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You have published your first game. It's a great success, and the online community is crazy about your game. The problem is that it is only available in English.

To be able to market your game in a different language, you need to localize it. This means making sure that gamers in the targeted market feel that your game was made for them. Translation is perhaps the single most important element in this process, but localizing a game goes well beyond translation: it is also about adapting characters so that people can relate to them, using music and content all customized for the market you are targeting.

¹ Mogi International Group is a memoQ user. "Interview with a Mogi localization agent".

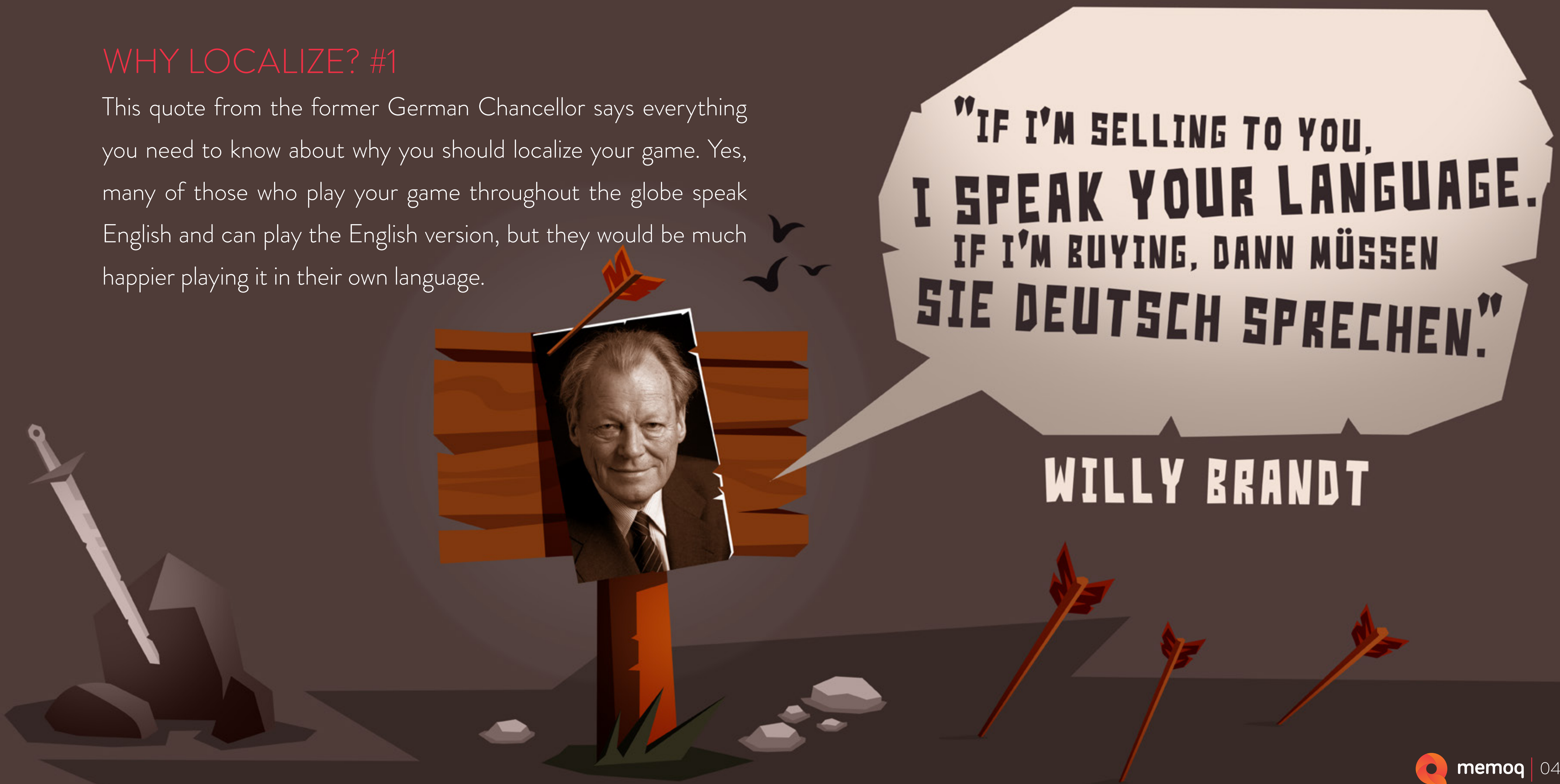
URL: www.mogi-translations.com/interview-with-a-mogi-localization-agent/

**MARION HERNANDEZ,
A LOCALIZATION AGENT FROM MOGI GROUP INTERNATIONAL¹, SAYS:
"VIDEO GAME LOCALIZATION ALLIES A BIT OF
EVERYTHING: LITERARY, AUDIO-VISUAL, TECHNICAL,
MARKETING, DIDACTIC, ETC. IT IS DIFFERENT FROM
TRADITIONAL FORMS OF TRANSLATION BECAUSE
THE TEXT IS NON-LINEAR DUE TO THE INTERACTIVE
DIMENSION OF THE PRODUCT."**



WHY LOCALIZE? #1

This quote from the former German Chancellor says everything you need to know about why you should localize your game. Yes, many of those who play your game throughout the globe speak English and can play the English version, but they would be much happier playing it in their own language.



**"IF I'M SELLING TO YOU,
I SPEAK YOUR LANGUAGE.
IF I'M BUYING, DANN MÜSSEN
SIE DEUTSCH SPRECHEN."**

WILLY BRANDT

WHY LOCALIZE? #2

Localization can be your best ally when trying to lengthen the revenue cycle of your games. Imagine 2 years ago you released a game to the English-speaking world that became widely popular. However, the user adoption for this game is now dropping and so are your game-related revenues. Back then, your company did not have the structure or capacity to venture into localization, but it certainly has now. Localizing your game and releasing it, for instance, in the Chinese or Russian market can be the best way of making your games profitable for a longer period.



