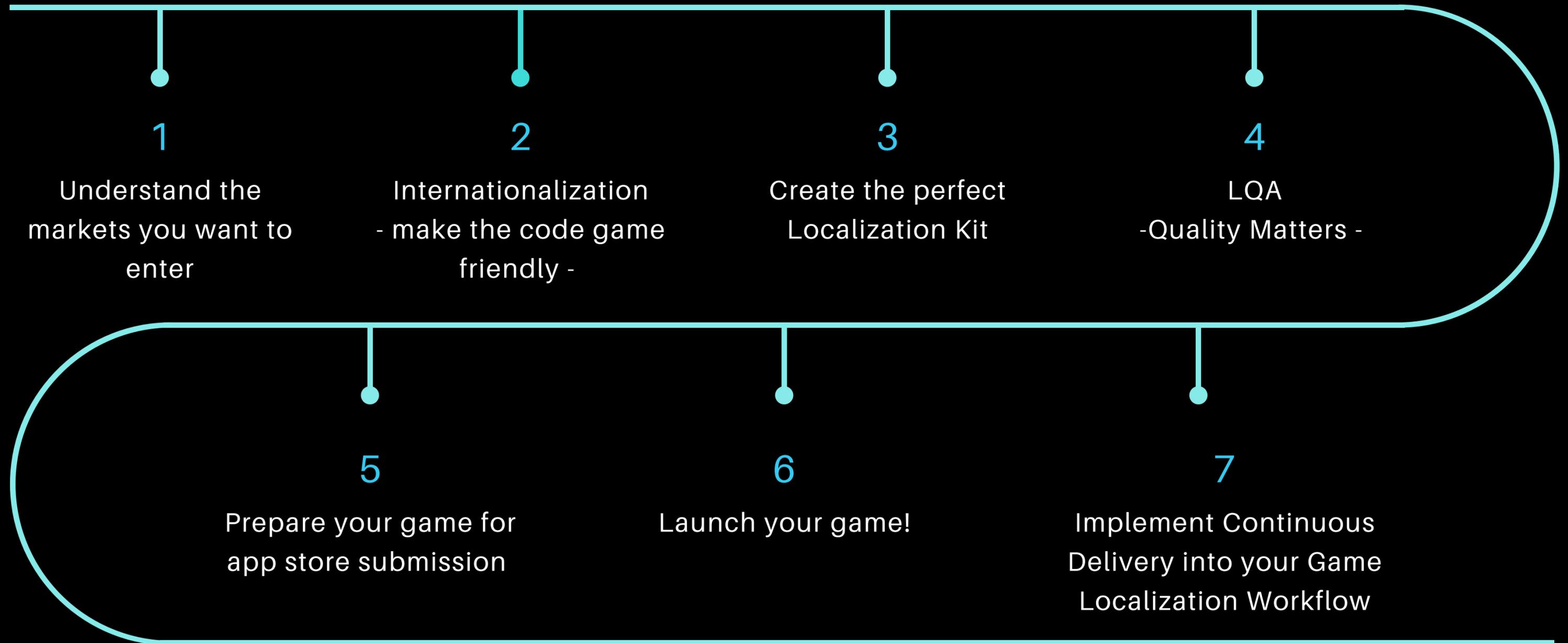


7 stops on the road of games localization

How good your game will perform on foreign markets depends on what road you take to localize your game!



Understand the markets you want to enter

What languages should you localize into?

Deciding which languages we want our game translated might not be a decision as easy as it might seem, actually there are quite a few factors that come into play in this decision



1

Wealth of the country

There are languages with huge numbers of speakers, but maybe those potential players cannot afford to buy the game or spend money on the in-game purchase items. A chest with cards with a cost of 5.99\$ might be considered quite affordable in some countries, while in other markets can be considered quite expensive for a virtual item!

2

Tech infrastructure in that market

Games might be quite heavy consuming resources, do your potential gamers have the required hardware to enjoy the game? In the case of mobile games, how's the network and mobile devices in that particular country?

3

How good is the English level?

