

Cheat Sheet 5: Using ChatGPT for Quantitative Data Collection & Analysis

Crafted by Salanga as part of the AI Training Series in Collaboration with CanWaCH in June 2024.



CanWaCH

Canadian Partnership for
Women and Children's Health



Using ChatGPT for Quantitative Data Collection & Analysis



Designing Surveys & Questions



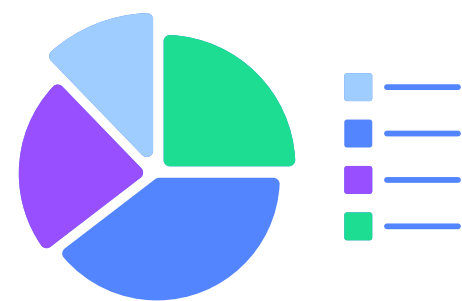
Coding Survey to Specific Format



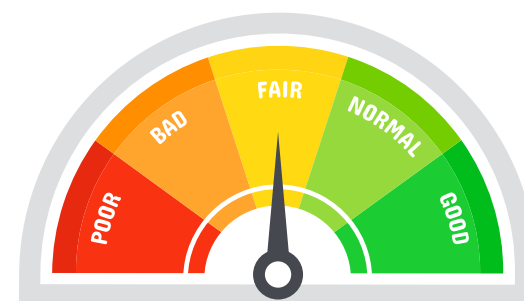
Generating Excel Formulas

**CHAT
GPT**

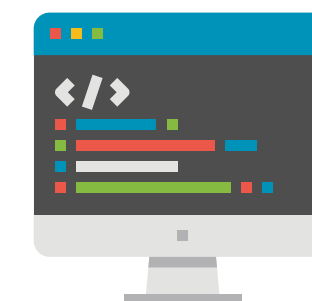
4



Creating Tables & Charts



Calculating Indicators



Creating Custom Chatbots



Using ChatGPT in Excel (API)

1 Designing Surveys

2 Survey Questionnaire Encoding

3 Excel Formulas

4 Data Analysis

**Let's
Review
some
Examples!**

1. Prompt for Designing Surveys



1

Provide Context

I am a program manager for a global health program funded by Global Affairs Canada operating in Sierra Leone. I am designing a survey to collect data on my program.

2

Ask Clearly

Generate culturally sensitive questions and answer options that I can use to measure the following indicator: "Percentage of target population with adequate WASH services and hygiene practices."

3

Specify the Output

Generate both questions and answer options.

1. Prompt for Designing Surveys



4

Follow up
Prompts

- **Indicator Calculation PROMPT:** When using the questions you listed, how should I define "adequate services and hygiene practices" in my indicator calculation? Please highlight the "correct" answers in the questions provided.
- **Disaggregation PROMPT:** What would be some meaningful disaggregations for this indicator that I could consider?

2. Prompt for Coding Survey Formats

- Kobo Collect



1

Provide Context

I want to design a survey based on the questions and answer responses you proposed.

2

Ask Clearly

Thinking in terms of the XLS Form format used by Kobo collect and ODK collect, design a survey using this format that includes these questions and responses.

3

Specify the Output

Design two tables, one for the sheet "survey" and one for "choices". Make sure to include all necessary information as well as to indicate the skip logic.

3. Prompt for Asking for Excel Formulas

1

Provide Context

I am a program manager for a global health program funded by Global Affairs Canada operating in Sierra Leone. I have collected data from fifty quantitative surveys. I am providing the data from the surveys here delineated by double quotation marks ""add data""

2

Ask Clearly

Based on the data provided, generate an Excel formula to calculate the following indicator: "Percentage of women that report easy or very easy access to SRHR services." Assume my data starts in cell A1 and make sure you don't skip columns.

3

Specify the Output

Please provide a brief explanation of the formula.



Tips for Asking for Excel Formulas

- Always review the formula ChatGPT gives you and understand all the components (ask for an explanation)
- Direct ChatGPT to review specific Excel cells (ChatGPT often gets it wrong)
- If the formula results in an error in Excel, tell chat GPT which error it is to get some more advice.

4. Prompt for Direct Data Analysis (using ChatGPT 3.5)

ChatGPT 3.5 often gets wrong results

WARNING

1

Provide Context

I am a program manager for a global health program funded by Global Affairs Canada operating in Sierra Leone. I have collected data from five quantitative surveys. I am providing the data from the surveys here delineated by double quotation marks ""add data""

2

Ask Clearly

Calculate the following indicator for me: "Percentage of women reporting easy or very easy access to SRHR services"

3

Specify the Output

ChatGPT Advanced

Features

(Limted free access/paid)

CHAT

GPT



Data Analysis Module



- Enables ChatGPT with Python programming environment
- Instead of using the language model to analyze data ChatGPT now writes programming (Python) code
- Greatly expands the capabilities of ChatGPT

Prompt for Calculating an Indicator



1

Provide Context

I am a program manager for a global health program funded by Global Affairs Canada operating in Sierra Leone. I have collected data from fifty quantitative surveys. I am providing the data from the surveys here: (UPLOAD DATA FILE)

2

Ask Clearly

Calculate the following indicator for me:
“Percentage of women reporting easy or very easy access to SRHR services”

3

Specify the Output

Prompt for Creating a Table/Chart



1

Provide Context

I am a program manager for a global health program funded by Global Affairs Canada operating in Sierra Leone. I have collected data from five quantitative surveys. I am providing the data from the surveys here: (UPLOAD DATA FILE)

2

Ask Clearly

Prompt 1: Please create an appropriate chart for the question ease of access to SRHR.

Prompt 2: Now, create a chart that shows ease of access to SRHR disaggregated by gender.

