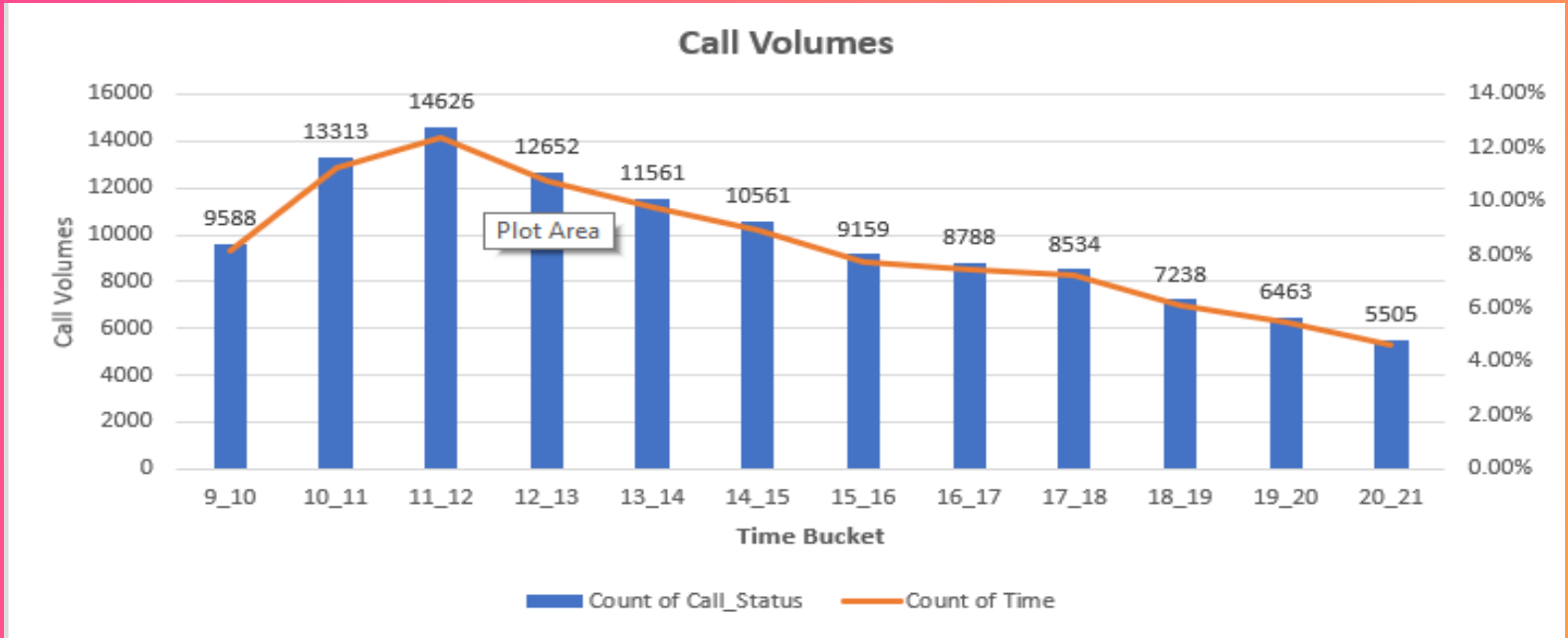
Insights Required: What is the average duration of calls for each time bucket?

During the time bucket of 10-11 am, 6-7 pm, 7-8 pm, and 8-9 pm, the highest average call duration is noted. The lowest average call duration is noted during 12-1 pm, 1-2 pm, and 2-3 pm.



Insights Required: Create a graph that shows the number of calls received in each time bucket.

There was a surge in call volume between 9-10 AM, peaking from 11-12 PM. Afterwards, there was a decline until the end of the working day.



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ASSUMPTIONS	
Shift	9 Hrs
Lunch	1.5 Hrs
Working Hours	7.5 Hrs
Productive Hours	**(60% of 7.5 Hrs)**
	4.5 Hrs

Calculations Per Head	
Productive Time in Minutes per day	270 Minutes
Productive Tim in Seconds per day	16,200 Seconds
Productive Time in Minutes per Months	8100
Productive Time in Seconds per Months	486000
Work Days in a Week	6 Days
Unplanned leave per Month	4 Days
Workind Days In a Month	20 Days

Average Calls during the whole day 5130

MANPOWER PLANNING	
Working Hour's Per day	4.5 Hrs
Average Call_duration	199
Required Working hours required to answer 90% Calls	255
Required Headcount	57

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MANPOWER PLANNING	
Average Calls Received during Night Shift (30%)	1539
Average Call_duration	199
Required Working hours required to answer 90% Calls	77
Required Headcount	17

Total Manpower Required for 24 hours to maintain the calling efficiency at 90%	**(57+17) = 74**

INFERENCES

Customer calls are least frequent in the evening, so the company can reduce the number of agents during that time for call handling.

Calls are least frequent in the evening, which presents an opportunity for the company to optimize its workforce.

One option is to move some day workers to the night shift to ensure seamless coverage and efficient call handling throughout the day.

To ensure round the clock availability,n the company can divide its workforce into three shifts, enabling agents to be available 24/7 to address customer queries and concerns.

It is important to note that during the analysis, outliers were identified in the data. Removing these outliers could potentially lead to different outcomes and answers, as they may have influenced the results.

These insights provide the company with actionable strategies for optimizing workforce allocation, enhancing customer service efficiency and ensuring continuous availability to address customer needs.

THANK YOU

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