Content creation & Video Editing

1. INTRODUCTION TO VIDEO EDITING

According to Cisco (2016), it is estimated that 80 % of the content to be consumed on the internet will be by means of videos. A good example is YouTube, the second most visited site worldwide with some extraordinary statistics: more than one billion registered users, over four hundred hours of uploaded videos per minute and 2,500 million views of internet's most popular video.

Video is an emergent format, both for those who consume content and those who produce it. Therefore, at a time when technology is everywhere and it is becoming increasingly easier to use, it makes sense having expertise in the area of video production and creation.

Broadly speaking, videos are edited in two different ways depending on the type of support used:

1. Linear or analogue: This method uses videotapes. Editing is mainly done through a video recorder. Typically, it consists of a player where the tape with previously recorded images is inserted and a recorder unit where the editing is done. It is called linear because during the editing process you need to record the images in an orderly manner on the same tape where the editing is done. If at a later point you want to change the order, you need to start over or else cut the tape and splice the pieces together. In other words, it does not allow you to freely manipulate the takes. Therefore, a very precise order at the time of its editing is absolutely required.

Non-linear or digital: The different generations that this type of editing have depended on the technological evolution at the time. This meant a considerable advance in the field of video editing. At present, the most popular method involves working with digital files and the editing is done through a computer, tablet or telephone. This support allows to freely manipulate each take and alter the order of the takes during the editing process order.

Many different digital video recording format systems have emerged following the technological development experienced by the professional video industry.

According to Espinosa y Abbate1 (2005), video editing consists in manipulating a video in order to elaborate an organised and coherent discourse, one that is sustained in time. Editing entails selecting previously recorded shots or clips and combining them into sequences based on the message to be conveyed, creating a discourse. This also allows us to insert fixed images, music and sound items, effects, graphical elements as well as any other resource that will help us to create a complete audiovisual product.

The way of editing also allows to correct and improve aspects derived from the recording. The idea is to improve the overall quality of the audiovisual product by treating sound and colour, adding filters, effects, transitions and so on.

It is very important to consider that the editing process has its limitations and that, therefore, some basic technical requirements must be met du- ring the recording process. This is so because you won't be able to com- pletely correct certain elements during the editing process.

For example, if the recorded images get burnt due to the over exposure or if the recorded audio is distorted or saturated, we will only be able to reduce these imperfections and not to correct them during the editing process.

Presently there are several technological solutions in the market for non-linear video editing, with a wide range of software with commercial licenses available for free. Some other solutions are intended for professional, semi-professional or domestic use.

Next, this guide presents you with some recommendations for video recording. Later you will find technical points to consider while engaged in video editing, as well as video editing tools for desktop and mobile devices and online tools. The main functionalities of some of these editing tools are also found in the guidelines, which conclude with various recommendations for the publication and dissemination of videos on the internet.

GENERAL RECOMMENDATIONS FOR RECORDING VIDEO

Source: Flickr

Make sure that, before starting any recording, you come up with a work plan. In other words, consider the subject and what is to be shown and explained in the video, clearly describing your goals and what you want to record. From here on, write the script2 and decide on the resources that you be need.

Once this is done, you will need to consider certain technical requirements if you want a high-quality recording that adapts to the means at your disposal. In this regard, there are many examples of professionals on the internet that have shared their guidelines and knowledge so that anybody, without any previous technical knowledge or experience, can record a video that is well-suited to their purpose and avoid potential mistakes. For example, El Periódico de Catalunya audiovisual journalist Mònica Tudela gives us some tips for shooting great videos in this article: "How to record a good video".

London-based journalist and consultant specialised in multimedia and online video production Adam Westbrook also gives some useful tips in his blog, as for example 10 quick hits to make your videos better right now.

Here is a summary of the main recommendations, together with other recommendations by other experts3 in the field:

1) **Using a tripod**

Since modern cameras are now smaller and lighter, they also become more unstable and sensitive to movement. Even though most cameras now incorporate image stabilizers, this is a common issue, particularly in mobile devices. Therefore, whenever possible, it is recommended to stabilise the camera when recording to avoid tremors or unwanted movements, especially in case of a panoramic take or any other camera movement4.

Tip

Get hold of a tripod or a selfie stick (some models may also include a tripod), or, if you do not have them at hand, use elements from your surroundings to hold your camera still (such as a basket bin, a chair, a bench, a wall, etc.)..

2) **Recording shots**

A common mistake among beginners is that they tend to zoom out to a long shot.