The level of English is very high in some countries. Therefore some gamers will feel totally comfortable playing the English version of the game. A localization budget is not infinite, therefore it might be a wise approach to focus first on those markets where the level is not that high. At a high level, we can use the English Proficiency Index as a rough guideline to get an understanding of the level of English around the world

4

Is that game genre popular in that market?

Depending on the country, there are game genres that they like more in some countries than in others. If your game is a first-person shooter you will have different market coverage than a puzzle or a racing game. Explore the game habits and preferences of your potential targeted countries before making a decision!

5

How much is the localization cost of that language?

Some languages are more expensive to translate than others. To mention an example, the cost per word of languages such as Swedish, Japanese or Norwegian is more expensive than translating into Spanish, Italian or Portuguese. For this reason, the cost per word is a factor to consider so that the ROI in a particular market is positive.

6

Don't underestimate the importance of culturalization

Culturalization is about making your game culturally relevant in any geography and not just limiting it to translating the text alone. Different markets=different cultures=different game expectations. Make sure you are aware of cultural nuances before making a final decision of your market coverage

Internationalization

- make the code game friendly -

It's all about international code readiness

The internationalization phase is undoubtedly the great unknown when we face the challenge of globalizing a game (or any software app in general). Explained in a simple way we can say that internationalization is a series of activities that what they do is prepare the code of our game so that it can be translated later. This phase is tremendously important, and therefore I strongly encourage you to pay attention to the best practices that I summarize in the next section.

```
if err := t.rpcContext.Stopper.RunTask(
    stream.Context(), "storage.RaftTransport: process
func(ctx context.Context) {
    t.rpcContext.Stopper.RunWorker(ctx, func(ctx context.Context) {
        errCh <- func() error {
            var stats *raftTransportStats
            stream := &lockedRaftMessageResponseStream{
                for {
                    batch, err := stream.Recv()
                    if err != nil {
                        return err
                    }
                    if len(batch.Requests) == 0 {
                        continue
                    }
                    if stats == nil {
                        stats = t.getStats(batch.Requests[0].From
                    }
                    for i := range batch.Requests {
                        req := &batch.Requests[i]
                        atomic.AddInt64(&stats.serverRecv, 1)
                        handleRaftRequest(ctx, req,
                            serverSent, 1)
                    }
                }
            }
        }
    })
}
```

@yolocalizo

1

Separate resources

Externalize all localizable game assets from the game code and organize them under separate language-specific folders

2

Internationalize Text Assets

Your in-game text and UI text are the main localization targets. Externalize all localizable text (in-game text, UI text) in different files, separated from the actual game code. Never, never hardcode text in images or in any content asset as it'll make the localization process very slow and prone to errors

3

Internationalize Voiceover

Game audio can be divided into 4 main areas which are voice-over sound effects, music, and the subtitles. It is good practice to store all VO tracks separately from the other components as this will ease localization at a later phase. Also implementing a subtitles system is necessary during this phase. Check out this article to understand more about how to do it

4

Naming Conventions

Name all localization folders and files in a manner that makes it easy to interpret the language/region they represent. Follow ISO standards, they are widely recognized across the globe. Example names are en-US(American English), ja-JP (Japanese), zh-CN (Simplified Chinese), zh-TW (Traditional Chinese), etc

5

Mirroring the interface

If you are planning to conquer the Middle East with your game don't forget that you will have to prepare your game by mirroring the interface! Some languages such as Arabic or Hebrew goes RTL (Right to Left)

6

Natural language standards

Time and date, currency, numbers are different per country, pay attention to the standards of each country!

7

Fonts are important!

Quite often font selection is not considered when a game is developed ;it should not be like that. Fonts will give your game that special touch fitting perfectly with your genre. Ensure you test fonts as early as possible for different languages. This will avoid many LQA bugs at a later stage due to missing special characters in the font code

8

Concatenation is evil

Different languages have different grammar rules. Sometimes, this affects word order and that's why concatenation is tricky and it should be avoided at all costs. Create variables in the strings and code them as one string, and let translators shuffle the variables in the string!

