Project Requirements Document: Google Fiber Repeat Caller Dashboard

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Client/Sponsor: Emma Santiago, Hiring Manager

Purpose:

This project will create a dashboard to help Google Fiber's customer service team understand repeat caller patterns. By identifying how often customers contact support multiple times, which problem types generate repeat calls, and which markets experience the highest repeat call volumes, the team can improve first-call resolution rates, reduce overall call volume, and increase customer satisfaction.

Key dependencies:

Team:

- BI Analyst: Dane Tipene
- Project Manager: Keith Portone
- Lead BI Analyst: Minna Rah
- BI Analysts: Ian Ortega, Sylvie Essa

Primary contacts:

- Emma Santiago and Keith Portone

Expected deliverables:

- Chart/table measuring repeat calls by first contact date
- Chart/table exploring repeat calls by market and problem type
- Charts showcasing repeat calls by week, month, quarter, and year
- Accessible dashboard with large print and text-to-speech alternatives

Data dependencies:

- All stakeholders must have access to datasets to explore methodology

Stakeholder requirements:

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

R	Display repeat caller data across multiple time periods (week, month, quarter, year)
R	Include chart/table measuring repeat calls by first contact date
R	Include chart/table exploring repeat calls by market and problem type
R	Dashboard must be accessible with large print and text-to-speech alternatives
R	All stakeholders must have access to underlying datasets
D	Provide actionable insights supporting call volume reduction goals

Success criteria:

- Dashboard successfully visualizes repeat call trends across all three market cities (market_1, market_2, market_3)
- Dashboard displays all five problem types (account management, technician troubleshooting, scheduling, construction, internet/WiFi) with repeat call data
- Stakeholders can view trends by week, month, quarter, and year within the dashboard
- Dashboard meets accessibility requirements (large print, text-to-speech compatibility)
- All five stakeholders (Emma, Keith, Minna, Ian, Sylvie) have access to the data and can view the dashboard
- Dashboard provides insights that support the goal of reducing call volume through improved customer satisfaction and operation optimization.

User journeys:

Current experience: Customer service leaders lack centralised visibility into repeat caller patterns. When customers call multiple times, there's no easy way to identify trends by market, problem type, or time period. This makes it difficult to pinpoint root causes or measure team effectiveness in resolving issues on first contact.

Ideal future experience: Customer service leaders access a single dashboard showing repeat caller trends across markets and problem types. They can quickly identify which markets have the highest repeat call rates, which problem types generate the most follow-up calls, and how these trends change over time. This enables data-driven decisions about training, resource allocation, and process improvements.

Assumptions:

- The fictional dataset provided is representative of actual repeat caller patterns
- Repeat calls are tracked accurately within the seven-day period structure (contacts_n through contacts_n_6)

- Market cities (market_1, market_2, market_3) represent distinct service areas with comparable operational structures
- Problem type classifications (Type_1 through Type_5) are consistently applied across all markets
- Stakeholders have the technical capability to access and view the dashboard once deployed

Compliance and privacy:

- Data is already anonymised and approved for use
- No personally identifiable information (PII) is included in the dataset
- Dataset is fictional but based on actual Google Fiber data structures

Accessibility:

- Dashboard must support large print display options
- Dashboard must be compatible with text-to-speech screen readers
- Colour schemes must be colour-blind friendly
- All charts must include clear labels, legends, and axis titles for context
- Text and visual elements must have sufficient contrast for readability

Roll-out plan:

Scope:

- Phase 1 (Current): Planning and documentation
- Phase 2: Data preparation and quality assessment
- Phase 3: Dashboard design, build, and stakeholder review

Priorities:

1. Complete all planning documents with stakeholder approval
2. Validate data quality and structure
3. Build core visualisations (repeat calls by date, market, problem type)
4. Implement time-period filtering (week, month, quarter, year)
5. Ensure accessibility requirements are met
6. Conduct stakeholder testing and gather feedback

Timeline: Project timeline to be determined based on course structure and stakeholder availability for review cycles.