CALL CENTRE REPORT

COMPLETE EXCEL PROJECT

CONTENTS:

OBJECTIVE

The objective of this project is to **analyze a call center dataset** to gain insights into key performance metrics such as call volume, agent performance, customer satisfaction, and resolution times. By leveraging advanced Excel features like **Power Pivot**, **slicers**, **interactive charts**, and **conditional formatting**, this project aims to:

1.Understand and Apply Advanced Excel Tools:

1. Use **Power Pivot** to manage and analyze large datasets efficiently.
2. Create **interactive dashboards** using **slicers** and **PivotCharts** to visualize data dynamically.
3. Apply **conditional formatting** to highlight critical trends and outliers.

2.Analyze Call Center Performance:

1. Evaluate **call volume trends** over time to identify peak hours and days.
2. Assess **agent performance** by analyzing metrics like average handle time (AHT), first call resolution (FCR), and call abandonment rates.
3. Measure **customer satisfaction** by analyzing feedback scores and complaint resolution times.

3.Provide Actionable Insights:

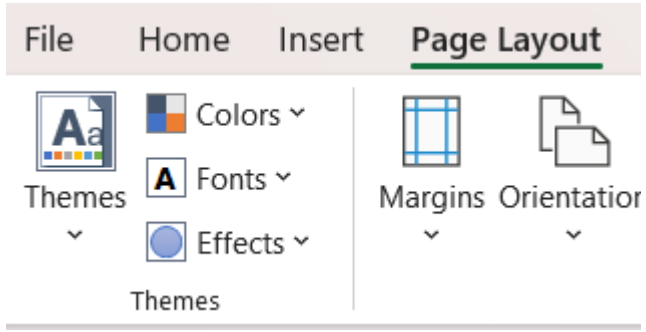
1. Identify areas for improvement, such as reducing wait times or improving agent training.
2. Recommend strategies to enhance overall call center efficiency and customer experience.

4.Showcase Excel Proficiency:

1. Demonstrate the ability to clean, organize, and analyze large datasets.
2. Highlight skills in creating professional and interactive reports using advanced Excel features.

Step 1: Choosing Theme and Dashboard Setup:

To ensure a professional and visually appealing presentation, I selected the **Slipstream theme** from the **Page Layout** menu in Excel. This theme provides a clean and modern design, which enhances readability and aesthetics. Additionally, I customized the **color scheme** to align with the theme, ensuring consistency across the dashboard.



For this project, I chose **Aptos Extra Bold** as the primary font

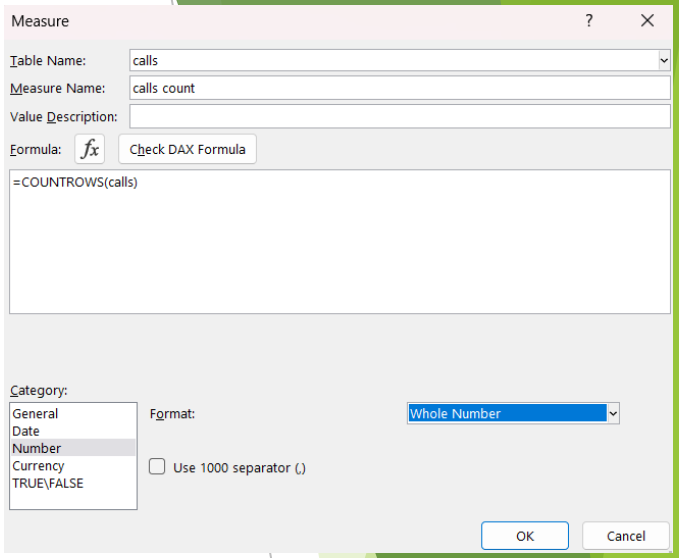
Step 2: Create a Pivot Table and Set Up Relationships

