



A Quick Guide to Localizing Games for Global Markets

Learn how to adapt your game for gamers worldwide

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What is Localization?

Localization (L10n) is the process adapting a product, game or content for a specific locale or market. This process includes adapting graphics and modifying content to suit target markets and their consumption habits, converting to local requirements (such as currencies and units of measure), and using proper local formats for dates, addresses, and phone numbers. The goal of localization is to give a product the look and feel of having been tailored for the target market and eliminate local sensitivities.

Why Localize Your Game

Why spend your precious time and resources localizing your game when you could be focusing on adding new levels or features? Besides giving your game a competitive edge, localization means more sales, more fans, and a bigger community.

Localization, the concept, isn't rocket science. However, localization, the activity, can get very complicated. Which international markets should you expand into? How do you account for culturalization? What are the basic processes? How much time should you allocate for the QA process? What translation methods should you explore? These are just some of the basic questions that game developers and localization managers need to answer in order to localize their game successfully.

In order to tackle the process, here are 8 basic steps to follow to localize your game for a global audience.

Step 1: Identify Target Markets

The first step to localize your game is figuring out which international markets to enter. This process includes determining your user demographics, their locations and languages, as well as the demographics of your competitors and their localization efforts. A tool you can use is [Flurry Analytics](#). Flurry, now part of the Yahoo Developer Network, is a pretty complete tool for mobile analytics. From its dashboard you'll be able to find out your game users' behaviors (active users, sessions, frequency, etc.), demographics (interest of users, personas), and technology profiles (carriers, firmware versions, errors, devices). It's also important to figure out how many users you'll reach with a new target language and what your return on investment (ROI) will be in this new market if you localize.

Step 2: Internationalization (I18n) of the Code

Internationalization is the foundation which enables game localization to occur. A game can only display game content in one language until your code base, architecture, and UI have gone through the internationalization process. This process makes the code capable of processing and displaying game content in the target languages you have chosen, and makes sure this content is ready to be translated.

During this step, avoid “hard coding” text within the program. If you do hard code, you'll have to fix your text strings by hand every time you create a new language version of your game. Instead, isolate all the text strings used in your game and pull them into a resource file for each target language.

Internationalization takes several concepts into account such as subject-object-verb order, pluralization rules, automatic line breaking or text wrapping, punctuation rules, and support for date/time, currency, and number formats. Refer to the best practices PDF link at the end of this guide for more information and examples.

Step 3: User Interface Design

Your game doesn't exist in a vacuum; it's supposed to be shared and enjoyed by your community of users. To do that, you need to create a UI that works with your various international communities and gives them proof that your game was designed with them in mind. The UI design phase is all about the colors and fonts you choose, and the way things are displayed, things that will show your users that you understand them.

As you can probably imagine, localizing a UI can introduce many challenges. Here are some ways to keep the UI simple and streamlined across all your target languages:

- + Leave extra room in the UI for localized text. One of the first signs to a user that the game was not built specifically for them is a cluttered UI with overlapping text and awkward formatting. Translated text can be 20-30% longer than English source language text. For instance, the German word for “exit” is “Ausgang”. If you try to fit “Ausgang” into a space that was originally designed for “exit”, well, it won't quite fit. That forces the translator to come up with an abbreviation or an alternate translation that fits the space better, unless you plan for responsive spacing in your UI.
- + While most languages are written left-to-right, some, such as Arabic, are written right-to-left. If you plan to expand into locales that use right-to-left text, be sure your UI supports it. This is also apart of the internationalization phase.
- + Use icons. Icons cut down on the number of words that need to be translated and integrated into the UI.
- + Use scalable UI elements when you can. If the UI buttons, drop-down menus, text boxes, and other elements can scale up or down depending on the size of the text, localized text can be accommodated more easily.
- + Support various local formats for time, date, and currency display.

Step 4: Finding the Right Tools

The gaming industry is dynamic and highly competitive. If you are going to localize, you will need to do it as real-time as possible. You may want to consider using a Localization Automation Platform that can be integrated into your development process. Any platform you choose should give you the flexibility to translate and publish content while you keep pace with your development process.

Step 5: Selecting the Right Translation Resource

To crowdsource or go professional – that is the question.

There are no right or wrong answers when it comes to translation, and you have a few options: crowdsourcing, professional translation services, or using a combination of the two. A crowdsourced translation is the collaborative effort of translating your content into other languages by your current user community. The benefit of this approach is that your existing users already understand the nuances of your game. Plus the process can be fast and cost effective.

In contrast, a professional translation is done by translators who have been certified by an association of professional translators. They typically have received professional training or education in translation. The benefit of using professionals is that they are typically native speakers of your target languages, and they have experience in appropriately adapting your source content for local sensibilities. If you decide to go with professional translations, you can purchase services from a third-party Language Service Provider (LSP).

One major concern with crowdsourcing is the quality of the translations. If you have a large fanbase and would like to take advantage of their knowledge and foster community participation, you can adopt a hybrid approach where crowdsourced translations are reviewed by an LSP for accuracy.

