Project Requirements Document: Google Fiber

## **BI Analyst:**

## Lipika Mahata

## **Client/Sponsor:**

## Google Fiber Customer Service Team

## **Purpose:**

## The project aims to improve customer support efficiency by analyzing repeat call patterns across market cities and issue types. By identifying the frequency and causes of repeat calls, the company can enhance first-contact resolution, reduce overall call volume, and improve customer satisfaction.

## Investing in this BI dashboard enables data-driven decision-making, operational optimization, and targeted service improvements.

## **Key dependencies:**

## **Team & Roles:**

* **Primary Contacts:**

1. Emma Santiago (Hiring Manager)
2. Keith Portone (Project Manager)

* **Stakeholders with Dashboard Access:**

1. Minna Rah (Lead BI Analyst)
2. Ian Ortega (BI Analyst)
3. Sylvie Essa (BI Analyst)

**Deliverables:**

* Dashboard visualizing:
  1. Repeat calls by first contact date
  2. Repeat calls by market city and problem type
  3. Time-based trends (weekly, monthly, quarterly, yearly)
* Underlying dataset access for stakeholders
* Accessibility features (large print, text-to-speech)

**Data Elements:**

* Number of calls
* Number of repeat calls after first contact
* Call type
* Market city (market\_1, market\_2, market\_3)
* Date
* Problem types (Type\_1 to Type\_5)
* Contact timestamps (contacts\_n, contacts\_n\_6, etc.)

## **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.)

|  |  |
| --- | --- |
| Requirement Description | Priority |
| View repeat call trends by market city and problem type | R |
| Filter trends by week, month, quarter and year | R |
| Include charts/table showing repeat calls by first contact date | R |
| Ensure dashboard accessibility (large print, text-to-speech) | R |
| Provide stakeholders access to underlying datasets | R |
| Enable explorations of root causes behind repeat calls | D |
| Include visual summaries for hiring/training decisions | D |
| Offer drill-down capabilities for specific cities or problem types | N |

## **Success criteria:**

## **Specific:** Dashboard must display repeat call trends segmented by market city, problem type, and time period

* **Measurable:** Stakeholders should be able to answer 3 core questions:
  + 1. How often do repeat calls occur?
    2. Which problem type drives the most repeat calls?
    3. Which market cities have the highest repeat calls volume?
* **Achievable:** All visualizations and filters must be functional and accessible by the project deadline.
* **Relevant:** Insights should support the goal of reducing call volume and improving customer satisfaction
* **Time Bound:** Dashboard must be delivered within 4 weeks from project kickoff

## **User journeys:**

## **Current User Experience:**

* Stakeholders manually review call logs or rely on fragmented reports
* Limited visibility into repeat call patterns or root causes

**Ideal User Experience Expectations:**

* Stakeholders access a centralized dashboard with intuitive filters
* Repeat call trends are clearly visualized by time, market, and issue type
* Accessibility features ensure inclusive usage
* Data exploration supports strategic decisions in hiring, training, and service improvement

## **Assumptions:**

## The dataset is pre-anonymized and approved for internal use.

## Repeat calls are tracked over seven-day windows using contacts\_n and related columns.

## Stakeholders are familiar with basic dashboard navigation and interpretation.

## Market cities and problem types are consistently coded across the dataset.

## **Compliance and privacy:**

## Dataset is fictionalized and anonymized to meet internal data governance standards.

## No personally identifiable information (PII) is present.

## Data access is restricted to approved stakeholders only.

## **Accessibility:**

## Dashboard must include:

## Large print options for all text and labels

## Text-to-speech compatibility for charts and tables

## High-contrast color schemes for visual clarity

## Keyboard navigation support for non-mouse users

**Roll-out plan:**

**Scope:**

* Build and deploy a BI dashboard using the provided dataset.
* Ensure stakeholder access and usability across roles.

**Priorities:**

* Core visualizations (repeat calls by date, market, problem type)
* Time-based filters
* Accessibility features
* Dataset access and documentation

**Timeline:**

* Week 1: Requirements finalization and data validation
* Week 2: Dashboard design and initial build
* Week 3: Stakeholder review and accessibility testing
* Week 4: Final deployment and training session