How To

# Analytical Framework

## Digital Agriculture Landscape Assessment Toolkit

JengaLab TechChange DEVELOPMENT GATEWAY An IREX Venture

# ANALYTICAL FRAMEWORK:
## DIGITAL AGRICULTURE LANDSCAPE ASSESSMENT TOOLKIT

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# PART 3 : ANALYTICAL FRAMEWORK

An **analytical framework** refers to the model used by a team to synthesize all the key information gathered during the data collection phase. This information may have been acquired via interviews, focus group sessions, validation workshops, surveys, and even desk reviews.

The main goal of the analytical framework is to **gather, organize, and summarize the critical information and evidence that will underpin the outputs of your assessment.** A well-designed analytical framework will make the transition from interviews to report writing a breeze. When used correctly, an analytical framework can allow you and your team to spend more time on analyzing and validating your findings and less time on collecting or trying to understand them.

# WHAT IS AN ANALYTICAL FRAMEWORK?

An analytical framework is a tool that helps to analyze qualitative information from key informant interviews, focus groups, validation workshops, focus groups, surveys, and even desk reviews - whatever method you used to better understand your data or digital ecosystem.

While you and your team debate about what format would be best for the framework, make sure to:

1. Create a **standardized template of the key information** that should be captured (wherever possible) in each interview *so that all team members do not have to read all interview notes.*
2. Create a **reference guide** to facilitate report writing or serve as an evidence base for other assessment outputs described in this toolkit.
3. **Anonymize data** and protect privacy by using unique identifiers instead of actual identities.

Analytical frameworks are often spreadsheets - but they could also be Air Tables, Powerpoint files, or even well-formatted Word documents. A typical Google Sheets or Excel version has key learning questions asked on one axis and the respondents (listed by name or anonymized by interviewee type) on the other. Ideally, an analytical framework will be structured around an interview guide or other assessment output; however, the tool should also be flexible enough to adapt to critical information being collected.

Below is a screenshot of an example framework:

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Participant Information | | | | | Intro | | | | |
| | **File Name (e.g. NE-IP-1)** | **Name and surname** | **Job Title** | **Organization** | **Interview Date** | **Link** | **Interviewer** | **Note Taker** | Interview Highlights/ General Notes | Role | How his/her role relates to tobacco control | Key priority for tobacco control | New tobacco product? | Biggest obstacle to achieving that priority |
| | *CSO-1* | *Brenda Chitindi* | *Executive Director* | *Tobacco Free Association of Zambia* | *Nov 22 2021* | *https://docs.google.com/document/d/1ALd4ZdtKxD37tVV8smYwApg_FAFEJumvQ6jaDv_N6cc/edit?usp=sh* | *Mbaita, Aminata* | *Seember* | *Brenda provided broad context of the tobacco control landscape in Zambia and the current status* | *Brenda is also founder & secretary of Zambia heart & stroke foundation. She also Initiated* | *Her organisation centres on advocacy. They also carry out surveys and investigations* | *1) Passing legislation on tobacco control to provide a sound backing for tobacco control activities* | *Use of shisha and vaping amongst the youth are a critical concern* | *Tobacco industry interference is the biggest challenge. Interference persists* |
| | *CSO-7* | *Isiah Mbewe* | *M&E/Project Manager* | *Centre for Trade Policy and Development* | *Nov 23 2021* | *https://docs.google.com/document/d/1I1VvvKmkaqPX3ha6CsKHk6tf3oFn1wWZkuc_lhavD3w/edit?usp=sharin* | *Mbaita, Aminata* | *Seember* | *Attributed the recent increase in excise duty on tobacco products to budget submissions* | *M&E expert and lead tobacco person.* | *Generates evidence for advocacy around tobacco control. Project is in its first year and has a* | *Ensuring that tob control bill is enacted as a law and implemented Increase taxation of* | *Has not been a focus of their work. Indicated that new bill largely addresses issues of shisha* | *Tobacco inteference ar influence is slowing down the work. Lack of politic will directly* |

# WHY USE AN ANALYTICAL FRAMEWORK?

**The analytical framework is the core of the assessment analysis process.** There are many benefits to using an analytical framework tool when synthesizing qualitative information:

- ➔ An analytical framework allows you to think about **qualitative data in a systematic way,** specifically when information can be subjective or open to interpretation.
- ➔ Analytical frameworks **highlight the methodology** of the research and allow others to understand and reproduce your results if they have questions.
- ➔ Analytical frameworks **allow you to easily find key information** during report writing, without needing to re-read interview notes or re-listen to the initial interview.
- ➔ You can also **hand over** an anonymized analytical framework to your partners or assessment user in place of raw interview notes or transcriptions (to protect privacy and confidentiality).

