Take Your Videos Global:
Technical Tips for Video Localization
It’s not difficult to make a case for video in today’s marketing landscape. Nielsen reports that 64% of marketers expect video to dominate their strategies in the near future\(^1\), while Cisco predicts that by 2017, video will account for 69% of all consumer internet traffic.\(^2\)

69% of all consumer internet traffic will be video by 2017.
Introduction

Video is becoming pervasive because it’s effective. Forrester estimates that just 60 seconds of video is worth 1.8 million printed words. What’s more, retail site visitors who view video tend to stay on site on average two minutes longer and are 64% more likely to purchase, according to ComScore research.

You probably already have an idea of the importance of video to your global communications strategy and the impact it can have with your customers. But it’s one thing to publish a great video and quite another to make the same content available to an audience who doesn’t speak your language.

Let’s take a look at some of the technical logistics and best practices behind video localization. You’ll soon be better equipped to choose the best approach to maximize the reach of your marketing and training videos.

Sources:
3. Reuters. “A minute of video is worth 1.8 million words, according to Forrester research,” April 17, 2014.
Localization is not the same as translation. Localization goes beyond the literal translation to reflect a thorough understanding of the context, culture, customs and characteristics of the target locale.
Methods of video localization

Video localization is a complex process with many intricate variables. Understanding the basics of video localization will help you ask the right questions to make informed decisions that result in a video that you’ll be proud to share with your global audiences.

There are three ways to make your video multilingual:

1. **Voice-overs**

   Voice-overs generally require hiring a “voice talent” (a person trained in vocal talents) to record in a professional studio environment. This audio is then applied to the video in one of two ways:

   - Voice-over and original. Also known as “overdubbing,” this is a technique where the volume of the video’s original audio track is turned down so the listener can still hear it while the localized voice-over is layered on top of it. TV newscasts use this technique frequently. You hear the original speaker start in their language, then after a few seconds, that audio track is turned down, while an interpreter speaks over it. This allows the viewer to hear the original speaker’s tone, while understanding the interpreter’s words.

   - Voice-over only. The video’s original voice audio track is turned off and a localized voice-over is applied in its place.

   Videos localized with voice-overs typically provide the highest-quality and most natural viewing experience.
Subtitles

Subtitles are translated text strings displayed on screen. Subtitles usually work best when the video has little other on-screen text.

On-screen text

On-screen text refers to translatable words that appear as part of the video such as animated text, titles or text that appears as part of a graphic.

Subtitles: In many cases, project files from the original source video are not required and subtitles can be added after the fact to a rendered video.

Localizing on screen text is pretty straightforward, but may require working in the original project file from the video editing software used to create the original graphics. You also have to be mindful of space restrictions when translating into languages with longer words and sentence structures like German.

Localizing on screen text is usually combined with subtitles or voice-overs as it typically forms only a small portion of the video.
## Methods of video localization

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<thead>
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<th>Used with subtitles</th>
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<td>Awesome</td>
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Subtitles are the most budget-friendly way to localize a video.

Cost and suitability comparison of video localization approaches.
Video considerations

Understanding how video works

Most video editing programs use a non-linear editing system: Everything is laid out in a single timeline and video elements (sometimes up to several hundred) such as video footage, music and voice-overs, are layered to create a combined product.

Using a non-linear editing system and having access to all original source files with the highest possible quality dramatically eases the localization process.

Start with accurate translations

To translate transcripts accurately, you need to pay close attention to the timing and flow of audio and visual elements. During translation, the linguist should take into account a natural speech pattern and tempo, ensuring there are no unnatural speech breaks and that audio is appropriately timed to the action on the screen.