In this regard, you need to ask yourself where the real interest of what you want to show lies. If you want to show details, then focus on them, especially if you want your video to be displayed online in services like YouTube or Vimeo. Screen displays of these services are 640 pixels wide, which is not a particularly suitable size to observe details in very general shots.

Controlling the light

This is a very important feature.

When recording with the camera, we usually deal with different light environments: very bright or low- light places, or work with natural or artificial light.

In order to control the light, there are two concepts to consider: white balance and exposure. You can either use the automatic modes of your camera or adjust the camera settings manu- ally. As for white balance, you need to know that it refers to colour temperature6 and that it is directly related to light. When white balancing a camera, we tell the camera what the colour white looks like so that it can display all colours correctly.

Cameras usually have different preset white balances, depending on whether the recor- ding takes place in daylight, with clouds or indoors. The most popular modes are “Daylight” “Tungsten”, “Fluorescent”, “Cloudy”, “Flash” or the camera’s own automatic setting, “AWB” (probably the best choice for beginners). When the auto white balance setting is selected, the camera determines the colour of light and corrects the previously pre-programmed calculati- on.

Although it is not a perfectly accurate or reliable option, in recent years this function has greatly improved in digital cameras.

Exposure, the amount of light that the camera lets in, is also an important feature. In video cameras, this opening is called iris and corresponds to the diaphragm in digital photo cameras.

Cameras also have the “Gain” option. This option allows you to electronically increase the light signal when it is very weak. The problem is that it can create a lot of noise (grain) in the image.

Another feature that lets us control overexposure (too much light is captured) or underexpo- sure (images that are too dark) is the “Zebra pattern”. This feature tells you what highlights

(or details) are blown out or warns you about the areas of the image where there is not enough light so we can readjust it.

In any case, you should avoid shooting in direct sunlight (contre-jour) to avoid blown out highlights. It is better to rely on back lighting and side lighting.

If you record under natural daylight, remember that it is always subject to unexpected chan- ges (weather conditions, clouds, etc.).Night recording is usually more complicated, and it de- pends both on the camera features and the user’s knowledge and skills to set them correctly.

Tip

If you are not very experienced, it is better to rely on auto mode and avoid recording in poorly lit spaces or do night recording.

5) Pay attention to sound

When recording anything, image and sound quality are equally important. The two features are key.

You should take into account that, in most cases, built-in camera microphones —particularly those in low or medium range models— record all kind of noises, both external and those of the camera itself.

To avoid this problem, an external microphone can be used whenever possible. It is also advisable to eliminate the wind noise associated with built-in camera microphones using a windscreen. If you do not want to buy one, then another option is using a piece of foam or a sock as simple solutions that could partially mitigate the annoying wind noise.

If the camera does not incorporate an external microphone input, an external recorder could be used instead. Alternatively, you can use this feature on a smartphone or tablet.

During the editing process, the externally recorded audio has to be integrated separately and then synced with the video track. In this regard, and to facilitate synchronization, an indica-