# HOW TO DEVELOP AN ANALYTICAL FRAMEWORK

**As always, start by thinking back to the use case for your assessment: who is the audience of this research, and what information is most useful to them?** Use this key question to structure the key dimensions or columns of your analytical framework.

Make sure to have the analytical framework ready for input before interviews start – this means identifying the key themes you want to extract from the interviews and making sure the assessment team has a place to “park” findings for each upcoming interview. After some careful planning and templating, your initial interview analysis should be as simple as copy and paste!

# STEP 0: CREATE TEMPLATE BEFORE INTERVIEWING

An early framework allows everyone to be clear on the most important pieces of information expected to be extracted from interviews, and provides a place to park notes in real time as interviews take place.

If you have carried out qualitative interview assessments, you know that **there is nothing more daunting than a multi-hour, multi-interview backlog of recordings that have not been transcribed or notes that have not been cleaned**. Such a backlog gets large fast. Having an analytical framework ready to go before you start the interview process allows your interviewers and note takers to quickly and easily document high-level findings and insights while they are still fresh in their minds.

Throughout the interviewing process, you should use the framework to develop additional insights and analyses that may support your assessment – take a kind of analyze-as-you-go approach to interview note taking and analysis. You can leave room to update or revise the structure of the analytical framework as you interview, but have a working version ready and formatted beforehand, with agreement on anonymization and other data standards such as "coding" for certain qualitative key words.

# STEP 1: CREATE A FLEXIBLE TABLE

Start your analytical framework by creating a basic table with the key pieces of information you want to know and their sources. Web-based tools such as Google Sheets or Air Tables are recommended, particularly for managing version control across multiple team members.

Title the first several columns with participant information, like name (or codename), job title, and organization. We also recommend adding information about the interview itself, such as the link to the interview notes and the names of the interviewer and notetaker. Standardizing these (and other) fields will help you filter and search through this document much easier and faster at a later point in time.

**Due to privacy considerations, we strongly recommend using a standard coding system to reference each individual instead of their full names** (see Column B of the analytical framework above). For example, **"GOV-2"** can be used to reference a representative from the Ministry of Finance named Mr. Jonathan Samson. This reference should be used in place of his real name in any version of the analytical framework shared outside the interview team. In addition to protecting the privacy and anonymity of Mr. Samson, standardized references will aid document and version control across assessment teams and secure confidential interview notes and documentation.

# STEP 2: ADD COLUMNS FOR KEY FINDINGS

Next, input the most important questions from your interview guide into the analytical framework. You do not have to (and probably should not) add every single question to your analytical framework.

**Instead, narrow down the number of columns or rows in your table by the key learning goals that will best help you develop your assessment report or other planned analytical outputs.** For example, if you have different sections to your interview guide (e.g. "Introduction," "Data Use," "Data Supply," etc.), then we recommend making headers that encompass those sections in the framework.

Alternatively, if you have already developed an assessment report outline, **consider structuring your analytical framework accordingly to assist with report writing.** If you plan to develop any additional analytical outputs, such as user analyses and stakeholder or ecosystem mappings, **ensure that information about key variables of interest is captured in the table as well. Standardize key terms** (e.g., user personas, stakeholder groups, data sources, types of training needs, etc.) to support coding, analysis, aggregation, search, counting, and filtering.

## STEP 3: ADD INTERVIEW NOTES

After conducting the interview, copy your notes into their corresponding key finding or thematic columns in the analytical framework. If the interviewee was particularly clear, you can copy and paste directly from the interview notes -- but be mindful of how much text you're trying to pack into a small space. It is typically more helpful to summarize the answers, use bullet points, or to put their answers into your own (fewer!) words.

