

How to communicate research for policy influence

Toolkit N°5

Dynamic formats for research communication

This toolkit is part of a series addressing different aspects and tools on research communication for policy influence.

Besides more traditional academic tools like books or policy briefs (see Toolkit 2: Policy briefs) and recent online tools innovation (see Toolkit 4: Online tools), there are other non-traditional formats that can help you enhance the way you communicate research: visualization, presentation and video tools enable a more dynamic and attractive communication of evidence, and can contribute to make findings easily accessible to decision makers and society.

The importance of data visualization

Data represents the building blocks of information. In the modern world, we have much more data than what we can actually process, and, many times, it becomes meaningless to most people. Moreover, when audiences are presented with too much information, they end up losing interest on it, which is often translated as lack of understanding of the available information (McCandless).

Giving this abundance –even saturation– of data in our societies, the practice of data visualization is becoming increasingly important; moreover it is changing the way people receive and consume information. **Data visualization** is a transversal discipline that

uses images' immense power of communication to explain great abstract masses of information generated by scientific and social processes (MediaLab PRado). The main goal of data visualization is to **communicate information clearly and effectively through graphical means**, enabling a more intuitive approach to key aspects of complex data. Data visualization **allows simplifying, measuring, comparing, exploring, and discovering data**; it transforms data into information and information into knowledge (Alcalde, 2013). In short, it is all about processing and presenting data as a multimedia experience.

The visualization challenge is very sensitive to researchers who seek policy influence. **Policy researchers collect and process vast amounts of data**. However, their outputs often remain in technical language, in mountains of visual static texts and knowledge products, accessible to only a handful of experts. Moreover, the technical formulation often prevents collaboration and usage of the publicly available data and analysis. As such, **unprocessed data misses many opportunities to create essential knowledge for society, and add the necessary depth and evidence backup for policy discourse** (Buldiosky, 2011).

New media have further exacerbated the challenges research organizations face. Today, organizations' knowledge products are forced to compete on the same market of ideas as that of blogs, news outlets, magazines and electronic media in general. Consequently, **in addition to analyzing, studying, interpreting and comparing the data with other data, organizations must know how to communicate it.** As Buldiosky (2011) says, "they have yet to master the art of using the new media and interactive information technology both to **communicate their results and bring their work to their existing audiences and promote it among new, wider audiences by utilizing user-friendly formats and thus increase the impact of their ideas.** Not only would organizations benefit from higher visibility and impact of their ideas, but also their products could be of more value for their societies."

Data visualization tips

- Even though there is a vast amount of tools, they do not work automatically: it is necessary to **dedicate time to display effectively** the information you have.
- The **aesthetic** and the **functional** dimensions must go hand in hand.
- Facilitating the understanding does not mean distorting data: do not fall for fashion or "eye candy" traps.
- **Visualization is not analysis.** It is important to remember that visualization is neither a tool to help the analysis, nor a substitute for analytical ability. Moreover, is it not a substitute for statistics. Do not expect data visualization to do all the work automatically (Alcalde, 2013).
- Remember that, **the quality of data visualization lies on the information that it is based on**, not on its aesthetics. It's all about the facts (The art of data visualization).

Tools for data visualization

There is a variety of conventional ways to visualize data: tables, maps, histograms, pie charts, bar graphs, and so on. However, to effectively convey a message to your audiences, sometimes **you need more than just a simple pie chart of your results.** In fact, there are much better, profound and creative ways to visualize data. Many of them are free so that your main investment is time (Machlis, 2011).

Among the vast amount of tools available, you may consider using the following ones due to their advantages. For further options and information on data visualization tools, see: [www.computerworld.com/s/article/9214755/Chart and image gallery 30 free tools for data visualization and analysis](http://www.computerworld.com/s/article/9214755/Chart_and_image_gallery_30_free_tools_for_data_visualization_and_analysis) and www.selection.datavisualization.ch/

