Power BI Virtual Case Experience

Telecommunication Business Churn Analysis.

Hello Claire,

I am a Digital Accelerator from PWC Virtual Experience.

We have received and analysed your dataset for insight and auctionable business decisions. Kindly find below a summary of the suggestions as well as findings.

Kindly do let us know if you need any further clarification.

Introduction

Attrition rate or churn rate is usually the measure of the rate at which customers stops using a service or doing business with an organization. It checks the subscribers who stop subscribing to a service at a given period of time. For a company to continue for long in business, business growth rate must exceed churn rate.

Problem statement

Subscribers exiting a company's service can be one of the many Key Performance Indicators (KPIs) and metrics of churn.

At what rate is a company losing customers for a given period of time?

What is the customer's satisfaction rating ?

What is the overall customer satisfaction?

What are the overall calls answered/abandoned?

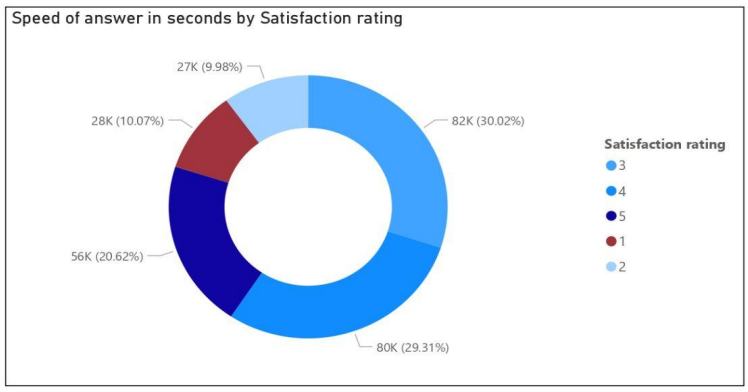
Analysis of Calls by time.

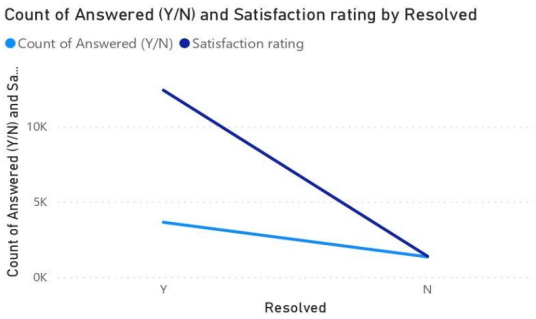
Data Design

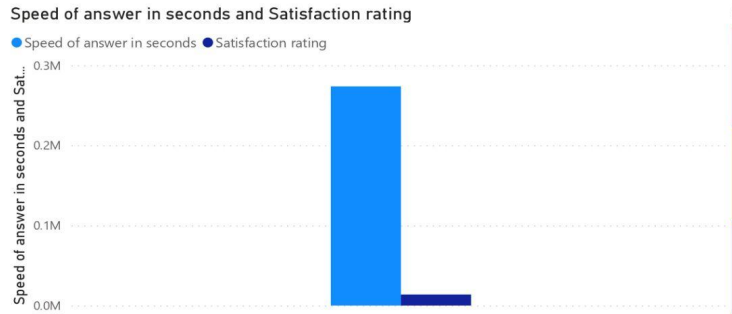
There were 5000 records and 10 columns in the dataset.

