

The Reporting Makeover

Transforming a Manual Excel Template into a Fully Automated BI System

The "Before": A Fragmented and Manual Workflow



Extremely Time-Consuming

Analysts spent ****1.5 hours**** performing a single removal calculation and hours more on other reports.



Error-Prone & Fragile

The process was plagued by broken formulas (`#DIV/0!`) and a high risk of copy-paste errors across multiple tabs.



Not Scalable or Automated

Data from different sources had to be manually entered, and adding new products required complex adjustments.

The "After": A Two-Stage Automated Solution

I engineered a new, two-stage system. First, a Python script automates all data gathering. Second, an intelligent Google Sheets template instantly processes this data into a dynamic dashboard.



Stage 1: Python Automation

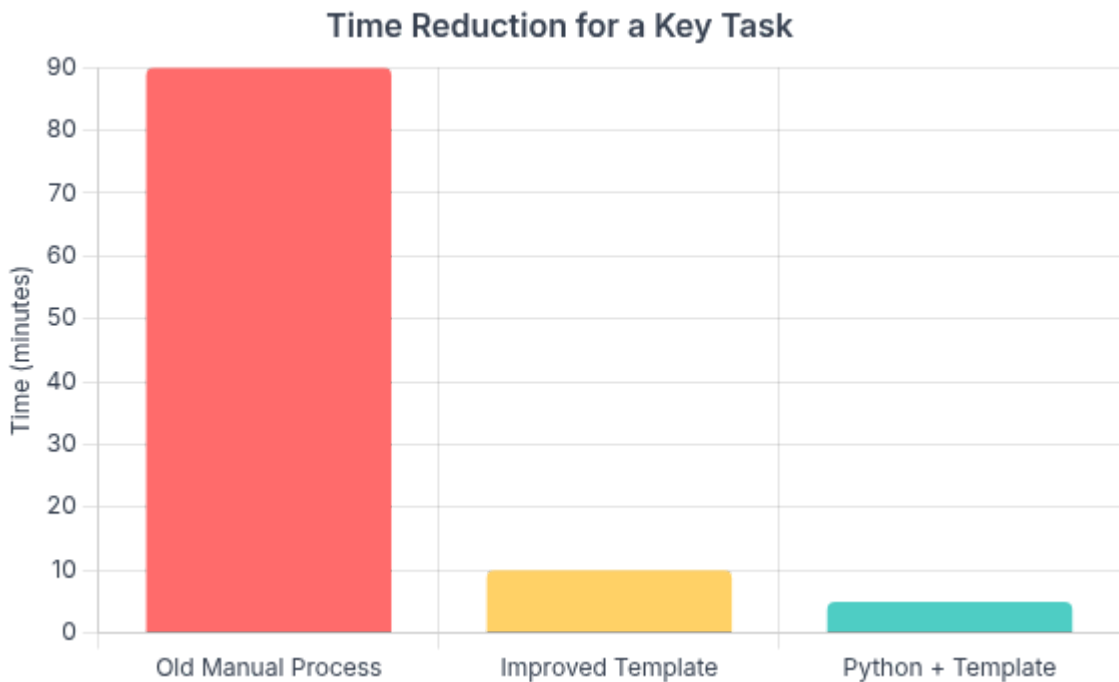
A Python script automatically connects to various data sources, gathers the required information, and consolidates it, greatly reducing manual data entry.



Stage 2: Dynamic Dashboard

The improved Google Sheets template uses robust formulas (`QUERY`, `IFERROR`) to automatically process the Python-fed data into a real-time P&L dashboard.

The Result: Massive Efficiency Gains

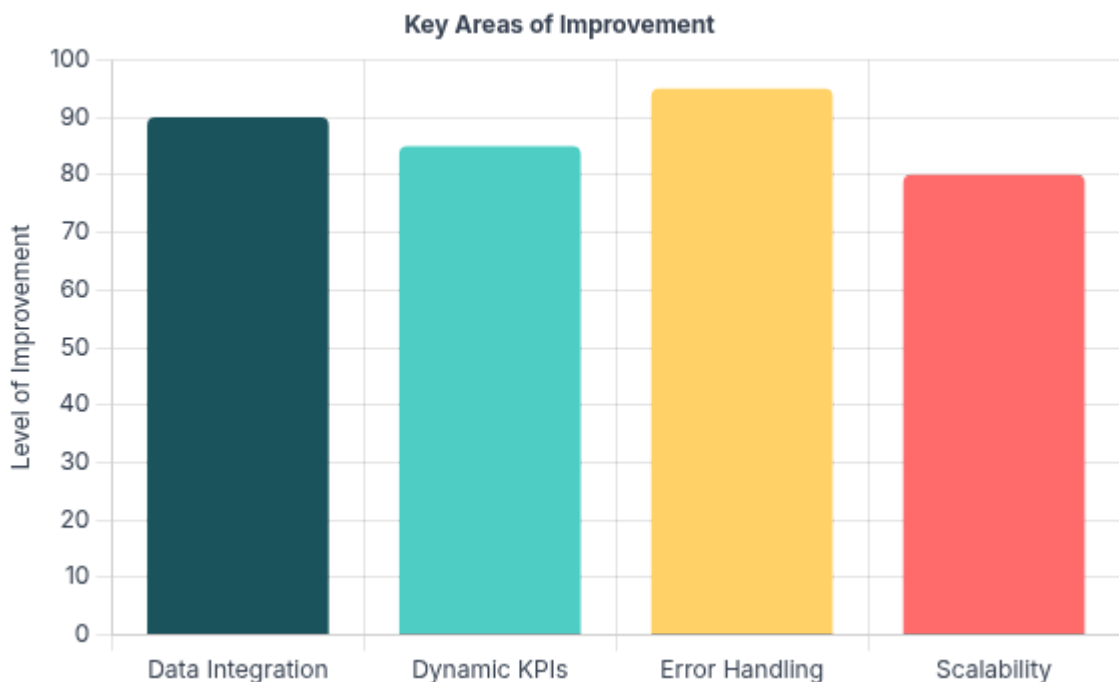


From 1.5 Hours to ~5 Minutes

The new system transformed the workflow, delivering huge time savings and enabling more strategic use of analyst time.

- ✓ **Up to 90% Time Reduction (Template Alone):** The new Google Sheets template reduced the removal calculation time from 90 minutes to just 10.
- ✓ **Further Automation with Python:** By automating the data gathering, the entire end-to-end process was reduced to approximately 5 minutes.
- ✓ **Data-Driven & Reliable:** The new system is scalable, robust, and provides a single source of truth for all profitability metrics.

Key Improvements & Features



From Static Tables to a Dynamic P&L View

The new dashboard provides a holistic view of profitability by integrating all cost and revenue streams.

- ✓ **Centralized P&L Summary:** A single tab shows a clear Profit & Loss statement, combining sales, ad spend, refunds, and COGS.
- ✓ **Product-Level Drill-Down:** Detailed tabs for each product automatically calculate and display granular metrics like storage fees and net margins.
- ✓ **Scalable by Design:** New products can be added easily without breaking the template's structure or formulas.

This project demonstrates a practical application of advanced Google Sheets and Excel skills to deliver significant improvements in efficiency, accuracy, and strategic insight.