

i18n & L10n Guide for Efficient Image Creation & Management

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TABLE OF CONTENTS

Are Images Necessary in an i18n Environment?	3
Get Familiar With the Terminology.....	4
What is the Difference?	4
1. Internationalization (i18n)	4
2. Localization (L10n)	5
3. Translation	5
4. Transcreation.....	5
5. Content Creation	5
Audit Your Images	7
Audit Table Example.....	8
Adaptation of the <i>Once and Done</i> Proces Model	9
The Image Creation Spiral	9
7 Image Techniques for Achieving a <i>Once and Done</i> Approach	11
1. Content Do's & Don't	11
2. Use Images in Conjunction with Numbers & Tables - No Added Text	12
3. Zoom Way In & Declutter	13
4. Use Simplified Images.....	14
5. Consider the Use of Only English Images	16
6. Create a Corporate Mock Assets Library	18
7. Separate Text from All Marketing Images	20
<i>Once and Done</i> Conclusion.....	22
An i18n Personal Inight.....	23

Are Images Necessary in an i18n Environment?

Can imagery really boost productivity, comprehension, inspiration, sales, and social media growth? Original research undertaken by TechSmith Corporation has proven this true. In fact, [the study](#) which included the US, UK, Australia, Canada, Germany, Switzerland, Austria, and France shows “younger workers around the world are twice as likely as baby boomers to use images and video to communicate on *their own time* — and are two times more likely to want *more visual communications at work*.” Additionally, according to Wendy Hamilton, CEO of TechSmith, the desire for more visuals will only increase in importance as the role of imagery for helping instruct and inspire continues to grow.

“We’ve always known that visuals are essential to the effectiveness of communication, and therefore are essential to instruct and inspire. The essential findings of this study are, first, that visuals matter even more than most assume and second, there is an urgency for leaders to adapt as employee demographics change.”

– WENDY HAMILTON, CEO - TECHSMITH

But visuals also evoke [emotional responses](#) such as joy, a sense of wellbeing, trust, and happiness and it’s these responses that encourage people to respond to your message. British retailer, [John Lewis](#) is a master at evoking an emotional response in clever and heartwarming advertisements – most of which never need translation to communicate their meaning.

Overall, some level of emotional response is critical for successful content marketing campaigns, increased brand awareness, engagement with product and tutorial videos, increasing sales, and more.

However, in a world craving increased imagery and almost instant global access, how shall companies cope with the burden of providing both imagery and access at a level of competency that upholds their brand, budgetary constraints, productivity, and internal processes? The answer is well defined, documented, and supported internationalization (i18n) and localization (L10n) processes.



While a Localization Service Provider (LSP) can help with translation and production work, 98% of your i18n and L10n image efforts need to happen *internally* within your company and individual teams before looking for outside help. **This means the journey begins right now without the need for additional resources, outside vendors, and startup costs.**

Get Familiar With the Terminology

To begin your graphics localization plan, a simple audit of the different images currently being created by your company is needed. To do this, some specialized terminology must be defined since various image types are handled differently.

Overall, there are just five basic terms, some of which you may already be familiar with:

Internationalization (i18n), **localization (L10n)**, **translation**, **transcreation**, and **content creation**. Each is important to understand as you move forward with a plan for creating and managing images.

What is the Difference?

You will find many, and sometimes differing, online definitions of what these words mean. The subject is both very deep and very wide, with numerous webinars, books, videos, and whitepapers available on these topics. But for the sake of clarity and to help you decide which method is best for you, the definitions here are kept simple. Overall, the most important part of defining these terms is to use them consistently across your own organization so everyone understands the work at hand, and all teams remain on the same page.

1. Internationalization (i18n)

For the most part, Internationalization (**i18n**) is the process of developing products, software, content, images, etc. in a way they can be localized for languages and cultures more easily and efficiently.

I include the documented corporate goals, team methodologies, and internal guidelines under this category. These are larger concepts and growth strategies to keep your whole company working along the globalization path outlined by your senior leadership team.

For example:

A two-year goal to have the company SIM ship all languages on the same day including software products, training and marketing videos, web pages, help files, social media, advertising, etc. In this case, the i18n work may include overarching company quarterly goals designed to meet this deadline, investments into new tools needed to get the job done, changes in corporate and team culture, realignment of how teams are internally organized, dedicated project management on a larger scale to scope and track work, etc.

2. Localization (L10n)

Is a collective “umbrella” term to encompass all the work and processes that go into making your international global strategy and goals a reality. This includes the minutia contained within project plans for the day-to-day work to be done, intricate team processes to grow toward scalability and efficiency, detailed localization kits, how the teams are adapting and growing according to the [Localization Model of Maturity](#) (LMM), working with Localization Service Providers (LSPs), the actual translations, and so much more.

Think of localization as a larger category or “department”, like *Marketing or Development*. Under Localization falls three categories for getting the language work done:

3. Translation

Translation is the process of putting words or text from one language into another. In the world of Localization, this term infers “directly” or “as-is”. It is pretty much a word-to-word or phrase-to-phrase match taking into account various locale forms of grammar, syntax, etc.

