8. VISUAL METHODS

The ACT project places a particular emphasis on adopting a co-design practice in its resource development, and especially visual aids, since non-verbal communication is a bridge between varied professional and cultural contexts. Apart from incorporating visual methods and templates within the above participatory methods, ACT also provides guidelines to creating visual materials. This includes infographics, storyboards, and photo documentation.

INFOGRAPHICS

What is an infographic?

Infographics are visual representations of information and data through text, images, charts and diagrams. An infographic helps to communicate knowledge and explain concepts clearly and synthetically, and facilitates the understanding of complex issues thanks to visual support and schematisation.

The use of infographics can benefit Communities of Practice by helping them to present its activities and outcomes in a quickly, compelling and attractive way. They are a versatile tool to raise awareness, educate and inform very diverse target audiences that improves the visibility of online messages. On the other hand, data- rich visualisations of information increase the engagement and interactions on social media and help people to remember key messages.

The digital nature of infographics means that they can be distributed face-to-face as a springboard and a prop for discussions, as well as online communications.

Tips to prepare good infographics

The first step to create an infographic is to identify what the main purpose and the core message to spread are: what is the overall question we want to communicate and who is the target audience?

Recommendations to take into account:

- Define an engaging, interesting title for the infographic. To draw the attention of the audience, the title should arouse their curiosity. The title might highlight the relevant conclusions of available data or launch a specific question to the reader.
- Select the content to include and organise the flow of information in the infographic trying to create a story: consider what the key concepts to be highlighted are and the complementary ideas, how elements relate to each other and what the concluding information should be.
- Combine diverse visual elements and avoid long texts. Think of the charts, icons or pictures that might help to illustrate your ideas. Select data considering the most relevant information.
- Show data together with engaging headers and short explanatory texts to give context. Midori Nediger offers in the Venngage blog post “How to make an infographic in 5 steps ep-By-Step-Guide][1]” several examples of uses of bold, colourful text and icons to bring attention to numerical data and make numbers understandable with little contextual information. The article highlights also different types of charts and pictograms to use depending of what your goal is: comparing independent values (bar chart, column chart or bubble chart); comparing parts of a whole (pie chart, donut chart, pictogram or treemap); or show trends over time or space (line chart, area chart or timeline).
- Use creatively colours, font and font sizes, and select colours with a good contrast in order to facilitate reading.
- Be concise and keep it simple. Prioritise clarity, do not include too much information and leave white spaces; if the infographic is hard to visualise it will be more difficult for the reader to understand the message.
- Include brief references to the information sources and add the relevant hashtags or social media links that help your audience to contact you and find out more information.

[1] See: https://venngage.com/blog/how-to-make-an-infographic-in-5-steps/

Online tools to create infographics:

- **Piktochart** (https://piktochart.com) is an online tool which free version offers templates to create simple infographics. It also offers premium plans for education and non-profit organisations with the possibility to access more customizable templates and create interactive charts and maps. Its infographics editor includes a library of free icons and images, and allows to upload your own. Interactive infographics can be inserted with an embed in websites and blogs.
- **Infogram** (https://infogram.com/) is a data visualisation and design tool that offers templates for infographics, reports and dashboards, as well as social media. The tool also includes templates of customizable charts to visualise data, which can be inserted in the infographics and other projects.
- **Canva** (www.canva.com) is a drag and drop editor with free access to templates and designs for infographics, diagrams, banners, flyers and social media headers.
- **Creately** (https://creately.com) is a software to create diagrams and flowcharts that allows team collaboration.
- **Venngage** (https://venngage.com/) site with tools to create graphic images for websites, presentations, and social media that includes free templates for infographics.
- **Flaticon** (https://www.flaticon.com) is a large search engine of downloadable free icons and vectors that can be used in both personal and commercial designs. The majority of the resources can be used for free, provided that the icon is attributed to its author and Flaticon, whereas subscribers to the premium plan can use all icons without any attribution.
- **Pixabay** (https://pixabay.com/) and **Unplash** (https://unsplash.com/) offer free photos, illustrations, and vectors that can be used in altered and non-altered form, with some restrictions regarding images that contain identifiable people or logos. Credit to the image author is appreciated but not required.
- **Flickr** (https://www.flickr.com/) image hosting service that allows to filter by types of license in order to find images tagged as copyleft.
- **Gimp** (https://www.gimp.org/) free software to create and edit images.
- **Font library** (https://fontlibrary.org/): website that contains free fonts to download.