THE MARKET IS GROWING FAST

According to NewZoo, the global games market is \$108.9 billion. This market is dominated by the Asia Pacific region which accounts for \$51.20 billion. The rest of the market is made of North America – \$27.00 billion; Europe, Middle East & Africa – \$26.80 billion; and Latin America – \$4.40 billion.²

GLOBAL GAMES MARKET



In 2016, the entertainment industry reached a value of \$2 trillion dollars (PwC). They highlight that video games were one of the fastest growing sectors with 6.5% growth and that it will end up being a larger sector than consumer magazines in 2017.

In gamesindustry.biz, Lara Noujaim, Director of Publishing at Game Cooks, argued that the MEA (Middle East and Africa) region “enjoys a hefty population of online gamers - 587 million in 2017 according to Newzoo - and these gamers’ favorite pastime is starting to have an impact on the region’s share of gaming profit.” According to the Digital Games Research Centre (DIREC), 23 million of Iran’s 79 million people currently play games

² The global games market will reach \$108.9 billion in 2017 with mobile taking 42%. NewZoo. April 2017. URL: newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-with-mobile-taking-42/

Maybe it would be worth translating my game into other languages, so that non-English speakers can play it as well. That would mean more fun and more cash. But how do I get started?

**LET'S GO
GLOBAL**



When you first venture into the land of game localization, you need two things: a weapon, aka translation software; and a companion, aka translator or translation vendor.

HERE YOU WILL FIND EVERYTHING YOU NEED TO KNOW ABOUT THE WEAPON.

Game companies all around the world use translation management systems to manage and execute localization processes. For those of you who are new to the concept, a translation management system is a platform that allows companies to centralize and automate the management of localization workflows involving multiple vendors and large volumes of linguistic assets.

For successful games localization, your translation management system needs to be able to do the following:

- REUSE NEW AND EXISTING TRANSLATIONS
- KEEP YOUR TERMINOLOGY CONSISTENT
- AVOID EMBARRASSING TRANSLATION ERRORS
- DEAL WITH THE FILE FORMATS YOU USE

REUSE NEW AND EXISTING
TRANSLATIONS

TRANSLATION MEMORY,
LIVEDOCS

KEEP YOUR TERMINOLOGY
CONSISTENT

TERMBASE

AVOID EMBARRASSING
TRANSLATION ERRORS

QUALITY ASSURANCE

DEAL WITH THE FILE
FORMATS YOU USE

FILTERS

REUSING NEW AND EXISTING TRANSLATIONS

There are distinct functions in a translation software that can help you leverage new or existing translations, so you do not have to translate the same things in your game time and time again.

THE TRANSLATION MEMORY

Translation memories constitute the core of translation technology, helping speed up the localization process while increasing translation quality. The translation memory, unlike machine translation, is an engine that enables the possibility to reuse human-made translations and handle language repetition throughout your localization project with ease.

LIVEDOCS

LiveDocs is an alternative to translation memories that keeps your translation content structured and organized. It allows for the re-use of previously translated material based on the entire corpus rather than segments. If you want to check the context of a past translation, you can jump directly to the full document from the translation editor. Translation memories have one big advantage: they only store every translation once. If your content has many repetitions, LiveDocs can become cumbersome.

WHY NOT JUST GO WITH MACHINE TRANSLATION?

People use machine translation from Google and Microsoft for a wide number of situations and it seems to work well, so why not use it for games localization as well? You can certainly take advantage of machine translation, but you need to be careful not to jeopardize the overall quality of your translation project.

HOW DOES MACHINE TRANSLATION WORK?

Machine translation works by large amounts of source and target language content being matched by a machine translation engine. There are different types of machine translation engines: rule-based, statistical and neural. Recently, there has been a lot of interest in neural machine translation engines. The reason for the excitement is that neural machine translation is providing better results with language pairs where there is less data and the output reads much better. The fact that the output flows in a more natural way is one of the reasons this is interesting for games localization.

CONTENT PRIVACY

If your project has confidential material, you might want to avoid using some of the very popular engines. These technologies split each sentence into smaller segments and it could be difficult, if not impossible, to recreate the original. However, it may still be possible for someone to find this information online.

INVOLVING HUMAN TRANSLATORS AND REVIEWERS IS ALWAYS NECESSARY

All machine translation engines make mistakes. The translation you get from the machine translation engine might be literally correct, but the tone, wording or register can be incorrect. If you just use machine translation without the supervision from translators or reviewers, you might get the phrase “Yo Dude!” being translated as if it were “Hello Sir”. Clearly, you want to avoid this.

MACHINE TRANSLATION IN MEMOQ

memoQ has integrations with 13 of the most popular machine translation engines. When translating, translators can see suggestions coming from the machine translation engines and use them if they feel they are applicable. This provides a good way to benefit from machine translation as the translator will ensure that the content of the localized version has the same style and feel as the original. As your expertise with games localization grows, it is worth your while to have a dedicated machine translation engine. When venturing into machine translation, you need to know that choosing an engine is not a simple task. You should think of different factors such as language pairs, content subject, among others.



KEEPING YOUR TERMINOLOGY CONSISTENT!

Proper terminology is crucial to translation quality, whether you are working with marketing, legal, finance texts or... games! Poor translations can affect your game's user acceptance. The right word needs to be in the right place and used consistently.

The Term Base: This is a database that allows you to store important words and expressions and their equivalents. It helps translators adhere to the terminology used in your game or at least stay consistent with themselves. In fact, it is indispensable for consistency if different people are translating the same large text simultaneously, collaborating online from various locations. A term base is often used interchangeably with a glossary, but they are not quite the same. A glossary is usually just a word list in two languages, while a term base can also include structure and metadata.



As you can see, whoever localized this text was trying a bit too hard to make something digestible for English audiences. Those are not really donuts in Brock's hand. The dialogue could have simply referred to them as "rice balls".