Let’s consider the phrase ***Where is the restroom?*** This phrase translates well as-is though many countries call this room something different: *bathroom, washroom, toilets*. Another example is software that looks and behaves exactly same in all languages, only the words are translated into another language. Translation is typically based off content already created in a source language. Typically, with translation, the content looks and reads very similar across all languages.

4. Transcreation

The process of culturally adapting and translating words, text, images, videos, entire campaigns, etc. from one regional locale into another. In the world of Localization, this term infers “change” or “different”. Transcreation is typically based off content already created in a source language. However, unlike translation, this process may include a change in tag lines on your ad images to better resonate with a locale, rewording a blog post to include regional examples or to sound more natural in other languages, changing up regional tradeshow information on your localized webpages, or font and layout changes to accommodate longer language translations. With transcreation, content may look slightly different between languages and may read differently but the goal is to have a similar content look and feel across all languages.

5. Content Creation

Content creation implies “from scratch” or no source content is available. With this method, other language content creators write original ad copy, blog posts, video scripts, etc. without using the source language content for reference. Other means such as outlines, brand guides, style guides, project plans, in-person meetings, and in- country cultural preferences help prep the other language writers for the content needed. With content creation, final content may look similar to the other language versions in terms of brand, layout, style, etc., or it may be completely unique to each locale.

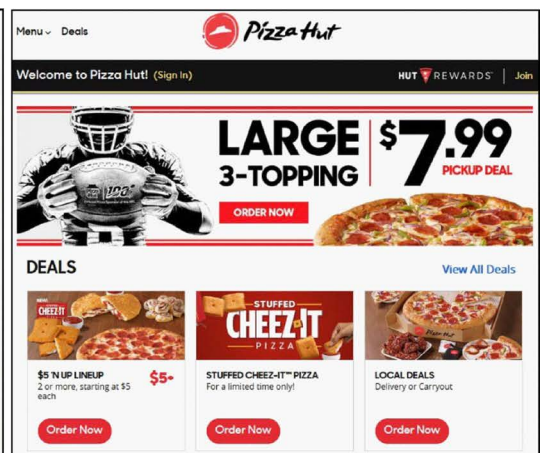
Consider this Chinese Pizza Hut [menu webpage](#). Aside from the red logo image, it doesn’t resemble anything we might recognize about Pizza Hut in the United States.

Overall, Pizza Hut operates in over [120 countries](#), each with their own unique website, cultural look and feel, menu, campaigns, etc. What’s more, each of their sites may have several language versions to choose from.

When you consider the scale of this operation, its mind boggling. However, it gets even better. Pizza Hut is part of [YUM!](#), the corporation that also owns Kentucky Fried Chicken, Taco Bell, and more. Overall, they operate in 140 countries and open seven new restaurants around the world **each day!**



Pizza Hut Menu Page - China



Pizza Hut Menu Page - USA

Audit Your Images

It could be your teams have never defined the various kinds of images you use. However, making clear delineations between these allows you to create clear i18n goals and L10n processes and instructions for the creation and handling of each. It also allows you to determine up front what kind of content receives which type of localization.

The audit need not be a huge undertaking; a short analysis and a simple table works just fine. In the following example, each team's image type is listed, along with the degree to which those images impact sales and corporate brand reputation; either high, medium, or low.

High visibility and brand impact images are images used to sell your products and promote your brand. They drive traffic to your website, attract buyers, advertise your offerings, and more. They are high stake images, and they must be perfect in all languages. These images should be fully translated, transcreated, or content created. They include:

- Ad images used to promote, advertise, and sell your products.
- Brand awareness promotional ads.
- Web site banners, product images, etc.
- Email images.
- Channel / sales information and catalog images.
- Images within thought leadership articles, blogs, and ebooks.
- Images within the product

Medium visibility and brand impact images are images that may be hybrids of two kinds of localization. Such as:

- Source images that cannot be fully recreated in another language for one reason or another, but, have other language text added to them. For example, your software is only in English, so you have ads showing the English user interface, and the ad tag lines are in Spanish.
- Second level web pages that receive less traffic.

Low visibility and brand impact images are collaterals that do not have any localization done to them and they remain in the source language. Such as:

- Technical support images that have very low views.
- Help page images that have very low views.

Audit Table Example

Overall, the higher the visibility and impact on sales and your brand, the more encompassing the localization effort. Lower visibility images typically receive no localization creation.

Your audit may consist of the team creating the image and where the image is used along with the Visibility & Brand Impact assessment, and the level of localization it will receive.

TEAM	IMAGE LOCATION	VISIBILITY & BRAND IMPACT	LOCALIZATION EFFORT
Instructional Design	Tutorial Videos, Written Tutorial Images, Job Aides	High/Medium	Full, Translation
Marketing Video	Product Overview Videos, Marketing Advertising Videos	High	Full, Transcreation
Advertising (Social)	Facebook, LinkedIn	High	Full, Transcreation
Advertising (Other)	Google, Print	High	Full, Transcreation
Tradeshow	Booth Images, Postcards, Handouts	High	Full, Translation
Channel / Sales	Partner Portals, Emails, Catalogs	High / Medium	Full / Partial, Translate full line of collaterals for the languages we have product for. No images for other languages. Text only with EN images.
User Assistance	Help Files	Low	None, No images for other languages.
Product Development	Software, Installer, Uninstaller, Registration of Product	High	Full, Translate all in-product components
Onboarding	In-Product Tutorilas, In-Product Tips and Instructions	High	Full, Translate all in-product components
Technical Support	Support Articles	Low	None, No images for other languages.
Writing Team	Blogs, eBooks/PDFs, Thought Leadership Articles	High	Full, Content Creation for all locales.

