

State of Translation Report

Contents

03 Overview

04 Translation market at a glance

- 05 Median annual translation volume by company from 2021 to 2024
- 07 Number of target locales per company in 2024
- 08 Top 25 target locales in 2024 with position compared to 2023

09 The rise of generative AI

- 10 How familiar are you with the capabilities of LLMs?
- 10 Have you received adequate training and support in using AI tools for translation?
- 11 Have you researched or experimented with LLMs in your translation work?
- 12 In your opinion, what are the primary benefits of using AI tools in translation?
- 13 What challenges or concerns do you have regarding using AI in translation?
- 14 LLM adoption by token usage

16 The changing translation mix

- 18 Average translation mix in 2021 vs. 2024
- 19 Growth of AI-powered human translation
- 20 Top 5 engines by translation volume in 2024
- 22 BLEU and TER results for MT vs. GPT4
- 23 Customers using custom engines

24 The push for translation efficiency

- 25 Distribution of customer automation percentage
- 26 Top 10 connectors
- 27 Average translation memory leverage
- 28 Impact of LLM fuzzy match repair
- 29 Glossaries per company

30 Conclusion

Hundreds of global brands rely on Smartling to help them translate their content. As a result, we have a front-row seat to the rapid transformation the translation industry is currently undergoing.

Smartling's powerful AI-driven translation solutions are used to translate billions of words per year across over 450 language pairs by hundreds of language service providers (LSPs). In addition, our Language Services team provides expert project management support and connects businesses and government organizations with professional translators around the globe.

The content we translate runs the gamut and includes everything from marketing content for pharmaceutical and healthcare companies, technical support material for software companies, multimedia, and translations for governmental agencies and organizations.

With this report, we set out to identify trends that span a variety of use cases and offer insights into what's currently happening in the translation industry — and where the industry is heading in the coming years. Read on not only to learn more about overall market trends but also to compare your current translation program with that of peers in the market.

Let's dive in. 

This report will discuss:

- How companies are translating 30% more this year and what they're doing with the extra volume
- The rising role of generative AI and why 75% of companies plan to use it next year
- How the optimal translation mix is evolving and why machine translation now is used for 40% of content
- How companies are finding efficiencies throughout the translation process

Translation market at a glance

Annual translation volume

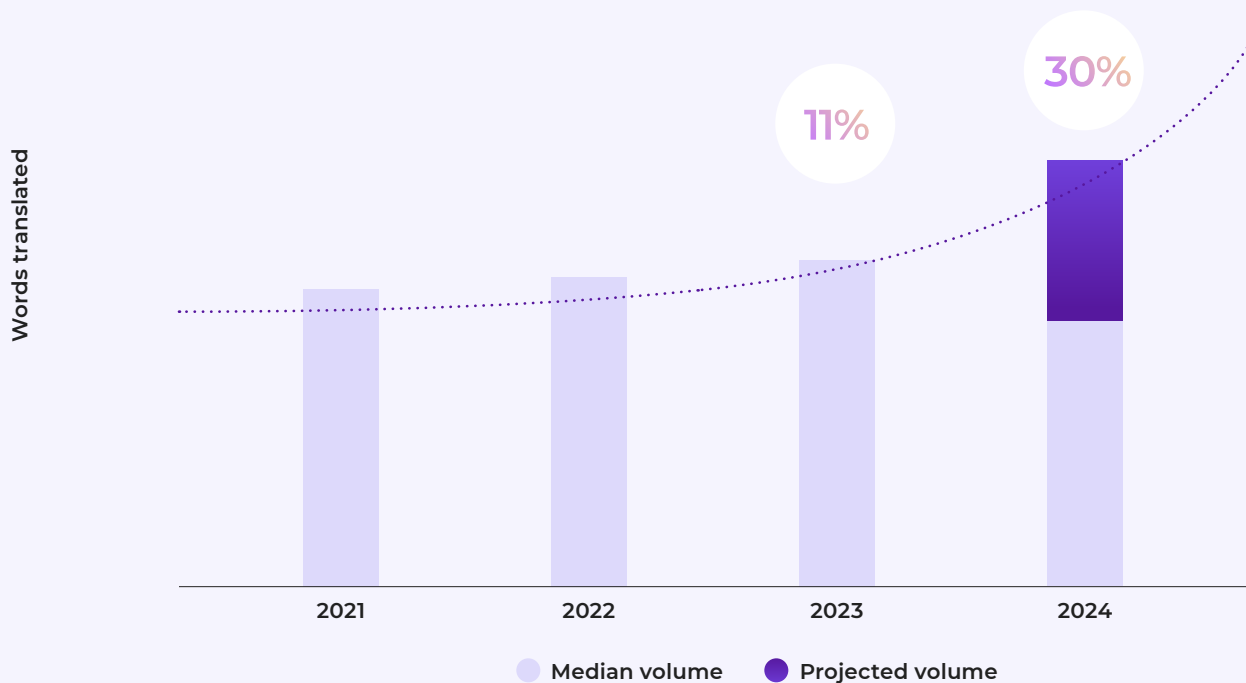
Global economic uncertainty has meant increased budgetary scrutiny and an emphasis on doing more with less. This has undeniably affected the translation industry as a whole. According to a recent report from market research firm Slator, the global language services industry saw a 3.07% decline in 2023. And the firm is predicting that the industry will continue to face challenges.

Yet, despite considerable market headwinds, the median translation volume for Smartling customers has not followed the overall trend. Instead, it has grown steadily over the past four years. From 2021 to 2023, the median annual translation volume grew roughly 11%.

This growth has continued into 2024. Indeed, the projected translation volume for the average company using Smartling has taken a major jump and appears to be ramping up. Based on the current trend, we anticipate that companies will translate 30% more than 2023, by the end of 2024.

FIGURE 1.

Median annual translation volume by company from 2021 to 2024



There are a few potential explanations for this significant increase despite the overall market downturn:

01 AI pushing down costs:

The strategic use of AI by translation providers like Smartling means companies can translate more content with the same, or even smaller, budgets. Over the past 12 months, for example, customers leveraging Smartling's AI-powered platform have slashed their per-word cost for human-quality translation. The industry standard for this level of quality has been \$0.20 per word for many years, but Smartling is delivering the same results for \$0.12 per word. Factoring in AI-enhanced translation memory capabilities, customers are often getting human-quality translation for less than \$0.09 per word.

It bears repeating: These lower costs are not coming at the expense of quality. Indeed, AI is improving the quality of all translation modes for Smartling customers. As a result, they can shift from using an entirely human translation workflow (which can be cost prohibitive) to a mix of AI-assisted, AI-only, and MT-only workflows while remaining confident that the translated output adheres to high quality standards.

02 Increasing legislation around language access:

Legislatures around the world are implementing new rules and regulations around providing access to certain information in the native language of local communities. This has already had a significant impact on government and educational organizations but is also starting to spill over into the private sector. As more of these regulations are imposed, companies and organizations must find ways to translate the necessary content as quickly and cost-effectively as possible.

03 Growing consumer expectations:

Access to content in the consumer's native language is becoming more commonplace through the use of smartphones and new consumer translation applications. For years, it has been understood that consumers prefer to purchase from companies that provide information in their native language. A 2020 study by CSA Research found that 40% of consumers would not purchase a product that was not available in their native language. Consumer expectations are likely to grow given the increased access to native language content in their personal life.

