

Customer Service Dashboard Report

Client: OptiConnect Solutions

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Tool Used: Power BI

Project Overview

OptiConnect Solutions is a call center service provider offering customer support across multiple departments such as TV, AC, Fridge, and Washing Machine. The goal of this project is to analyze call center performance using Power BI by visualizing key operational metrics.

The dataset includes call-level data such as call response status, resolution status, time to answer, duration of the call, and customer satisfaction ratings.

Objective

To uncover patterns in agent and department performance, identify gaps, and generate **actionable insights** for improving call response time, resolution rate, and customer experience.

Dataset Description

The dataset contains call-level information with the following fields:

- **Call Id:** Unique identifier for each call
 - **Date:** Date the call was received
 - **Agent:** Name of the agent who handled the call
 - **Department:** TV, AC, Fridge, or Washing Machine
 - **Answered:** Whether the call was answered (Y/N)
 - **Resolved:** Whether the issue was resolved (Y/N)
 - **Speed of Answer:** Time taken (in seconds) to answer the call
 - **Talk Duration:** Length of the call in seconds
 - **Satisfaction Rating:** Customer feedback (1 to 5 stars)
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Business Questions Addressed

1. How many calls were answered and resolved?
2. Which department has the highest and lowest customer satisfaction?
3. Which agents perform best in terms of resolution and customer experience?
4. What are the daily trends in calls, resolutions, and satisfaction?
5. How does speed of answer relate to customer satisfaction?

Key Metrics and KPIs

- **Total Calls:** 1772
- **Answered Calls:** 1455 (82%)
- **Resolved Calls:** 1311 (74%)
- **Average Satisfaction Score:** 3.45 / 5
- **Fastest Answering Agent:** Diane (64 seconds average)
- **Top Performing Agent:** Martha (3.54 rating, 69% resolution rate)
- **Best Performing Department:** Fridge (Avg. satisfaction: 3.52)
- **Lowest Performing Department:** Washing Machine

Solution Approach

To solve the business problem and build a meaningful Power BI dashboard for OptiConnect Solutions, I followed a structured and logical approach. Below is a step-by-step explanation of the process, including the reasoning and tools used at each stage:

1. Data Loading & Cleaning

- Imported the dataset into Power BI.
- Ensured proper data types for each column (e.g., Date as Date, Satisfaction as Number).
- Replaced blanks/nulls in critical columns with appropriate values or filtered them out.

2. Data Modeling & Measures

- Created calculated columns and DAX measures such as:
 - Total Calls
 - Answered % and Resolved %
 - Average Satisfaction Score
 - Average Speed of Answer
- Ensured proper relationships (if required) for date-based visuals.

3. Dashboard Design

- Divided the dashboard into two pages:
 - **Page 1** for overall KPIs and department/agent performance
 - **Page 2** for time trends and deeper exploration
- Applied filters and slicers for interactivity (date, agent, department).

4. Visualization Logic

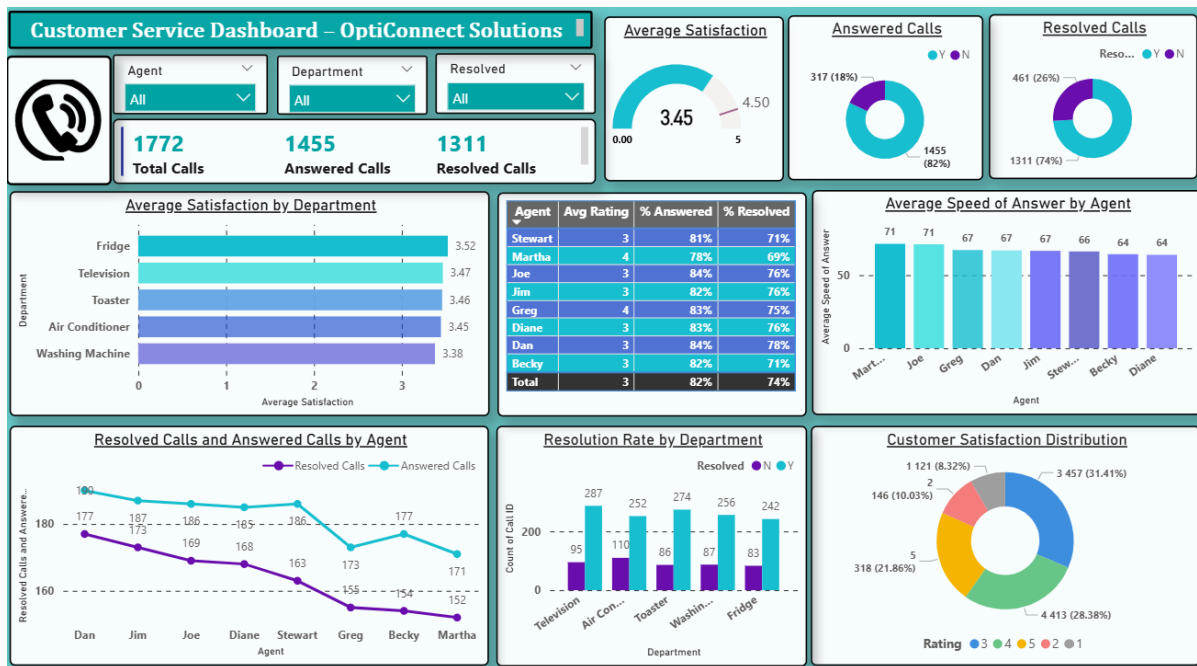
- Used bar, line, donut, scatter, and matrix visuals for readability.
- Mapped metrics to business questions (e.g., scatter plot for speed vs satisfaction, matrix for day-wise analysis).
- Color-coded charts for easy understanding (e.g., cyan = answered, purple = resolved).