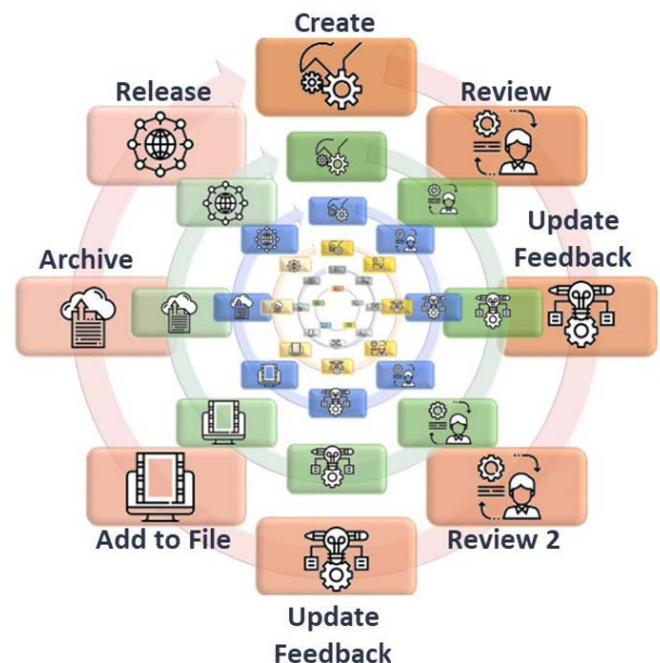
Adaptation of the *Once and Done* Process Model

Once your audit is complete, it's time to see how to adapt your current image processes with the *Once and Done* techniques. Overall, if you currently use images in help articles, blogs, support documentation, web pages, training manuals, videos, ads, etc., you know how time-consuming they are to create and manage. Each needs to be painstakingly made, reviewed, and finalized. Then updated with every product release, campaign, or launch, and stored and archived in a way to make them linkable, findable, etc. Repeat this current process in 3 or more languages, and you have an out-of-control system wallowing in churn that is unsustainable for any future global growth.

The Image Creation Spiral

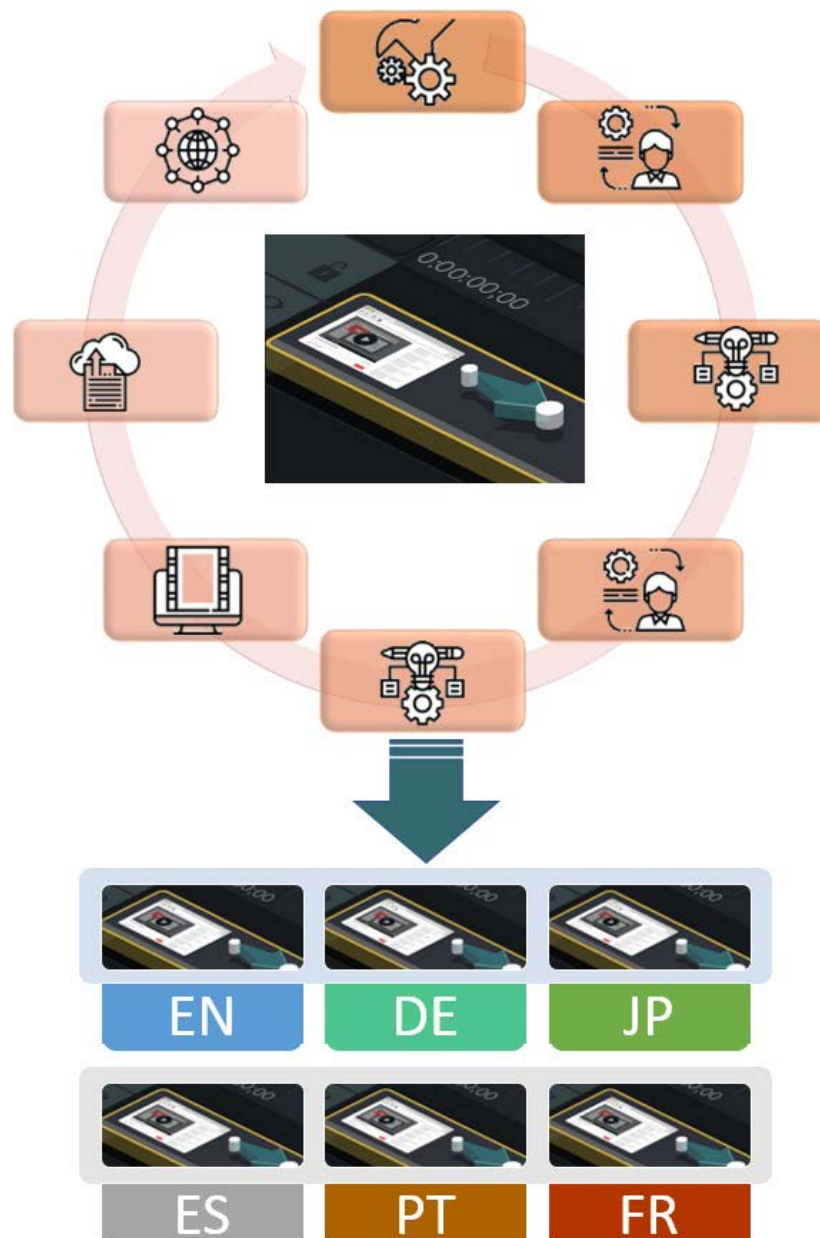
The basic *Once and Done* idea, when applied to graphics, is to create a source image once — and be done with it — for all languages. This might seem like a radical or even impossible idea for many, however, there are several ways to successfully achieve this goal. First, let's look at a common example to identify what we mean by churn and unsustainable process. For one UI screenshot or web image, a common process may be:

- Create the original source image, send for a round of review, incorporate feedback, repeat for final feedback, upload or add the image to the source (help, web, etc.), then store/archive, and release.
- Repeat the same in 3 (or more) languages. (This takes at least 2X longer per language since computer systems need to be changed over to other locales for screenshots, translations need to be sent, received, and incorporated, etc.)
- Then for the next release, update source image, repeat #1, then repeat #2.
- And so on, and so on. If you have experienced this workflow, you know and understand churn firsthand.



Visually, the process appears like this, a spinning cycle that goes deeper and deeper the more languages and images you add — until you come to a place where you hit a wall, productivity is impossible, sustainability and capacity have ground to a halt, and you have no ability to move into more languages. *This is the tipping point where teams decide to no longer include images — just when the market is demanding even MORE VISUALS.*

In sharp contrast, the *Once and Done* model, which is more efficient and scalable, looks like this:



7 Image Techniques for Achieving a *Once and Done* Approach

To achieve maximized efficiency and scalability, there are seven image techniques to deploy across your content teams. Not all techniques apply to each team, but each technique is an important step to move each of the content teams into *Once and Done* automation and the ability to scale efficiently into any number of languages.

1. Content Do's & Don'ts

There are content best practices to adhere to when creating images for [single source publishing](#). Researching and following these saves you a lot of re-work and will get you to a place where one image will work for across most languages.

Avoid this Type of Imagery

If you include these items in your images, you need more than one source image per language. Since the *Once and Done* goal is to use only one source image for all languages, avoid:

- Showing hand symbols, gestures, and body parts
- Religious symbols and icons
- Animals that invoke an emotional response
- Flags and other political imagery
- Babies and children

Use this Type of Imagery:


If you include this kind of imagery in your images, you can use one source image per language. You are on your way to *Once and Done* efficiency.

- Screenshots of software
- Office setting locations
- Diverse humans in modest apparel or office attire
- Images of nature
- Abstract illustrations
- Icons, sketches, geometric shapes
- Inanimate objects
- [ISO globally recognized symbols](#) like professions, modes of transportation, equipment, devices and consumer goods
- [Standardized international traffic](#) and warning symbols
- Other [standardized images](#), like scientific symbols, abstract processes/ideas, business concepts

2. Use Images in Conjunction with Numbers & Tables - No Added Text

Remove all callout or caption text from your source images. Instead, use a well-trimmed image to orient the user to the location on the page or screen and add descriptive or instructional text *below* the image in a caption or table. Text *outside* the image is translated with the file when sent for localization to your other languages. Bits of text within the source image need **not be translated** when using this approach.

This following image and table can be used for all languages.



	Video Control	Description
1	Elapsed time	Displays the elapsed time at the playhead's position on the timeline.
2	Start handle	Drag the handle to select the starting point for a video selection.
3	Playhead	Controls which frame in the video is displayed. Drag the playhead to jump to a specific point in the video.

English Version



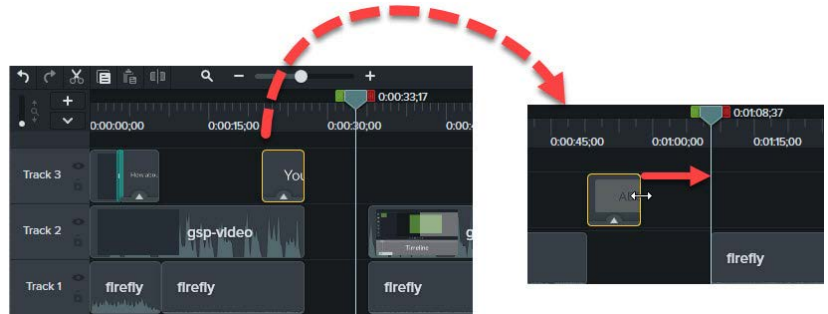
	Commande vidéo	Description
1	Temps écoulé	Affiche le temps écoulé à la position de la tête de lecture sur le plan de montage chronologique.
2	Poignée de début	Faites glisser la poignée pour sélectionner le point de départ de la sélection vidéo.
3	Tête de lecture	Commande l'image vidéo affichée. Faites glisser la tête de lecture pour passer à un point spécifique de la vidéo.

French Version

3. Zoom Way In & Declutter

When showing instruction for user interfaces, zoom in to give a close-up view. And, de-clutter the shot while you're at it. This process removes the bulk of any areas that are not needed and if used, may need translation.