AVOID EMBARRASSING TRANSLATION ERRORS

When exploring new markets, you want to make sure your company meets the quality expectations of your new target audience in every possible way. That is why localization projects need to go through quality assurance to avoid mistakes that can cause embarrassment to your brand. Gaming localization projects are no exception to this rule.

In memoQ, quality assurance is made up of multiple tools that check for potential mistakes. While automatic quality assurance is meant to assist translators during translation, linguistic quality assurance is there to support human reviewers and make it easy to provide structured feedback to translators.



AUTOMATED QUALITY ASSURANCE

The whole purpose of quality assurance is to enable you to deliver good translations. In memoQ, quality assurance is made up of multiple tools that check for potential mistakes.

memoQ has a powerful quality assurance functionality. Project managers can use the quality assurance module to run a series of tests on the translations. The points below are the categories that automated quality assurance can check for easily: missing segments, forbidden terms, and consistent translation of same sentences.

The quality assurance functionality also offers an easy and intuitive way to find and fix the errors or ignore ones that are irrelevant.



LINGUISTIC QUALITY ASSURANCE

Quality assurance is not only about automated checks, it is also about human reviewers checking for fluency, tone and other components in language that machines are not able to detect.

Many companies put a lot of effort into managing quality properly, but encounter difficulties when wanting to demonstrate this. memoQ can easily detect some errors in documents, but reviewers can also use linguistic quality assurance models to give much more meaningful feedback about a translation.

A quality assurance model is more or less a form that a reviewer fills in when reporting an error. memoQ allows you to use popular standard models or set up your own.

- ✓ The report you get from the linguistic quality assurance model can be shared among project managers
- ✓ and all projects can be tested against it. It is certainly an effective tool to manage quality and provide transparency on how you are handling quality assurance on your projects.



BENEFITS

While high quality can be very intangible and difficult to define, people seem to spot low quality more easily. Improving the quality of a translation helps you reach your target audiences and create engagement.



Other benefits of memoQ's quality assurance functionality include:

- A large proportion of potential translation errors are spotted automatically by the quality assurance module, including mismatching numbers that can easily lead to big problems in certain industries.
- memoQ provides automatic checks to prevent easy errors. memoQ identifies if a term has not been used the right way, if a forbidden term has been used, if the numbers are not the same in the target text as in the source text, if the number format isn't correct, if an identical sentence has been translated differently two times, and so on. These reports can also be saved.
- memoQ allows you to implement industry standard quality assurance models.

DEALING WITH THE FILE FORMATS YOU USE

It is important that your translation system of choice supports the file formats you use. Many of the file formats used in game localization are XML, text-based or Excel. If your company uses multilingual Excel files, you need to make sure you have the best possible multilingual Excel filter at your fingertips.



THE MEMOQ MULTILINGUAL EXCEL FILE FILTER

Many game developers use Microsoft Excel for their translation work. The content is exported to an Excel sheet, translated, and the localized content is imported back.

Sounds simple enough but what happens when you want to localize a multilingual Excel file or when you only want to localize part of the Excel file?

This sounds a lot less simple than it did one moment ago, but memoQ can deal with the sort of issues you find in Excel files.

MULTILINGUAL EXCEL SHEETS

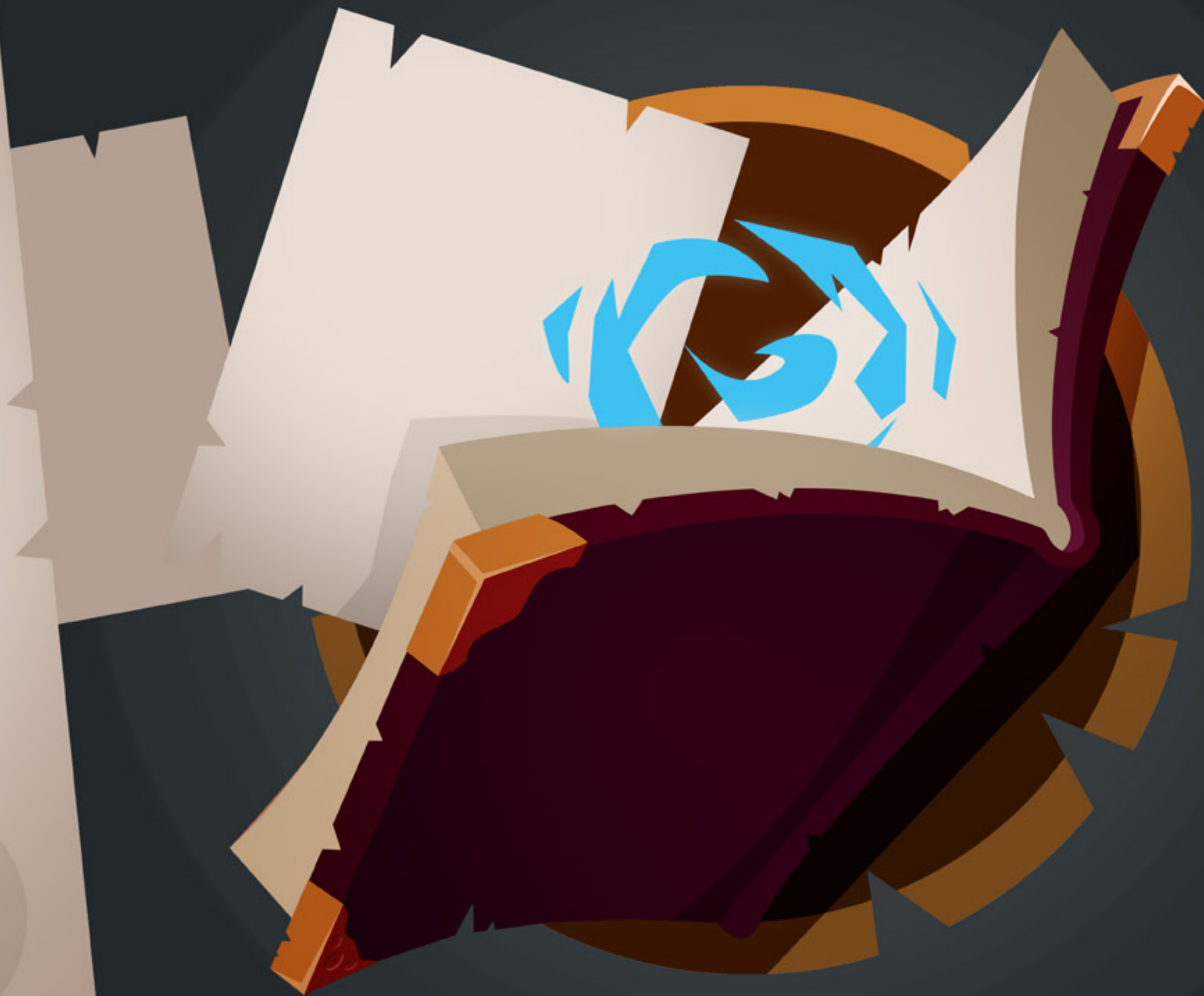
memoQ has a dedicated filter that allows you to easily work with multilingual Excel or CSV sheets. You can then specify which languages are in which columns. You can find more information [here](#).