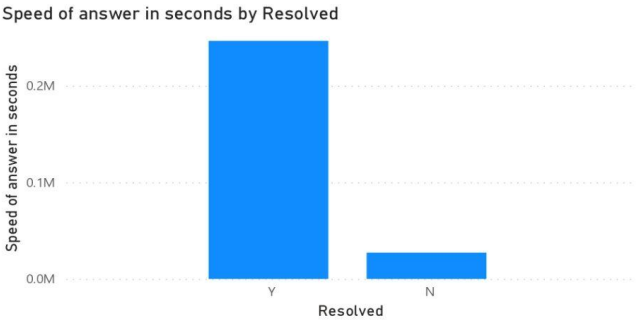
The data was transformed on powerBI using Power Query. The duplicate data were removed and columns with NaN that are not relevant to this analysis were dropped to improve data quality. Average duration and was splitted and transformed by splitting column by position and 11 and 10 respectively. Column quality check shows 100 percent validity for calliD, Agent, Date.Time, Response to customers call, resolved issues There were 18 percent(178) missing values in speed of answers,average talk duration and satisfaction rating … Record with large missing columns where drop for the purpose of data quality. 4054 were left in the transformed and cleaned dataset. 4054 records were used for this analysis

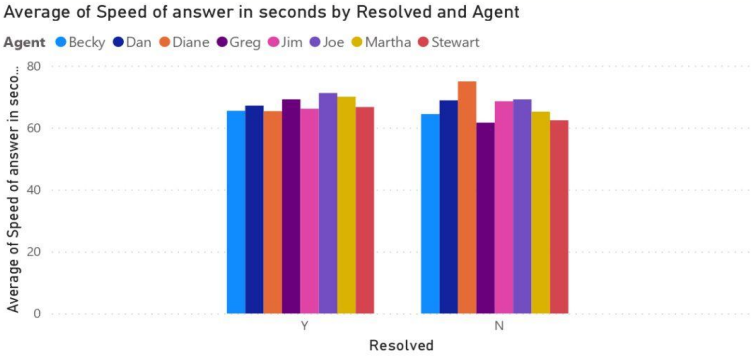
Findings

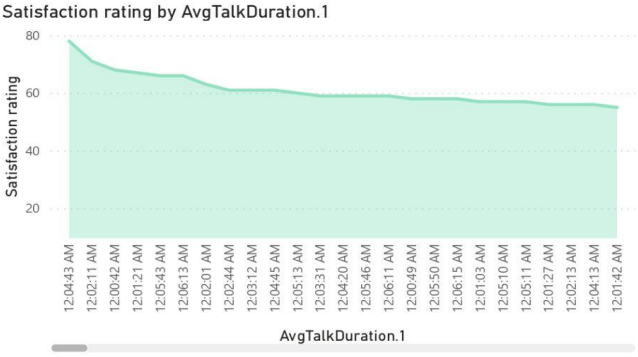












There is a correlation between speed of answer in seconds and customers satisfaction rating. **I suggest maintaining the speed or improving upon it.**

The 3-5 ratings percentages were more for customers who received fast response. The number of 1 rating is high this may be concerning.

I therefore analysed the quality of the calls. Speed alone is not enough. **I suggest quality customer response.**

All the agents seem to be active. Were the customer's issues resolved?

I therefore analysed how effective your customer service agent has been.

All Agents were active but the number of unresolved customer’s issues may be an indicator for churn. **I suggest improving the quality of response to customer’s query.**

The customer rating was high where there was a Y response to customers' query.

Many issues were resolved in less duration. I would suggest a quality response.

There were too many unresolved issues that may be responsible for customer dissatisfaction.

Customers rating is positively correlated with length of calls.

Suggestion: Average call duration is okay. You may maintain the average call duration.

Churn rate and Business suggestions

A high rate of churning may adversely affect and hinder business growth and this must be prevented. There seems to be a minimal rate of churning which should also be addressed .

I suggest improving the quality of customer services. There were large numbers of unresolved issues.There were unanswered calls leading to low customers rating. The percentage of low customers rating was higher than 10 percent. I also suggest working on a Time schedule. Most resolved issues were within the early hours of the day

Conclusion

From finding there is the need to improve the quality of customer's service so as to reduce low customers rating and improve positive correlation.

I suggest maintaining the speed and duration of response or improve upon it if possible however, I suggest quality customer response and service.

Best regards,

Funmilayo Aina

PWC Power BI Virtual Case Experience.