- Be sure to include readily recognized elements to quickly orient the user to where you are on the screen.
- Use arrows, boxes, and numbers to focus the viewers attention.

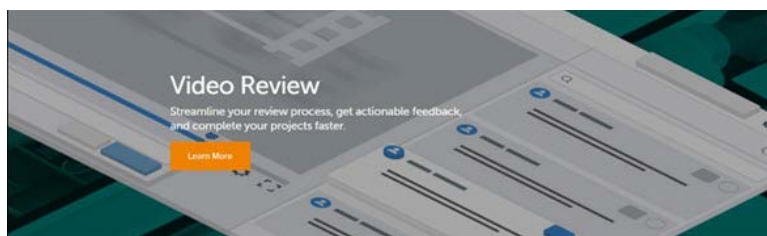


In this example, the larger image (left) was pared down to the image on the right. An arrow now helps the viewer understand the area of importance. This image can be used for all languages.

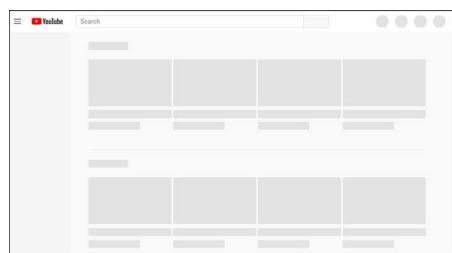
4. Use Simplified Images

Simplified images remove the literal portions of the screen or image and replaces them with simple, abstract representations. The main benefit of using simplified images is they don't need constant maintenance or translation and they can be used for marketing, instructional, training, sales, and other image types. They also allow the viewer to focus only on what is important within the image.

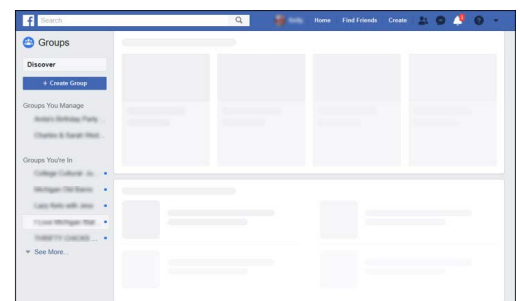
Here are some corporate uses of simplified user interface images that work across all languages.



Video Review Service Software User Interface Images



YouTube Interface While Loading



Facebook Interface While Loading

Traditional Image Example

Consider this image of the YouTube interface intended to give instruction on Playlist usage. Note the clutter, use of people and brands which may not be appropriate for all locales, flag and pet imagery, personal theme used for the browser, all the text on the screen, and all the text in the callouts.

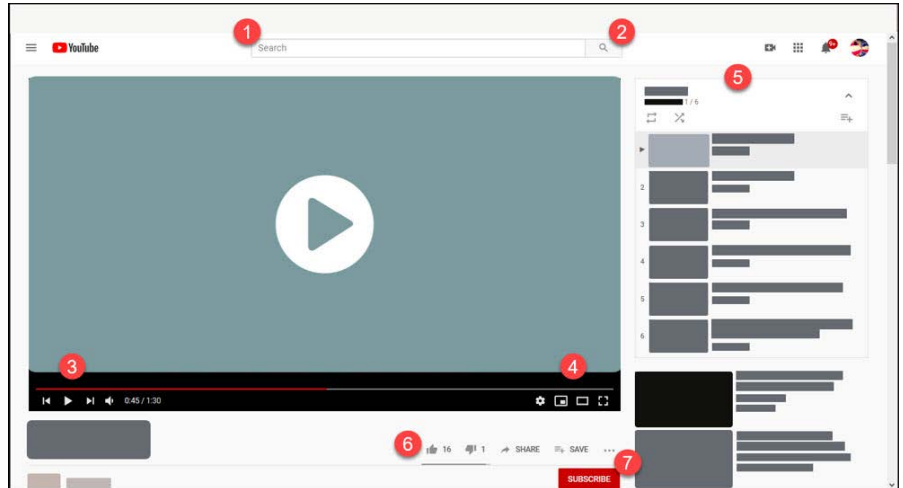
This image offers no reuse at all, requiring a different image be created for most other languages. Additionally, this image is very high maintenance since updating the image and text would prove almost impossible for the busy content creator. Also take into consideration some languages are up to 30% longer, making callouts much larger. And, in some languages, sentences do not break according to punctuation marks. Therefore, pasting translated text into callouts would require the added step of a localization review.



Simplified Image Example

Now let us consider the simplified version of the same image which clears the clutter and inappropriate imagery, leaves the recognizable framework of YouTube intact using neutral colors, exposes the important aspects of the UI, and has no callout text to maintain or translate.

The instruction text in the table is sent to translation via the source document and instructions are updated in all languages. In future, if written instructions do change within the table, the image could remain as-is. Or, if an update is needed for the image, just one image needs to be created for all languages.



STEP	INSTRUCTION
1	Bibendum Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut la.
2	Ultrices Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
3	Sit Amet Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo.
4	Cras Adipiscing Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id.
5	Dignissim Molestie ac feugiat sed lectus vestibulum mattis ullamcorper velit sed. Duis tristique sollicitudin nibh.
6	Lorem Sed Orci ac auctor augue mauris augue neque gravida in. Dignissim diam quis enim lobortis.
7	Lectus Et ligula ullamcorper malesuada proin libero.