5. Insight Extraction

- Focused on identifying best/worst-performing agents and departments.
- Analyzed whether fast answering led to higher satisfaction.
- Derived patterns in call and resolution trends across dates

Dashboard Pages Overview

Page 1: Customer Service Overview & KPIs

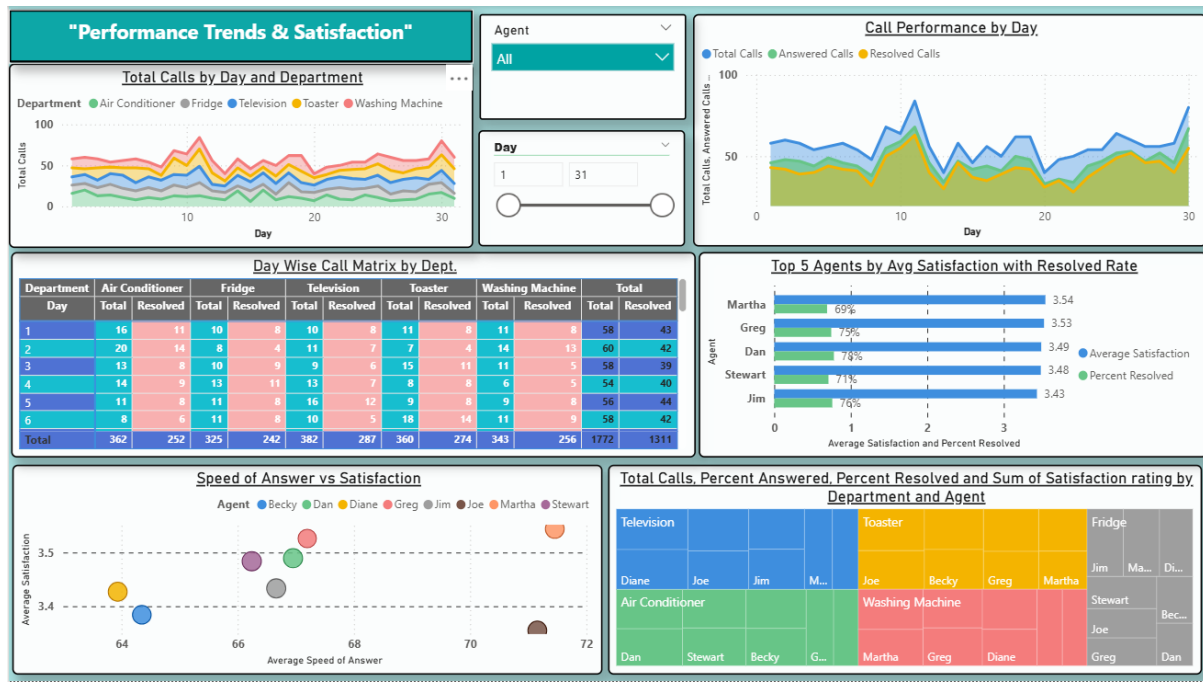


This page provides a high-level summary of call center performance.

Visual Components Include:

- **KPI Cards:**
 - Total Calls, Answered Calls, Resolved Calls, Average Satisfaction
- **Donut Charts:**
 - Answered vs Not Answered
 - Resolved vs Not Resolved
- **Bar and Line Charts:**
 - Average Satisfaction by Department
 - Speed of Answer by Agent
 - Resolved Calls by Department
 - Answered vs Resolved by Agent
- **Table View:**
 - Agent performance with average rating, answered %, and resolved %
- **Donut Chart:**
 - Customer Satisfaction Rating Distribution (1 to 5 stars)

Page 2: Performance & Trends



This page focuses on temporal performance and in-depth comparisons.

Visual Components Include:

- **Area & Line Charts:**
 - Daily trends for total, answered, and resolved calls
- **Stacked Area Chart:**
 - Department-wise call trends over time
- **Matrix Table:**
 - Day-wise breakdown by department for calls and resolutions
- **Bar Chart:**
 - Top 5 Agents by average satisfaction and resolution %
- **Scatter Plot:**
 - Speed of Answer vs Satisfaction Rating (Insights on quality over speed)
- **Tree Map:**
 - Department and agent-wise stats (total calls, resolution %, satisfaction)
- **Slicers/Filters:**
 - Interactive filtering by agent and date

Key Insights

- **Martha** stands out as the top agent with the highest satisfaction and resolution rate.
 - **Diane** answers calls fastest but maintains moderate satisfaction scores.
 - The **Fridge** department leads in both resolution and customer satisfaction.
 - The **Washing Machine** department requires improvement in service quality.
 - Faster response **does not always result in higher satisfaction**, highlighting a need to focus on quality resolutions.
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Conclusion

This Power BI dashboard enables OptiConnect Solutions to visualize and evaluate its customer service operations in real-time. The insights support data-driven decisions for:

- Training underperforming agents
- Improving departmental service quality
- Monitoring KPIs to enhance customer satisfaction

With clear visualizations, filters, and organized sections, the dashboard empowers management to spot trends, take action, and improve customer experience across departments.

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