Stakeholder Requirements Document: Google Fiber

BI Professional: Syed Taha Ahmed

Client/Sponsor: Emma Santiago, Hiring Manager

Business problem:

The team's ultimate goal is to communicate with the customers to reduce the call volume and increase customer satisfaction and improve operational optimization. The dashboard we create should demonstrate an understanding of this goal and provide our stakeholders with insights about repeat caller volumes in different markets and the types of problems they represent. Primary question: How often are customers repeatedly contacting the customer service team?

Stakeholders:

- Emma Santiago, Hiring Manager
- Keith Portone, Project Manager
- Minna Rah, Lead BI Analyst
- Ian Ortega, BI Analyst
- Sylvie Essa, BI Analyst

Stakeholder usage details:

To understand how effectively the team is able to answer customer questions and resolve problems, the stakeholders would like to explore how often customers are calling repeatedly in different markets with different problems.

Primary requirements:

- 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
- 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.

Project Requirements Document: Google Fiber

BI Analyst: Syed Taha Ahmed

Client/Sponsor: Emma Santiage, Hiring Manager

Purpose:

The Fiber customer service team has asked for a dashboard using fictional call center data based on the data they use regularly on the job to gain insights about repeat callers. The team's ultimate goal is to communicate with the customers to reduce the call volume and increase customer satisfaction and improve operational optimization. The dashboard we create should demonstrate an understanding of this goal and provide our stakeholders with insights about repeat caller volumes in different markets and the types of problems they represent.

Key dependencies:

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

Stakeholder requirements: (R - required, D - desired, or N - nice to have)

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 clearly identify the specific characteristics of a repeat calls, including how often customers are repeating calls.

Measurable: Calls should be evaluated using measurable metrics, including frequency and volume. For example, do customers call with a specific problem more often than others? Which market city experiences the most call? How many customers are calling more than once?

Action-oriented: These outcomes must quantify the number of repeat callers under different circumstances to provide the Google Fiber team with insights into customer satisfaction.

Relevant: All metrics must support the primary question: How often are customers repeatedly contacting the customer service team?

Time-bound: Analyze data that spans at least one year to understand how repeat callers change over time. Exploring data that spans multiple months will capture peaks and valleys in usage.

User journeys:

The team's ultimate goal is to communicate with the customers to reduce the call volume and increase customer satisfaction and improve operational optimization. The dashboard we create should demonstrate an understanding of this goal and provide our stakeholders with insights about repeat caller volumes in different markets and the types of problems they represent.

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, we 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.

Strategy Document: Google Fiber

Primary dataset: market_1, market_2, market_3
Secondary dataset:

User Profiles:

Emma Santiage, Hiring Manager
Keith Portone, Project Manager
Minna Rah, Lead BI Analyst
Ian Ortega, BI Analyst
Sylvie Essa, BI Analyst

Dashboard Functionality

Dashboard Feature	Your Request
Reference dashboard [Should this dashboard be modeled on an existing dashboard? If so, provide a link and describe the similarity.]	Build a new dashboard to explore the number of repeat callers and their problem types in three different market cities.
Access [How should access to the dashboard be limited? Who needs to have access?]	Access will be provided as read-only to the user profiles listed in this document.
Scope [What data should be included (or excluded) in this dashboard?]	Fields include: date, market, problem_type, contact_n and contact_n_#
Date filters and granularity [Should the dashboard include date filters? If so, what time frame should be displayed by default? Should the dashboard include a "Granularity" drop-down? If so, what granularity should be selected by default?]	Data filters can be applied for the following: Week, Month, Quarter Granularity: Any chart with detailed metrics should have the ability to click on that metric to view specific information.

Metrics and Charts

Chart 1

Chart Feature	Your Request
Chart title	Repeat calls by first date
Chart type [What type of chart needs to be created? This could include any chart type, including a line chart (timeseries), bar chart, or table.]	Table
Dimension(s) [What dimensions does this chart need to include?]	Day of initial call, subsequent repeat calls
Metric(s) [What metrics are relevant to this chart?]	Contact

Chart 2

Chart Feature	Your Request
Chart title	Market and Problem Type of First Repeat Calls
Chart type [What type of chart needs to be created? This could include any chart type, including a line chart (timeseries), bar chart, or table.]	Bar
Dimension(s) [What dimensions does this chart need to include?]	Call type, market, contact_n_1
Metric(s) [What metrics are relevant to this chart?]	Contact

Chart 3

Chart Feature	Your Request
Chart title	Calls by Market and Type
Chart type [What type of chart needs to be created? This could include any chart type, including a line chart (timeseries), bar chart, or table.]	Table

Dimension(s) [What dimensions does this chart need to include?]	Market, call type, day
Metric(s) [What metrics are relevant to this chart?]	Contact

Chart 4

Chart Feature	Your Request
Chart title	Repeats by Week, Month, and Quarter
Chart type [What type of chart needs to be created? This could include any chart type, including a line chart (timeseries), bar chart, or table.]	Bar
Dimension(s) [What dimensions does this chart need to include?]	Date, contact
Metric(s) [What metrics are relevant to this chart?]	Date