Simplified Image Tips for Localization

When using simplified images, since the purpose of the image is to orient viewers to the correct location on the screen, it's important to match the elements in the original image with those in the simplified version.

- If you want to show a menu selection that is the fourth element in a column of six, the simplified version must also show the fourth item being selected within a column of six.
- If you show a specific button or icon, put it in the same location it appears on the user interface, web page, etc.
- It is best to use simplified images consistently within each page, help topic, etc. — don't mix and match simplified images with literal screenshots.
- You can make simplified images from most image editors. Some make it easier than others. Snagit has a built-in feature for [automating this process](#). (For full disclosure, I work for TechSmith, makers of Snagit).

5. Consider the Use of Only English Images

This particularly effective way to reduce image churn may be the hardest one to get your head around. Traditionally, the thought has been to do all images in all languages. However, at some point, the churn this produces becomes unmanageable and the literal cost per image becomes too high. It's at this stage where efficiency and scalability require you look at new, and sometimes radical solutions. (See also An [i18n Personal Insight](#).)

Those who follow the *Once and Done* processes given thus far, will find it much easier to make the smooth transition into using only English images for *some* of their deliverables such as technical support articles and help topics.

If you study some larger companies, [Evernote for example](#), who translates into over twenty languages, they are employing this approach with much success. In the Evernote and [Camtasia](#) examples below, all the text on the web pages, including the navigation links, are translated while the images remain in English.



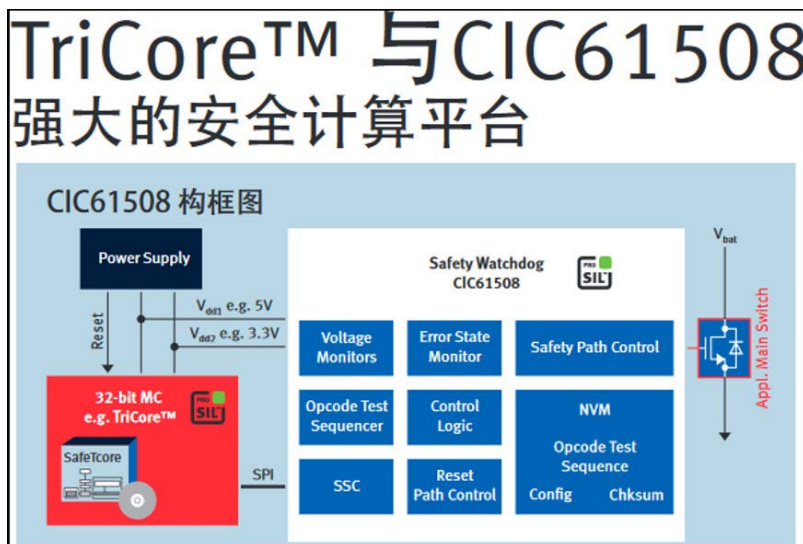
Evernote Tutorial Image



Camtasia Tutorial Image

Technical and logistics corporations are also offering multiple languages with some images available only in English. Here is an example of a more technical image in English, surrounded by translated page text.

Clearly, this approach requires conversations within your company and/or teams to see what is right for your global strategy and growth. However, English-only images, when used in conjunction with the other techniques discussed here, clearly provide a viable *Once and Done* approach to free up internal resources from churn which in turn leans into other important i18n and L10n keys to success such as repeatable processes, scalability for growth, and cost and time efficiencies.



6. Create a Corporate Mock Assets Library

So, you need to create an image that shows a website, but it can't be your own...and it can't be copyrighted, and the colors must match the product brand, and it needs to have a German, French, Spanish, and Japanese counterpart. Trying to come up with sample content to show a process, use as a background in a video or on a web page, etc. can be extremely time consuming and oftentimes futile. However, there is a solution...I call these mock assets.

Mock assets are just that...fake web pages or other content used to create *your* content. These simple web pages are translated to be in all the languages you need. So, when you need an image, you have one already made up and ready to go. When shared with all the content creating teams, it ensures everyone is consistently using the same images, examples, etc. Here is an example of a mock asset we use in videos and in other visual content. Our mock assets are placed on a company site where everyone has easy access to them.



French Mock Asset



German Mock Asset

Use a Google document, SharePoint, etc. to give easy Library access to everyone who needs it. Include assorted image variations, language options, color choices, and instructions for correct usage. Links provide a quick way to download the asset. A mock asset library can also include coordinated simplified graphs, charts, task boards, devices like monitors and phones, and more.

Here are several examples.