Over the coming year and beyond, we anticipate that the cost per word for translation will drop further, eventually arriving at a new equilibrium. In addition, given the lower cost of translation, increased regulation, and growing customer expectations, we also expect to see translation volumes continue to rise even as the overall language market contracts.

Target locales

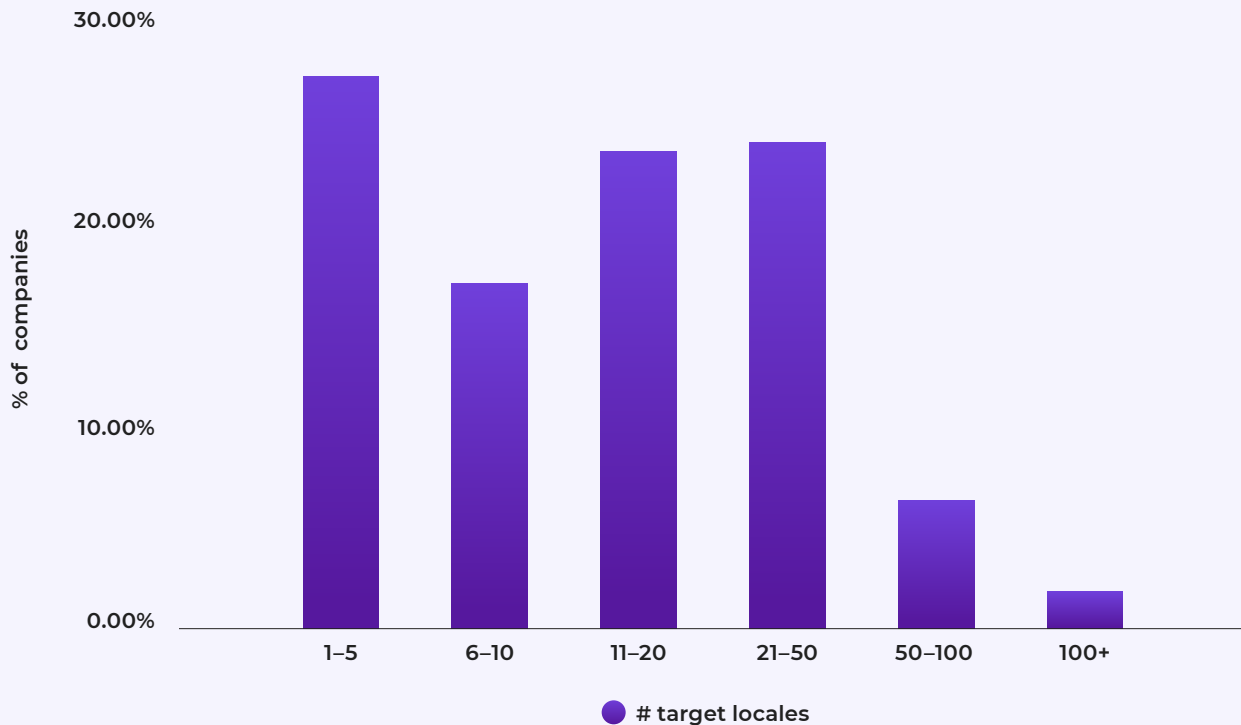
Now that we know how much companies are translating, let's dig into what languages they are translating. One decision that teams must make is how many locales to target, given their budget and the amount of content that needs to be translated.

In 2024, companies translated into 22 target locales on average. However, this number appears to be a bit skewed by a low percentage of companies that are translating into over 100 target locales. The median number of locales, which is more informative, sits at 17 per company.

Nearly half of all companies are translating into fewer than 10 languages, with 10% targeting only one locale this year. This indicates that many companies may just be starting out with their translation journey. Perhaps they have been spurred on by the demands of customers to get content in their native language or new regulations in their markets.

FIGURE 2.

Number of target locales per company in 2024



The top 25 target locales this year are unlikely to shock anyone. These languages account for over half of the world’s native speakers and have been fairly consistent over the last four years.

In fact, despite the ever-changing populations and economic powers of the world, even the top 50 target locales have remained the same over the past three years with one exception: Hindi has now moved into the top 50 (but just from spot 51).

This consistency is fascinating to see, but we anticipate that, with more focus on developing models to address longtail and low-resource languages, the number of target locales will increase over time as reaching these native speakers becomes more efficient.

Despite the ever-changing populations and economic powers of the world, even the top 50 target locales have remained the same over the past three years.

FIGURE 3.

Top 25 target locales in 2024 with position compared to 2023

| 2023 | | 2024 | |
|------|-------------------------|------|---------------------------|
| 1. | Spanish (US) | 1. | French (France) ▲ |
| 2. | French (France) | 2. | German (Germany) ▲ |
| 3. | Simplified Chinese | 3. | Simplified Chinese ▶ |
| 4. | Italian (Italy) | 4. | Japanese (Japan) ▲ |
| 5. | French (Canada) | 5. | Italian (Italy) ▼ |
| 6. | Korean (Korea) | 6. | Spanish (US) ▼ |
| 7. | German (Germany) | 7. | Korean (Korea) ▼ |
| 8. | Polish (Poland) | 8. | Portuguese (Brazil) ▲ |
| 9. | Japanese (Japan) | 9. | English ▲ |
| 10. | Chinese (Hong Kong) | 10. | Spanish (Spain) ▲ |
| 11. | English | 11. | Polish (Poland) ▼ |
| 12. | Russian (Russia) | 12. | Russian (Russia) ▶ |
| 13. | Arabic | 13. | Dutch (Netherlands) ▲ |
| 14. | Portuguese (Brazil) | 14. | French (Canada) ▼ |
| 15. | Spanish (Spain) | 15. | Arabic ▼ |
| 16. | Bengali (Bangladesh) | 16. | Swedish (Sweden) ▲ |
| 17. | Urdu (Pakistan) | 17. | Danish (Denmark) ▲ |
| 18. | Haitian Creole | 18. | Spanish (Latin America) ▲ |
| 19. | Yiddish (US) | 19. | Portuguese (Portugal) ▲ |
| 20. | Swedish (Sweden) | 20. | Chinese (Taiwan) ▲ |
| 21. | Dutch (Netherlands) | 21. | Chinese (Hong Kong) ▼ |
| 22. | English (Great Britain) | 22. | Bengali (Bangladesh) ▼ |
| 23. | Turkish (Turkey) | 23. | Norwegian (Norway) ▲ |
| 24. | Indonesian (Indonesia) | 24. | Haitian Creole ▼ |
| 25. | Danish (Denmark) | 25. | Urdu (Pakistan) ▼ |

The rise of generative AI

The most consequential trend of 2024 is the increased use of generative AI in the translation workflow. Indeed, the role AI will play in translation has been talked about incessantly this year. It's at the same time thrilling and stress-inducing for individuals all over the business as it presents a major shift akin to that brought about by machine translation (MT) many years ago. We already see some of the positives coming from this change, with companies able and willing to translate more than ever before due to efficiency gains from this technology.