EMBEDDED HTML IN EXCEL SHEETS

If you export HTML or other code so that a section of HTML will appear in a cell of the sheet, you can use cascading filters to deal with this. In the case of an Excel file with HTML content, you would choose the Excel filter plus an HTML filter.

SELECT CELLS FOR LOCALIZATION

If you wish to only localize some of the cells in the Excel sheet, you can also do this.



LEVEL 2

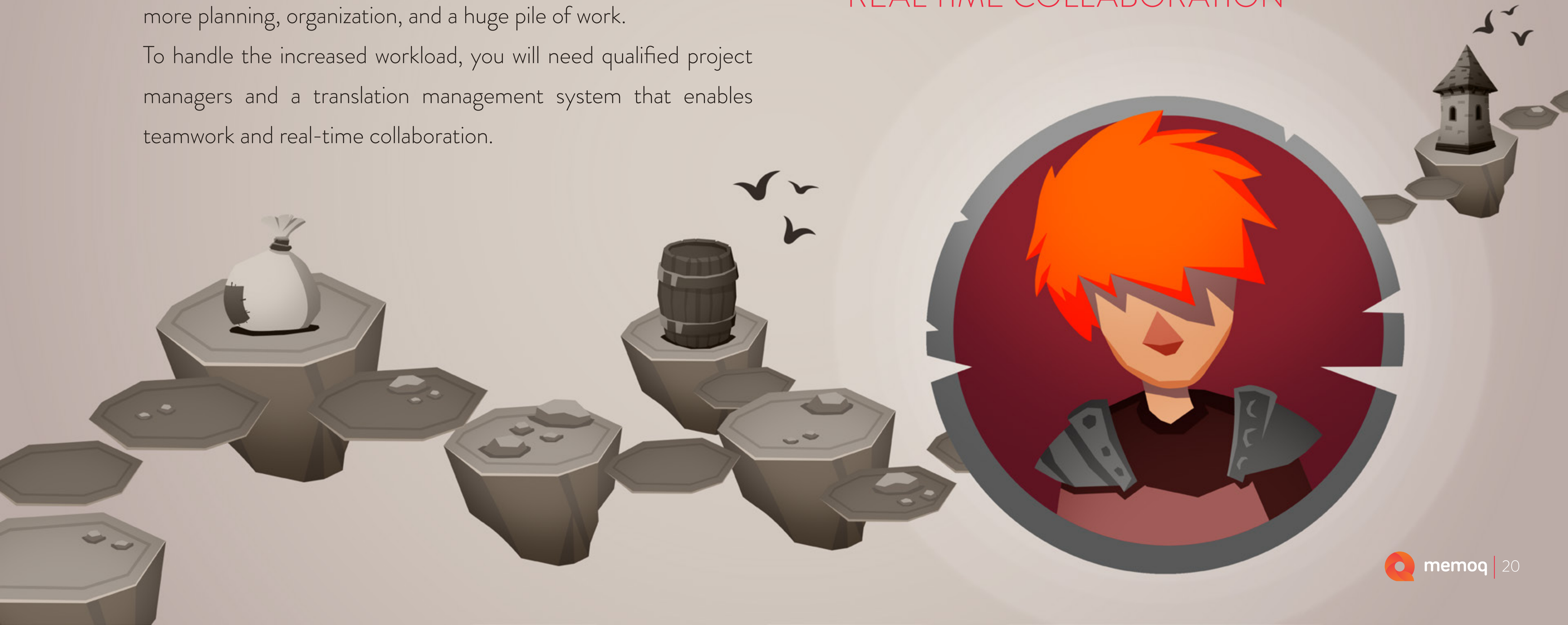
THE BRAINY CREATOR



Finally, you have published your game abroad. Good job! Now create more games and translate them into even more languages. It is not as easy as it sounds. More games and languages require more planning, organization, and a huge pile of work.

To handle the increased workload, you will need qualified project managers and a translation management system that enables teamwork and real-time collaboration.

- PLANNING LOCALIZATION
- PROJECT MANAGEMENT & REAL-TIME COLLABORATION



PLANNING LOCALIZATION: THE EARLIER THE BETTER

The pyramid shows the cost savings that planning and implementing localization early can bring about. When you execute your plan at the design stage, we have given this a cost value of 1. Doing this at the stage when you are developing the game costs 10 times more, and doing it at the localization stage costs 100 times more.