PHOTO DOCUMENTATION

The ACT Communities of Practice will carry out activities such as raising awareness meetings, training sessions, and workshops for exchanging best practices and promoting collaborative learning, which can be documented with the purpose to analyse and synthesise the data collected, share information among CoP members, or openly disseminate the generated outcomes.

This section of the toolkit includes some basic concepts and resources about photography, together with recommendations for CoP facilitators and members of Communities of Practice to photo document their activities and take good quality images to share with general audiences. The suggested guideless are oriented to the use of digital cameras or mobile phones.

Some technical concepts

Below we include a summary of the most relevant technical concepts to take into account when capturing an image:

1. **Photographic exposure:** It is the relation between three elements: shutter speed, aperture of the diaphragm and sensitivity in ISO scale. A correct exposure is important to obtain an image with the correct grain and sharpness.
2. **Shutter speed:** it allows to modify the time of exposure of the sensor of a digital camera, regulating the time since the shutter opens to let the light pass until it closes. Trepidation is the defect (lack of sharpness, or "moving image") caused by the movement of the objective at the time of shooting.
3. **Aperture and F-Stop:** together with the shutter speed, aperture affects the amount of light that reaches the camera sensor: a large aperture captures more light than a smaller one. Adjusting the aperture is important to capture right pictures, in order to avoid ghosting images or too dark images. When the size of the aperture is changed, f-stop is the number that the camera shows (it is also known as f-number).

Besides determining the amount of light, aperture also has an important effect in photography: depth of field, which is the distance between the nearest and the furthest objects that are in sharp focus in an image. A larger aperture produces images with a smaller depth of field, such as the photograph of the cup below, where only a small part of the image is sharp while the background is blurry. On the contrary, in order to capture images that are entirely sharp (e.g.; the image of the meeting room below), you need to use a small aperture.

Images by Pexels from Pixabay.

4. **Sensitivity or ISO scale:** Sensitivity is the amount of light that the sensor needs to react and achieve the required density. Like shutter speed and aperture, ISO affects the brightness or darkness of photos. A photo taken at a too high ISO will show a lot of grain and might not be usable. You should avoid high ISOs whenever possible and stick to the lowest native ISO on your camera (known as "base ISO") in order to get the highest image quality[2].

[2] To know tips on avoiding image blur read this blogpost by Nasim Mansurov: https://photographylife.com/how-to-take-sharp-photos

Point of view and composition

Point of view in photography means the position from which the camera sees the scene. Deciding on the position we adopt before the subject we are shooting can totally change the photo and how viewers perceive the scene.

- **Shooting from eye level:** the point of view puts the subject on our level. The photo is taken frontally, with the focal plane perpendicular to the ground. This point of view facilitates a more realistic appearance, is less expressive and emotional, and avoids distorting the scene. Shooting from eye level also helps viewers to emotionally connect with the photo subject.
- **Shooting from above:** the point of view is higher and above the photographed subject. This position generates psychological connotations of superiority and control on the scene. Like when shooting from below, this angle gives the space a significant role in the picture. This point of view can be useful to capture images of group work around a table and focus in the object of the discussion (e.g.; capturing the notes that the group is writing down) instead of focusing in participants' faces. Also, shooting from above can be useful to capture images of large groups of people (e.g.; participants in a Conference) or wide spaces in events.
- **Shooting from below:** the point of view adopted is lower than the photo subject. With this angle, the subject seems to be in control of the situation, is more dominant and has more relevance, whereas the smallness and irrelevance of the viewer is emphasised.

