



Welcome!

Using OpenAI API with Google Sheets to
Automate MR Workflows

Join Us:

AI for Insights:

How & When to Work With The Leading Platforms

May 1, 2, 7 & 8

1-2:30 p.m. ET

- ✓ Claude
- ✓ Gemini
- ✓ Llama
- ✓ DeepSeek
- ✓ Mistral
- ✓ ChatGPT
- ✓ Copilot
- ✓ More

BEFORE WE BEGIN

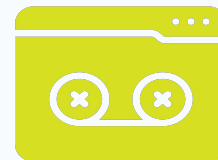


Closed captioning
is available in the
Zoom menu bar.



Post your questions
in the Q&A pod.

Use Chat window
for comments + to
connect during the
webinar!



A recording and
slides will be
shared.

Today's Presenter



Alok Jain
CEO, Reveal

OpenAI + Google Sheets

Alok Jain, Niket Patel (Co-founders, Reveal)

March 27, 2025

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Welcome!!

Our goal is to **empower you**
to **actively participate** in AI
and **drive your own innovations.**

Quick Intro

- Alok, Niket Co-founders, Reveal (AI-assisted synthesis of qualitative research)
- 28 years in research, strategy and design
- 8 years in AI/ML

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<div> <div>← Back Covid 19</div> <div>Analyses ▾ Cohort Comparison ▾ Snippets ▾ Report</div> <div>+ Add an Interview</div> </div>					
Observations	Interview Comparisons		Willow Transcript View Transcript Edit	Siobhan Interview View Transcript Edit	
	Similarities	Differences	<div> <div>Willow</div> <div>Virginia Nurse Male</div> <div>lapsed</div> </div>	<div> <div>Siobhan</div> <div>Female EMT Virginia</div> </div>	
What Were the Economic Impacts of the Pandemic?	<ol style="list-style-type: none"> Initial underestimation of the pandemic's severity PPE shortages and supply chain issues Emotional and mental health toll on healthcare workers Delayed and reactive responses from leadership Impact of misinformation and politicization Healthcare system unpreparedness Community support and 	<ol style="list-style-type: none"> Preparedness of healthcare institutions Effectiveness of leadership and communication Impact of the pandemic on mental health Public compliance with safety measures Availability of PPE Early warnings and proactive measures Role of political leadership in pandemic response 	<ol style="list-style-type: none"> Mask policies and shortages impacted hospital operations 95% Poor planning of COVID ICU setup increased workload 90% Anxiety and extended work hours due to pandemic 85% Hospital overwhelmed by COVID-19 surge 90% PPE shortages and delayed preparedness 90% Hospital overwhelmed by COVID-19 surge 90% 	<ol style="list-style-type: none"> Healthcare overwhelmed during early pandemic response 95% Economic strain from health department closures 90% Impact on essential workers and virus spread 85% Economic effects of prolonged pandemic duration 85% Operational challenges in emergency services 80% Economic impact on EMTs and paramedics 80% 	<ol style="list-style-type: none"> Frustration with public non-compliance and misinformation Healthcare system overwhelmed during early pandemic response Impact on essential workers and virus spread Economic effects of prolonged pandemic duration Operational challenges in emergency services Economic impact on EMTs and paramedics
How Did COVID-19 Affect Global Travel and Mobility?	<ol style="list-style-type: none"> Initial underestimation of COVID-19 severity Impact of global travel on virus spread Healthcare system unpreparedness Emotional and mental health challenges Frustration with public non-compliance and misinformation Disparities in pandemic impact 	<ol style="list-style-type: none"> Effectiveness of early pandemic responses Public compliance with safety measures Perception of vaccine mandates Preparedness of healthcare systems Public perception of COVID-19's severity Impact of lockdowns on 	<ol style="list-style-type: none"> Initial underestimation of COVID-19 severity 90% Hospital overwhelmed by COVID-19 surge 95% Mask policies and shortages impacted staff 90% Hospital struggled with ICU capacity and isolation 85% Anxiety among healthcare workers during early pandemic 	<ol style="list-style-type: none"> Early Awareness of COVID-19 Severity 95% Healthcare System Overwhelmed by COVID-19 90% COVID-19 Impact on Emergency Services 92% Family and Personal Health Concerns During COVID-19 88% Non-Compliance with COVID-19 Isolation Rules 85% 	<ol style="list-style-type: none"> Early Awareness of COVID-19 Severity Healthcare System Overwhelmed by COVID-19 COVID-19 Impact on Emergency Services Family and Personal Health Concerns During COVID-19 Non-Compliance with COVID-19 Isolation Rules Preparedness in

