The latest Data Talks meeting discussed the ways in which international organisations can share a clearer picture of the work they do by using data visualisation. While data is becoming increasingly available, the amount of infographics is proliferating as well. It is therefore all the more important to create a narrative to go along with the visuals we produce. Data visualisation, communication, and storytelling make information even ‘more informative’. However, the challenge is to work on briding the gap between information and knowledge.

Data analysis is always referred to as the process which ‘makes sense of data’, namely, which transforms data into information. Considering that coding, data analysis, and storytelling go hand-in-hand as they are steps of the same ‘data cycle’, the discussions explored ways for ‘storytellers’ to understand complex datasets, as well as good practices for data scientists to ensure that the data is understood by a wider audience.

Mapping the sustainable development goals (SDGs) through visual representation

The discussions were guided by best cases provided by the practical experiences of collecting vast amounts of data and finding ways to produce visuals that will serve a wide audience. Ms Aziyade Louise Poltier Mutal (Head of Perception Change Project (PCP)) said that they were able to use visuals to show the impact of the United Nations in both Geneva and the rest of the world. One of these projects was the SDG mapping, a data graphic that visualizes the expertise of over 80 organisations based in Geneva towards the Sustainable Development Goals (SDGs). Ms Esther Cappelli (Perception Change Project (PCP)) explained that the first challenge was to find common and comparable data, given that each respective organisation works on different aspects of the SDGs. In this initial phase, the involvement of the organizations was fundamental to agree on “areas of expertise” to be mapped out for each of the SDGs. Taking into account the various areas of expertise and working with severe time constraints, a second challenge was to define methods to collect the data. The PCP opted to provide three different options to the participating organisations for submitting their contributions. In a context where data must be collected and voluntary collaboration is relied upon, the focus should be on making data collection as easy and comfortable for the ‘data donor’.

The transformation of raw data into a final product, usually an infographic or visual, should occur in accordance to the target audience. In the case of the SDG Mapping, the PCP opted for representations of the same data on different platforms. They created an interactive platform online where the organizations provide examples of their expertise towards the SDGs, and a print version which gives an overlook of all the data. While the print version was developed for international organisations to cross check similar expertise and built new partnerships, the interactive representation and the campaign on social media have been developed specifically for a broader public.

Challenges for visual representations

Similarly, Mr Djordje Jancic (Head of the Data Team, DiploFoundation) identified the standardisation of input data as one of the greatest challenges for data visualisation. Adding to the experiences of the PCP, Jancic and Ms Natasa Perucica (DataTeam, DiploFoundation) mentioned the importance of referencing the limitations and potential biases of the final products in a methodology section.

One of Diplo’s data projects also related to the SDGs and showed a different approach to a similar topic as covered by the PCP’s representatives. Besides using different ways to show the same data, a different methodology was used – a perfect example of how the same topic can be covered in several different manners.

Diplo’s Data Team is developing ways to use artificial intelligence (AI) powered tools to help with data collection and processing. When using these tools, it is important to consider that data must be continuously monitored by humans. Moreover, even if the results do not produce the desired outcome in terms of data collection, it should be used as a lesson to adjust future AI-based runs. Selecting the media also bears trade-offs which must be taken into account, such as the fact that humans might be able to analyse sources in different languages, while automated processes might not be able to do so but have the capacity to analyse a much larger quantity of data in a specific language. Therefore, the desired result of data analysis must also be considered before undertaking the research.

Organising large amounts of data and finding ways to communicate the most information possible through visuals is a recurring challenge which requires close collaboration between the data scientist and the ‘storyteller’. Visuals do not always need to be accompanied by an explicitly told story. As Jancic highlighted, there are visuals and interactive infographics that tell a story on their own.
Finding the right visual to the story

There are many ways to arrive at a finished product. Depending on the area you are working on, the narrative for the data might already be provided. In the case of the PCP, the story revolves around ‘trending’ UN topics such as climate change, multilateralism, or the SDGs. Therefore, the visuals support an already existing narrative.

In other cases, it is the density of information which must be displayed that will guide the design of the visuals. As pointed out by Jancic, the process of transforming raw data into a visually informative graphic involves a lot of creativity on the part of both the data expert and the person in charge of creating the narrative, highlighting the importance of inter-team collaboration. Tools mentioned in the process of creating infographics are kumu.io[link] as well as infogram[link], both tools used for their advantage of visually displaying large and complex amounts of data.

Data Talks is an initiative of the Geneva Internet Platform to bring international organisations together in an effort to share knowledge on data-related opportunities and challenges across silos. For more information, visit www.giplatform.org/data