Photographic composition refers to how elements are arranged in a picture. It consists on making a decision considering what is our focus of interest, who or what we want to photograph, and creativity criteria. Composition rules can be taken into account for images to be harmonic or to emphasise dynamism and contrast. Some essential aspects of photographic composition are listed below:

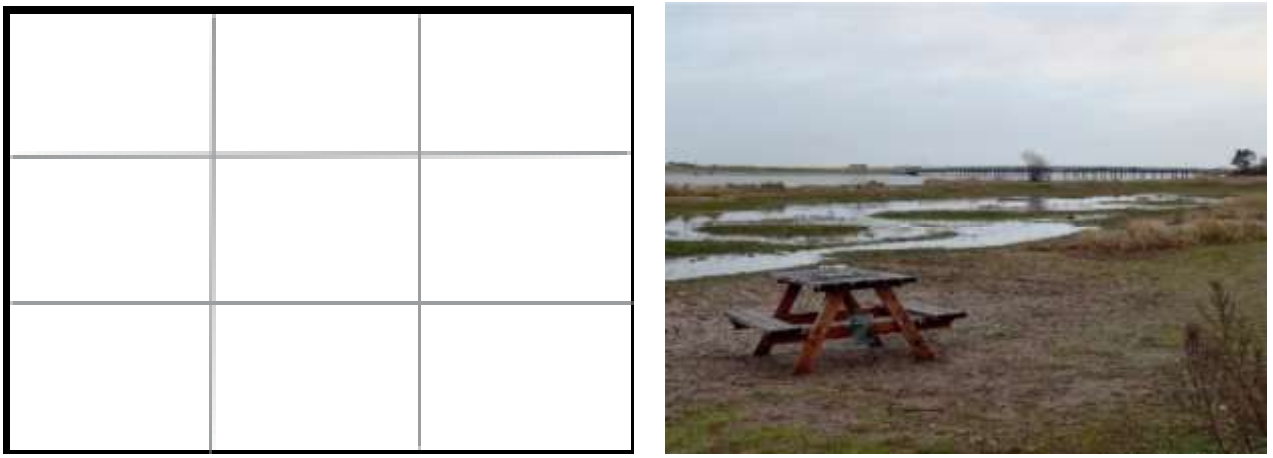
- **Point of interest:** it is the element which functions as the centre of attention in the picture. It can be a physical point in the image, a specific subject or the vanishing point where all visual lines converge. Centering a subject in the picture is a usual way to draw attention to an individual among a group of people[3].
- **Lines:** Lines help to direct the look and convey sensations, such as calmness, agitation, etc. Horizontal lines usually convey placidity and quietness, curb lines convey softness and movement, while diagonal lines convey dynamism and action.
- **Rule of Thirds:** it is one of the basic rules in photography, frequently used to avoid using central composition and symmetry in all images. It consists on dividing the image into a 3 x 3 grid, three equal thirds vertically and horizontally.

  In this way, four imaginary lines create four intersection points (see image below). According to the Rule of Thirds, important elements within an image are placed at these intersection points.

  For instance, in the landscape image below, the horizon and the table, as primary subject, are placed along the grid or in one of the intersection points[4].

[3] Detailed information about arranging the centre of interest in photography can be found in: https://www.tiyana.net/principles-of-composition/point-of-view.

[4] Interesting information on alternatives to central composition and the pros and cons of the rule of thirds are included in: https://photographylife.com/the-rule-of-thirds and https://www.tiyana.net/principles-of-composition/golden-ratio/



© Image by Gorka Ipinazar Santamaria (Shutterstock). General guidelines for photo documenting CoP activities.