+ Add Research Question
Regen Interview Comparisons
Default View ▾
Customize

We'll cover

- Why are we doing this?
- Look at real examples
- Understand how OpenAI API works
- Talk about Google Apps Script
- Build something together
- Q&A

These slides and examples will be available at:

<https://doreveal.com/blog/v/training-on-google-sheets-open-ai>

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questions in zoom Q&A

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Why are we doing this

- A. Intelligence is increasing exponentially.
- B. The cost of LLM is reducing 10x/year.
- C. Programming will be disrupted, enabling anyone to program (vibe coding)

AI is happening and it's a big opportunity. Lead this transition.

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Why Google Sheets?

- Easy to understand and work with
- Store data, read data, process data (Apps Script)
- Built in privacy and security, yet easy to share

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OpenAI + Google sheets

Google sheets are like a database and OpenAI is very flexible. This can allow us to do a lot.

Some Examples

Synthetic Survey Responses

Demo-Synthetic Survey Data Generator ☆ 📁 ☁

File Edit View Insert Format Data Tools Extensions Help Synthetic Data

100% 123 Default... Generate Responses

Question	Question Type	Answer Options
How satisfied are you with our product/service?	Single Select	5. Very satisfied 4. Somewhat satisfied 3. Neither satisfied nor dissatisfied 2. Somewhat dissatisfied 1. Very dissatisfied
What features do you value the most?	Multiple Select	Quality of the product/service Customer support Ease of use Pricing Availability Speed of service Customization options User-friendly interface Integration with other tools
What is your age group?	Single Select	Under 18 18-24 25-34 35-44 45-54 55-64 65+
What is your gender?	Single Select	Male Female Other/Prefer not to share

Research Plan Generator

Generate Research Plan

OpenAI API Key:

Research Goals:

Target Audience:

Other Details:

Synthesize Transcripts

Reveal mini

Import Transcripts from Google Drive

Run Analysis

Open Reveal (doreveal.com)

Enter Interview Title Here

Enter Interview Title Here

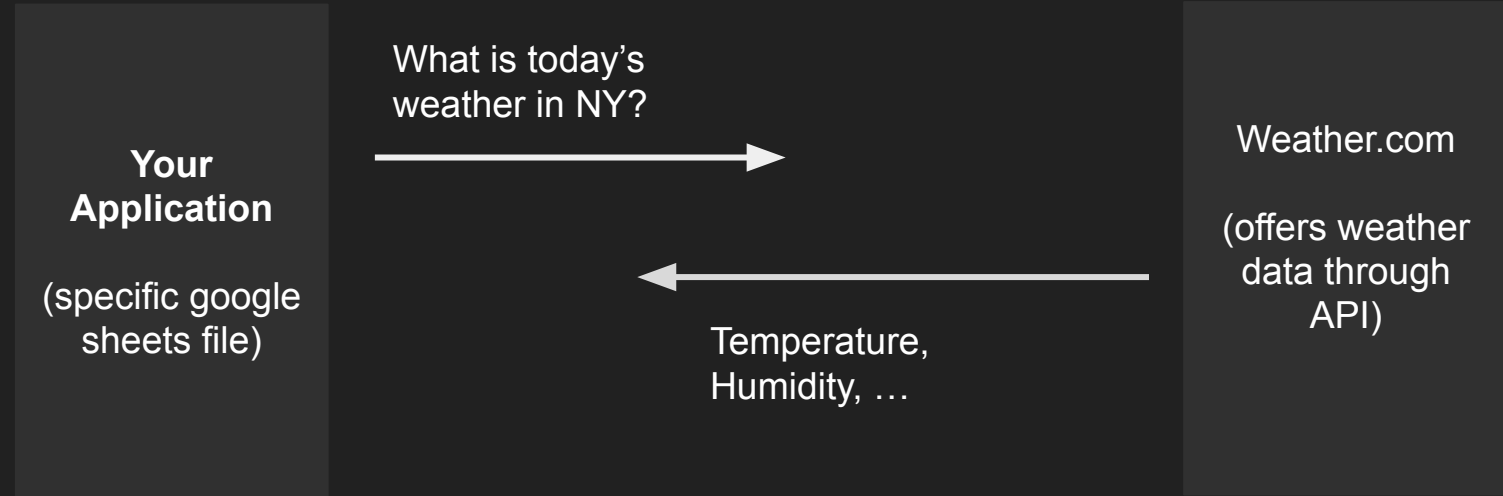


What is an API and how does it work?