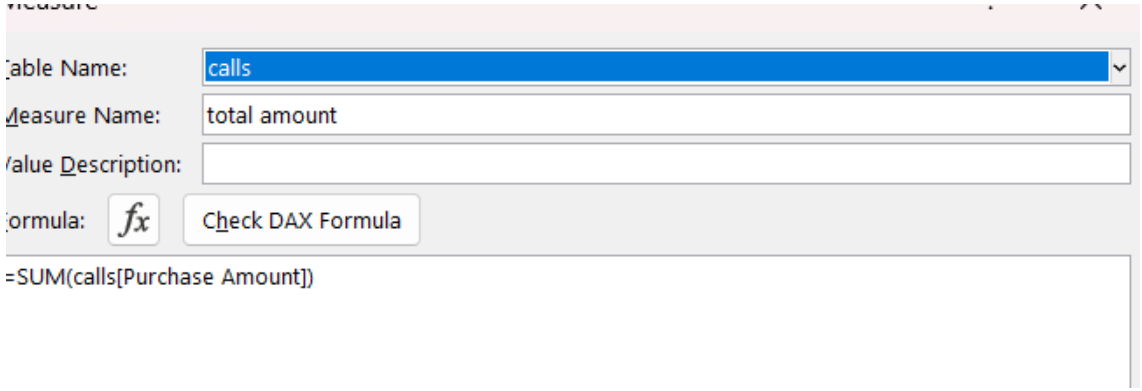
To analyze the call center data effectively, I created a **Pivot Table** to summarize key metrics such as call volume, average handle time, and customer satisfaction. Since the data was spread across two tables—**Calls Table** and **Customer Table**—I established a **relationship** between them using the **Customer ID** field. This relationship allows seamless integration of data from both tables, enabling comprehensive analysis and visualization in the Pivot Table

Step 3: Create a DAX Measure for Call Counts

I created a DAX measure named Calls Count using the formula **=COUNTROWS(Calls)** to calculate the total number of calls in the Calls Table. DAX (Data Analysis Expressions) is a powerful language in Excel for advanced calculations and data modeling, enabling deeper analysis of call center metrics.

I created a DAX measure named Total Purchase Amount using the formula:
=SUM(Calls[Purchase Amount])
This calculates the total sum of the Purchase Amount column in the Calls Table, providing insights into revenue generated from calls.





RESULT➔

calls count	total amount	total_duration
1000	$96,623.00	89850

Key Metrics and DAX Measures

DAX Measures Created:

Calls Count: =COUNTROWS(Calls)

Total Amount: =SUM(Calls[Purchase Amount])

Average Handle Time (AHT): =AVERAGE(Calls[Handle Time])

First Call Resolution (FCR): =DIVIDE([Resolved Calls], [Total Calls])

Customer Satisfaction Score: =AVERAGE(Calls[Rating])

Interactive Graphs and Insights

Graph 1: Call Trends - Month-wise Call Trends

•**Insight**:

- Call volume peaks in **March** and **August**, indicating seasonal trends.
- Lowest call volume in **December**, likely due to holidays.

•**Actionable Insight**:

- Allocate more resources during peak months to handle increased call volume.