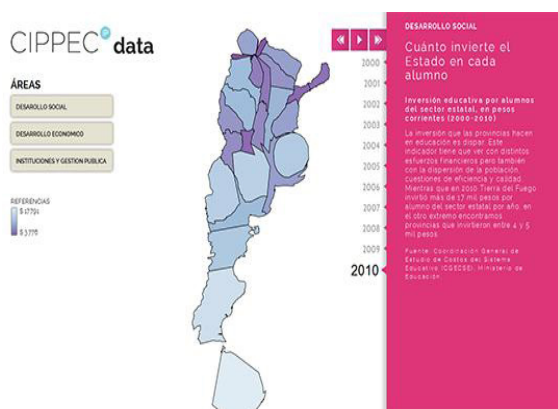
Tool		What is it?	Web	To inspire
Charts	Google Motion Chart	It's a dynamic chart that allows you to explore several indicators over time. Some features are: shows more dimensions of data simultaneously, therefore revealing more interesting stories in the data, and shows high level patterns as well as the individual elements that make up the pattern.	https://developers.google.com/chart/interactive/docs/gallery/motionchart	Housing price Index: http://www.socr.ucla.edu/test_dir/GoogleMotionChart.html
	Tableau Public	Enables creating interactive graphs, dashboards, maps and tables from virtually any data and embedding them on your website or blog in minutes. From a simple Excel spreadsheet, you can have a high impact interactive visualizations graph.	www.tableausoftware.com	Tale of 100: http://www.tableausoftware.com/public/gallery/taleof100
	Google Fusion Tables	Turns data into a chart or map. You can upload a file in several different formats and then choose how to display it: table, map, heatmap, line chart, bar graph, pie chart, scatter plot, timeline, storyline or motion (animation over time). It is somewhat customizable, allowing you to change map icons and style info windows.	http://www.google.com/drive/apps.html#fusiontables	Mapping the riots with poverty (The Guardian): http://www.guardian.co.uk/news/datablog/interactive/2011/aug/10/poverty-riots-mapped
Timelines	Dipity	Dipity is a free digital timeline website. It helps organize a web's content by date and time. Users can create, share, embed and collaborate on interactive, visually engaging timelines that integrate video, audio, images, text, links, social media, location and timestamps.	www.dipity.com	Deaf International Community: http://www.dipity.com/terpprof/Deaf-International-Community/
	Timeline JS	With Google Spreadsheet, you can tell a story using multiple formats for its content. It accepts formats such as Twitter, Flickr, Google Maps, Youtube, Vimeo, Wikipedia and Soundcloud. It also facilitates the configuration of font and set of the interface language.	www.timeline.verite.co	The Vancouver Sun (Canada): http://www.vancouversun.com/news/montreal-murder.html
	Tiki-toki	Registers texts, images and videos within a chronological line, with the possibility to display the details in a popup window without impairing the aesthetics of the line created.	www.tiki-toki.com	Group Edit Memo: http://www.tiki-toki.com/timeline/entry/2300/Group-Edit-Demo/#vars!date=2011-01-01_00:00:00!
Maps	Google maps	Offers several map views that you can switch between depending on your needs. You can also create a custom map for any location, adding place marks, lines and shapes to it. You can load the saved map at any time, print it out for your reference and share it with others.	www.maps.google.com.ar	
	D3.js	D3.js (or just D3 for Data-Driven Documents) is a JavaScript library that displays digital data in dynamic graphical forms. It allows great control over the final visual result.	www.d3js.org	CIPPEC data: www.cippec.org/data

Source: CIPPEC based on www.computerworld.com, www.selection.datavisualization.ch/ and the official websites of the described tools.

An inspiring experience of data visualization: CIPPEC data

CIPPEC data (www.cippec.org/data) enables you to see, analyze and understand statistic information on 20 social, economic and institutional indicators in Argentina through an interactive cartogram, a map that is distorted to represent an indicator proportionally. The cartogram is useful to analyze the situation of provinces regarding several topics in relation to others, and it also depicts the individual performance of each province over time.

The cartogram was built with JavaScript D3.js of the algorithm to construct continuous area cartograms. It was developed by James A. Dougenik, Nicholas R. Chrisman and Duane R. Niemeyer



Other inspiring experiences are:

- Climatescope (Inter American Development Bank): <http://www5.iadb.org/mif/climatescope/2012/tool.html>
- The microscope of votes in Spain (rtve.es): <http://datos.rtve.es/elecciones/autonomicas-municipales/>
- An urban world (UNICEF): <http://www.unicef.org/sowc2012/urbanmap/>

Presenting information: Prezi and Storify

Not only is an attractive visualization of data important to engage audiences. Many times research organizations do not realize **how important it is to present well their work or research findings**. Beyond the traditional power point, other ways of presenting information are increasingly being used at different workshops, seminars, conferences and other spaces where research organizations show their work. Two of those new ways of presenting information are Prezi and Storify.