There is no doubt that AI is making an impact already. But we wanted to dig into both companies' perceptions of AI and how they've used it so far in practice. Let's see if AI is really living up to all the hype.

What are companies saying?

We recently asked our customers for their perspectives on the emergence of generative AI within the translation industry and its impact. They shared their thoughts on potential benefits, concerns for the industry, and personal plans to use it in their programs.

We found that while the vast majority of companies are somewhat or very familiar with the capabilities of large language models (LLMs), over one-fifth are not familiar at all. This is reinforced by responses to the question of whether individuals feel they have received adequate training and support for using AI tools in translation. Only one-quarter of respondents indicated that they felt they had received proper training to use these tools.

This points to a potential issue in the market overall: Translation teams (and others within organizations) are being asked to adopt AI quickly, but many are not sure where to start or how to implement it effectively or don't currently have the resources to do so.

That's where the help of a partner, like Smartling, that has significantly ramped up its investment into research, development, and evaluation of generative AI applications in the translation market is so important. Guidance and training in this area will be paramount in the coming year as companies look for not only AI-powered solutions but effective AI-powered solutions to help them reach their goals.

FIGURE 4.

How familiar are you with the capabilities of LLMs?

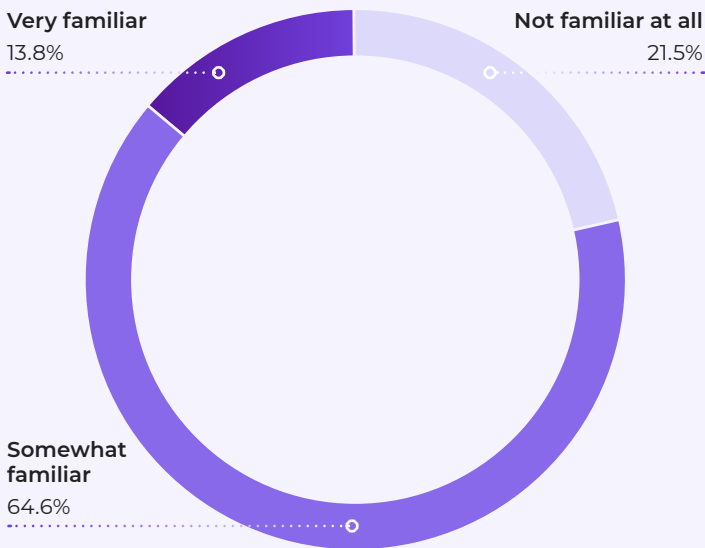
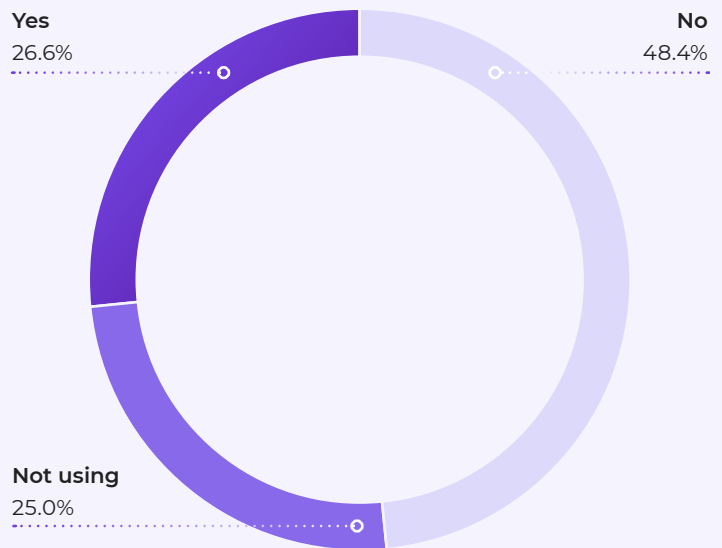


FIGURE 5.

Have you received adequate training and support in using AI tools for translation?



The rise of generative AI

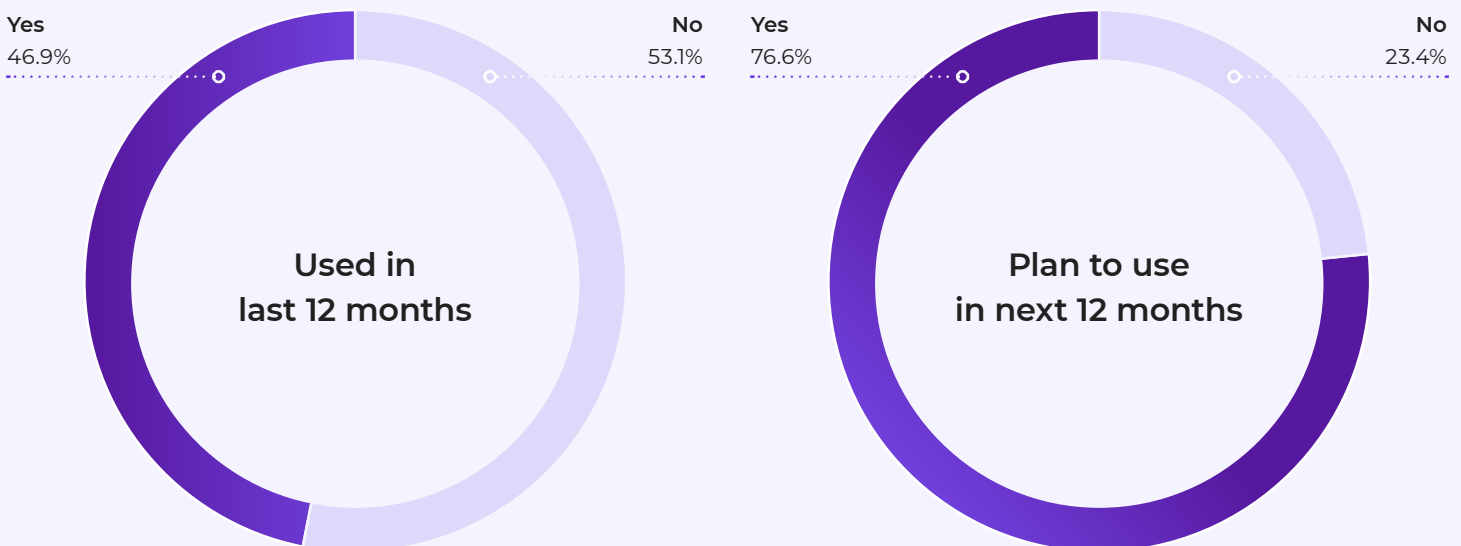
Despite the uncertainty and lack of training, nearly 50% of all respondents said they had researched or experimented with LLMs in their translation work over the last year. We expect to see that number increase to over 75% next year based on the number of respondents who anticipate adopting AI technology in 2025.

Overall, the survey results indicate that AI-powered translation is set to become fully integrated into the standard translation mix for most companies within the next year.

It's also worth mentioning that how they do that will likely be guided by successes in the market from early adopters who have already taken on the AI challenge. For example, while companies just starting their AI journey may be tempted to replace MT with LLMs, that's not playing to either technology's current strengths. On the contrary, we've seen that companies that have opted to leverage LLMs *and* MT — deploying each where they're most suited — are getting the greatest value from their investment. (More on that later.)

