# Learning Log: Define problems and ask questions with data



## Overview



In a previous learning log, you reflected on what you learned from the SMART questions you asked you during your real life data conversation. Now, you’ll complete an entry in your learning log using notes about your data conversation to explain your initial insights to potential stakeholders. By the time you complete this entry, you will have a stronger understanding of how you might use data to define problems and what information is useful for stakeholders at this stage. This will help you develop formal documents like a scope of work (SOW) as a data analyst in the future.

## Summarize your findings



**As a data analyst, part of your job is to communicate the data analysis process and your insights to stakeholders.** This often involves defining the problem and summarizing key questions and available data early on. You might include this information in a formal document for stakeholders like a scope of work (SOW) at the beginning of a project. As a reminder, an SOW is an agreed-upon outline of the tasks to be performed during a project; it is important to ensure your stakeholders understand this key information at that stage.

Before you start your learning log entry, take a moment to review your notes and your reflection for Learning Log: Ask SMART questions about real life data. **Imagine that you are going to design a data analysis project based on this data conversation.**

In the learning log template linked below, you will create a summary of key information you think a stakeholder would need to know about this project. In this case, your stakeholder could be a member of the executive team, like a project manager. Here are some questions to help you get started:

* What is the problem?
* Can it be solved with data? If so, what data?
* Where is this data? Does it exist, or do you need to collect it?
* Are you using private data that someone will need to give you access to, or publicly available data?
* Who are the relevant sponsors and stakeholders for this project? Who is involved, and how?
* What are the boundaries for your project? What do you consider “in-scope?” What do you consider “out-of-scope?”
* Is there any other information you think is relevant to the project?
* Is there any information you need or questions you need answered before you can begin?

**As you think about these questions, it’s likely you’ll discover that you don’t have all the information you need. This is part of the process!**

When kicking off data analysis projects, expect to have a lot of conversations. By identifying what you know and what you don’t know, it makes it much easier to plan your next data conversation, so that you can get the answers you need.



### Access your learning log

To use the learning log for this course item, click the link below and select “Use Template.”

Link to learning log template: [Define problems and ask questions with data](https://docs.google.com/document/d/1kooOADIAtWrB6to-klZ_v5mWHXbQ8WJ_UsKFJtbGWuo/template/preview?resourcekey=0-DpVgA8sZGhn-s32LAzCIeA)

OR

If you don’t have a Google account, you can download the template directly from the attachment below.

[Learning Log Template\_ Define problems and ask questions with data.docx](https://d3c33hcgiwev3.cloudfront.net/_J8pF3RMRxmfKRd0TFcZFw_b8fba225588f42408f7e9e5e63fedd6a_Learning-Log-Template_-Define-problems-and-ask-questions-with-data.docx?Expires=1622592000&Signature=EfqWiLZDr-FDb3FnMSJB76AwUK5dutzhSCVkFzP3mijFCV8ssNqjExmkdqXjpuhZA7YhmOxeHrjFjAiKo5GHLpHpLhw0WfHCqG2AYVsqj0Hr4lWLBzDTQoM88S7Y1drJVRAbwleLFvTqFWMl9np0z~eaieO7FghIFKLIQJbPrck_&Key-Pair-Id=APKAJLTNE6QMUY6HBC5A)

[](https://d3c33hcgiwev3.cloudfront.net/_J8pF3RMRxmfKRd0TFcZFw_b8fba225588f42408f7e9e5e63fedd6a_Learning-Log-Template_-Define-problems-and-ask-questions-with-data.docx?Expires=1622592000&Signature=EfqWiLZDr-FDb3FnMSJB76AwUK5dutzhSCVkFzP3mijFCV8ssNqjExmkdqXjpuhZA7YhmOxeHrjFjAiKo5GHLpHpLhw0WfHCqG2AYVsqj0Hr4lWLBzDTQoM88S7Y1drJVRAbwleLFvTqFWMl9np0z~eaieO7FghIFKLIQJbPrck_&Key-Pair-Id=APKAJLTNE6QMUY6HBC5A)

## Reflection



Now that you have started identifying which information would be useful for a potential stakeholder, write 5-7 sentences (100-140 words) summarizing the key questions, the data available, and the answers or insights you have gained so far in your learning log template.

When you’ve finished your entry in the learning log template, make sure to save the document so your response is somewhere accessible. This will help you continue applying data analysis to your everyday life. You will also be able to track your progress and growth as a data analyst.

[Week 3 Glossary](https://docs.google.com/document/d/1v1_vAc7R81IK2JL4QTIbkUdHVYXnIvithZ_gC_k--jw/template/preview)