Prezi (www.prezi.com) has replaced Power Point as the best tool for presentations. A Prezi presentation has a great visual impact and is generally more useful than PowerPoint for **non-linear presentations**, as it jumps from one page to another, goes back and forward, and zooms in and zooms out. However, other design features such as inserting videos, using different fonts and colors, trying typos, etc. are quite the same for both PowerPoint and Prezi. So, the biggest difference is probably the much-hailed non-linear nature of Prezi against the linear structure of PowerPoint.

So, when deciding which tool to use, think how Prezi's non-linearity could be harnessed. For example, Prezi would be useful for presenting a stakeholder map which focuses in different nodes. It is also an ideal option for creating mind maps around a chosen topic.

A Prezi can be shared on Facebook, Twitter and websites, and can be accessed by anyone unless you upgrade your account.

Some tips for using Prezi:

- Close up and sort first the most important content.
- Use Movement to establish the relationship between elements and the story-telling.
- Use Grouping and Frames to avoid motion sickness.
- Add 3D backgrounds to your Prezi.
- Use Prezi as a whole website.
- Choose wisely the title of your Prezi for search engine optimization.

Source: Seattle Pacific University.

Storify (www.storify.com) is a platform that **enables users to tell a story using social web material**. The tool allows you to organize text, documents, video, images and social media (Twitter, Facebook, etc.) in an orderly and linear presentation. The pieces of the story retain all original links and functions, and can be integrated into any site.

With Storify you can **create new narratives** about events of major importance. The stories can be generated in a **chronological order** so that users have an idea of how different events raised and developed.

You can access Storify through your personal Twitter account. Two columns will appear: the left one presents a variety of social services such as Twitter, Facebook, Flickr, YouTube or SlideShare. The right column is where you enter the title of the story and the description. Then the left side content is dragged to the right side of the screen to recreate the story.

The stories are published under a URL that can be shared to make it viral or it can be embedded on a blog or website. Storify provides visitor with statistics of history to show content popularity.

Storify also gives you the option of publishing a story on Wordpress platforms or Twitter, among others. Every time you publish a story it will appear in either of these sites automatically.

Here is an example of Storify with material of the Tsunami in Japan: <http://storify.com/torontostar/videos-japan-tsunami>

You can visit www.storify.com for further examples.

Videos: a tool for communicating complex ideas

Videos are powerful and efficient tools to disseminate research results. **Audiovisual language allows explaining research in a dynamic and attractive way**, thus engaging many people with the content. Though videos can't replace a policy brief in its depth and detail, they can make that document **more popular**. Today, many donors explicitly ask research organizations to use video or other audiovisual formats to **make their work more influential and easily accessible**.

Planning or preproduction

Like any communication initiative, when making a video it is important to plan:

- **The main idea** the video needs to convey. What is your **key message**? Why do you want people to watch your video? (To inform, to raise awareness, to call them to action, etc.).
- **The target audience**. Think about the people you want to watch your video.

These questions will help you **define the content of the video and organize a plan for later dissemination**.

It is often useful to think about the content of a video in terms of ideas: **define one or two central arguments**. This approach

has two advantages: it forces you to **synthesize your work** and to **create a narrative** for the video.

Once the main content is defined, the next step should be determining the audiovisual resources. This means thinking about **how your video will look like**: you can think about interviews, researchers' comments, graphs, images, videos related to the research, and so on. For instance, if you were working in a rural area where the landscape is important to explain your work, using images of it would be the best. If, instead, you have a lot of statistical information, interactive graphs would be an ideal option. In other instances, resources can be combined; all depends on the requirements of the video.

One of the best investments that your organization can do as part of its communication plan is to **define a format for its video production**, as the Council on Foreign Relations (www.cfr.org) or CIPPEC (www.cippec.org) did. This entails **agreeing on a narrative manner and a set of aesthetic guidelines and contents**, which can be used whenever the institution makes a video. It is helpful to have the advice of a media professional who can help your organization think about creative and flexible solutions that can be adapted to the institution's resources and audiences. Having an own format offers many advantages:

- Contributes to **strengthening the institution's identity** and enables viewers to recognize the author of the video.
- **Links the video to other products of the organization**, such as policy briefs or blog entries that use the same aesthetic standards.
- **Enhances the skills of the staff** in producing, screenwriting and exposing videos, as they constantly work with the same format. A more experienced staff facilitates many production tasks.