9

Plan carefully UX for Asian languages

Asian characters are often difficult to read when displayed in the same font size as English text. I can read without any problem a font size of 10 in FIGS languages, and then in Japanese that font size will be hardly readable. Make sure that your translated text is legible in the font size you have selected. In some cases, you may need to increase the default font size

10

Allow space for long translations

Localized languages are longer than English. As a rule of thumb allow enough space (around 30% longer than English) to avoid truncations in the translated text

11

Colors

Believe it or not, colors have a different meaning in different countries. Red might mean happiness in China while in Spain it means I don't have money in my bank account when checking the balance in my app. Plan carefully your color scheme in the game for a better emotional connection with your potential players.

12

File format

Although it might be tempting to use Excel for your texts please avoid the temptation. Use XML (or a derivative format) to send files for translation

13

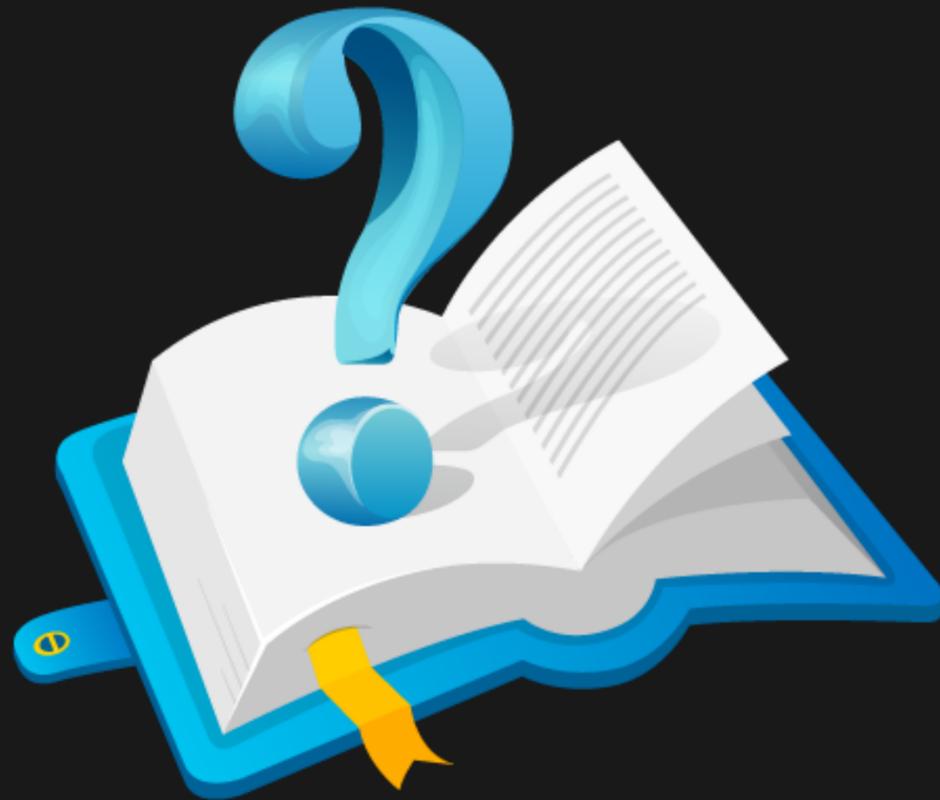
Translation Management System

Choose a TMS to enhance the translation processes. This will help to reduce the workload of manual tasks and it'll allow project managers to get a good overview of the entire process chain and control cost more efficiently. Also please ensure you test the chosen TMS can be successfully integrated in your game development ecosystem!

Create the perfect Localization Kit

Provide context and instructions to translate the game and you will be loved by translators

Investing the time to create a top-notch localization kit will yield untold benefits for your language partner and for you. A good "LockIt," as some refer to it will lead to fewer emails, fewer clarification calls, on-time deliverables and the best possible translation for your content.



1

Glossary

Glossaries help us keep key terms consistent throughout the translation of your game. They make sure that a uniform format is applied whenever terms are used.

2

Language Style guide

The style guide is a document that helps you get consistent, high-quality translations. It defines the voice, tone, and style that will characterize the localization of your game.