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What is an API



What is an API

Your Application

(specific google sheets file)

[https://api.openweathermap.org/
?city=NY
&date=today
&appid=API_key\(like a password\)](https://api.openweathermap.org/?city=NY&date=today&appid=API_key(like a password))

Weather.com

(offers weather data through API)

```
{  
  "unit": "F"  
  "high": 89,  
  "low": 53,  
  "humidity": 76,  
  ...  
}
```



OpenAI API

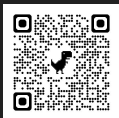
Request

<https://api.openai.com/v1/chat/completions>

```
...  
{  
  role: 'user',  
  content: 'What is today's weather in NY?'  
}  
...
```

Response

```
{...  
  "content": " As of 7:27 PM on Wednesday,  
  February 19, 2025, in New York City, the  
  weather is mostly cloudy with a temperature of  
  27°F (-3°C).  
"  
... }
```



OpenAI API - Structured data

Request

<https://api.openai.com/v1/chat/completions>

```
...
response_format: { "type": "json_object" },
messages: [
  {
    ...
    content: 'What is today's weather in NY?.
    Respond with JSON. Include temperature
    unit, high, low, and humidity.'
  }
]
...
```

Response

```
{
  ...
  "content": {
    "unit": "F"
    "high": 89,
    "low": 53,
    "humidity": 76,
  }
  ... }
```



Core Process



Let's Code.

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A technical concept

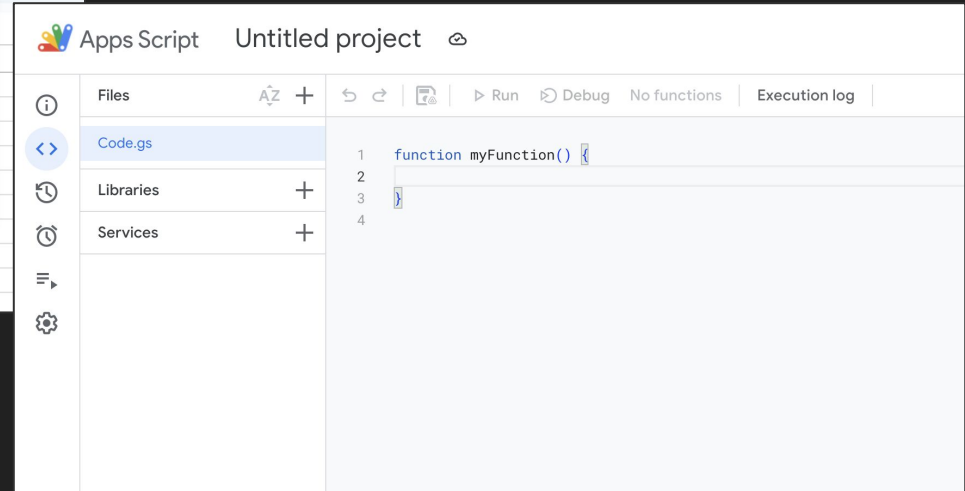
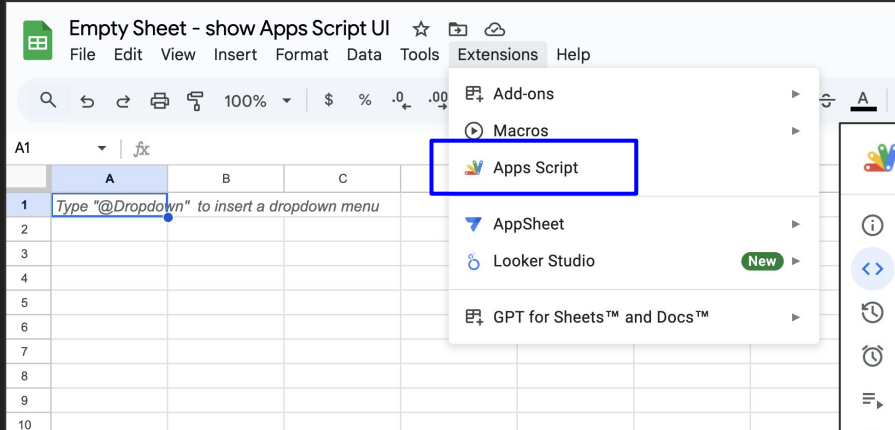
Variable: It's a way to store some value.