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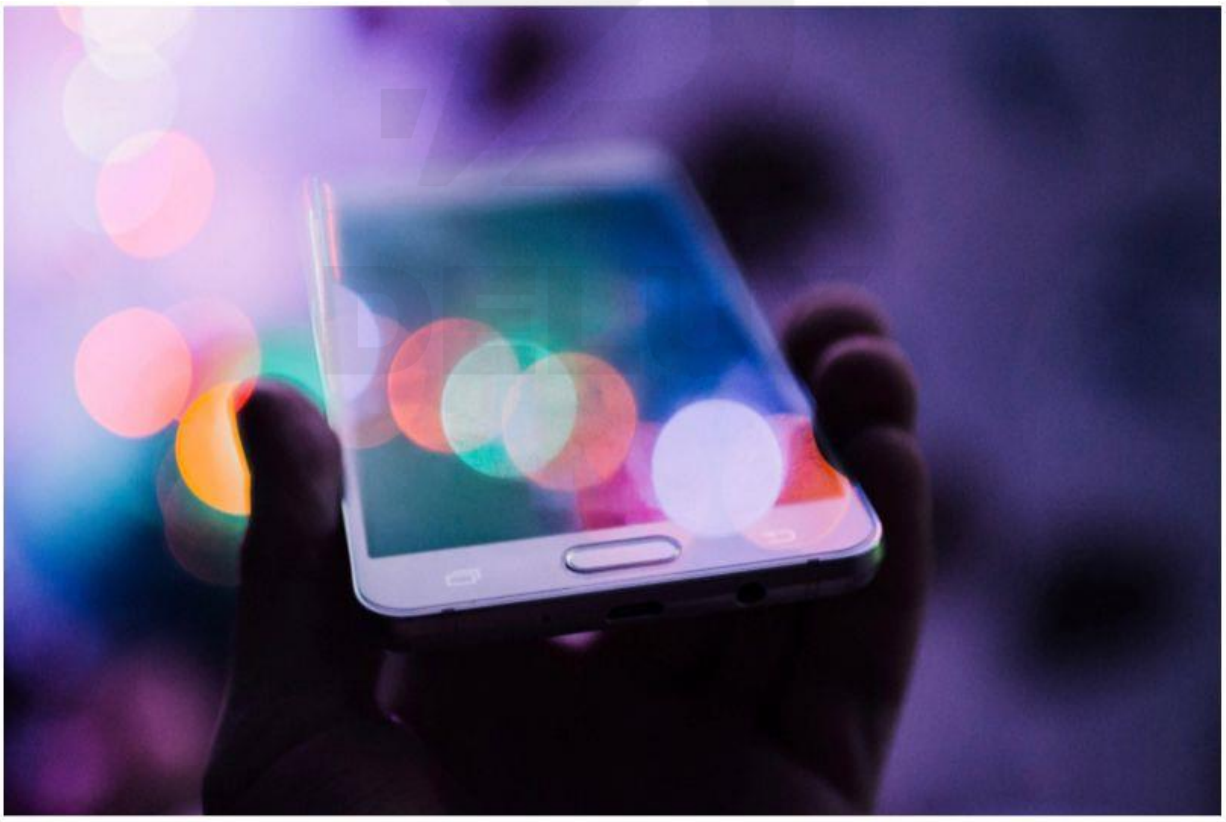
tive sound signal —a clap, for example— can be made during the recording to know where it begins.

When recording interviews, avoid noisy environments whenever possible.

Tip

Use a recorder or microphone. If possible, avoid noisy environments when recording interviews.

2.1. **Recommendations when recording with a mobile device**



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1**. Lens cleaning.** Although lens cleaning is a must to do to any camera no matter what, smartphones and tablets are used a lot and therefore their lenses are more likely to get dirty from fingers, grease and dust.

Tip

If you want to record sharp images, use a soft or a microfiber cloth to clean the lens.

2. **Record the video horizontally.**

Avoid vertical recording if you use your smartphone or tablet.

Vertical recording appears to be the logic position as is the way we use the phone in most cases.

Source: Pixabay.

Notice that when you record with a video camera, you usually do it horizontally — landscape orientation— unless you specifically choose to do it vertically.

That would not be a problem if your videos were only played on your smartphone.

The problem arises when the video is displayed in other screen types, like computers or TV sets that are horizontal and with a 16:9 resolution.

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In this case, when displaying images vertically, you will see black bands appear on either side of the footage as proportions are reversed.

This is the reason why we horizontal recording is recommended when using phones or tablets.

When done incorrectly, you can get images like the following:

Horizontal (Recommended)

Vertical (not recommended)

It is also important to look for a reference line in the horizon; do not hold your camera crooked as this will tilt your subjects within your recorded images.

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Tip

Put the device horizontally and find a reference point in the ho- rizon.

3. Be careful with the digital zoom. Telephones and tablets are fitted with a digital zoom, but when recording, you have to be careful as the final image can exponentia- lly lose quality since it usually adds noise to the image because they do not perform as well as high definition cameras do.

Move the camera smoothly, both when zooming in and out.

Tip

Avoid tampering with the digital zoom.

4. Battery and internal memory. Video recording involves using storage capacity and a high use of battery power in smartphones or tablets. Therefore, before recording you need to check how much internal memory is available and that of the memory card. In addition to that, you need to check the levels of electric charge of the battery.

Tip

Charge the battery and free up space on the internal memory and memory card. Whenever possible, have an external battery and extra memory card at hand.

5. **Stability**. You should try to keep a steady hand when recording an event with your smartphone, avoiding brisk or quick movements, or else the footage will be jerky. For example, you should use a tripod when recording panoramic images. If you do not have one, you need to stand still and then gently move your body, firmly holding the phone with your hands as shaky camera motion can make viewers feel dizzy.