Let us now look at three crucial things that need to be done at the beginning:

1. Using Unicode
2. Separating code and content
3. Ensuring that your game can cope with longer strings



1. USING UNICODE

For a computer to process characters they must be given a number. Prior to the introduction of Unicode, characters would use a code page such as the ASCII text code page and the code page allocated a number to a specific character. There were huge problems with localization because the different locales used different code pages and changing the code page in an application was not a trivial matter. Unicode resolved all this by creating a single code page. It does not matter what sort of machine you are using, what the operating system is, or what the language is in the content. Unicode is a universal code page where the characters of almost every language in the world are in a single table.

The obvious question is: 'Why on earth would anyone not use

Unicode?' There is no simple answer to that. However, some applications are still built using code pages other than Unicode. This works fine when everyone speaks your language and the game is only going to be on one platform. This is certainly you want to avoid with your games. You definitely want to use Unicode.

If you use Unicode from the very beginning, it will cost you nothing extra. However, as soon as you have started developing in a code page other than Unicode, there will be a cost for porting your application to Unicode. As mentioned before, if you want your game to only have an English version, then there is not much to worry about. However, if you want more people to play it, using Unicode right from the start would be better.

2. SEPARATING CODE AND CONTENT

Hardcoding is a term used when a string or data is included in the source code of a program. This is not good if the game will only be used in one language. It becomes a nightmare when the game is localized. In the early days of software localization, a lot of time and money was spent fixing issues caused by hardcoded strings. Translators would sometimes have to translate directly in the code and sometimes did not understand what placeholders were doing. Sometimes these changes crashed the program or caused other bugs which were difficult to find.

The best approach is to split your code, content, and data from the beginning. There is also a lot to be gained from using an XML based format for your content from the beginning.



3. YOUR TEXT WILL GROW

You need to think what will happen to any text you are displaying when it is localized. If you use a lot of text which takes up a significant amount of screen space, you will have a problem when this is localized into a language such as German which on average is 20% longer than English text. You should also think about what happens to a screen when the text is right to left as in Arabic and Hebrew.

Everything is going well. Your first game has been translated. It has been very hectic but you got there. However, just when you thought everything was under control, there is an update and the developers and creators did not just create new parts of the game, but they also changed and updated some of the parts you had already translated. Using a translation memory is an effective way to only translate what is new in the updated version.



PROJECT MANAGEMENT & REAL- TIME COLLABORATION

CONNECT WITH YOUR TEAM MEMBERS!

Your next challenge is to get your team to work together effectively. You can do this by using more advanced functionalities in the translation management system.

- PROJECT MANAGEMENT
- REAL-TIME COLLABORATION
- COMMUNICATION

TEAM 01



PROJECT MANAGEMENT

Game Localization like any other complex task comprises many inter-related tasks. The project manager ensures the game gets localized by completing these tasks. A small project might have three or four files that need to be translated from the source language into a couple of other languages and then reviewed. The project manager is responsible for finding translators and reviewers, and ensuring the project gets delivered on time.



PROJECT MANAGEMENT DASHBOARD

A project management dashboard is a critical element to any localization process. With it, the project manager gets a better overview of their projects and can check a project's status in detail. In memoQ, for example, the project management dashboard offers an extensive search functionality and allows project managers to see project metadata in addition to the standard status information. The project management dashboard also offers the following functionalities:

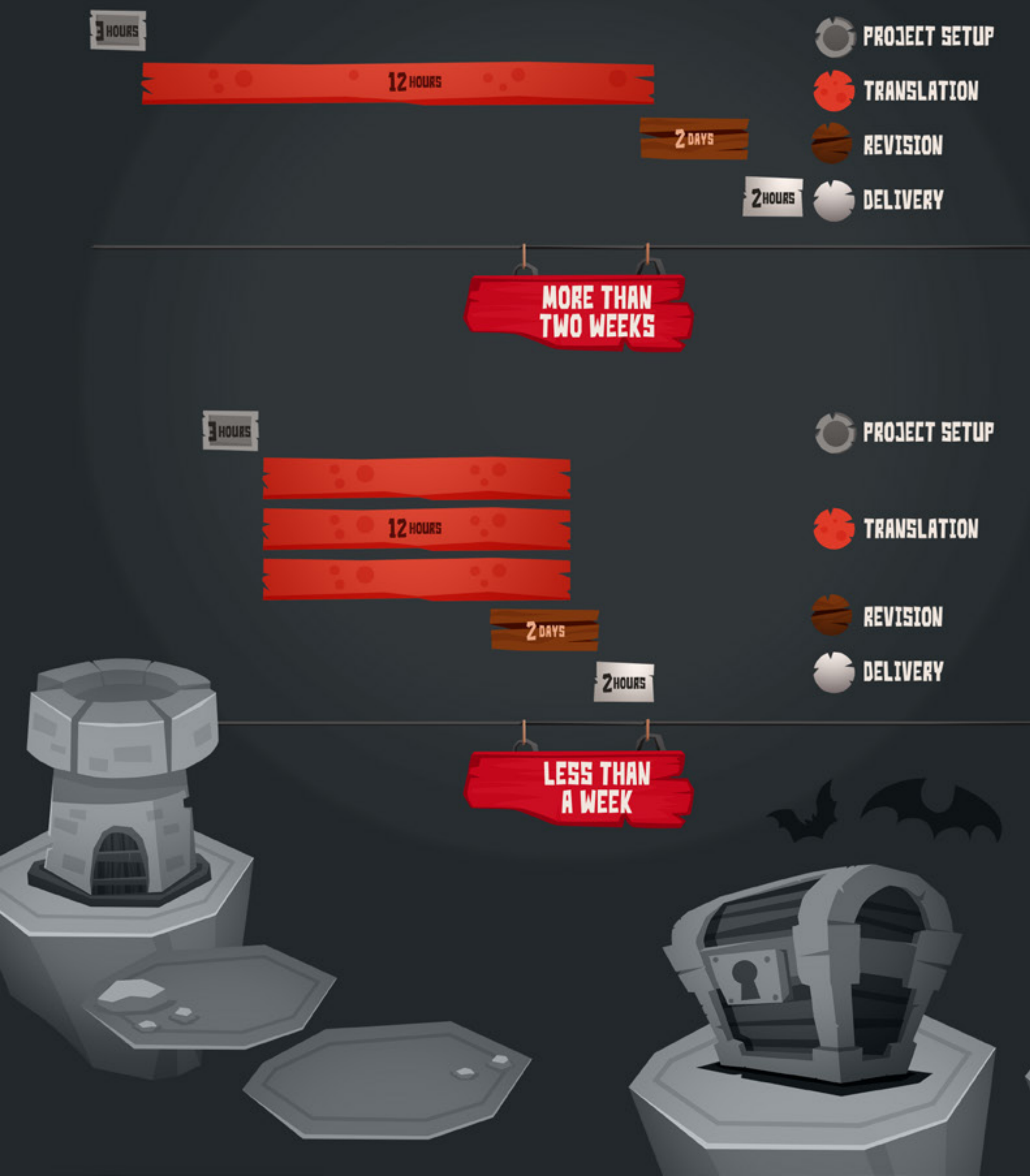
- **ALERTS** are warnings that something needs to be done or something is wrong in the project. For example, if there is a missed deadline, you get a warning.
- **REASSIGNING TRANSLATORS** - a project manager can reassign translators on any number of projects without even opening one project.