FIGURE 6.

Have you researched or experimented with LLMs in your translation work?



Finally, we asked companies what they saw as the key benefits and challenges of using AI for translation. Consistency and cost savings topped the list for benefits. This reinforces the narrative that AI is making it possible for companies to cut their cost per word without sacrificing quality.

Consistency through generative AI comes from better application of linguistic assets in the form of AI-enabled glossary term insertion and fuzzy match repair for translation memory. Utilization of style guides to adjust formality and apply persona-based translations is also an emerging approach that has promising results for generating more consistent, automated translation outputs.

Consistency and cost savings topped the list for benefits. This reinforces the narrative that AI is making it possible for companies to cut their cost per word without sacrificing quality.

FIGURE 7.

In your opinion, what are the primary benefits of using AI tools in translation?

- 01 **Consistency in translation**
- 02 **Cost savings**
- 03 **More advanced translation tools**
- 04 **Faster delivery**

Despite these benefits, companies are still concerned with the potential for hallucinations — i.e., fabricated or misleading content — and translation accuracy issues. Employing robust quality control methods that ensure that the prompts return translations and that those translations are high-quality is, therefore, another top priority. Other concerns include data security, possible ethical considerations related to bias and cultural sensitivity, and the impact AI will have on the human aspect of translation.

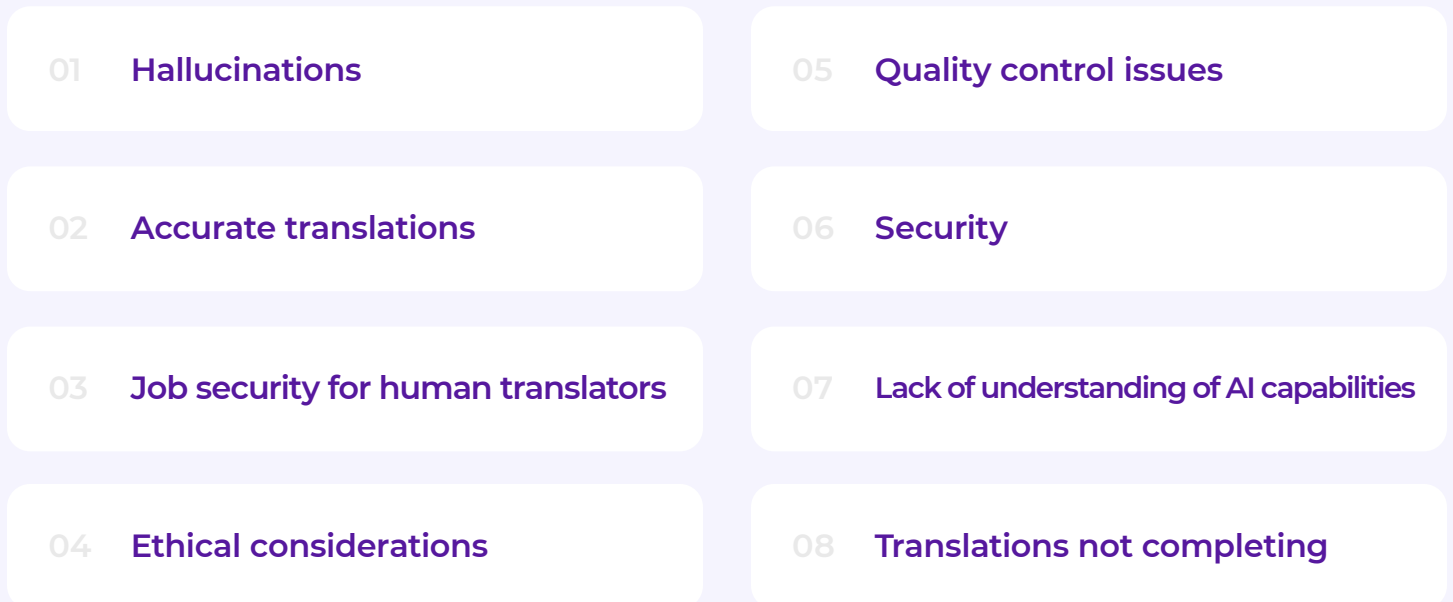
Companies like Smartling have already put in place several quality control measures and techniques to safeguard against the potential pitfalls of generative AI. And these will continue to be refined as the technology evolves.

Nevertheless, we at Smartling do not see AI evolving to the point where humans are no longer needed. To date, much of the AI technology that has been created is focused on improving the efficiency of human translation. This allows translators to process more words than ever before with the assistance of a higher-quality first translation than has been possible with workflows like machine translation post-editing (MTPE).

Looking into the future, while AI may take on a more prominent role, it will serve to enable professional human translators. From ensuring the LLM training data is top-notch to creating effective LLM prompts to validating and polishing the final translated output and beyond, professional translators will remain vital to the process.

FIGURE 8.

What challenges or concerns do you have regarding using AI in translation?



What are companies actually doing?

Now that we've discussed how companies are feeling about new AI technology, let's dive deeper into what they are actually doing. In our survey, nearly 50% of participants mentioned that they have experimented with LLMs in the past year.

But that raises another question: How much have they experimented? In other words, how many companies have just dipped their toes in the water, and how many have already heavily incorporated LLMs into their workflows?

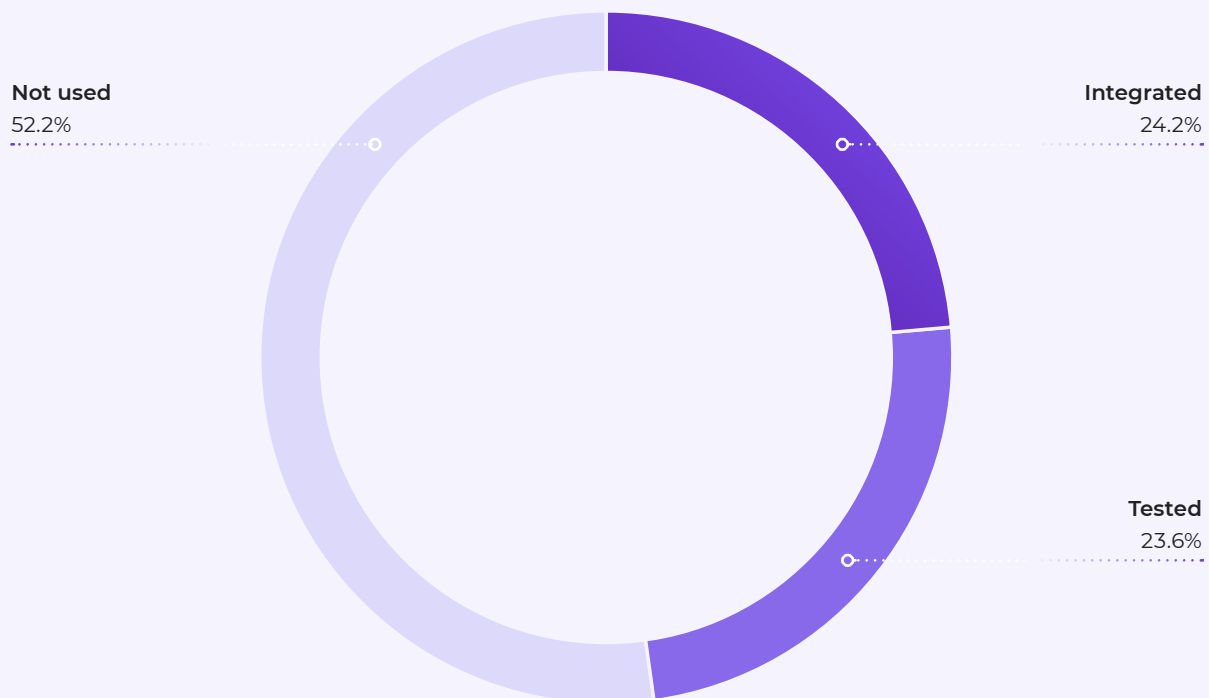
To answer this question, we took a look at the number of LLM tokens (a discrete unit of text processed by the LLM) used by each of our customers over the last year and bucketed them into an adoption category based on this usage. Those in the