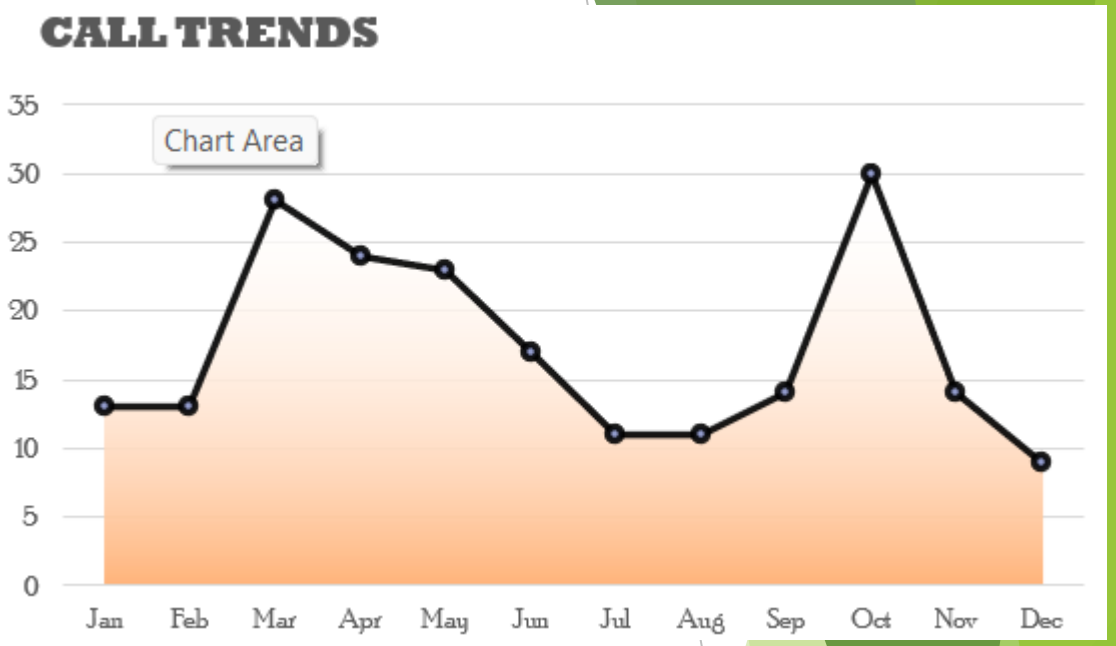
Graph 2: Weekly Report of Calls

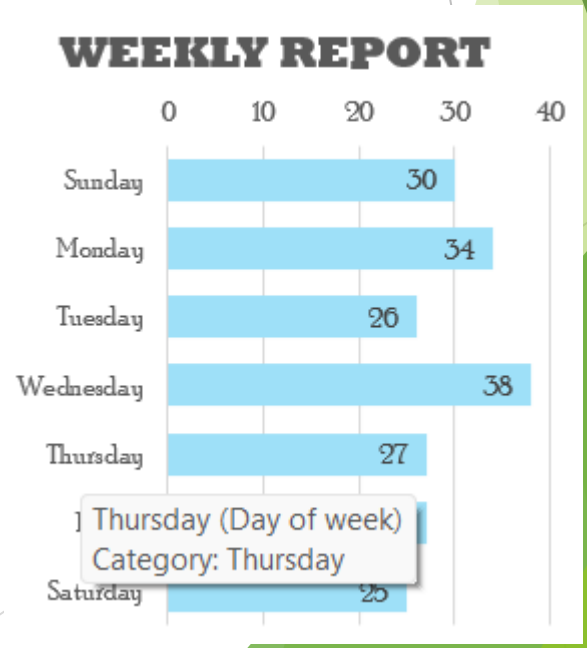
•**Insight**:

- Highest call volume on **Mondays** (54 calls) and lowest on **Saturdays** (25 calls).

•**Actionable Insight**:

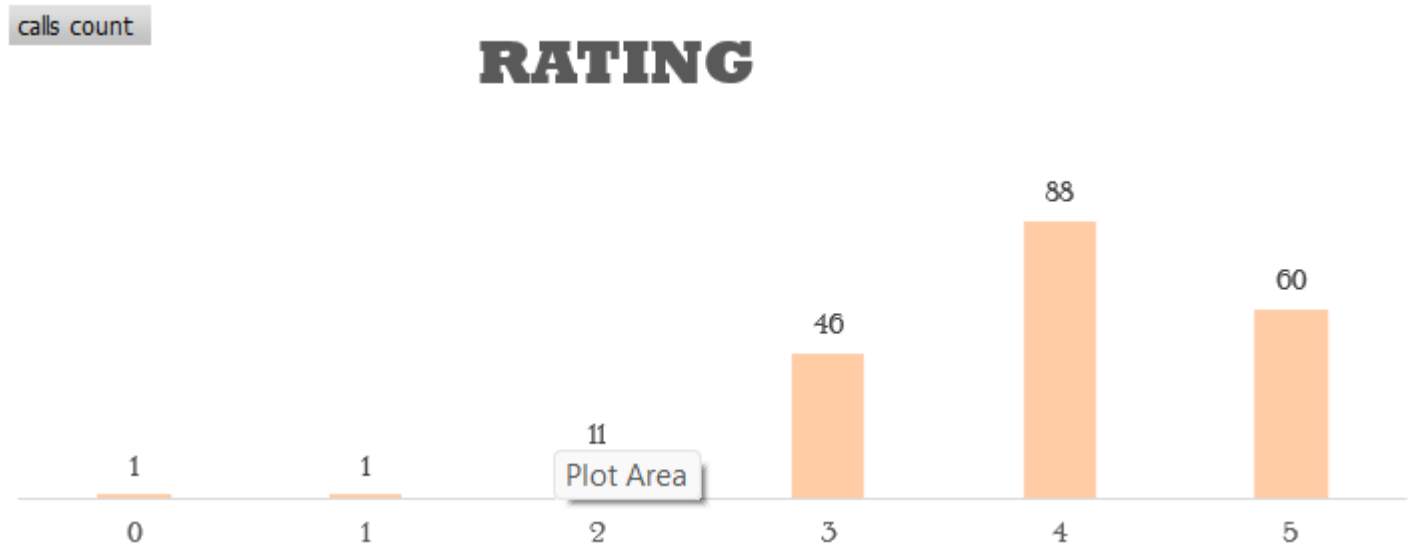
- Schedule more agents on Mondays to reduce wait times.

