

Project Requirements Document: Google Fiber

BI Analyst: Areeb Shafqat

Client/Sponsor: Emma Santiago, Hiring Manager

Purpose: (Briefly describe why the project is happening and why the company should invest resources in it.)

This project is being implemented to help the Google Fiber customer service team understand the frequency and reasons for customers making repeated calls to the customer service center. Through analyzing trends in the prior and incoming repeated calls, the customer service team hopes to identify ways to augment the customer experience and lower call volume and workload for the team. Thus, this will lead to enhanced customer satisfaction and efficient and optimized operations. Lastly, the company should invest resources in this project is mainly boost customer service and experience and reduce overall expenses which are associated with high call volumes.

Key dependencies: (Detail the major elements of this project. Include the team, primary contacts, and expected deliverables.)

The major elements of this project include investigating repeat customer calls to the Google Fiber customer service center, analyzing trends whilst working with a fictional dataset that contains variables of call data such as call type, number of calls, repeat calls after first contact, market city, etc. The team in this project include Emma Santiago, Keith Portone, Minna Rah, Ian Ortega and Sylvie Essa, Emma and Keith being the primary contacts.

The expected deliverables for this project entail a chart or table measuring repeat calls by their first by their first contact date, a chart or table exploring the repeat calls categorized by market and problem type, and lastly charts showcasing repeat calls by week, month, and quarter. One key point to mention is that the BI analyst must ensure the final dashboard is accessible, with large print and text-to-speech alternatives, and that all stakeholders have access to the datasets to explore and confirm the steps taken.

Stakeholder requirements: (List the established stakeholder requirements, based on the Stakeholder Requirements Document. Prioritize the requirements as: R - required, D - desired, or N - nice to have.)

To ensure consistent enhancement of customer satisfaction, the dashboard needs to enable Google Fiber decision-makers to comprehend the frequency of repeat customer calls, as well as identify the underlying causes such as problem types or other contributing factors such as technician troubleshooting.

- 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
- Provide insights into types of customer issues that seem to lead to repeat calls: D
- Charts showcasing repeat calls by week, month, and quarter: D
- Design charts for stakeholders to view trends by week, month, quarter, and year: R
- Exploring repeat caller trends in the three different market cities: R

Success criteria: (Clarify what success looks like for this project. Include explicit statements about how to measure success. Use SMART criteria.)

The success of this project will be measured using SMART criteria, which stands for Specific, Measurable, Achievable, Relevant, and Time-bound. The specific success criteria for this project are:

- Reduce call volume: The goal of this project is to reduce the number of repeat calls by increasing customer satisfaction and improving operational optimization. The success criteria for reducing call volume include for example: Decreasing the number of repeat calls by 10% within the first six months of implementing the BI dashboard.
- Improve customer satisfaction: The success criteria for improving customer satisfaction is to achieve a customer satisfaction rating of 4.5 out of 5 or higher within the first year of implementing the BI dashboard. The rating will be based on surveys and feedback received from customers.

To ensure the success of this project, the BI insights must clearly identify the specific characteristics of repeat calls, including the frequency and volume of customers repeating calls. Measurable metrics, such as the number of calls with a specific problem and the market city experiencing the most calls, should be evaluated to gain insights into customer satisfaction. The outcomes of the project should be action-oriented, quantifying the number of repeat callers under different circumstances to provide the Google Fiber team with actionable insights. All metrics

must support the primary question of how often customers repeatedly contact the customer service team.

To make the project time-bound, the data analyzed should span at least one year or 6 months to understand how repeat callers change over time. Exploring data that spans multiple months will capture peaks and valleys in usage. By following these guidelines, the project will be successful in meeting its goals and objectives.

User journeys: (Document the current user experience and the ideal future experience.)

Current user experience:

- Customers call the Google Fiber customer service center with their inquiries or issues.
- The customer service representative records the details of the call in the system, including the call type, the market city, and the date.
- If the customer calls back again within seven days, the representative records it as a repeat call.