Integrated category have used more than 1 million tokens in 2024, while those in the Tested category have used less than 1 million but more than one.

Though this categorization is a bit subjective, it gives a relative idea of how deep the 50% of customers that have tested LLMs in translation have gone. Nearly 25% of customers have used enough tokens that we can surmise that it is integrated significantly into their translation mix. The other 25% are likely testing out capabilities or using it only on a small portion of their content. It will be interesting to track the growth of these categories over the coming year and see how they shift.

FIGURE 9.

LLM adoption by token usage



Multiple LLM approach

The last piece of the AI trend that we wanted to discuss is the use of multiple LLMs. When generative AI first came on the scene, it was largely synonymous with OpenAI's GPT models. However, as time has gone on, more and more models have emerged, and translation-specific models have entered the scene as well.

At Smartling, we take a multiple LLM approach. That means we have several LLMs working throughout our platform and in different workflows at any given time. We do this because we find that certain LLMs perform better than others and do different tasks. Since we are LLM agnostic, we are able to test out new models as they are introduced and swap them into the platform to optimize for quality, cost, consistency, and speed. Currently, Smartling has multiple LLMs in use, including general

models like GPT, Gemini, and Chat Bison as well as translation-specific models like Gecko, plus more in testing. We are excited about the introduction of several IBM Granite models into the process as well — which provide an indemnified experience for companies that have regulations around data privacy.

LLMs in use



- GPT-35-Turbo
- GPT-4
- GPT-4o



- Gemini
- Chat Bison
- Gecko



- Granite
- Llama
- Mixtral

The changing translation mix

For years, we have advised our customers to optimize their translation mix to find the right balance of quality, cost, and speed for their business. Each customer will have their own unique translation optimization mix based on their requirements, the content being translated, and other standards.

The changing translation mix

Each translation type has its own use and purpose within the mix. For example, MT is ideal for content that requires quick turnaround times, like support tickets, or materials that are updated frequently, like help center pages.

However, MT would not be the best solution for things like binding legal documents, clinical research, or other materials where the highest quality is required. There, you would want to use an AI-powered human translation or traditional human translation workflow to get expert linguist validation.

Humans will continue to be extremely important for high-value content translation regardless of how technology grows.

Humans will continue to be extremely important for high-value content translation regardless of how technology shifts and grows.

Recommended content for common translation methods

| MT (Machine Translation) | AIT (AI Translation) | AIHT (AI-Powered Human Translation) |
|---|---|--|
| <ul style="list-style-type: none">• Support tickets• Forums• Customer reviews• Knowledge bases and training materials• Product information catalogs• Time sensitive• Short shelf life• Subtitles• Blogs | <ul style="list-style-type: none">• Patents• Product manuals• Low touch marketing (Websites)• Opinion portals marketing materials• SEO content• Commercial contracts• E-Learning materials• LLM training data• MT training data | <ul style="list-style-type: none">• Drug warnings and clinical research• High-liability instructional content (I.e. heavy machinery construction)• Packaging• Binding legal documentation |

Massive translation mix shift

We took a look at how the actual translation mix has changed between 2021 and today to see what companies are doing and what shifts have occurred. The data demonstrates trends that have been highly discussed in the industry over the past few years. There is a decided shift from a largely single-mix approach of human translation to a more balanced spread between human translation, MT with post-editing, and MT.

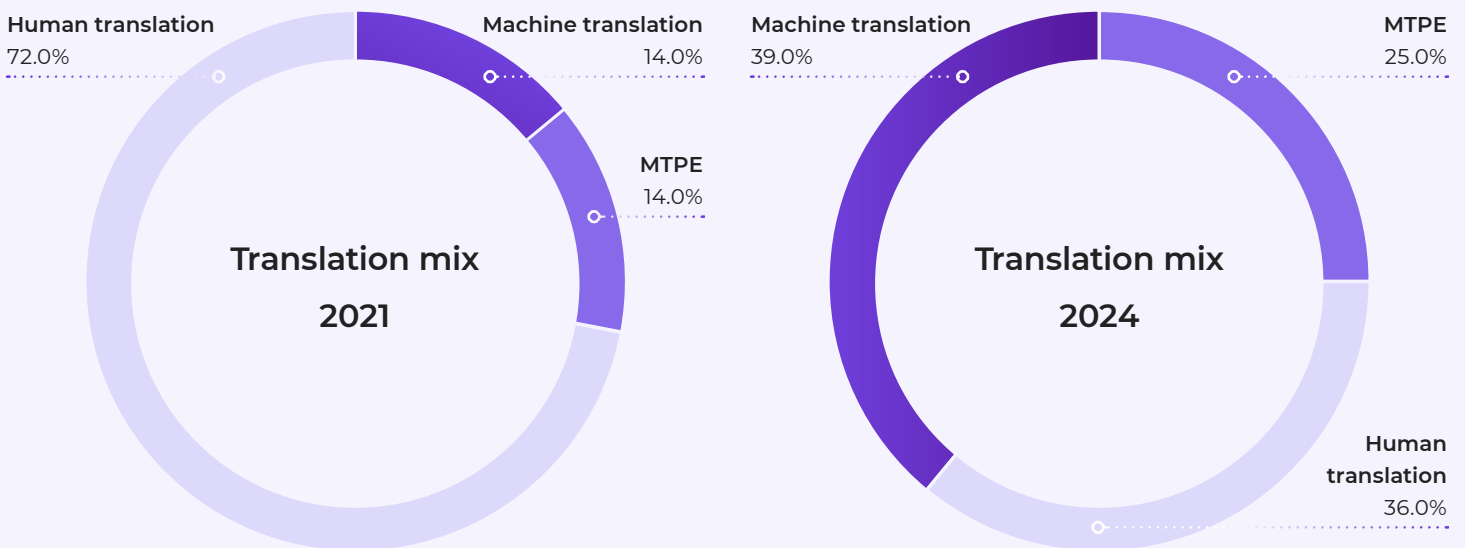
In 2021, human-only translation workflows accounted for 72% of all translation volume. But in 2024, that number has dropped to just 40% of all translation volume. Meanwhile, workflows combining human expertise with MT and AI have grown significantly in the last three years — from just 14% in 2021 to 25% in 2024.