Examples:

- `var first_name = "Alok"`
- `var profile = {"name": "Alok", "company": "Reveal"}`
- `var years_of_experience = "28"`



Google Apps Script UI



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Example

Simple function to call OpenAI API.

What we need:

1. API Key - like a password
2. Model we want to use (GPT-4o) (ref: [Models supported by OpenAI](#))

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[Sample Google Sheet](#)

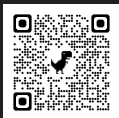
Get structured data and store in google sheets

Vibe Coding in ChatGPT

Prompt:

Write google sheets apps script that pull structured data for average temperatures in Jan for all states of the US and then create a new google sheet to store the values. Use OpenAI api to get this data. Use the following function to call OpenAI API

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[Sample Google Sheet](#)

Add Menu to trigger the function

[Vibe Coding in ChatGPT](#)

Prompt:

“Let's add a UI menu to trigger this function”

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[Sample Google Sheet](#)

Add logic to ask for the month

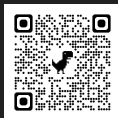
Vibe Coding in ChatGPT

Prompt:

“Let's update the logic to:

1. When user clicks Fetch US Avg Temps menu item, ask the use which month do they want to get the weather data for
2. Then use the value to update the OpenAI prompt”

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[Sample Google Sheet](#)

Error handling

Let's remove a line, Run the code and then copy the error into ChatGPT.

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Let's do some MR stuff

Synthesize qualitative research

- Import Transcript into a sheet
 - Allow user to enter a folder url to import from
- Use OpenAI to summarize the transcripts
 - Add summaries by interview in a “Summary” sheet



Importing transcripts

[Vibe Coding in ChatGPT](#)

Prompt:

Write google sheets Apps Script that does following

1. Adds a menu items "Import Transcripts"
2. On click, allow user to enter a google drive url
3. The drive url should have a list of txt files. Each txt file has an interview transcript.
 - 3a. Read each file and populate a sheet called "Transcripts".
 - 3b. Each transcript should show as a column.
 - 3c. First row of each column should have the file name and second row should have contents of the transcript file
4. If the "Transcripts" sheets already have any data remove it before importing.

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[Sample Transcripts](#)

[Sample Google Sheet](#)

Summarizing transcripts

[Vibe Coding in ChatGPT](#)

Prompt:

You are writing Apps Script to summarize transcripts in a google sheet. You have a "Transcripts" sheet with following data

1. One or more columns with interview transcripts
2. The first row of each column has the title for the interview
3. The second row has transcript

You want to

1. Use OpenAI API to summarize each transcript
2. Then update a "Summary" sheet with each summary.
 - 2a. If the summary sheet doesn't already exist, create it.
 - 2b. Delete any existing values in the "Summary" sheet, before importing.

Use the following openAI API function

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<paste openAI API function>



[Sample Google Sheet](#)

A few things

- JSON v/s Not

If you want structured response from OpenAI, use JSON output.

<https://api.openai.com/v1/chat/completions>

```
model: 'gpt-4o',  
response_format: { "type": "json_object" },  
messages: [  
  {  
    role: 'user',  
    content: 'What is today's weather in NY?  
    Respond with JSON. Include temperature  
    unit, high, low, and humidity.'  
  }  
],  
temperature: 0.3
```



A few things

- [OpenAI models](#)
- [API Pricing](#)
 - Pricing is “[token](#)” based.
- Security
 - Careful when running sensitive code
 - Do not share your API Key
 - If the key is compromised, you can [delete and generate a new one](#).



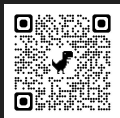
Suggestions

- Start small
- Tweak the example files from this presentation
- Try Vibe Coding

Tip: Ask AI to explain the code.

Prompt: “Add developer comments against each important line of the following code to help people understand what the code is meant to do. <add code here>”

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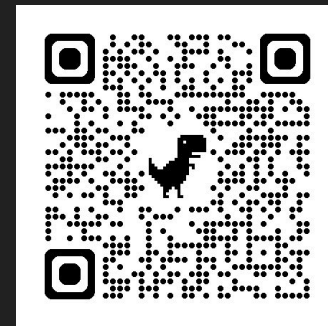


Questions

Join the free slack community at:

<https://doreveal.com/blog/v/training-on-google-sheets-open-ai>

(You can also download these slides from the same url.)



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