Ideal future experience:

- Customers call the Google Fiber customer service center with their inquiries or issues.
- The BI dashboard provides insights into the frequency of repeat customer calls, the types of issues that generate more repeat calls, and repeat caller trends by market and problem type.
- Decision-makers can use the dashboard to identify areas for improvement, enhance the customer experience, and reduce call volume.
- The dashboard is accessible and easy to understand, with large print and text-to-speech alternatives available for stakeholders with different needs.

Assumptions: (Explicitly and clearly state any assumptions you are making.)

To ensure the data is both anonymized and fictionalized, the dataset replaces the actual city names with the columns `market_1`, `market_2`, and `market_3`, representing three different city service areas. The data also includes five problem types, which are identified as `Type_1` for account management, `Type_2` for technician troubleshooting, `Type_3` for scheduling, `Type_4` for construction, and `Type_5` for internet and Wi-Fi. Additionally, the dataset captures repeat calls over seven-day periods, with the initial contact date listed as `contacts_n`, and other call columns are represented as `contacts_n_number` of days since the first call. For example, `contacts_n_6` denotes a repeat call made six days after the first contact.

Compliance and privacy: (Include compliance, privacy, or legal dimensions to consider.)

As with any project that involves data, there are several compliance, privacy, and legal dimensions to consider. The data used in this project is a fictional dataset that has already been anonymized and approved. However, it is essential to ensure that the data is protected and handled according to relevant data privacy regulations, such as the General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA).

Furthermore, any dashboard created for this project should adhere to the organization's policies and guidelines concerning data access, storage, and sharing. The BI analyst must ensure that only authorized personnel i.e., the stakeholders can access the dashboard and the associated datasets, and appropriate measures are in place to secure the data from unauthorized access, use, or disclosure.

Accessibility: (List key considerations for creating accessible reports for all users.)

The dashboards as requested need to include text alternatives including large print and text-to-speech

Roll-out plan: No information listed, ask follow-up question

Project background:

The team needs to understand how often customers again phone customer support after their first inquiry; this will help leaders understand whether the team is able to answer customer questions the first time. Further, leaders want to explore trends in repeat calls to identify why customers are having to call more than once, as well as how to improve the overall customer experience. I will create a dashboard to reveal insights about repeat callers.

This fictional dataset is a version of actual data the team works with. Because of this, the data is already anonymized and approved. It includes:

- Number of calls
- Number of repeat calls after first contact
- Call type
- Market city
- Date

Stakeholders:

- Emma Santiago, Hiring Manager
- Keith Portone, Project Manager
- Minna Rah, Lead BI Analyst

Team members:

- Ian Ortega, BI Analyst
- Sylvie Essa, BI Analyst

*Primary contacts are Emma and Keith

Per Minna: Dashboard needs to be accessible, with large print and text-to-speech alternatives.

Project approvals and dependencies:

I need to make sure stakeholders have access to all datasets so they can explore the steps I've taken.

Project goal: Explore trends in repeat callers

Details from Mr. Portone:

- Understand how often customers are calling customer support after their first inquiry; this will help leaders understand how effectively the team is able to answer customer questions the first time
- Provide insights into the types of customer issues that seem to generate more repeat calls
- Explore repeat caller trends in the three different market cities
- Design charts so that stakeholders can view trends by week, month, quarter, and year.

The deliverables and metrics:

- A chart or table measuring repeat calls by their first contact date
- A chart or table exploring repeat calls by market and problem type
- Charts showcasing repeat calls by week, month, and quarter

Measure success:

The team's ultimate goal is to reduce call volume by increasing customer satisfaction and improving operational optimization. My dashboard should demonstrate an understanding of this goal and provide stakeholders with insights about repeat caller volumes in different markets and the types of problems they represent.

Other considerations:

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 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.

People with dashboard-viewing privileges:

Emma Santiago, Keith Portone, Minna Rah, Ian Ortega, Sylvie Essa

Questions:

- How often does the customer service team receive repeat calls from customers?
- What problem types generate the most repeat calls?
- Which market city's customer service team receives the most repeat calls?