Tip

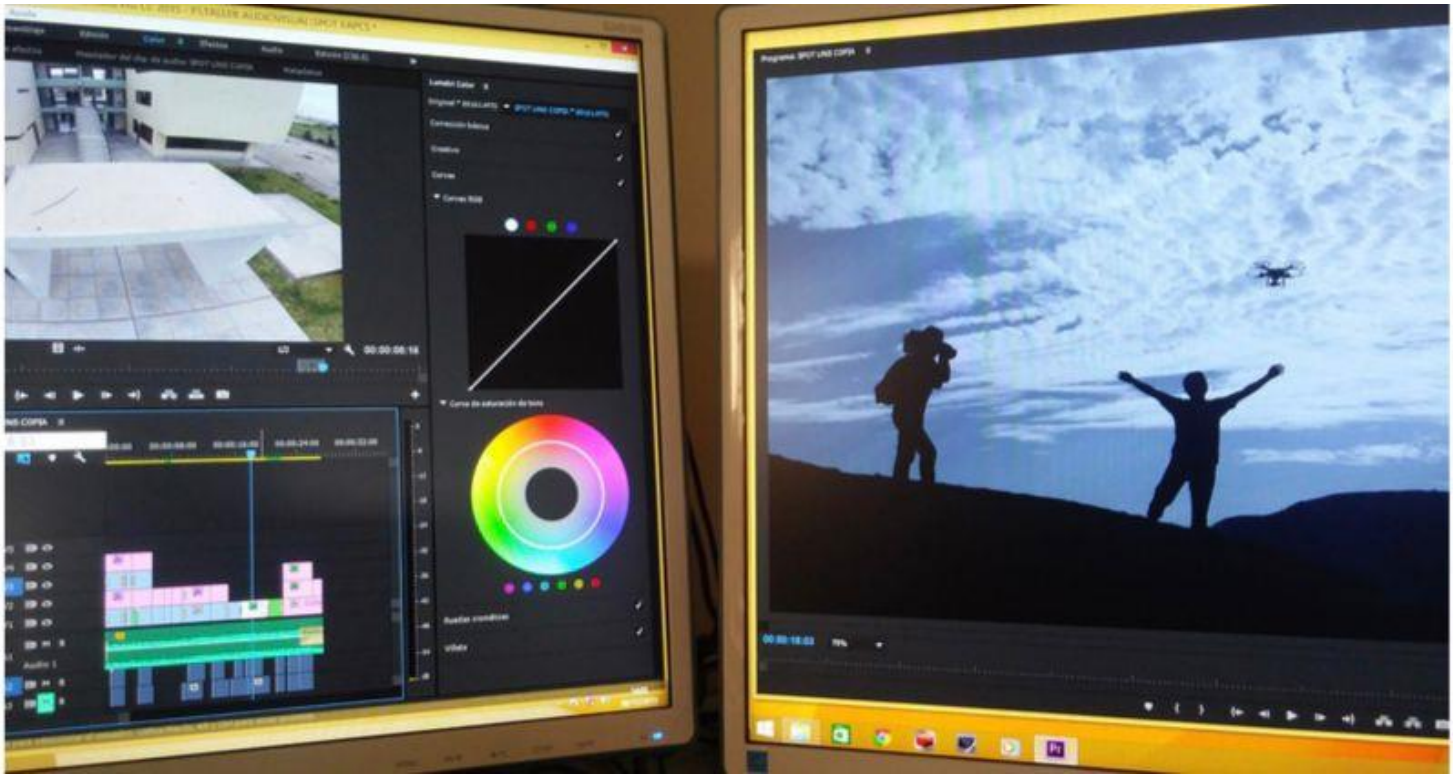
Make sure your movements are both slow and controlled. A way to achieve stability is to stand with your legs apart.

6. **Audio checking**. Make sure not to block the smartphone or tablet microphone with your hands.

Tip

Make sure you know where the microphone is located and be careful not to cover or block it with your hand or fingers while recording.

TECHNICAL ASPECTS TO BE CONSIDERED WHEN VIDEO EDITING



Fuente: Pixabay.

3.1. **Video format**

When talking about formats in digital video, concepts like codec or container are often mi- xed. Confusion arises because we usually think that format is the type of file or file extension. However, as far as video editing goes, it is a little different.

It is important to have an idea of these concepts as they are the reason why sometimes a video can’t be opened inside the editor, uploaded on a platform or played correctly. In these cases, the software is unable to read the file contents because it cannot identify the codecs. This is a widespread problem among video users.