This shift is largely due to the fact that these hybrid workflows are becoming increasingly reliable as a source of human-level quality but at a much lower cost and with faster turnaround.

The remainder of the translation mix is covered by MT, whether generic engines or custom-trained ones. Back in 2021, MT accounted for just 14% of all translations on our platform. Fast-forward to 2024, 40% of translation volume on our platform is now processed through workflows that route MT content straight to publication. The quality of these engines has significantly improved over the past several years — with custom engines, in particular, being able to deliver MQM quality scores of 93+.

FIGURE 10.

Average translation mix in 2021 vs. 2024



The changing face of human-quality translation

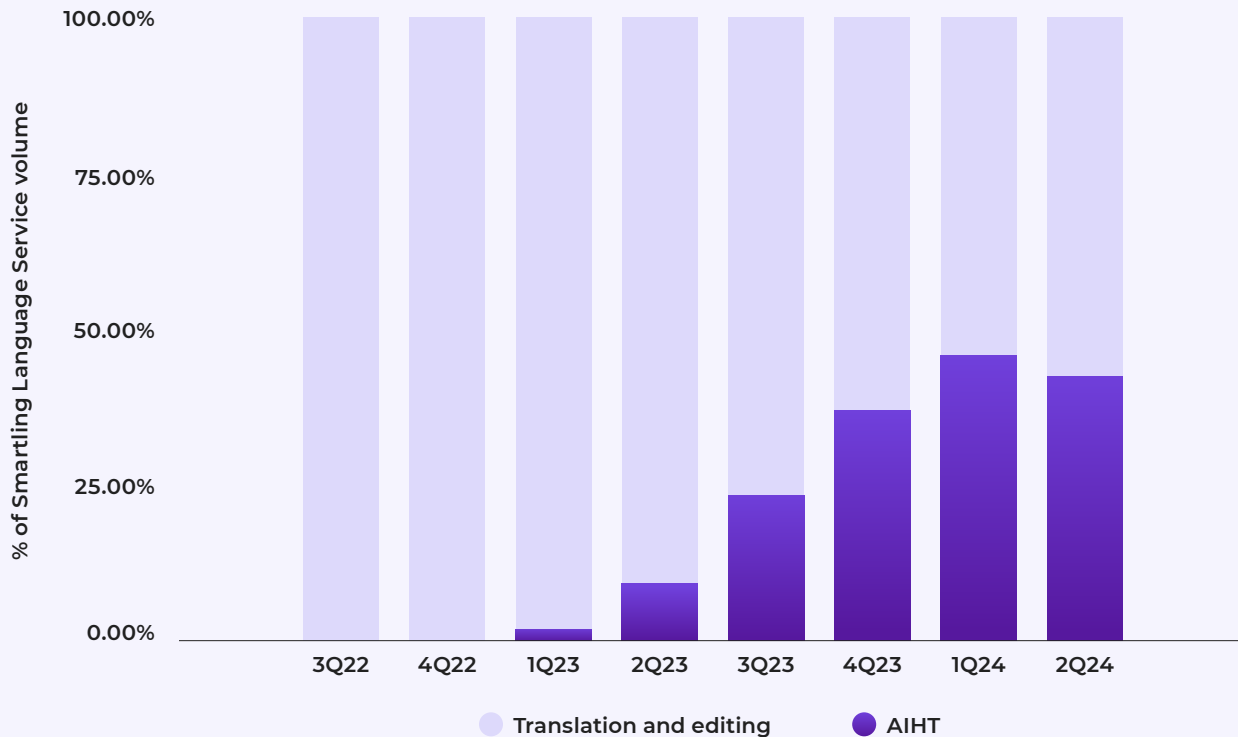
Further emphasizing the shift in translation mix is the use of our AI-Powered human translation (AIHT) solution. Over the last six quarters, AIHT has rapidly grown to account for nearly 40% of all translations that are performed by our Smartling Language Services (SLS) team.

From zero customers using this solution at the end of 2022, we now have over 100 companies benefiting from the high quality, faster turnaround, and lower cost of AIHT. These companies are currently sending the majority of their translation volume through this workflow.

Humans will continue to be extremely important for high-value content translation regardless of how technology shifts and grows.

FIGURE 11.

Growth of AI-powered human translation



Diving deeper into Machine Translation

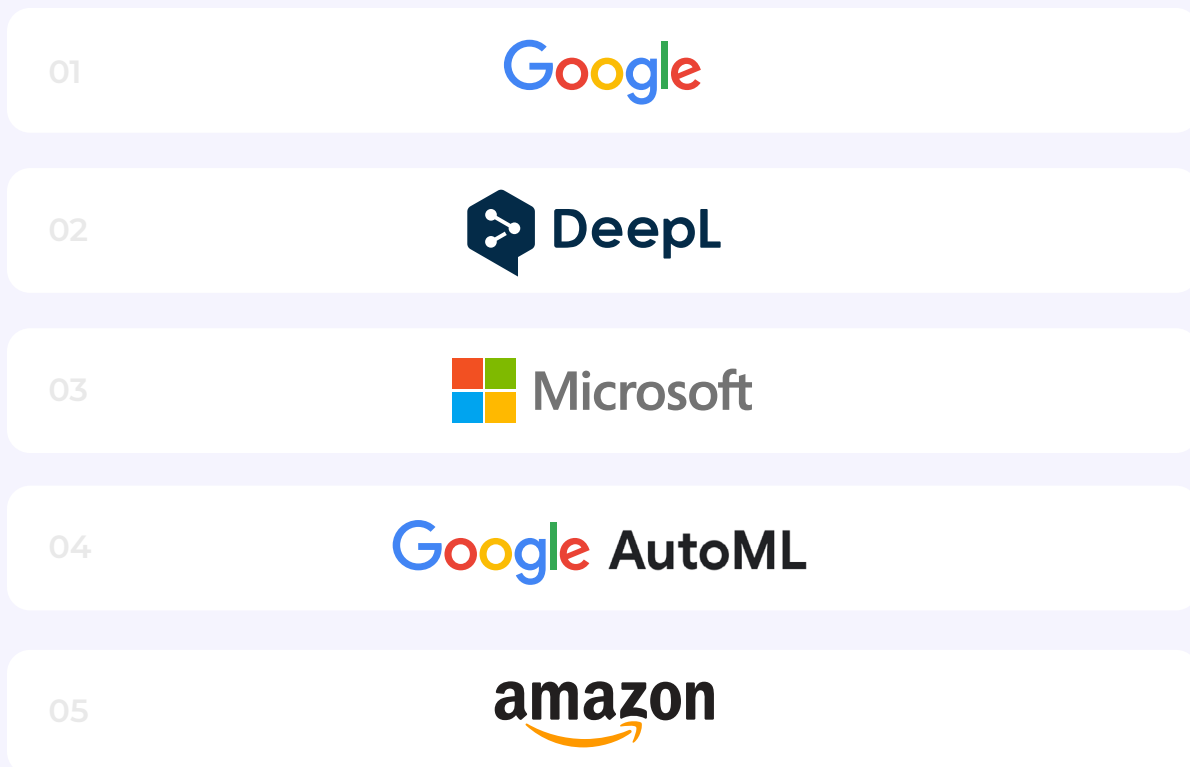
Machine translation is now the largest translation method by volume. Let's dive a little deeper to see which engines are most popular, how companies decide what engines to use, and how much they're investing in things like custom engine training.