Translation errors in the transcript can have a ripple effect throughout an entire project, possibly resulting in delays and additional costs. Catching translation errors early will minimize their overall impact to a project.
Video length

Generally speaking, a two-minute video will be faster and easier to localize than a 60-minute video. But that doesn't automatically mean that short videos are always pain free. There are two types of audio recordings:

Time-constrained recording
- Recording to a time constraint means the translator must interpret what the original speaker said and provide an accurate translation that fits the exact same amount of time. This can be a challenge where there are audio length variances between languages. For example, English translated into German may yield a longer translation by almost a third. Professional voice talents can usually adjust their speaking tempo to fit.

Non time-constrained recordings
- These can be recorded to the natural rhythm of the speaker’s voice as there is no defined time restraint. However, the video will still have an overall time limit, so voice talents should bear this in mind and adjust their tempo if necessary so as not to exceed or fall short of the overall video length.

Time constraints are crucial for TV advertising, where a time overrun of even one second can increase media cost by thousands of dollars.
Text expansion problems

When the translated text or audio is too long, there are three ways you can adjust the video to make it fit:

1. **Shorten the translation**
   Retranslate the copy using more succinct phrasing to reduce text expansion.

2. **Re-record the translation**
   Re-record the voice talent asking them to speak faster, but still in a natural way.

3. **Adjust the speed of the audio or video**
   Slightly slow down or speed up the audio in an unnoticeable way. The human eye and ear are extremely adept at noticing unnatural patterns, so this should only be done if the result is seamless.

A time-ramp is a section of video that is sped up or slowed down.
Video files, projects and versions

- **Video file**
  A self-contained file that is played using a compatible video player or device. A video file cannot be easily edited.

- **Video project**
  A video file is created within a video editing suite such as Adobe After Effects, Adobe Premier, or Apple Final Cut Pro. The video project contains information about how and where the assets used in the video are stored and where they appear on a timeline, but it does not contain the assets themselves. Asset files are used in conjunction with the project file. Once all the asset files are assembled in the video project, a final video file can be exported.

“Video files” and “video project files” are not the same thing!

Various assets are layered in the video project file.
Tips for working with video production vendors:

- Specify that the video project file (as well as the video file) are included in the final deliverable.
- Make sure your internal video engineer uses the same software and version as the video production vendor.

Project file versions

Even within one video editing suite, different file versions are not necessarily compatible. For example:

- After Effects CS5.5 is not backwards compatible, so while a CS5 file can be opened in CS5.5, a CS5.5 file cannot be opened in CS5.
- Final Cut Pro 7 and Final Cut Pro X are so different they are basically two separate programs and their files are not interchangeable.
Exporting your video

One of the last steps in the video creation process is also one of the most important: exporting the video files into the final “rendered” video which your audience will see. The concept is similar to the creation of an Adobe PDF file from a Microsoft Word doc, where the Word doc is the project file and the PDF is the rendered, final file.

Understanding the variables within the export process will help you end up with the highest quality video that works for your audience and playback needs.

A. File type or format. These are the most common file types:

- .mov Movie file, Apple QuickTime
- .avi Audio/Video Interlaced file, Windows Media Player
- .wmv Windows Media Video, Windows Media Player
- .mp4 MPEG-4 (Moving Picture Experts Group), MP4 players
- .m4v Movie file, Apple iTunes and Apple QuickTime Player
- .swf Shockwave Flash file, Adobe

B. Codec. This refers to the compression method of the video (i.e. h.264, mpeg-4). Most file types have a standard compression which is a commonly used high-definition compression.

C. Audio codec. Refers to compression method of the audio (i.e. ACC, mp3). Just like video, audio is compressed by various means.
D. **Resolution (expressed in pixels).** This refers to screen size of the video (i.e. 800x600 pixels, 1080x720 pixels). Your video's resolution depends on the end device it will be viewed on. As a rule, your video's final resolution should always be smaller than the original source of the video file provided. "Upscaling" refers to exporting a video larger than the source, which can result in poor quality and pixelation.

E. **Bit rate (measured in kilobytes per second or “kbps”).** This is the amount of data displayed in one second of footage (i.e. 1500kbps, 2400kbps). A higher bit rate yields higher quality, but increases the size of the file. As a general rule, videos start to display lower quality when they drop below 1200kbps.

