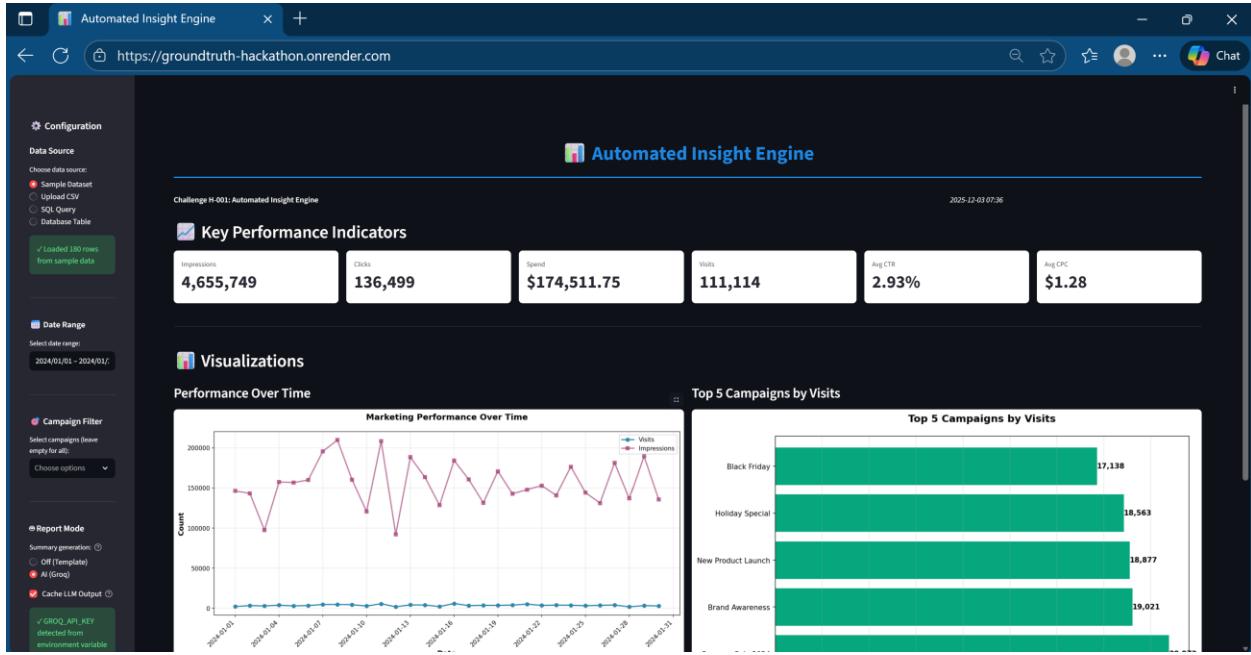


# Challenge H-001: Automated Insight Engine

## Implementation Summary with Screenshots

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## Data Import Options

The system supports multiple data ingestion methods, including:

- Built-in sample dataset (CSV)
- User-uploaded custom CSV files
- SQL query input
- External database connections
- Preset query templates for faster access