Smartling provides access to over 15 MT engines and LLMs for use in translation. Google, DeepL, and Microsoft topped the list of the engines Smartling customers use the most. Google AutoML has also firmly established itself as a popular choice among those who want to create custom, domain-specific translation models.

Google, DeepL, and Microsoft topped the list of the engines Smartling customers use the most.

FIGURE 12.

Top 5 engines by translation volume in 2024



LLMs as replacement for MT?

It's worth noting that no LLMs were in the top ten most used translation engines this year. Over the past year, we have seen that LLMs are actually much better suited for use in the pre- and post-processing of translations instead of for raw translation. MT engines currently provide better-quality outputs for raw translation and are significantly cheaper.

In a recent study, we evaluated the quality of translated output from Smartling AutoSelect MT and OpenAI's GPT4 across a number of languages to understand which translation method would deliver the highest quality. Smartling AutoSelect evaluates MT engine performance for the chosen language pair and chooses the highest-performing engine to use for translations.

We evaluated performance based on two standard metrics for evaluating quality of automated translations:

The [BLEU](#) (Bilingual Evaluation Understudy) metric compares a human-created translation to the output from the translation engine. A higher score indicates more agreement between the two translations and is better.

The [TER](#) (Translation Error Rate) metric indicates the minimum number of edits needed to bring the translation to human quality. In this case, a lower number means better quality translation output.

Quality evaluation metrics for automated translations

BLEU

(Bilingual Evaluation Understudy) metric compares a human-created translation to the output from the translation engine

BLEU: No human-in-the loop, higher is better

TER

(Translation Error Rate) metric indicates the minimum number of edits needed to bring the translation to human quality.

Edit distance: Human-in-the loop, lower is better

The changing translation mix

The results were definitive - in both cases MT outperformed LLMs for translation. On average, the translated output from GPT4 received a BLEU score of 39.6, while Smartling AutoSelect scored almost 9% higher, with a score of 43. In addition, GPT4's translations had an average edit distance of 29.9. Contrast that with Smartling AutoSelect's results — an edit distance of 27.1, or 10% higher.

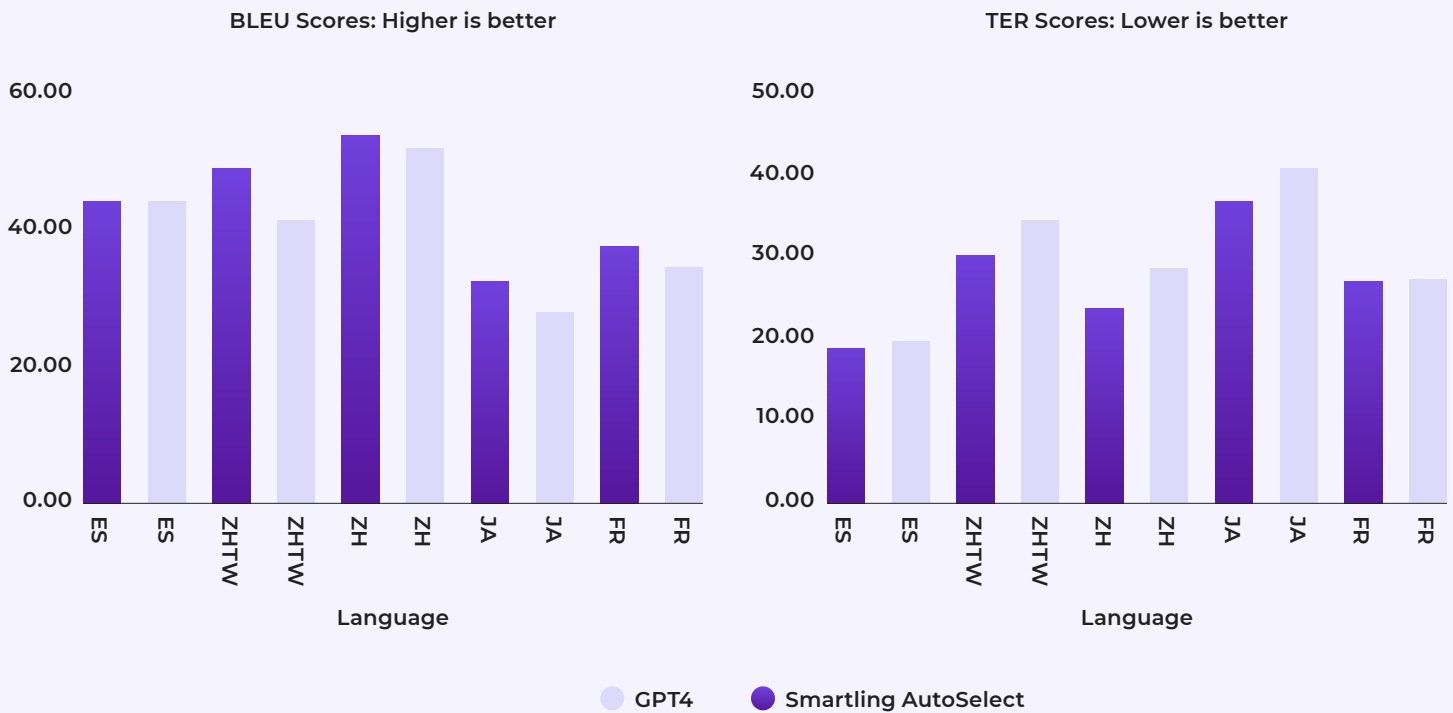
Furthermore, we received comparable results across all target locales and both metrics: While the scores for some languages were closer than others, the MT engines chosen by Smartling AutoSelect consistently outperformed GPT4. And this outcome has been recreated for multiple LLMs.

We may see the performance of LLMs for translation tasks change over time. But for now, our research strongly indicates that MT is the way to go for the translation element of the process, with LLMs used as a pre- and post-processing tool.

Speaking of AutoSelect, we find that the majority of Smartling customers utilize this feature to choose the right MT engine for them. Two-thirds of companies choose this approach with the other third preferring to directly control their translation engine. This may be because of a preference for the tone of translation that comes from a specific engine, the use of custom engines, or the decision to experiment with things like LLMs.

FIGURE 13.

BLEU and TER results for MT vs. GPT4



Generic or custom MT engines?

Turning from generic to custom engines, we find that trained models are continuing to grow in popularity. The number of customers using trained engines has increased by 34% since 2023. But we saw an even bigger jump the year before: from 2022 to 2023, where the number grew by 150%.