Step 6: Pre-flight

The aim of the pre-fighting phase is to create a mutual understanding of your game and vision, so you and your translators are on the same page. It's important to localize the text, not just translate it. This is a big reason why familiarizing your translators with your content is so important.

Style guides, glossaries, game instructions, screenshots, and sample scenarios all help your translators understand the game's story and characters. This in turn will give you the best adapted and translated content for your target audiences.

A style guide is a referential framework for understanding how the game's content is presented. This will be the skeleton for your translator to refer to. With a detailed and well-thought-out style guide, a translator will be able to adapt the game's content into the local culture while still staying true to the source game's story and tone. When creating your style guide, you should include brand elements, linguistic choices (i.e. the use of third or second person in dialogue, formal or informal tones), and formatting or grammar choices (i.e. the use of parentheses, exclamation points, etc.).

For games, a glossary is a standard requirement. Here are some tips for creating a strong and effective glossary:

- KIS (Keep it simple), only include the terms that are specific to your game.
- To ensure consistency, which is extremely important in gameplay, you should make sure every game-specific term is translated in the same way.
- You should also provide context (not just a definition) for terms in the glossary.

Screenshots are especially helpful to translators because they provide visual context to how their translated content will be displayed (i.e. if the text is dialogue or an error message).

Culturalization is a crucial part of any localization effort. For instance, if your game was centered around collecting and disposing of farm animals, and in particular, cows, you might want to re-think your disposing of cows if you are sending your game to India. Things to consider include historical accuracy, religions and belief systems, ethnicity and cultural frictions, and geopolitical issues.

Adapting your game for different cultures doesn't mean massive changes and rethinking the entire game. Your approach to culturalization should be precise. Only change what really needs to be changed in order to ensure that distribution of the game to a global market will be well received. In the majority of cases with cultural issues, the resolution is a small fix (like a specific word, character, symbol, or design).

Step 7: Translation

Now that you have decided on a translation approach, and you have prepared your reference material, the next step is to determine what needs to be translated.

- + Dialogue
- + UI text
- + Descriptive, help, and tutorial text
- + All of the above

Translators balance between two languages, trying to communicate between cultures. This takes time. Each translator will have his or her own speed. Typically audio scripts will take more time to translate than UI text. For an experienced, professional translator, you can expect them to translate 2,000 English words (4,000 Japanese characters) per day. If your game has audio involved, then you should expect the translator's speed for the audio/voice sections to drop by half (however, this really depends on how much lip syncing or time-constrained text is involved).

The indie game scene has altered the trends in game development so that today, lots of games have a lot of text rather than audio. The good news is that this makes L10n a lot easier, more cost-effective, and much more scalable.

Step 8: QA

Test. Test some more. Then test again.

At this point the testing process begins. Make sure that all elements of the game go through a comprehensive localization testing sequence including verifying:

- + All localized content is in place
- + The UI allows room for longer translations
- + All the fonts are working in each target language
- + Dates, times, currencies, etc. have been accounted for

Once the testing is complete and errors have been corrected, you can confidently send your game out into the world. More players, in more languages will enjoy playing the game you worked so hard to create.

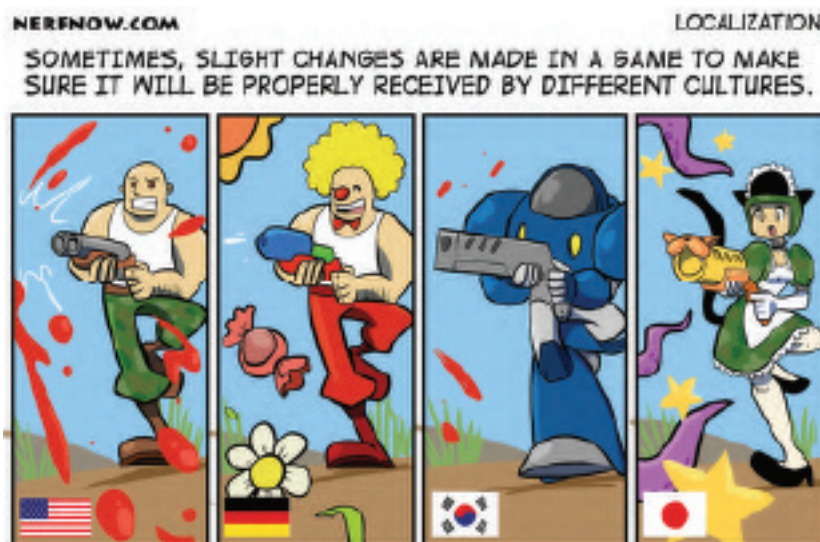
Looking to learn more?

Here are some more detailed resources for localization:

The Game localization Special Interest Group (SIG) of the International Game Developers Association (IGDA) has an awesome in-depth best practices guide for the game localization process. Learn more about culturalization, internationalization, localization and project planning here: <http://bit.ly/1DuAFI1>

Creating Games for Global Players: Consider Localization & Culturalization - Kate Edwards. <http://bit.ly/1vCBzLR>

Want to learn more about crowdsourcing vs. professional translations? Check out this blog post: <http://bit.ly/lioyzb>



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