ABC Call Volume Trend

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PROJECT DESCRIPTION

- This project is about the inbound call team for 23 days where we get the data of the customer experience.
- Where we get the data like Time, Time_Bucket and Agent_Name ..Etc.
- As data analyst our job is to understand the data get meaningful insights from the data.
- Get the hidden insights from the data and get the predictive analysis that we need.

APPROACH

- My approach for this project is to first of all understand the data and get to know about the data columns.
- Next step of approach is to clean the data like removing the null values and unnecessary data.
- Going through the problems which I need to be solved and provide a suitable solution for it.

TECH-STACK USED

- To Analyze and extract meaningful insights from the data I have used the Microsoft excel 2022.

INSIGHTS

- The insights we got from analyzing the data of the incoming call data of team for 23 days like average call volume duration , Man power plan and Charts of call volume at different time bucket's.
- By using the pivot table in excel we have performed the data analysis of incoming call data and got various insights from that data.

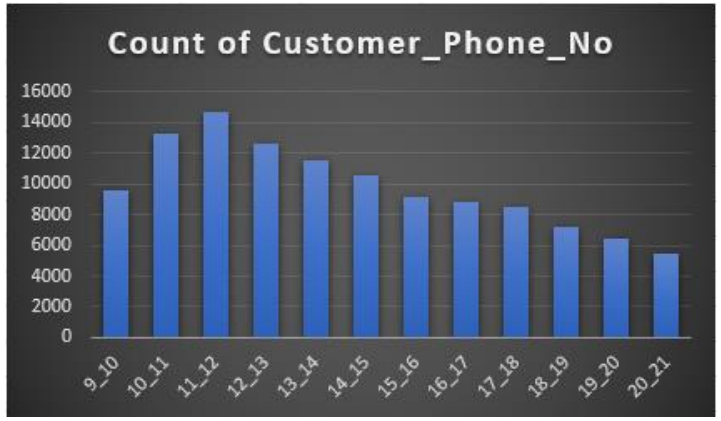
AVERAGE CALL DURATION

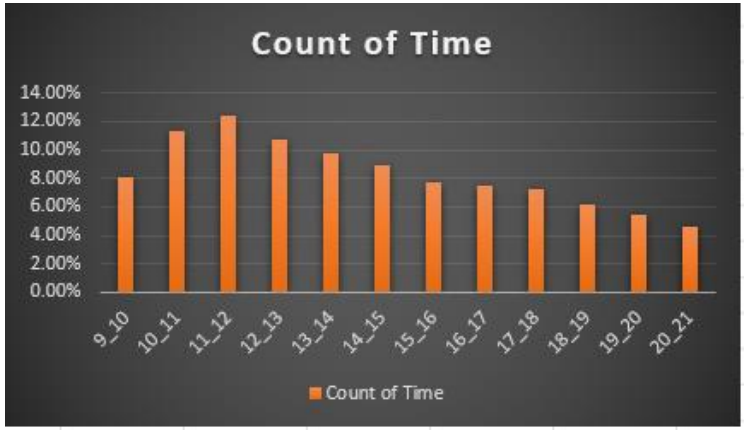
Call_Status	answered

Row Labels	Average of Call_Seconds (s)
9_10	199.1
10_11	203.3
11_12	199.3
12_13	192.9
13_14	194.7
14_15	193.7
15_16	198.9
16_17	200.9
17_18	200.2
18_19	202.6
19_20	203.4
20_21	202.8

- The average call duration for incoming call for team is **198.6** Sec.
- Where we find out the average call seconds of incoming for call team and we have also applied filter to filter out the calls which are only answered by the team.
- For the we have used the Call_Status Column as filter and the whole operation is done by using the pivot table feature.

CHARTS





- For Plotting the total volume / no.of calls incoming via the charts/graphs by the time_bucket interval.
- For this operation we have used the pivot table where we have sorted the data by means of time_bucket and plotted those data in the form of column chart.
- The column's we have used are customer_phone_no and time.

MAN POWER PLAN

Time Taken On An Average To Answer A Call		198.6 Sec
Time Required To Answer 90% of Total Calls[9Am - 9Pm]		254.7001826
Person's Required Per Day To Answer 90 % Call's		57

- For the proposal of man power plan for reducing the abandon rate to 10% first of all we need to calculate the time taken on an average to answer a call is 198.6 Sec which got from first problem.
- Then we have to calculate the extra hours which are required for reducing the abandon rate to 10% which is done by taking average per call volume , average call duration , call answering rate divided by total seconds in a hour (3600).
- To get the man power required for reducing the abandon rate to 10% we need to divide the extra hour's required by average time per person working on calls so that's when we get the people required to answer the 90% calls i.e **57.**

MAN POWER PLAN AT GIVEN INTERVAL

Time Required To Answer 90% of Total Calls[9am - 9pm]	254.7002
Time Required To Answer Calls During [9pm-9am]	76.41005
Person's Required to Answer the call's at 9pm-9am per day	17

- For proposal of man power plan at given interval as the condition mentioned we get only 30% of total call volume at night then the extra hours which we need to 30% of total extra hours.
- So the extra hour's that we need to answer calls at night would be 76.41 hours for finding the people required for attending the incoming calls at night would be 30 % of total extra hours divided by the average time per person working on calls.
- People required for attending the calls at night would be 17.

Thank you