REAL-TIME COLLABORATION

Many projects demand the translation of thousands of words in just a couple of days. If your company needs to deal with large projects and tight deadlines, memoQ can help to speed up work by allowing multiple translators and reviewers to work on it simultaneously. Collaboration features include the possibility to share translation memories and term bases as well as discussion forums within each project.

The example below shows how you can save time with collaborative translation. This is for the translation of a single 29,000 word document followed by revision of the document.





A standard translation workflow, with just one translator doing all the work, would require as much as 12 days. That would then be followed by 2 days of revision. If we add project management tasks, this project will take almost 15 days to get delivered.

Instead, with memoQ, you can use collaborative translation and split the work between many translators. As they work, they synchronize their translation into a server-based project. This allows each translator to leverage from the translation memories they and other translators update in real-time. A collaborative workflow also allows reviewers to start working early on translations that have been completed, saving valuable time when dealing with tight deadlines. The project that would have taken 2 weeks to complete, can now be delivered in just 5 days.

COMMUNICATION

memoQ offers a transparent way to communicate with other team members using instant messaging (chat window) and discussions. memoQ's discussion feature replaces e-mail communication for query management. This way you can also build a knowledge base, another important resource that shortens the learning curve of translators.





L10N stands for localization, representing localization as “L” followed by 10 more letters, followed by “n”.

Now that you have got to grips with the increased workload, it would be great to introduce automation into your workflows. Your localization process continues to evolve and at this stage, dealing with large volumes of translation is not your only concern. You are now also launching your games into several markets at once, and this certainly adds complexity. Your localization project managers are great assets, but you would like to rely less on the individual skills of people to deliver work on time, maintain quality and increase control.

But there is more than that. Automating your game localization efforts also has financial benefits. It can help you avoid translation from becoming an increasing cost for your organization.