## Data Filtering & Configuration

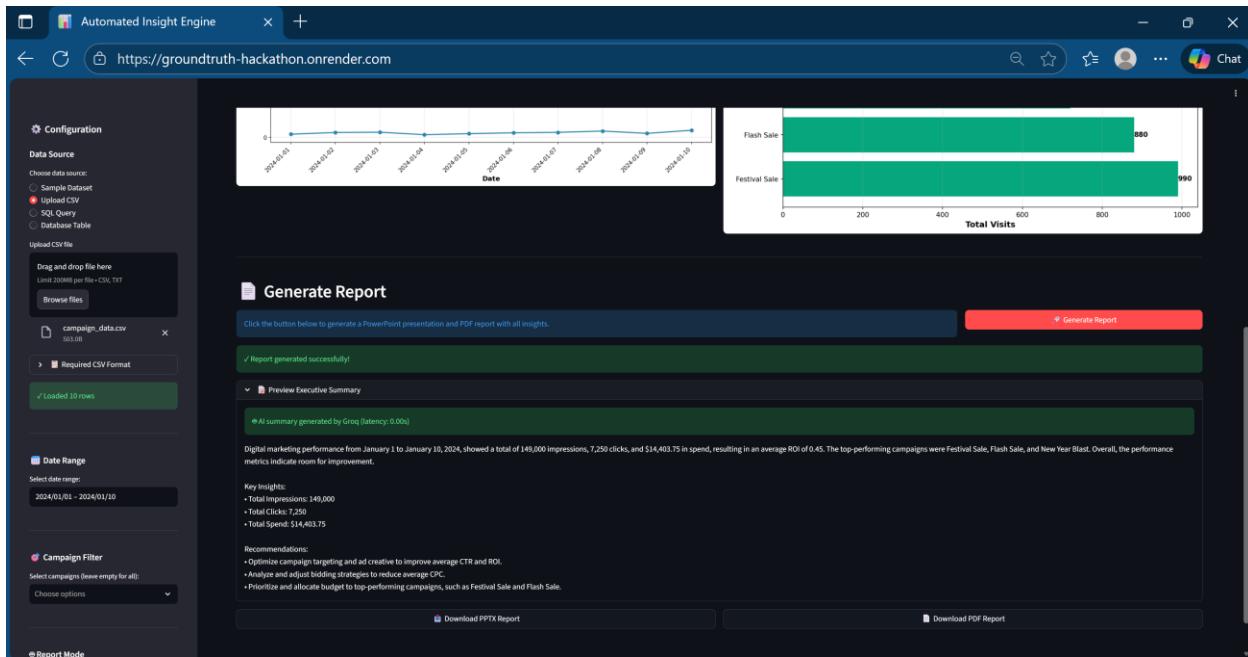
Users can refine the analysis by applying filters such as:

- Campaign selection
- Custom date range
- Option to enable or disable AI-generated summaries

## Interactive Metrics & Visualizations

Once the data is imported, the application automatically displays:

- Key Performance Indicators (KPIs)
- Time-series trends
- Comparative visualizations for top campaigns and channels



## AI-Enhanced Report Generation

The **Generate Report** feature produces a comprehensive summary powered by Groq LLM, offering:

- Key insights extracted from the data
- Actionable recommendations
- Executive-level narrative tailored to campaign performance

## Report Export Options

Users can download the final output in multiple formats:

- **PowerPoint (PPTX)**
- **PDF**

Automated Insight Engine

automated\_report\_20251203\_073903.pdf

File Ask Copilot

Marketing Campaign Performance Report

Executive Summary

Key Metrics

Key Metric	Value
Total Impressions	149,000
Total Clicks	7,250
Total Spend	\$14,403.75
Avg CTR	0.04%
Avg CPC	\$1.96

Top 5 Campaigns

Rank	Campaign	Impressions	Clicks	Spend
1	Festival Sale	100,000	5,000	\$10,000
2	Flash Sale	40,000	2,000	\$4,000
3	New Year Blast	30,000	1,500	\$3,000
4	Holiday Offer	10,000	500	\$1,000
5	Season Greetings	10,000	500	\$1,000

Key Visuals

Top 5 Campaigns

automated\_report\_20251203\_074612 [Protected View] - PowerPoint

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PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View.

Enable Editing

1 Marketing Campaign Performance Report

2 Executive Summary

3 Key Visuals

4 Top 5 Campaigns

5 Appendix & References

## Executive Summary

Digital marketing performance from January 1 to January 10, 2024, showed a total of 149,000 impressions, 7,250 clicks, and \$14,403.75 in spend, resulting in an average ROI of 0.45. The top-performing campaigns were Festival Sale, Flash Sale, and New Year Blast. Overall, the performance metrics indicate room for improvement.

**Key Insights:**

- Total Impressions: 149,000
- Total Clicks: 7,250
- Total Spend: \$14,403.75

**Recommendations:**

- Optimize campaign targeting and ad creative to improve average CTR and ROI.
- Analyze and adjust bidding strategies to reduce average CPC.
- Prioritize and allocate budget to top-performing campaigns, such as Festival Sale and Flash Sale.

Slide 2 of 5 English (United States)