Typical elements in a style guide include:

- Punctuation (spacing, quotation marks)
- Branding elements (unique to the country or language)
- Formatting (bolding, fonts, trademarks)
- Tone (formal vs. informal)
- Info about your target audience

3

Explain game characters

A game has a backstory and this will be shown while we play the game. But who are the characters of your game? Are they funny or serious? Do they have any particular skill that makes them special? When you create the game you know the ins-and-outs of the different characters, but for the translators, this is a blind spot, they don't know who your characters are and how they behave and act, therefore the more details you can give them by explaining their personality the better

4

Provide a demo of the game

Translating a game without seeing the game is a tough practice, for this reason, it's a great idea to provide a demo build to our translators where they can play around with our game. Sometimes there might be logistical/legal barriers to overcome to provide a demo, but, if we can get over these barriers this will enhance dramatically the chances of the translators of getting familiar with the game they are translating. This will undoubtedly contribute to higher quality in the translation of our game

5

Collect and share screenshots

Quite often translators need to provide not an accurate translation but a creative translation (aka transcreation). To do that a screenshot to use as a reference is quite practical. And if for whatever reason it is not possible to provide a game as suggested in the previous. A screenshot is crucial, especially if we don't have a build to play.

6

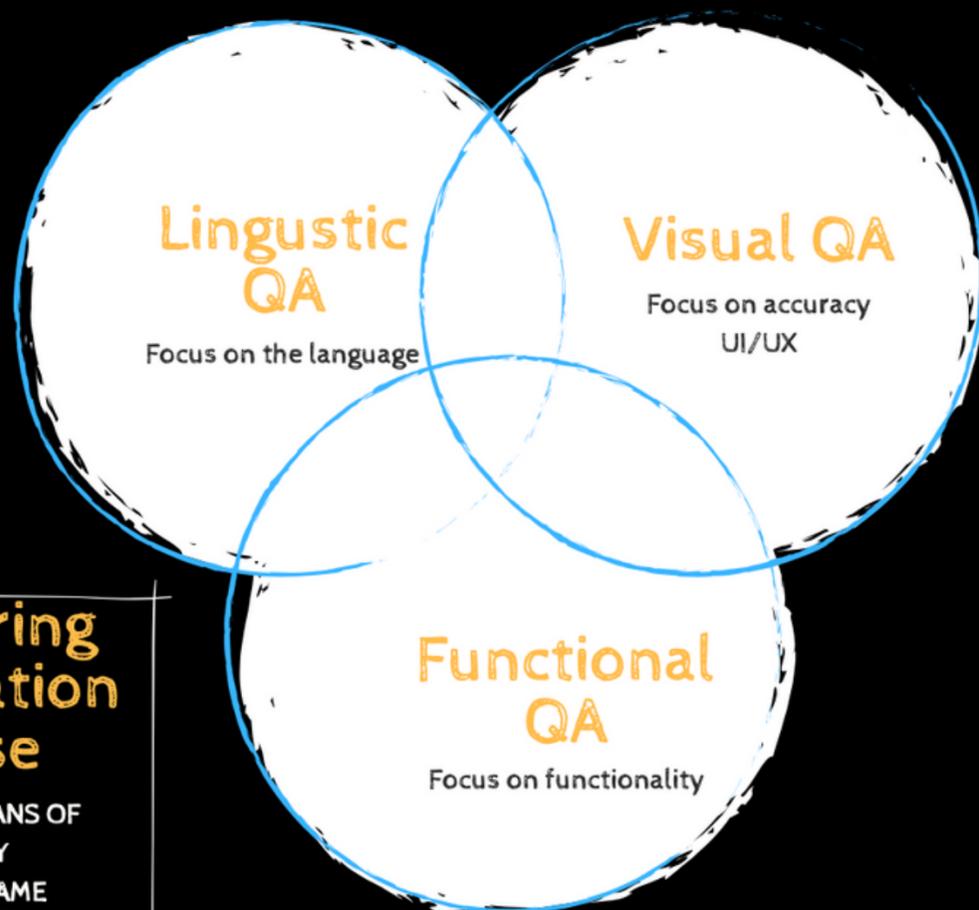
Share existing TMs (if any!)