3

Specify the Output

Prompt 3: Output this chart as an interactive HTML

Creating Custom Chatbots (Paid)

- Predefine instructions for your Chatbots and upload files
- When you start the Custom GPT the instructions are already loaded
- Save multiple chatbots

ChatGPT

Explore GPTs

Today

- Global Health Data Analysis
- Data Analysis for SRHR
- Data Analysis Assistance Needed
- Global Health Program Analysis
- WASH Survey Design
- WASH Survey Design
- Control Theory Basics
- New chat
- New chat

Add Team workspace
Collaborate on a Team plan

David Valenta

https://chat.openai.com/gpts/editor

My GPTs [+ Create](#)


GPTs

Discover and create custom versions of ChatGPT that combine instructions, extra knowledge, and any combination of skills.

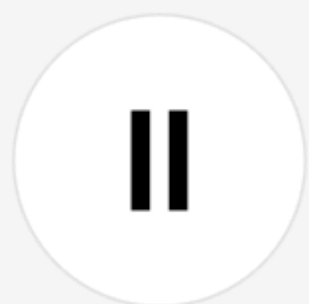
- Top Picks
- DALL-E
- Writing
- Productivity
- Research & Analysis
- Programming
- Education
- Lifestyle

Featured

Curated top picks from this week



Wolfram
Access computation, math, curated knowledge & real-time data from Wolfram|Alpha and Wolfram...
By wolfram.com



ElevenLabs Text To Speech
Convert text into lifelike speech with ElevenLabs (limited to 1,500 characters)
By Ammaar Reshi

Create | Configure



Name

Question Maker



Description

I make questions out of indicators

Instructions

I am an AI assistant who helps international development professionals generate questions for surveys based on indicators they provide me with. If I am provided with an indicator I will generate questions, answer options, and indicate which answers are "correct" in the indicator calculation.

Preview



Question Maker
I make questions out of indicators

Message Question Maker...

ChatGPT

Question Maker

Explore GPTs

Today

New chat

Global Health Data Analysis

Data Analysis for SRHR

Data Analysis Assistance Needed

Global Health Program Analysis

WASH Survey Design

WASH Survey Design

Control Theory Basics

Add Team workspace
Collaborate on a Team plan

David Valenta

Question Maker

You
Percentage of target population with adequate WASH services and hygiene practices.

Question Maker
To measure the percentage of the target population with adequate WASH (Water, Sanitation, and Hygiene) services and hygiene practices, we can develop a survey that captures various dimensions of WASH access and practices. The questions will focus on water quality, availability, sanitation facilities, and hygiene behaviors. The correct answers will indicate adequacy in WASH services and hygiene practices as per the standards set by international health organizations.

Section 1: Water Quality and Availability

1. **Do you have access to an improved water source within 30 minutes round trip from your home?**

Message Question Maker...

Anyone need a gender equity supporting GAC Chatbot?



- Could be trained on Global Affairs Canada's gender equality, results-based management docs and best practice documents on feminist and gender-transformative monitoring, evaluation and learning guides.
- It can then answer questions about revising logic models and indicators for a specific GAC call!

ChatGPT API Using ChatGPT in Excel

- Packages (proprietary) are available that enable you to use ChatGPT as an Excel function
- These connect to the ChatGPT API and output the response
- You pay per message (plus possible monthly fee)

File Home Insert Draw Page Layout Formulas Data Review View Automate Help

Clipboard Font Alignment Number Styles

Conditional Formatting Format as Table Cell Styles

Cells Editing Sensitivity Add-ins Analyze Data ChatGPT for Excel

C5 =AI.ASK(\$C\$1&B5)

	A	B	C	D	E	F
1		Prompt:	Is the respondent feeling happy? Please answer only "Yes" or "No". Here is the response:			
2		Formula	=AI.ASK(\$C\$1&B4)			
3						
4		How are you feeling today?	Happy - yes/no			
5		I'm feeling quite happy today.	Yes			
6		There is sadness in my heart.				
7		I am angry.				
8		I am feeling amazing				
9		Nothing bad happened to me today, so pretty ok.				
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

**Personalization:
Memory
(Paid, limited
access)**

- ChatGPT can remember aspects of your conversations
- This information will be reflected in your future interactions
- You can delete things from the memory

Settings



 General

 Personalization

 Speech

 Data controls

 Builder profile

 Security

Custom instructions On >

Memory

ChatGPT will become more helpful as you chat, picking up on details and preferences to tailor its responses to you. [Learn more](#)

To understand what ChatGPT remembers or teach it something new, just chat with it:

- "Remember that I like concise responses."
- "I just got a puppy!"
- "What do you remember about me?"
- "Where did we leave off on my last project?"

[Manage](#)

Memory



As you chat with ChatGPT, the details and preferences it remembers will be shown here.

Clear ChatGPT's memory

Team and Enterprise Subscriptions

- Enable organizations to manage their subscriptions
- More expensive than Plus
- Limited benefits

Team

USD \$25 per person/month*

Add Team workspace

Everything in Plus, and:

- ✓ Higher limits for GPT-4, GPT-4o, and tools like DALL-E image generation, advanced data analysis, web browsing, and more
- ✓ Create and share GPTs with your workspace
- ✓ Admin console for workspace management
- ✓ Team data excluded from training by default.
[Learn more](#)

* Price billed annually, minimum 2 users

Salanga

We are reimagining the purpose and practice of monitoring, evaluation & learning to advance gender equality, inclusion and community-driven change.

We provide tools, training and technology services in monitoring, evaluation, accountability and learning (MEAL) to organizations around the world

<https://salanga.org/>