- **Saves time, money and effort**, as many tasks are only done once, such as creating a graphic pack, or producing a set of illustrations or of templates for graphic elements.

Script and production

The script is perhaps the most important component of the video. It describes **how the video will be when finished**, and organizes the work of producing the video. The script is not only the speech of the researcher(s) who presents his/their ideas, but it is also a detailed description of all the elements that will be included in the scene. These two aspects of the video are written down in different columns or areas describing sound and image, which make it easy to understand how they can be combined.

Once the script is finished, you can write down a work schedule and a list of all the production requirements, including film permits, speakers to convene, graphics, specific illustrations, and so on. The production process typically follows these steps: "script approval, first-cut editing, which organizes the main elements of the video; and, finally, the final cut with all the superimposed graphic elements, audio postproduction and music.

Dissemination and circulation

A **large amount of communication work** needs to be done after an audiovisual product is ready. It makes no sense to invest resources in producing a video, and later let it languish on your website or, worse, just use it at one conference. One of the great advantages of these products is that you can take them where **your audience is** (read about the "being there approach" at Toolkit 4: Online tools): you can disseminate your products in social networks, recommend them on sites or blogs focused on the same topic as yours, e-mail them to all of

your contacts, and send personalized messages to those who can help you spread them and make important decisions based on them. The other important element is to **anticipate how you are going to respond to the interests of the viewers**. If a person liked your product, you must give him/her more tools so that he/she can continue reading about your work (i.e., putting a url at the end of a video, or a link on a data visualization).

Similarly, you must be ready to receive interested visitors: if you put a link to a policy document, you must make sure that the document is ready and that the link works; if you link to your website, it should be easy for a person to find his desired topic.

Tips to make viral videos

- ✓ Produce **attractive and informative videos** on issues people are already talking about. Add value to online conversations.
- ✓ **Keep it short**. Videos should not last longer than two or three minutes. If you need a longer video, make sure you can keep user's attention long enough.
- ✓ Include a **clear call to action**. What do you want people to do with your video? Ask them to share it with their friends.
- ✓ Make research and data **more human by telling stories** people can identify with.

Some interesting and varied examples from colleagues:

- ✓ A promotional video from the Council on Foreign Relations: http://www.youtube.com/watch?feature=player_embedded&v=ccuDffnPZPI
- ✓ An animated video from the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA): http://www.youtube.com/watch?feature=player_embedded&v=qOP2V_np2c0
- ✓ Politics & ideas' promotional video: <http://www.youtube.com/watch?v=6LW06Vn41ec&feature=youtu.be>
- ✓ Government's advantages in Argentine provinces (English subtitles): <http://www.youtube.com/watch?v=RURQpRJ5sFE>
- ✓ Take a tour through our "Knowledge Garden" - Ecologic Institute in five minutes: http://www.youtube.com/watch?feature=player_embedded&v=hZtiK04A9Yo

To continue exploring!

Recommendations from CIPPEC

In English:

- *Information, data visualization, and think tanks*, Goran Buldiosky, 2011.
Available at: www.goranspolicy.com
- *Data visualization: Modern approaches*, Vitaly Friedman, 2007.
Available at: www.smashingmagazine.com
- *7 things you should know about... Data Visualization*, EDUCAUSE, 2007.
Available at: www.educause.edu
- *Chart and image gallery: 30+ free tools for data visualization and analysis*, Sharon Machlis, 2013.
Available at: www.computerworld.com
- *Digital tools for think tanks: videos*, Andrea Moncada, Onthinktanks, 2012.
Available at: www.onthinktanks.org
- *The Power of film Do it yourself: The Talking Head*, Caroline Cassidy, Onthinktanks, 2012.
Available at: www.onthinktanks.org
- *Prezi vs. Power Point. Learn how to use Prezi and when you might use it instead of Power Point*, Seattle Pacific University.
Available at: www.spu.edu

In Spanish:

- *Infographics and visualization: the alchemy of information*, Ignasi Alcalde, 2013.
Available at: www.ignasialcalde.es
- *Data visualization: challenges and myths*, Ignasi Alcalde, 2013.
Available at: www.ignasialcalde.es

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