

Portfolio Presentation Quick Guide: SQL JOIN + Dashboard Project

Project Title: Call Center Agent & Call Performance Analysis (March 2025)

Project Overview: In this project, I combined two separate datasets — agent rosters and call records — using SQL JOINS to create a unified view of call center performance. The final output was visualized through an interactive dashboard that highlights agent activity, call distribution by issue type, and operational trends over time.

Tools Used:

Tool	Purpose
SQL (PostgreSQL or similar)	Data extraction, cleaning, and joining
Power BI or Tableau	Dashboard design and visualization
Excel (optional)	Light data preparation or validation

Business Problem Addressed: Leadership needed visibility into individual agent workload, team performance distribution, and common customer issues during March 2025. Understanding call patterns and gaps would allow better resource allocation and process improvement planning.

Technical Process:

Step Action Taken

- 1 Wrote INNER JOINS to match agents to their handled calls
- 2 Wrote LEFT JOINS to show full agent roster, including agents without calls
- 3 Created aggregation queries (COUNT, GROUP BY) to calculate total calls per agent and per issue type
- 4 Created KPIs, bar charts, pie charts, and line charts to visualize agent activity and call trends
- 5 Structured dashboard to clearly separate KPIs, agent-level performance, issue breakdowns, and call volume over time

Key Insights Delivered:

Insight	Example
Top-performing teams and agents	Team Alpha handled 45% of all calls
Most common call types	Billing issues made up 38% of customer calls
Gaps in agent activity	12% of agents had zero calls logged during March
Daily operational patterns	March 15th had the highest single-day call spike

Business Value:

- Improves agent scheduling and staffing decisions
 - Targets specific customer issues for workflow streamlining
 - Highlights underutilized agents for reassignment or coaching
 - Creates a reliable baseline for month-over-month call center performance tracking
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