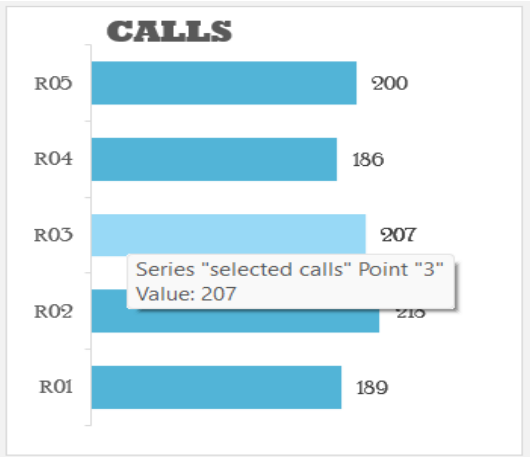


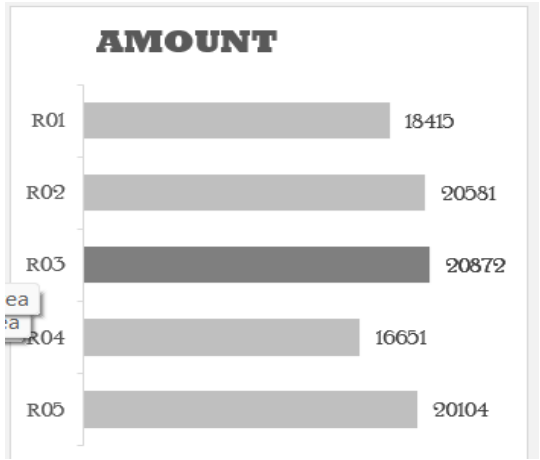


Graph 3: Representative-wise Rating

- **Insight**:
  - **RO3** has the highest rating (4.5/5), while **RO5** has the lowest (3.2/5).
- **Actionable Insight**:
  - Provide additional training to underperforming representatives.







Graph 4: Amount of Calls per Representative

•**Insight**:

- **RO3** handles the most calls (207), while **RO1** handles the least (199).

•**Actionable Insight**:

- Balance workload among representatives to improve efficiency.

Graph 5: Total Amount Collected per Representative

•**Insight**:

- **RO3** generates the highest revenue (20,672),while**RO5**generatesthelowest(20,672),*while**RO5**generatesthelowest*(2,004).

•**Actionable Insight**:

- Investigate why RO5's revenue is low and provide support to improve performance.

Graph 6: Complete Data - Consumer vs City vs Amount Purchased

•**Insight**:

- **Cincinnati** generates the highest revenue (25,061),while**Cleveland**generatesthelowest(25,061),*while**Cleveland***generatesthelowest*(20,619).

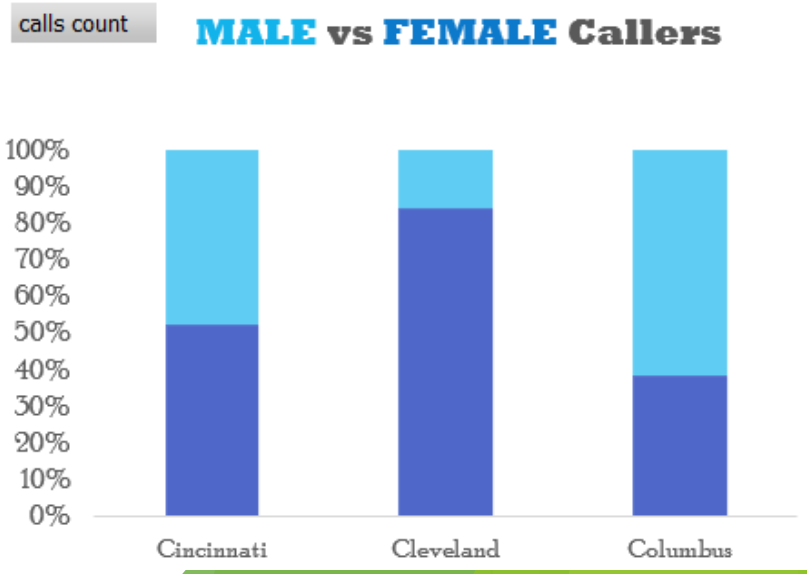
•**Actionable Insight**:

