



Project Requirements Document: Google Fiber

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Purpose:

Develop a dashboard to analyze fictional call center data, mirroring real-world scenarios. The primary aim is to equip the customer service team with insights into repeat caller behavior to facilitate proactive communication and address issues efficiently. The dashboard should showcase an understanding of this goal by highlighting repeat caller volumes across diverse markets and problem categories. By leveraging these insights, stakeholders can strategize to reduce call volumes, enhance customer satisfaction, and optimize operational processes. Ultimately, the dashboard serves as a tool to empower the team in achieving these objectives effectively.

Key dependencies:

The project relies on fictionalized datasets, pre-anonymized and approved for use. Ensuring stakeholder access to all datasets is crucial for transparency and validation of the analysis steps taken. Primary contacts for data access and validation are Emma Santiago and Keith Portone. Successful execution of the project hinges on seamless access to the datasets by stakeholders, facilitating their exploration of the analysis process and insights generated. This ensures alignment with project objectives of enhancing operational optimization and customer satisfaction through informed decision-making.

Stakeholder requirements:

In order to continuously improve customer satisfaction, the dashboard must help Google Fiber decision-makers understand how often customers are having to repeatedly call and what problem types or other factors might be influencing those calls.

- A chart or table measuring repeat calls by their first contact date R
- A chart or table exploring repeat calls by market and problem type R
- Charts showcasing repeat calls by week, month, and quarter D
- Provide insights into the types of customer issues that seem to generate more repeat



calls D

- Explore repeat caller trends in the three different market cities R
 - Design charts so that stakeholders can view trends by week, month, quarter, and year.
- R

Success criteria:

- Specific: BI insights must delineate characteristics of repeat calls, including frequency and patterns of customer repetition.
- Measurable: Evaluation should include quantifiable metrics such as call frequency, volume, and distribution across different problem types and market cities.
- Action-oriented: Outcomes should quantify repeat caller numbers under various scenarios to provide actionable insights for improving customer satisfaction.
- Relevant: Metrics must align with the primary question: How frequently do customers repeatedly contact customer service?
- Time-bound: Analysis should cover a minimum one-year period to track changes in repeat caller behavior over time. Exploring data across multiple months will capture usage fluctuations and trends, aiding in informed decision-making for operational optimization.

User journeys:

Enhance customer satisfaction and operational efficiency by analyzing repeat caller patterns. User journeys will explore the customer experience, focusing on interactions leading to repeat calls. By mapping these journeys, stakeholders can identify pain points and areas for improvement. The goal is to understand why customers are repeatedly calling, whether due to unresolved issues or recurring problems. Insights from user journeys will inform strategies for proactive communication and targeted problem resolution, ultimately reducing call volumes and improving overall customer satisfaction.

Assumptions:

In order to anonymize and fictionalize the data, the datasets the columns market_1, market_2, and market_3 to indicate three different city service areas the data represents.

The data also lists five problem types:

- Type_1 is account management



- Type_2 is technician troubleshooting
- Type_3 is scheduling
- Type_4 is construction
- Type_5 is internet and wifi

Additionally, the dataset also records repeat calls over seven day periods. The initial contact date is listed as contacts_n. The other call columns are then contacts_n_number of days since first call. For example, contacts_n_6 indicates six days since first contact.

Compliance and privacy:

The datasets are fictionalized versions of the actual data this team works with. Because of this, the data is already anonymized and approved. However, you will need to make sure that stakeholders have data access to all datasets so they can explore the steps you've taken.

Accessibility:

The dashboards should offer text alternatives including large print and text-to-speech.

Roll-out plan:

The stakeholders have requested a completed BI tool in six weeks.