- **AUTOMATED WORKFLOWS FOR YOUR PROJECTS**
- **INTEGRATION WITH OTHER SYSTEMS**

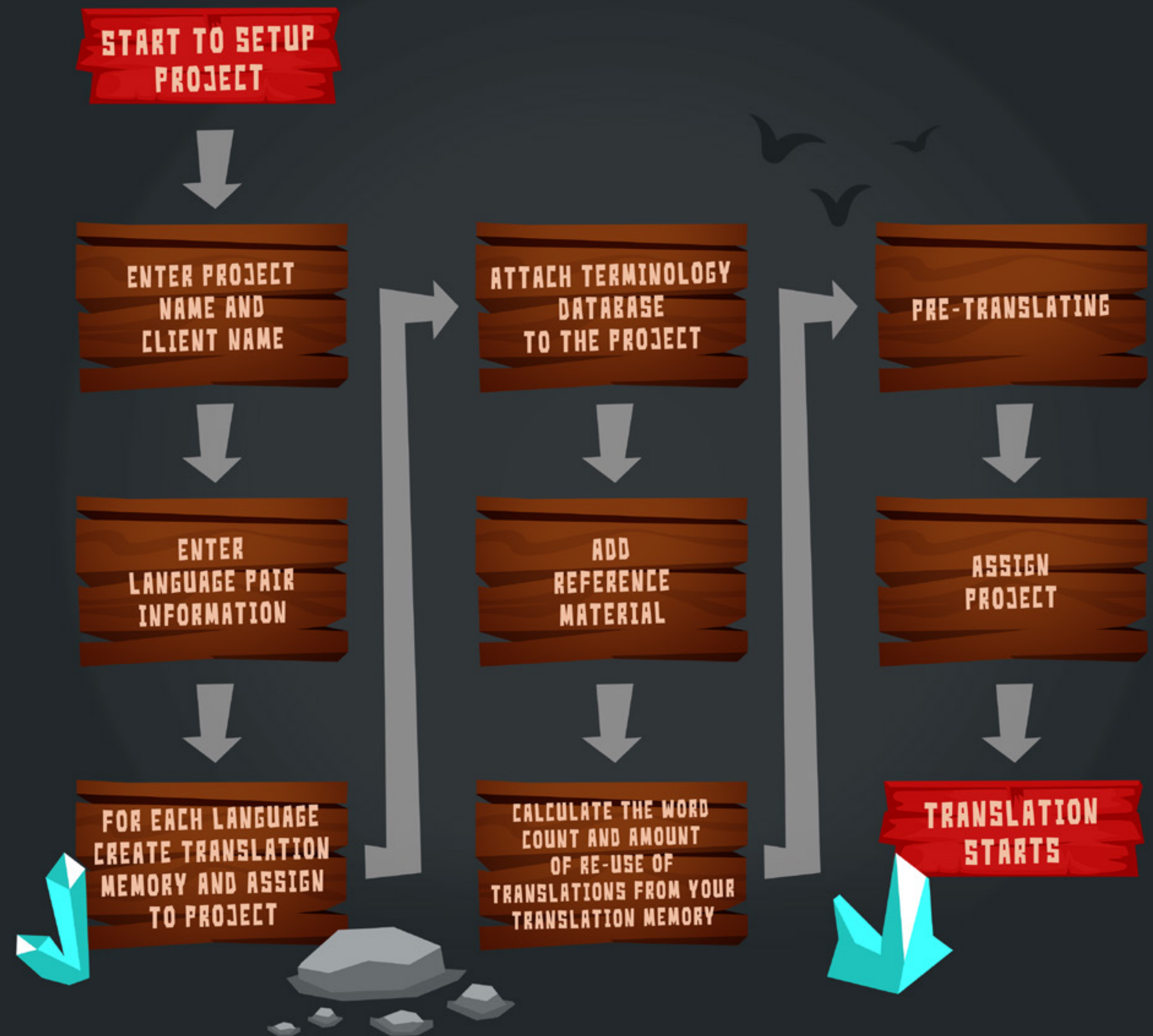


AUTOMATED WORKFLOWS FOR YOUR PROJECTS

The idea behind workflow automation in memoQ is a very simple desire to make the project manager more productive. Project templates is a functionality in memoQ that allows you to automate many steps within a project, from setup, work assignation, to quality control and delivery.

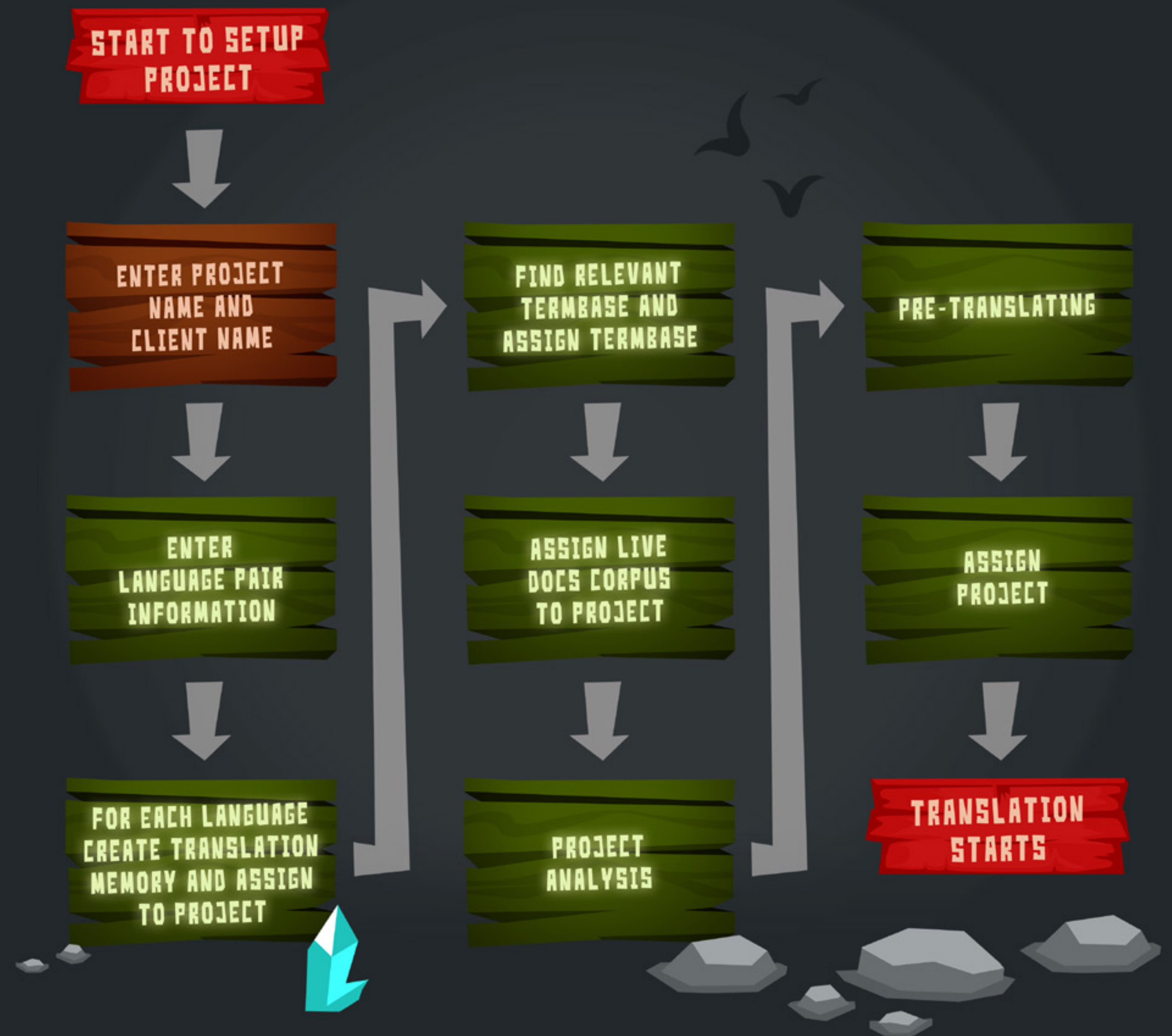
A number of memoQ customers have reported that the project template feature has reduced the amount of time it takes to set up a project from 30 minutes to 10 minutes.

The following shows a standard project setup workflow (without automation).