Note that every single line from every single interview needs to make it into the analytical framework. Narrative examples or use cases that are specific or attributable to an individual interviewee, for example, should be highlighted in the interview notes but not in the analytical framework. Instead, a note such as "see interview notes for user story or use case" will suffice. This keeps the analytical framework trim and tidy while highlighting where key references can be found in the interview notes.

## STEP 4: ANALYZE AND PROSPER

Throughout the interviewing process, use the framework to develop additional insights and analyses that may support your assessment. As you conduct interviews, share a living version of the analytical framework document with the entire assessment team to ensure findings from all interviews are captured, visible, and understood. Iterate and adapt the analytical framework as necessary to capture additional or less information. Use the analytical framework to reference specific details, quotes, user stories, or use cases further in the interview notes.

A well-developed analytical framework can serve as a key reference for your assessment's findings, outputs, and recommendations. **If you utilized coding schemes and planned your assessment outputs and analytical framework accordingly, you should be able to easily develop mappings and diagrams.** This will help free you to focus on developing recommendations!

# TIPS AND TRICKS

## MAINTAINING THE FRAMEWORK

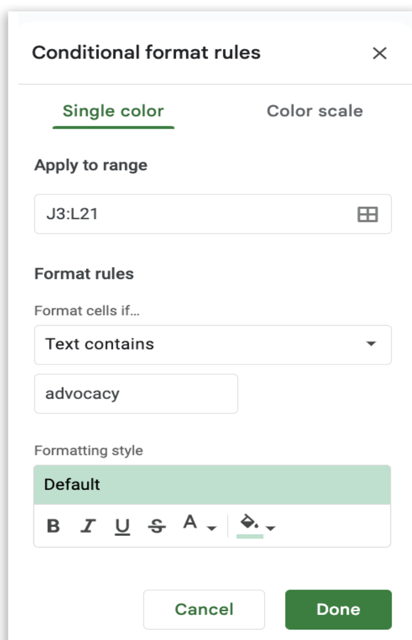
- If an interview guide is too detailed for use as a framework, consider the final output and use case for your assessment: what is most useful to your user?
- Identify top-level topics/themes that you want to track, based heavily on the assessment methodology, learning goals, and assessment outputs.
- Think of the columns as sections of your report outline/table of contents, or sections in the interview guide.
- Allow for filtering and aggregation where possible (e.g., extract quantitative responses in their own column so that you can run averages, include standalone columns for sector, role, etc.)
- Ensure that interviews and note takers populate the analytical framework as soon as possible after each interview, while the information is still fresh.
- If you are sharing this framework with another institution/agency, do not record actual names of the interviewer (unless agreed upon via the privacy agreement in the interview guide).
- Always include a space for interview highlights/notes that are not explicitly captured in the rest of the framework.
- Leave room for revisions/iterations depending on interests, preliminary findings/themes, or agency/country priorities.

## CODING AND AGGREGATION

We recommend using Google Sheets for your analytical framework. It allows users to build formulas and automate certain analyses by searching for standardized key terms or "codes." See the two examples below for ideas on how to use coding and aggregation for easy analysis.

### Example 1: Use conditional formatting to highlight certain words or phrases

If using Google Sheets, go to Format → Conditional Formatting. You can create a rule that colors cells green if text contains the word "advocacy":



Thereafter, your spreadsheet will quickly highlight in green all the cells that contain the word "advocacy." You can then easily identify which interview notes to reference to develop your understanding of advocacy needs and opportunities.

### Example 2: Using COUNTIF function to identify how many times a certain text appears in a cell range

If you opted for a spreadsheet for your analytical framework, you can use the COUNTIF function to quickly tally key insights or information, and have that information updated in real time.

For example, if you know that all government interviewees were coded with "Government" under Column C - Stakeholder Type in your analytical framework, a simple COUNTIF function can quickly tally the number of government interviews that have been added to your framework thus far. The function would be:

=COUNTIF(C1:C1000, "Government")

For more information on how to use formulas in Google Sheets, please see Microsoft Support.

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