Coordinated Graphics

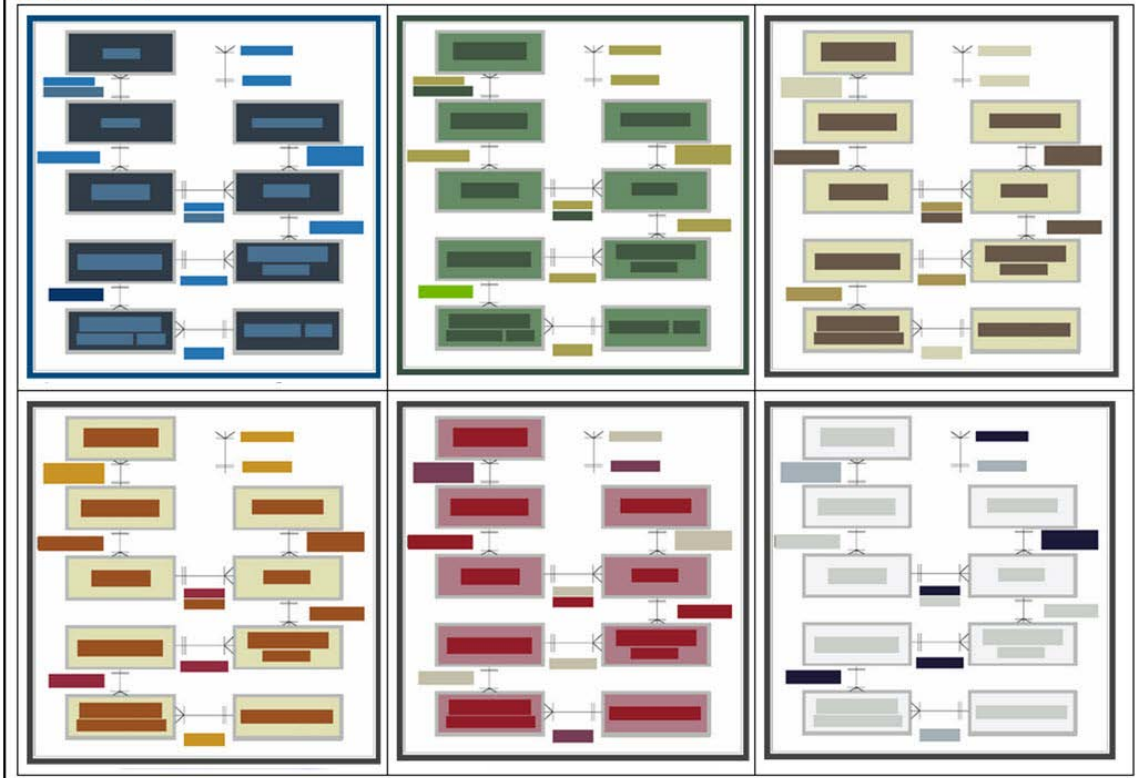
Use in Recorder UI, on timeline, in clip bin, in the library or editor views, as filler in videos, to make other SUI images, to show a webcam view, etc..

Should not be used as standalone images.

Graph Small



Flowchart Small



7. Separate Text from All Marketing Images

One of the most basic and important *Once and Done* processes to implement with your design team is the separating of all text from any image files when sending over for localization work.

Typically, the most efficient, scalable, and automated process for creating graphic ads, webpage images, banners, etc. is something very close to this:

1. Company team packages up and sends off ad project files, text files, completed source ads for context and samples.
2. LSP Project Manager receives files and scopes out the work.
3. LSP PM sends the text with completed source files to translation/transcreation.
4. Translated text is merged into the Translation Memory for later reuse, consistency, and cost savings.
5. Translations and graphic project files are sent to LSP Creative team to replicate in other languages.
6. Translation QA occurs.
7. Completed files are sent back to Company.

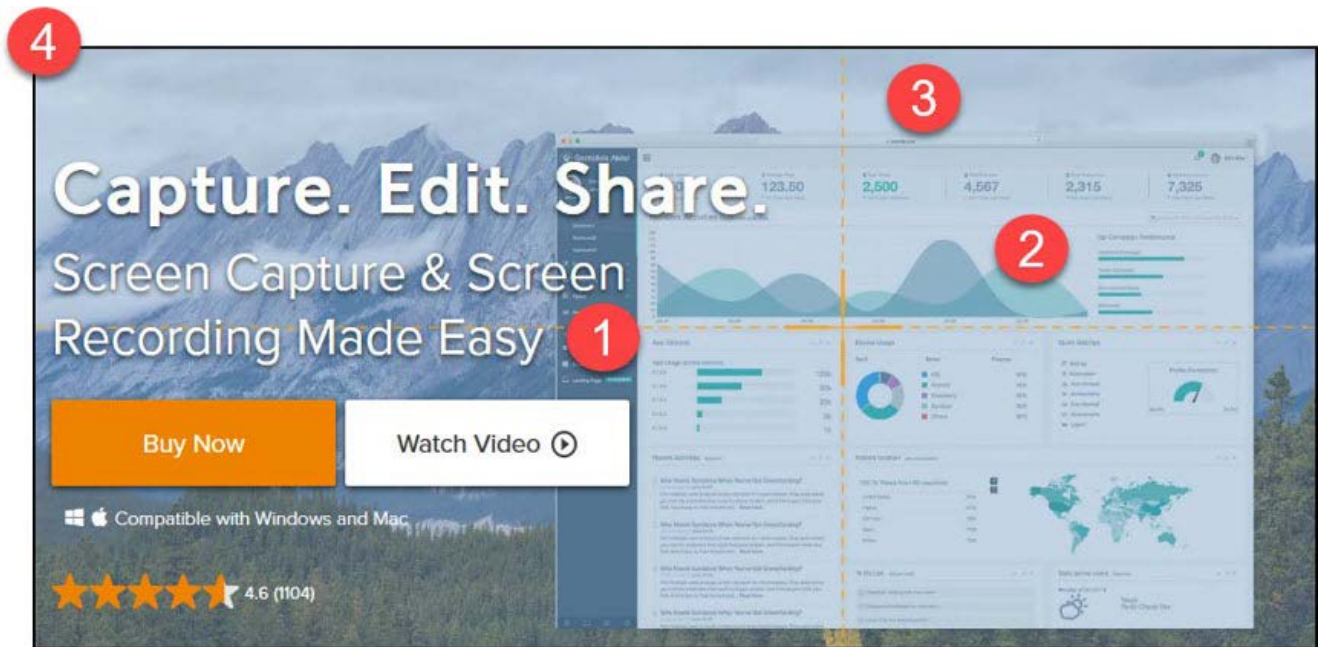
With this simple but very efficient process, you can add any number of languages and not have it impact your internal team's work and release cycle.