Project templates allow project managers to enter data they will use for one project and re-use it for projects with similar characteristics.

The data entered can be as simple or as sophisticated as you wish. For example, if you translate many projects from English into Japanese, you can create a template for that particular language pair. If you have customers with specific requirements, you could create a template for each of them. Using templates effectively can ensure for consistency and methodology to your projects.



AUTOMATED ACTIONS

Project templates are also able to carry out automated actions at particular stages (triggers) in the project's workflow and these actions will be executed at that point.

Here are some examples of actions that you can automate at different stages:

- At document import: use a specific file filter to handle tricky formats.
- After translators have completed their work: set the template to send these files to a reviewer.
- After translators delivered their work: run automated quality assurance checks, export quality assurance report and send it to the project manager.

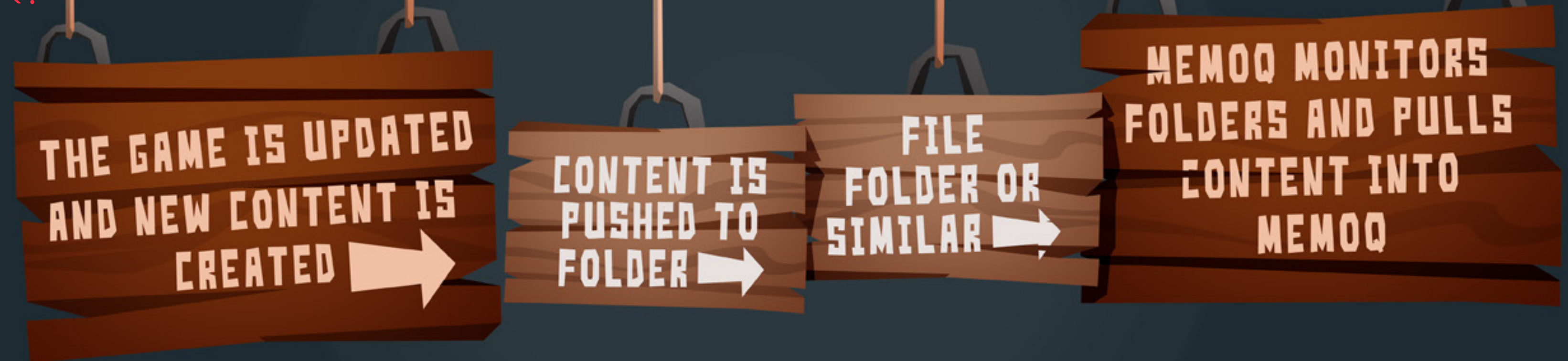
INTEGRATING MEMOQ WITH OTHER SYSTEMS

CONTENT CONNECTORS - AUTOMATIC TRANSLATION MANAGEMENT FOR EVER-CHANGING CONTENT

When you release a game update, you have to make changes not just in the original languages but across all languages. The source content is often stored in a content or file management system, and we use Connect Connectors to connect it to memoQ server. This technology automates content pickup and routing, removing the need for project management and allowing seamless processes.



HOW DOES IT WORK?



The technology behind Content Connectors is illustrated above. There is a new update to a game. The content is pushed to a file folder, FTP site or similar. memoQ Content Connectors monitor this folder. When a new or modified file is detected, memoQ then automatically puts this into the relevant translation project and the localization phase of the update starts very soon after new content is created.

Other companies also use Content Connectors to manage the translation of their content. For example, most of our own localizable content is also localized with Content Connectors, and this saves us a lot of manual work.

BENEFITS

- Automated ways to get new or changed content imported for translation
- Automated preparation and calculation of word count
- Automated assignment of translator or reviewer based on your requirements
- Automated delivery of files

OTHER INTEGRATIONS WITH MEMOQ

In addition to Content Connectors there are connectors which connect memoQ with Wordpress, Rigi.io, as well as translation business management tools such as Plunet, XTRF and Flowfit. It is also possible to use the API (Application Programming Interface) to connect other systems to memoQ.





CONGRATS!

YOU WIN!



—

Promising ideas



memoq

WANT TO LEARN MORE?

Now you are the L10nheart of game localization, but you can still learn more and improve your skills. The good news is that many others within games localization are very happy to help you succeed. Interestingly, you may get some of the most useful help from your competitors.

HERE ARE SOME SUGGESTIONS

- The **IGDA** (International Games Developers Association) has an **SIG** (Special Interest Group) devoted to localization. You can find out about this [here](#). It is well worth joining this organization.
- The **IGDA** also has a **FACEBOOK GROUP**. Again, well worth joining.
- Another group on Facebook is **INDIE GAMES LOCALIZATION**.
- **LOCWORLD** is one of the major conferences for the translation and localization industry. They usually have a games localization roundtable on the day before their conferences in the US and Europe. You can find more information by going to the pre-conference program for the event you plan to attend. See more [here](#).
- One of the best conferences for memoQ users is of course, **MEMOQFEST**. This is a great place to meet other gaming companies and other enterprises with localization experience.

THE UNITY-MEMOQ PLUGIN: LOCLINK

Native Prime (a multilingual game localization company) has created a plugin called Loclink that makes localization between Unity and memoQ easy and simple. The plugin automates the sending and receiving of files between Unity and memoQ. You can see how this plugin works in this [2-minute video](#).

COMPANY STATEMENT

memoQ Translation Technologies is the developer of memoQ, the world's most advanced translation environment.

Used by hundreds of enterprises and translation companies all over the world, memoQ is the #1 solution to automate and optimize the entire localization process, and manage translation and localization projects in a time- and cost-efficient manner.

A lot of gaming companies have already strengthened their global presence by using memoQ for their localization processes. You may check out their list by clicking [here](#).

CONTACT US

Are you new to games localization, or have a well-oiled process already?
Give a chance to our games localization professionals to establish your
workflow, or optimize the existing one even further.

Get in touch with us at games@memoq.com