Translation Memories benefits are undoubtful, they reduce the cost of the localization phase and they increase the accuracy and consistency during the localization phase. If you happen to have a TM from your game (maybe from the previous version of the game, maybe of the work performed by a different vendor last time) just share it. Because you know what they say "sharing is caring!!

Localization Quality Assurance

Don't let clumsy bugs eclipse all the hard work you invested developing your game

Linguistic quality assurance (LQA) is the phase where we test the quality of the translation and its integration into the game. And that's always a good idea as a game bug free will avoid negative reviews, and it'll produce happy gamers. Also prevention and inspection is a very good practice because finding and fixing bugs before the game is published is always better than urgently fixing them live.



QA during localization phase

THE GUARDIANS OF QUALITY IN YOUR GAME

1

Linguistic QA

In this phase, we ensure there are not "language mistakes" in our game. Quite often translators will localize content blindly and during this phase, linguistic testers will be the first ones to see all the assets coming together in our game. During this LQA check, we pay attention to the following aspects of the language

- Grammar
- Spelling
- Punctuation symbols
- Culturalization mistakes (i.e geography mistakes in a map)
- Inconsistent translations (although working with glossaries and TMs the number of inconsistent terms should be close to zero, it's a best practice check consistency of the terms across the game)

2

Visual QA

A great game deserves a great UI/UX design, during visual QA your QA team will ensure that all elements of the game look nice!

During visual QA phase typically we pay attention to the following elements:

- Font issues (truncated/missing characters)
- Truncated texts
- Untranslated content
- UX/UI issues
- Graphics misplaced

3

Functional QA

Functional QA usually goes hand in hand with LQA/Visual QA. But here the testers focus more on aspects not necessarily related to the language or the design of the UI/UX. Game testing is an important part of a game development process. This is the final component that analyses whether your game is ready for launch or not. Such assistance gives the development process a critical eye to focus on constant explorations like inconsistencies or any misc error. There are different platforms we might need to cover here, basically as many as devices we are supporting.

This will include testing on Android devices, iOS, PlayStation, Xbox, Nintendo, PC, web browsers ... and it'll require to test with different hardware, so be prepared to create a matrix and track the results of all the test in those platforms.

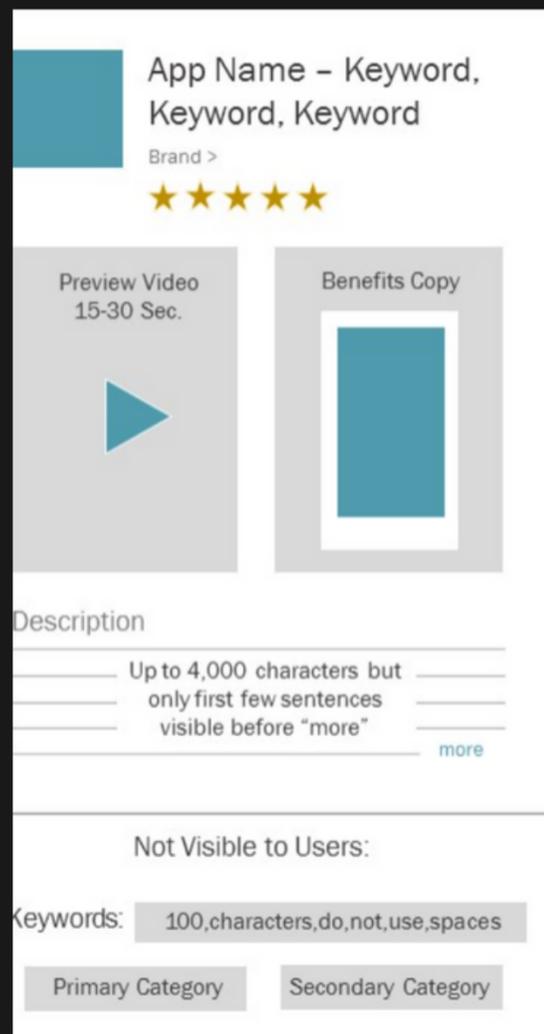
During FQA we typically test:

- Compatibility
- Performance
- AI behavior
- AudioText/subtitles

Prepare your game for app store submission

Grow your business in 155 countries and more than 40 languages

The app store for Android and iOS gives a great opportunity for publishers to distribute games easier than never before. The build submission process has been simplified, still, there are a number of different tasks we need to execute as explained alongside



The screenshot shows a form for app store submission. At the top, there is a field for 'App Name - Keyword, Keyword, Keyword' with a 'Brand >' link and a five-star rating. Below this are two sections: 'Preview Video 15-30 Sec.' with a play button icon, and 'Benefits Copy' with a placeholder image. The 'Description' section has a character count: 'Up to 4,000 characters but only first few sentences visible before "more"'. Below the description is a 'Not Visible to Users:' section with a 'Keywords:' field containing '100,characters,do,not,use,spaces' and two category selection buttons: 'Primary Category' and 'Secondary Category'.

Credit to briggsby.com

1

App Store Description

There are thousands of games available out there, for this reason, it'll be crucial to spend time thinking about how to craft a great app description so our game can shine in those crowded app stores!

Some ideas to consider to help our game to be noticed by potential games are:

- The first 1-3 sentences of your game description must describe the main concept of your game. Keep in mind in the store description there's a character limitation. So we will have to get to the point in this summary description (4000 characters)-
- If the game won any prize or there's something special and unique with your game it'll be a good idea to mention special achievements. in this section
- For future updates of the game remember to talk about 'What's new?' Inform gamers about bug fixes, new game modes, new boosters or simply the addition of new features.

2

Game Title

You want your players to find your game through the search on the App Store and Google Play.

The only way to make this possible is by choosing the right name for your game. Please ensure you run a name sense check to ensure the name of your game does not sound funny/offensive in different markets. Because sometimes, when choosing a name, things might go wrong.

Check out here some nightmare stories related to naming...

3

Game Logo/Icon

A beautiful, cool and recognizable game icon must be a critical part of your App Store Optimization strategy. Having a great game icon that stands out doesn't mean automatically you'll get tons of download. It does not mean that your game is great neither, but it sure will help get potential players to explore your game in more depth.

3

Localize keywords/ASO

Keywords are essential to allow a gamer to find a game. There are thousands of puzzle games or shooters, so how do we stand out from competitors? Keywords are our allies in the crowded ocean of games store ... With the keywords, we are saying to the iOS/Android algorithm what our game is about and in which type of game search should be listed. Check out this article I wrote a while ago to know more about how to craft the perfect keywords so our game does not go unnoticed.

4

Screenshots

The first screenshot is the most important. It describes how our game looks like. Also since it will be visible in the Store search results is crucial to choose the best one there. You can create up to five screenshots for your game. Aim to high-quality screenshots to increase the chances our game might be downloaded!

5

Game preview

Game preview videos appear in the first "slot" of the screenshot section of the app listing and App Store search results. Your preview should be between 15 and 30 seconds long. You can add a limited amount of text and graphic overlays to the video and include audio (music is recommended)

