Customer Care Call Logs Analysis Using Excel

Project Overview

The goal of this project was to analyze customer care call log data to identify factors affecting customer satisfaction, call duration patterns, and representative performance. The dataset included details such as call duration, customer demographics, purchase amount, and satisfaction ratings. The findings aim to help improve customer service operations and decision-making.

Data Cleaning and Preparation

Before analysis, the dataset was cleaned and prepared to ensure accuracy and consistency. Key steps included:

- Removing extra header rows and blank cells

- Correcting inconsistent column names

- Checking for and removing duplicate entries

- Converting date fields to the correct date format

- Creating calculated columns such as **"Duration Bucket"** and **"Rounded Rating"** to make insights easier to interpret

These steps ensured the dataset was accurate, structured, and ready for analysis.

Analysis and Insights

Using Excel tools such as **Pivot Tables**, **Conditional Formatting**, and **Charts**, the following insights were identified:

- **Customer Satisfaction:** The average satisfaction score was **4.2 out of 5**, showing that most customers had a positive experience.

- **Call Duration:** Most calls lasted between **1–2 hours**, suggesting that representatives often needed time to resolve customer concerns.

- **Top Representatives:** Representative **R05** handled the highest number of calls, accounting for roughly **20% of total interactions**.

- **Purchasing Trends:** Customers who gave higher satisfaction ratings also tended to have higher purchase amounts.

- **Demographics:** Most customers were **male, aged 25–45**, and located in **Columbus** and **Cleveland**, which recorded the highest number of calls.

Visualizations

The interactive Excel dashboard included the following visuals:

- **Bar Chart** – Call counts by representative

- **Line Chart** – Average satisfaction score over time

- **Pie Chart** – Customer distribution by city

- **Summary Cards** – Average satisfaction score and total purchase value

These visuals provided a clear overview of call performance and customer satisfaction trends at a glance.

Conclusion

The analysis highlighted key insights into customer service operations, showing strong satisfaction levels and identifying top-performing representatives. Using Excel functions, formulas, PivotTables, and visualizations, raw call log data was transformed into an informative dashboard that supports data-driven decisions.

Skills Demonstrated

This project strengthened my skills in:

- **Data cleaning and preparation** using Excel functions

- **Exploratory data analysis** with PivotTables and formulas

- **Dashboard creation** using charts, slicers, and summary visuals

- **Business insight generation** through trend interpretation and performance tracking