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What is data visualization?

- Data visualization is the graphical representation of information and data. It can provide an accessible way to see and understand trends, outliers, and patterns.
- Data visualization and graphic summaries can help us absorb and analyze massive amounts of information.
- Our eyes are drawn to colors and patterns.
- It is a form of visual art that grabs our interest and keeps our eyes on the message.
- It is storytelling with a purpose and a chance to creatively display work.

Why create a data visualization?

- We live in a digital world with short attention spans. To get and keep people's attention, it helps to use dynamic visuals and graphical summaries.
- It is easier to share digitally, and often, easier to hand out once printed off.
- With less information and more digestible language, data visualizations are often more accessible than your average evaluation. This means more people have the chance to learn from your findings.
- It works together with the long-form report, so make sure to always link back to the original resource.

There are many types of data visualizations: charts, tables, bar graphs, word clouds, bubble clouds, heat maps, timelines, etc.

There is a lot of room to get creative!
When to create a data visualization

So you have just produced an evaluation with some great learnings, and you think that others would benefit from this knowledge. One way to share resources, and their findings, is to create a data visualization. But, how do you know if it is best for your evaluation? Below are a few indicators that your work might benefit from becoming a data visualization.

1. You have discussed with colleagues and have identified it as a key resource for your team and/or organization.

2. You have been asked multiple times about this resource/report by colleagues from other organizations, or it is one of your go-to evaluations that you share when talking to others about your work.

3. Would others benefit from this knowledge? Can the results or practices be replicated? Is there is an aspect of it (methodology used, insightful findings, unique project design, etc.) that could make it an important learning tool? If you answer 'yes' to any of these questions, you should consider creating a data visualization!

Does it tell a good story?
Once you choose a resource, you should think about the best way to structure your data visualization. There is no set 'best way' to display your information, so feel free to experiment with different styles! But, one easy way to organize all the information is to structure it as if it is a story with a beginning, middle, and end. Not every resource will fit into the structure, but it is generally a good place to start. Here are some examples of what information might fit into each category:

**Beginning**

- Project Goal
- Theory
- Hypothesis
- Objectives
Insider Mediators = Social Cohesion

How did IMs help promote social cohesion within the communities? Did this social cohesion enhance their resilience to violence?

- Insider Mediators - the project selected community leaders who were members of the same community and trained them on mediation
- This helped community members become more aware of the need to discuss their issues at the community level
- It also strengthened the cooperation and social ties among community members
- In Taiz, a committee of female community representatives was established to provide follow up for dialogue discussions and address future conflicts
- Members reported a decrease in the number of conflicts, which created a better living situation within the villages and less tensions among community members
- They also reported that villages became less affected by regionalism and conflicts

Middle

- Activities
- Methodology

End

- Results
- Findings
- Lessons Learned
How to pull and summarize information for your visualization

Step 1: Define your audience. Who do you want to see and use this document?

- General public
- Only other people in your field or industry
- Only internally within your organization

Most audiences will fall into the 'general public' category. Consider these when creating visualizations for this category:

- Avoid jargon and technical language, as much as possible
- Don't use acronyms - if you must use them, make sure you find a place to explain their meaning
- Keep the text short and sweet
- When in doubt – a link to the full report should always be at the end of the visualization

Remember that different audiences interpret stories/visual pieces in different ways:

- Do the colors used have a cultural meaning? How will different groups interact with them?
- Do they have the technology to interact with a gif/video piece?

Step 2: After you define your audience, begin conquering your evaluation or report by reading the executive summaries, abstracts, conclusions, etc. Start with the more concise overviews of the resource, so that you can start to get a sense of what you find insightful and want to highlight in your visualization.

Step 3: Identify what is most significant. This is what you believe to be the most important aspect of, or insight gained, from the resource. There might be more than one!

- Keep in mind that you want to be able to tell a story
- Is it something that other will be able to learn from or find unique?
- Can you keep the information concise and break it down into manageable chunks?
Step 4: Choose the focus of the visualization. It is best to start with one aspect. You can choose two, if you are able to concisely weave them together.

- If you still have more topics you want to cover, consider making a second visualization. Each resource can have more than one
- If you are having trouble choosing the focus, and it is possible, talk to someone involved in the project or evaluation. They can help you identify the significant takeaways

Step 5: Go back to specific sections of the evaluation that might contain important statistics, details, quotes, etc. that will help you support the significant takeaway that you have chosen to focus on.

Step 6: Provide context for your information. Once you have gathered the data you want to visualize, make sure that you include the appropriate context for this information. If your audience does not understand, at least on a basic level, the context of your information, your visualization will mean nothing. Think of this as developing the setting of your story.
Ways to make it more compelling

- **Decide which format is the best fit** for displaying your data (ex. bar charts, pie charts, infographics, maps, etc.)
- **Consider the visual journey you want your viewers to go on.** This should help you organize your information and supporting data on 'the page'
- **Make sure your font size and color are easy to read.** It is best to keep your font at 11pt or above. Do not put similar colored text and backgrounds together (ex. light text with a light background or dark text with a dark background). You want your words, and the points you are making, to stand out
- **Use clear and concise headings and sections.** Your headings and sections should break apart your data visualization into digestible chunks. This will make it easier for your audience to navigate through your visualization and find what they are looking for. It also just makes it easier to follow, in general
- **Use larger and smaller sized shapes, art, pictures, charts, fonts, etc.** to establish a visual hierarchy. The information and data that you identify as most important should stand out within the data visualization
- **Your first draft will probably have too much text.** It is best to say what you need to in the most concise way possible. So, go back to your visualization and cut text, cut text, and cut it again
- **Remember that white space is your friend.** Our eyes search for things that stand out, so good design often use white space to draw the audience's eyes to the most important information first. Less can be more
- **Keep your visualization clean and organized.** Clutter is the enemy of readability
- **Use color but be smart about it.** Use your intuition when making color choices (ex. applying bold colors to key data, while lightening or softening other elements)
- **Use visuals that are consistent, and not overly complex**
- **Use shapes and framing around text** to draw attention
- **Have fun and mix it up!** Using a mixture of stats, quotes, comparison tables, maps, images, etc. throughout your visualization can make it more interesting. But, ideally do not use all of them in a single visualization. **Less can be more**
Programs to help you create a visualization

**Canva:** This program is easy to use, even if you are new to graphic design. It provides multiple templates to choose from, numerous free fonts and graphics, and a user-friendly layout. Even if you do not use their templates, they are great for inspiration.

**Piktochart:** It is very similar to Canva. Just like Canva, you can use their pre-designed templates or create your own visualization from scratch. Piktochart also has map and graph functions that are easy to use.

**Prezi:** This program helps you create interactive and dynamic presentations. It makes it easier to share more detailed and dense information in an interesting manner.

**Visme:** You can also make infographics, presentations, charts, reports, and social media graphics with this program. It is user-friendly and has an intuitive layout.

**PowerPoint:** This program is good, because most computers already have it downloaded. You can add transitions, animations, and graphics to make your presentations visually pleasing. It is also pretty easy to use.

These programs all have basic, free versions to get you started!

To view some of our visualizations:

dmeforpeace.org/resource/the-pec-data-visualization-series