F. **Audio bit rate.** Similar to video bit rate discussed above, this is the amount of sound data in one second (i.e. 128kbps). Since audio contains less data than video, its sizes are far smaller.

G. **Frame rate (measured in frames per second or “fps”).** This refers to how many still images are shown in one second (i.e. 30 fps, 15 fps). The more frames per second, the smoother the video, but as you can imagine, the more frames, the larger the file size. Broadcast television is shown at 29.97 fps. Most online videos are at 30 fps. Hollywood movies are normally shown at 24 fps.

H. **Audio sample rate (measured in hertz or “Hz”).** This refers to the frequency range the audio encompasses (i.e. 44100 Hz). Human hearing falls roughly between 20 Hz and 22,000 Hz.

I. **Audio Channels.** This refers to the number of audio tracks (i.e. mono, stereo, "surround sound" 5.1 or 7.1). Most videos have mono audio, which means there is one channel of audio. When played on multiple speakers, the sound that comes out of each speaker is exactly the same. With stereo and other surround sound formats, the sound coming from each speaker differs.

Every project is unique and there are many different output options to consider. Talk to a SDL video production expert about your project and we can make sure your output settings are perfect for your needs: www.sdl.com/mediaservices
Creating videos that are easy to localize: Plan ahead for...

1. A global audience
   - Avoid culturally sensitive clothing styles as well as appearance, behaviors and social settings.
   - Carefully evaluate the effectiveness of any humor in your script and remove anything that might not translate well to other languages or cultures.
   - Avoid idioms that may not translate well to other languages or cultures, such as barking up the wrong tree, beating around the bush, pulling someone’s leg, etc.
   - Be aware that translated phrases in different languages may be different lengths. Rapid speech and fast-paced editing can be difficult to accommodate in all languages.

2. Viewer acceptance of a localized video
   - If your audience will easily accept a video that originated in another language, techniques like subtitling and voice-overs are suitable.
   - If not, your video must support localization of all vocals and translation of all on-screen text. You may need to re-shoot large portions of your video with local actors as a dubbed over audio track can be easily detected.

3. Subtitles
   - Don’t place important visuals in the lower third of the screen where the subtitles typically appear.
   - Keep the rate of speech slow enough to accommodate a viewer reading subtitles.

4. On-screen text
   - Allow flexible space to accommodate target languages that are longer or shorter than the original language.
   - Make on-screen text files available to your translation vendor.

5. Project collaboration
   - Organize your native audio, video and animation files, along with the project files for your video editing software.
   - Make them available to your localization vendor using an efficient file transfer solution.
Best practices for working with a language solution provider (LSP)

Sending files

- Provide original project files where possible. This will allow for solutions which would otherwise be time consuming and costly.
- Send the highest possible resolution assets (video, audio track, music track, sound effects). Video can always be scaled down, but not up.

Returning files

- Ask your LSP to return the modified project files, so you can make changes in the future.
- If you don’t have a file preference, files will probably be returned in the most standard and widely available export option available at the time. At the time of this writing, we recommend H.264 MP4 at a variable bit rate no lower than 15kbps with the same resolution. This will yield a generic file that can be viewed on a local computer as well as online.
- Talk with your LSP about the best way to transfer files. Video files, especially those that accommodate multiple languages, can easily reach gigabytes, so you’ll want a mutually convenient plan for sharing files.

Deadlines

- The longer the video and the higher the resolution, the more time it takes to process and render. Discuss realistic expectations for project deadlines and allow for time if something needs additional attention.
Video and SDL

Using our global network of sound studios, translation experts and video engineers, SDL provides an end-to-end solution for the creation, management and delivery of video localization.

Our clients include BOSE, Box, Canon, CNH, DAF Trucks, and Dassault.

For more information and to speak to one of our specialists, visit www.sdl.com/mediaservices