However, when you “bake in” or flatten text on images, you add a terrible layer of complexity to the process that causes expensive churn and inefficiency. In this case, the text must be manually extracted or copied from the image, then sent for translation. And, the image itself must be painstakingly recreated. Only then can the localized marketing images can be made.

Overall, this time consuming and inefficient process is laden with potential for error if recreated images are not “right”, colors are “off”, typos occur when text is copied, etc. And, this process adds expensive manual labor costs and takes 2-3 times longer than the more automated, assembly line style of content creation we want to happen with the *Once and Done* process.

Here is an example of a Webpage Hero image. For the most efficient and automated process:

1. Put all the text into a Google document, Word document, etc.
2. Use simplified and/or mock assets for the screenshots or other imagery. This needs no translation.
3. Use any background images that require no translation.
4. Package up completed source images to be used for content during translation.
5. Zip up all content, along with the source graphic project files and send for localization.
6. Receive back files in all languages.



Once and Done Conclusion

Overall, these seven *Once and Done* image techniques, when deployed consistently across your teams, not only reduce churn, they give your teams a solid foundation for practical, scalable, and efficient image localization process that allow your organization to grow into unlimited languages.

And while these processes will significantly impact the way you work, there are still other topics your teams may want to consider for discussion:

- **When is an image actually needed?**

Be intentional about where you use images. You might not need as many as you think you do.

- **When should simplified images be used? Or a photo? Or a screenshot?**

Come up with a standard for each with the focus of reducing workloads when it comes to product upgrades, maintenance of the image over time, etc.

- **How can the feedback loop for an image be reduced?**

Where an image needed two rounds of feedback before, can employing one or more of these techniques limit the feedback cycle to further reduce churn?

- **How often will you update images?**

Will any of these techniques allow you to “skip” updating for maintenance level releases?
Can simple changes be made to existing images so total rework can be eliminated?

Calculate the Cost

Lastly, as an interesting team activity, try and whiteboard the lifecycle (in number of hours and people involved) of just one image in your system to see all the hands that have touched it, and the time on task handling the image at each stop, throughout its life from inception until it is no longer used. This gives you a good idea of the internal churn and all the costs associated to maintain that image over time.

After you log the complete image path, mentally multiply the cost and effort by the number of languages you want to move into, then multiply that by two since localized versions are at least twice the effort. This gives you a rough estimate of how much time and money one image may cost. Now, if you are brave enough, multiply that final number by the total images you use in your advertising, help topics, website, technical support pages, tutorials, etc. Seeing the overall effort for image creating and management may be the push you and your teams need take the leap toward a more focused approach to image creation as it relates to your global growth goals.

An i18n Personal Insight

For many years, we had an internal policy to always include help document images in all languages. Some help files would have up to 500 images in them. We also maintained a Windows and Mac version for each software product. This meant there were at least 5000 images in five languages to inspect, maintain, and update on a continuous release cycle! We made traditional help files, printed books, and output PDF guides from Word documents. So, there was also linking, and embedding, four color separation files to make, and storage issues to contend with.

We also made liberal use of callouts and many localized screenshots. We had a User Assistance team of up to ten information developers to maintain these huge, complex help files. Slowly the team began to shrink as people moved to other teams and into different roles. Those who remained no longer had the time or desire to continuously update help images in five languages.

Meanwhile, other teams were implementing Agile processes and the information developers were stuck updating the same UI images over and over. We soon realized our help files processes would be holding the company and product teams back from growing into more languages as Agile release cycles became the new norm. So, two years ago, we made the radical decision to move our help to an online only format, only do images in English, and employ the *Once and Done* techniques given here for ongoing efficiency and scalability.

This was a huge decision since we are a visual communication company – images and video are what we do. So, we knew our reputation, brand, customer trust, and more were on the line with this decision. After much planning and discussion, we implemented the EN-Only image plan for both help files and technical support articles. On deployment day we had backup content and a rollback plan waiting to be deployed if necessary, and waited for the feedback to come in. And... nothing. No

backlash. Customer satisfaction surveys continue to indicate the same levels of satisfaction. We now have two information developers who write, maintain, update, research, and innovate around Agile sprints, help initiatives, and release cycles in four languages for several software products. Due to successful i18n image reform, we have been able to take on other help related automation processes that have set this team and our company up to successfully move into any number of languages without missing a beat.

