

Speeding-up Game Localization with tailored Machine Translation

The case of MGI Group



Key facts and figures

- With roots dating back to gamigo's founding in 2000, **the publicly traded company has grown rapidly** and acquired more than 30 companies and assets in the games and media sectors
- Main operational presence in **Europe and North America**
- Diversified Portfolio of **10+ Top Massive Multiplayer Online Games and 5,000+ Casual Games**
- More than **100 million registered gamers**

Challenges

As a publisher of free-to-play Massive Multiplayer Online games, MGI Group was facing **regular content updates that result in a constant high work load for localization teams**. Some games receive content updates that equals the word count of the "Lord of the Rings" trilogy over the course of one year (more than 1000 pages).

The difficulty MGI Group was facing with human translations was time constraints. Games must be translated from Chinese into English and then into French, German and Spanish, in a very short time frame, making on-time delivery a real challenge.

Solutions

SYSTRAN has used MGI Group's well structured data stored in their CAT tool (MemoQ) to train **a specialized translation engine dedicated to their own game localization needs.**

MGI Group uses **SYSTRAN Pure Neural Server with a tailored MT engine** with a seamless integration in their **CAT Tool**, thanks to SYSTRAN connector with advanced features, including Translation Memories, Tag Management, User Dictionaries, Glossaries, etc...

The challenges of using Machine Translation for Gaming

In an attempt to optimize cost/performance ratio, MGI Group aimed to increase efficiency by adding Machine Translation (MT) to their localization workflow. First, **generic MT** was used to translate from Chinese to English and the results of ten lead to a higher workload instead of a reduction.

One of the major challenges with MT were the machine-readable instructions in the text that need to stay exactly as they are in structure and placement, and should not be translated.

However, with MT, some instructions like e.g. [CURRENCY] have been translated. Additionally, the machine-readable instructions had been placed randomly and needed manual adaptation.

Improving the quality of Machine Translation for in-game content

Video games depend on the subtleties of dialogue to build an immersive world. Leveraging **SYSTRAN's Neural Machine Translation (NMT) technology combined with MGI Group structured translation data** made it possible to build tailored Machine Translation to provide rapid localization of dialogues and text contributing to the game experience.

To **build an engine that is fully specialized to in-game content**, MGI Group's **Translation Memories & Glossaries were used** to train machine learning algorithms. SYSTRAN Neural Machine Translation engines were able to recognize tags embedded in the text to improve the translation, while simultaneously leaving them untouched so they are present to guide the localized in-game experience.

On-going translation quality improvement was possible with the SYSTRAN User dictionary feature for real-time translation adaptation, while periodic engine re-training cycles are planned to improve performance on the long run.

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" SYSTRAN Machine Translation enabled us to gain more independence in our localization process, with a successful shift from human translation to post-edition. We're now achieving delivery twice as fast, with a 15% decrease in expenses. "

Henrik Schröder

Head of Localization & Product Support gamigo
MGI Group

The benefits of choosing SYSTRAN

- Comparing with generic MT engines, specialized MT brought a **200% improvement in terms of BLEU** (bilingual valuation under study) **score** on average.
- While increasing through put with quicker turn around, **IP privacy is ensured with a dedicated & secured deployment.**
- Specialized MT quality is good, yet not as good as a human translation, as it requires additional proof-reading and post-editing before publication. However, **MT is delivered nearly instantly, resulting in more time spent on game quality assurance** with an overall stable quality, while significantly reducing the time needed for delivery.
- A major advantage is the **ability to provide QA teams with preliminary translations** for newly arrived patches, enabling them to understand the content earlier in the process.
- MGI Group decided to use SYSTRAN MT to translate from English into French, German and Spanish, moving away from human translation to post-editing. The result is **delivering twice as fast with, a 15% decrease in expenses.**

About MGI Group

Media and Games Invest SE is a digital integrated games and media company with its main operational presence in Europe and North America. The company combines organic growth with value-generating synergetic acquisitions, demonstrating continuous strong, profitable growth with a revenue CAGR of 45% over the last 6 years. Next to strong organic growth, the MGI Group has successfully acquired more than 30 companies and assets in the past 6 years. The acquired assets and companies are integrated and cloud technology is actively used to achieve efficiency gains and competitive advantages.

For more information, visit www.mgi-se.com

About SYSTRAN

With more than 50 years of experience in translation technologies, SYSTRAN has pioneered the greatest innovations in the field, including the first web-based translation portals and the first neural translation engines combining artificial intelligence and neural networks for businesses and public organizations.

SYSTRAN provides business users with advanced and secure automated translation solutions in various areas such as: global collaboration, multilingual content production, customer support, electronic investigation, Big Data analysis, e-commerce, etc. SYSTRAN offers a tailor-made solution with an open and scalable architecture that enables seamless integration into existing third-party applications and IT infrastructures.

For more information, visit www.systransoft.com