6

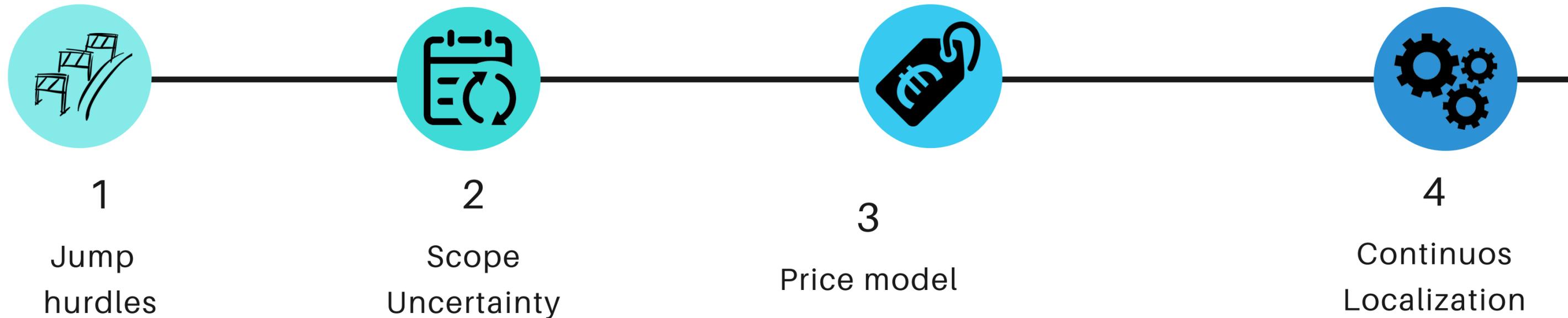
Games for Console

The process of submitting our games to traditional platforms such as PS4, Xbox or Nintendo Switch is totally different to the process we need to follow to submit builds for iOS and Android. I encourage you to read over the following links to have a better understanding of the requirement form Sony, Microsoft and Nintendo

- Microsoft
- PlayStation
- Nintendo

Implement Continuous Delivery into your Game Localization Workflow

When it comes to localizing “traditional console/PC” games – when the content is finalized and the game is launched, usually it requires no further updates (or better said minor updates at large intervals) . But this is different when it comes to mobile games. Mobile games might have new content every day! (i.e LiveOps) or it might be just a new set of levels every 2 weeks. This business model requires a total different localization strategy , some best practices and some thinking about potential pain points such as our relationship with our vendor and the price model



Think how to overcome the two biggest hurdles in game continuous localization. Scope Uncertainty, Price Model and also reflect on your current workflow

The amount of content can change daily with two major drawbacks – on the client-side we can easily lose our control of the budget and on the vendor side ... how do you guarantee to your client that the translators are available when they need it to localize those 80 words in 22 languages in 1 day? The role of the localization manager will be crucial here ensuring the scope is not an unpredictable black box

During many years the Localization industry was driven by price per word and PMs fee, which might have a sense when you need to translate a big volume of words in a given time. But nowadays a minimum fee per word might be an obsolete model. Obviously, LSPs need to make money for their translation efforts, but the model in place cannot be the same in a continuous localization model than in a traditional localization context. More about this dilemma in the industry can be read in this article I wrote in a previous post

Without a doubt, an optimal process is essential in any localization project, but in the case of continuous localization, it is absolutely essential to have a well-integrated workflow and with the least possible number of friction points. Look at your localization process as a flow of content and identify and remove as many obstacles as you can before deploying it into production. Once you have eliminated all the friction in the process, make sure that the localized content is flowing to the relevant stakeholders. A good CMS/TMS will be our best friend in this quest. Check out one of the most popular articles in my blog here where I describe which approach we might take to bring our continuous localization efforts to the next level!

References

The game localization process is complex and it is desirable to familiarize yourself with the different concepts and best practices explained in this pdf. During the creation of this pdf, I have consulted different reference material that I leave below so that you can go deeper into the topics presented in the above pages

1

Understand the markets you want to enter

Which Markets Should You Localize For First? Transifex
What Languages to Localize Your Game Into? - Andovar Game Localization
What Languages To Translate Your Game Into In 2020 (Trends & Insights)

2

Internationalization - make the code game friendly -

Internationalization of video games - Nimzdit
Video Game Internationalization: Best Practices for Localization Friendly Architecture
What is Internationalization?- GALA
Internationalization & Localization- UX Knowledge base
Game Localization and Internationalization Checklist

Best Practices for Game Localization - IGDA

3

Create the perfect Localization Kit

How to Prepare Your Game for Localization
Translator's Style Guide - Andovar
What Needs to be Done to Prepare a Game for Localization?
The Perfect Lockit

4

LQA -Quality Matters -

LQA: What Is Game Localization Testing And How To Do It Right - Localize Direct
6 REASONS WHY LOCALIZATION QA + TESTING IS SO IMPORTANT - welocalize
Localization Quality Assurance Testing: Why and How? -Ulatus

5

Prepare your game for app store submission

Tips on How to Write App Descriptions That Sell Your Product
How to Optimize Your App for the App Store
Localization Quality Assurance Testing: Why and How? -Ulatus

6

Implement Continuous Delivery into your Game Localization Workflow

9 Strategies from Cisco's Continuous Localization Expert - OneSky
CONTINUOUS LOCALIZATION -Nimzdi