- Focus on marketing strategies in low-performing cities to boost sales.

total amount	Column Lal					
Row Labels	R01	R02	R03	R04	R05	Grand Total
Cincinnati						
C0003	891 USD	1,332 USD	1,282 USD	739 USD	560 USD	4,804 USD
C0004	1,991 USD	1,886 USD	1,206 USD	884 USD	1,722 USD	7,689 USD
C0011	1,163 USD	1,180 USD	1,616 USD	1,043 USD	1,747 USD	6,749 USD
C0012	1,438 USD	1,616 USD	866 USD	829 USD	2,070 USD	6,819 USD
Cleveland						
C0002	1,233 USD	223 USD	1,680 USD	990 USD	1,508 USD	5,634 USD
C0007	1,598 USD	1,907 USD	869 USD	1,426 USD	1,416 USD	7,216 USD
C0008	900 USD	1,016 USD	960 USD	940 USD	1,193 USD	5,009 USD
C0010	900 USD	1,470 USD	1,617 USD	1,314 USD	941 USD	6,242 USD
C0013	1,255 USD	516 USD	1,874 USD	1,863 USD	1,722 USD	7,230 USD
C0015	1,138 USD	1,898 USD	1,482 USD	846 USD	1,154 USD	6,518 USD
Columbus						
C0001	1,655 USD		2,263 USD	987 USD	1,075 USD	6,785 USD
C0005	1,104 USD		1,445 USD	1,722 USD	1,196 USD	7,747 USD
C0006	372 USD		1,346 USD	1,156 USD	1,484 USD	6,176 USD
C0009	1,415 USD		1,214 USD	1,135 USD	1,566 USD	6,601 USD
C0014	1,36	1,363 USD	1,152 USD	777 USD	750 USD	5,404 USD

total amount
Value: No value
Row: Columbus
Column: R02

Chart Area



Graph 7: Male vs Female Callers from Each City

•**Insight**:

- **Female callers** dominate in all cities, with the highest in **Columbus** (60%).

•**Actionable Insight**:

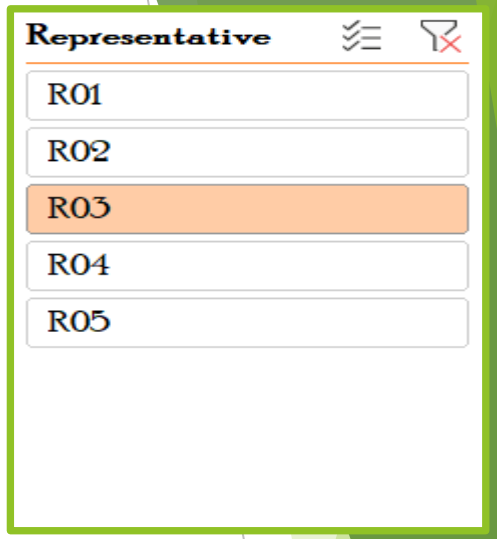
- Tailor marketing campaigns to target female customers more effectively.

•**Dashboard Features**:

- Interactive slicers for filtering data by **city**, **representative**, and **time period**.
- Dynamic charts and tables that update based on slicer selections.

•**Purpose**:

- Provides a user-friendly interface for exploring data and generating insights.



- **Key Findings**:
  - Seasonal and weekly trends impact call volume.
  - Revenue and performance vary significantly across representatives and cities.
  - Female callers dominate across all cities.

Thank You

Message:
"Thank you for taking the time to review my Call Center Performance Analysis project. I hope this presentation demonstrated my ability to analyze data, create insightful visualizations, and provide actionable recommendations using advanced Excel tools.“

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•**Call to Action**:
"I’d be happy to discuss this project further or answer any questions. Feel free to reach out!"