GSheets AI Marketing Insights Interface – Product Requirements Document:

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Verison1.0

Objective:

Build a simple, cost-efficient AI assistant directly within Google Sheets that can process structured campaign data and generate actionable marketing insights. The tool is designed for performance marketers and GTM teams who need quick hypotheses, validation checks, and next steps from large volumes of historical campaign data.

Target Users:

- Marketing Analysts who want to review past campaign performance quickly
- Growth or GTM Teams exploring optimization ideas
- Founders/Product Marketers in early-stage startups needing insight without a data team

User Stories:

- As an analyst, I want the AI to suggest next validation steps like comparing week-over-week trends, reviewing segment-level performance, or asking for a deeper cohort cut, so I'm not guessing what's meaningful.
- As a marketing team lead, I want to paste in multiple campaigns with minimal formatting effort, and receive clear, contextual insight per row with hypotheses, benchmarks, and confidence levels.
- As a decision-maker, I want the AI to flag when more data is needed before a conclusion (e.g. "trend is noisy, suggest watching for 2 more weeks"), so I can avoid reacting prematurely.
- As someone preparing a report, I want the output to be easily copy-pastable into slides or emails, structured and visually clean, so I can move quickly and look credibile

Must-Have Features (MVP)

1. Prompt Interface

- Prompt goes in cell A1
- Campaign inputs go in column A3:A
- Outputs returned in B3:B aligned row-wise

2. Run & Control Buttons

- Run – Executes AI processing in batch (up to 50 rows at once)
- Stop – Allows manual interruption using script property flag
- Clear – Clears outputs and progress flags

3. Progress and Feedback

- Column C: Status tracker (Processing, Done, Failed, Skipped)
- Column D: Error messages, retry logic if needed
- Status bar in C1:D1 shows current progress, cost estimate, or stop status

Technical Details

- **Batch Size**: 50 rows per run

- **Wait Time Between Calls**: 1.5 seconds

- **Model**: Claude-Sonnet-4 via OpenRouter

- **Token Estimation**: ~1 token per 4 characters

- **Error Handling**:

  - Missing prompt

  - Empty cells

  - Already processed cells

  - JSON parsing errors

  - API quota exceeded or 402 credit errors

  - HTTP/server issues

UX/ UI Enhancements:

Area	Current	Suggested Enhancements
Prompt Input (A1)	Free-text prompt	Add dropdown for use-case templates: "Trend Analysis", "Creative Test Review", "Budget Shift Validation".
Input Format	Raw JSON in A3:A	Add collapsible row viewer for long campaign objects; optionally allow upload of a CSV.
Output (B)	Full response text	Split into sub-columns: Hypothesis, Validation, Action. Add emoji headers to improve scannability.
Error & Retry	Manual inspection	Add toggle for "Retry failed rows". Display count of failed rows in status bar.
Progress Tracking	Status text only	Add visual loading bar for batch run. Use checkboxes ☑ or ⟳ icons for state clarity.
Context Sensitivity	Static prompt	Let user toggle options like: "Include creative changes?", "Highlight anomalies only?", "Assume weekly cadence?"

Follow-Up Actions	Not supported	Add a new column E to suggest follow-up data cuts, additional metrics to review, or "ask again in 2 weeks" flags.
Feedback Loop	No tracking post-insight	Add optional columns F (Business Owner) and G (Follow-up Done: Yes/No) to track who's responsible and whether the suggestion was implemented or tested.

Notes on Security and Cost Control

- API key is currently hardcoded—plan to externalize via script properties or use per-user keys if shared
- Cost per row is estimated; use DRY_RUN = true for test mode
- Add usage alerts or max daily run cap to avoid unintended charges

Future Enhancements (v1.1+)

- **A/B Comparison Mode**: Let users compare two campaigns side-by-side to identify what's driving performance differences
- **User Tagging & Ownership**: Add a column to assign each insight to a team member for accountability and follow-through
- **Confidence Score per Insight**: Show how reliable or strong each AI-generated insight is, based on available data patterns
- **Prompt Version History**: Track and reuse past prompts, making it easier to iterate and learn what worked
- **Filtered Reruns**: Allow users to rerun AI only for specific inputs (e.g., just Facebook campaigns or failed rows) to save time and cost
- **Slack-Ready Export Format**: Allow users to export 1-liner insights in a clean, formatted message that's ready to paste into Slack or team updates.