- Whenever possible, use a tripod with the camera or the mobile phone to avoid blurring.
- Activate the grid option usually available in mobile phone cameras to help you in defining photographic composition.
- Experiment with the point of view and capture some of the images from unusual angles to increase expressivity.
- Use central composition as a resource to bring attention on the primary subject. Explore also other unconventional, non-centred, unexpected ways to place the primary subjects in the image.
- Shoot not only general scenes, get close and focus in details.
- Include elements in the scene that refer to the project's visual identity when possible (e.g.; by photographing people next to roll ups, posters, flyers or slides that contain the ACT or the CoP's logos).
- Shoot images in RAW format if you want to allow for more technical adjustments afterwards and preserve the quality of the image, or just use JPEG format as a commonly-used and compressed image file format.
- Store image files by adding a meaningful file name and the date of the activity. When uploading the image to the CoP's Photo Gallery, synthesise the file name by including the relevant keywords, so that images are more easily traced by search engines.
- Take pictures of notes taken in flipcharts, wall paper and post-its during workshops and participatory sessions in order to preserve them for analysis afterwards. Do not include personal data or sensitive data in the notes and consider the legal requirements for data protection.
- Inform workshop participants that minutes and pictures of the workshop will be taken in order to elaborate a summary report.
- Request for due informed consent of participants to use image in order to make photographs during workshops and publish them afterwards.

Resources for photo manipulation and image edition:

- **Gimp:** free software for photo retouching and image composition which provides tools for both image manipulation and graphic design. It is available for gnu/linux, os x, windows and more operating systems. The website contains a user manual in different languages and tutorials on specific opics[5].
- **Pixlr:** browser photo editor that offers editing tools for free. It can be used online in desktop or mobile, with no need to be downloaded[6].

Websites and blogs on digital photography:

- **Digital-photography-tips.net:** website with extensive information on photography terminology and useful tips for digital photography. It also compiles recommended tutorials and resources.
- **Photographylife.com:** site founded by professional photographers Nasim Mansurov and Spencer Cox, which collects articles about photography with contributions from other authors, as well as a forum and tutorials on specific topics.
- **IPhone photography school:** website funded by Emil Pakarklis and developed by photographers specialised in iPhone photography. Even though it is dedicated to iPhone, it also contains useful tips for mobile photography.

[5] https://www.gimp.org/

[6] https://pixlr.com/

STORYBOARDS

Short Description

Storyboarding can help visually capture the social, environmental, and technical factors that shape the context of how, where, and why people engage with services or policies.

When to use this method?

Storyboards can be used to build empathy for people who are the target audience of a specific policy, and consider design alternatives in the early phases of the design process. This can be achieved by illustrating contextually rich narratives (Hanington and Martin, 2012).

How to use this method?

A: Brief explanation

Five design practices common to visual storytelling can be harnessed to facilitate storyboards will be presented below:

B: Detailed Step-by-step guide

- Simple, abstract drawings of stick figures drawn by anyone are often more effective than artist's outputs at garnering the attention of the storyboard audience on a specific detail or message.
- Draw with enough context, but not so much that details distract from the purpose of the storyboard.
- Use text to supplement the visuals in a storyboard when it would otherwise take too much effort to illustrate a concept or idea. Add words or thought balloons, captions, or background signs.
- Emphasise people, products, or both: To elicit an emotional impact illustrate characters in emotionally charged situations. If on the other hand the goal is to elicit technical or evaluative feedback regarding the concept, leaving characters out of the panels can focus attention on the details of the design.
- Use between 3 to 6 panels to communicate an idea. Each storyboard should be focused on one salient concept or idea. If more than one concept needs to be communicated, consider creating multiple storyboards that each focus on a different factor.
- Time as a design element should be used to show large time lapses in a scene. Clocks, calendars, zoom-ins of wristwatches, or the movement of the sun in the background can be added to explicitly show the passage of time.
- Construct the story and the storyboard panels depending on what information will resonate with the target audience. For instance, when designing for stakeholders, illustrate the range of potential design opportunities.[7]

Additional ideas / information

The storyboard outputs can be distributed in face-to-face meetings and presentations, as well as online and on websites.

ADAPTABLE ONLINE

[7] Adapted from Hanington and Martin (2012: 170).

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