We expect this trend to continue, given the many benefits of using custom-trained engines. For example, it can lighten a translator's workload significantly by creating a higher-quality translation from the outset. For example:

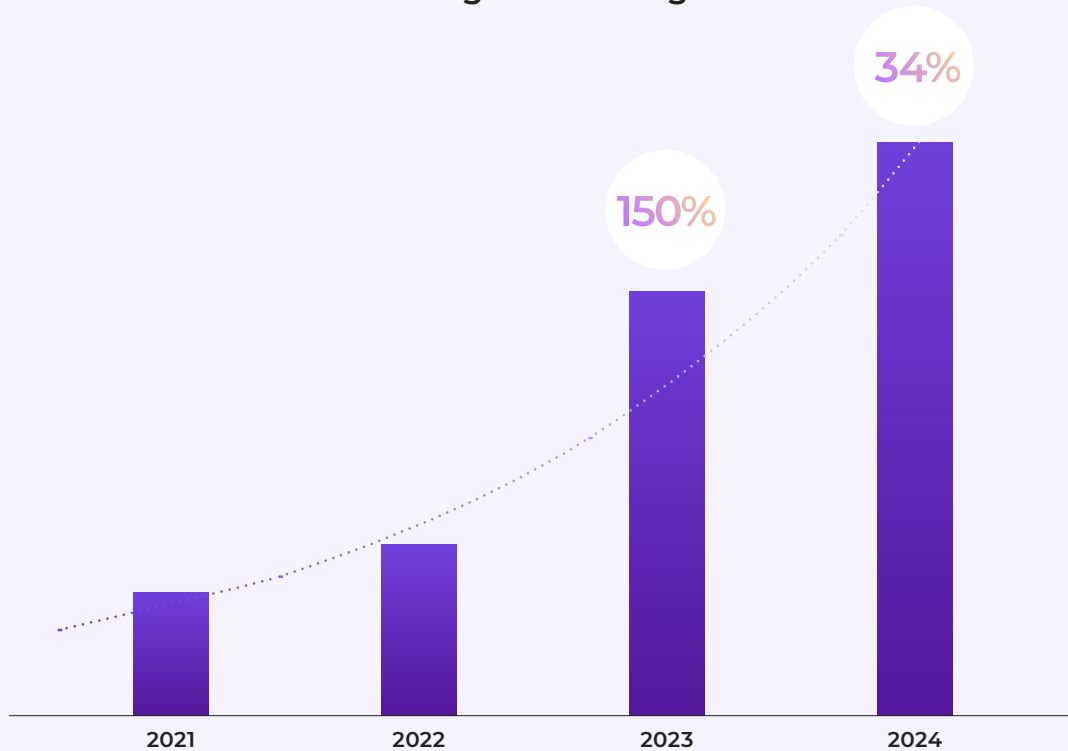
- Translations from custom-trained engines achieved 18% higher BLEU scores than untrained engines

- 22% fewer edits were made to output from a trained MT engine versus an untrained counterpart
- Content produced by custom-trained engines consistently delivers 93+ MQM quality levels — and that's before a professional review.

Today, 14% of all MT content goes through custom translation engines. It will be interesting to track this trend into the next year as companies shift their translation mixes into positions that prioritize quality at an affordable rate. Custom engines and, perhaps soon, fine-tuned LLMs provide ideal opportunities for this approach.

FIGURE 14.

Customers using custom engines



The push for translation efficiency

Finally, let's talk about efficiency. AI is not the only way that companies are looking for opportunities to streamline processes, reduce costs, and eliminate manual time consuming tasks enabling employees to redirect toward higher-value efforts.

There are several established approaches for companies to enhance and automate their translation process. The first is the use of automatic content ingestion and publication through API, connectors, or other means. The second is the use of linguistic assets to greatly improve brand adherence, especially when relying on machine- or AI-translated content.

We see that, in 2024, Smartling customers have continued to focus on these areas. We believe that this combination of mastering the basics while embracing new opportunities will set companies up for success. Many AI solutions rely on clean linguistic assets and strong automated workflows to work effectively.

Automation

Let's start with a stat you may have heard before: On average, Smartling customers automate 93% of all content ingestion. In fact, we see that nearly 60% are automating more than 90% of the ingestion process.

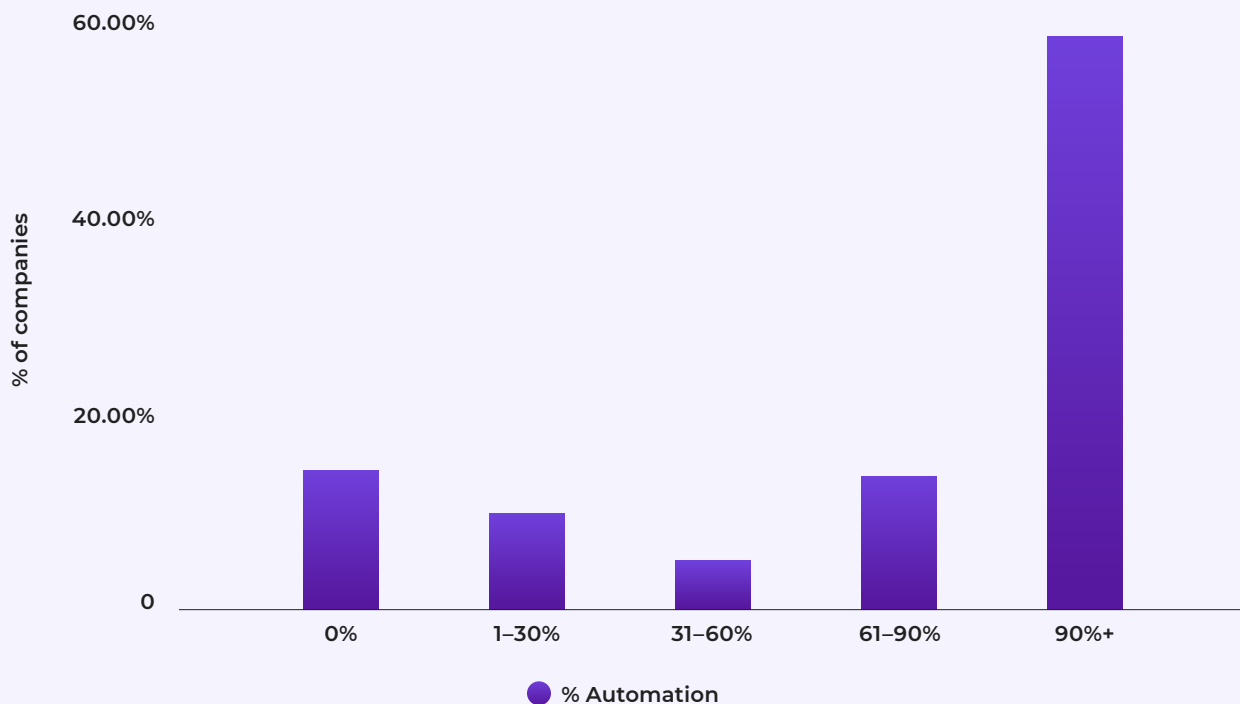
There are still a number of companies that utilize manual methods and should look towards finding additional ways to use connections to their top content systems so that they can reap the benefits of automation as well.

From an outcomes perspective, companies that automate even 50% of their content can save, on average, \$42,000+ and 1,000 hours of valuable time. Meanwhile, companies automating 98%+ can potentially save millions of dollars and hundreds of thousands of hours, depending on their scale.

We believe it is well worth the investment to get these content pathways set up so you can benefit in the long run.

FIGURE 15.

Distribution of customer automation percentage



The push for translation efficiency

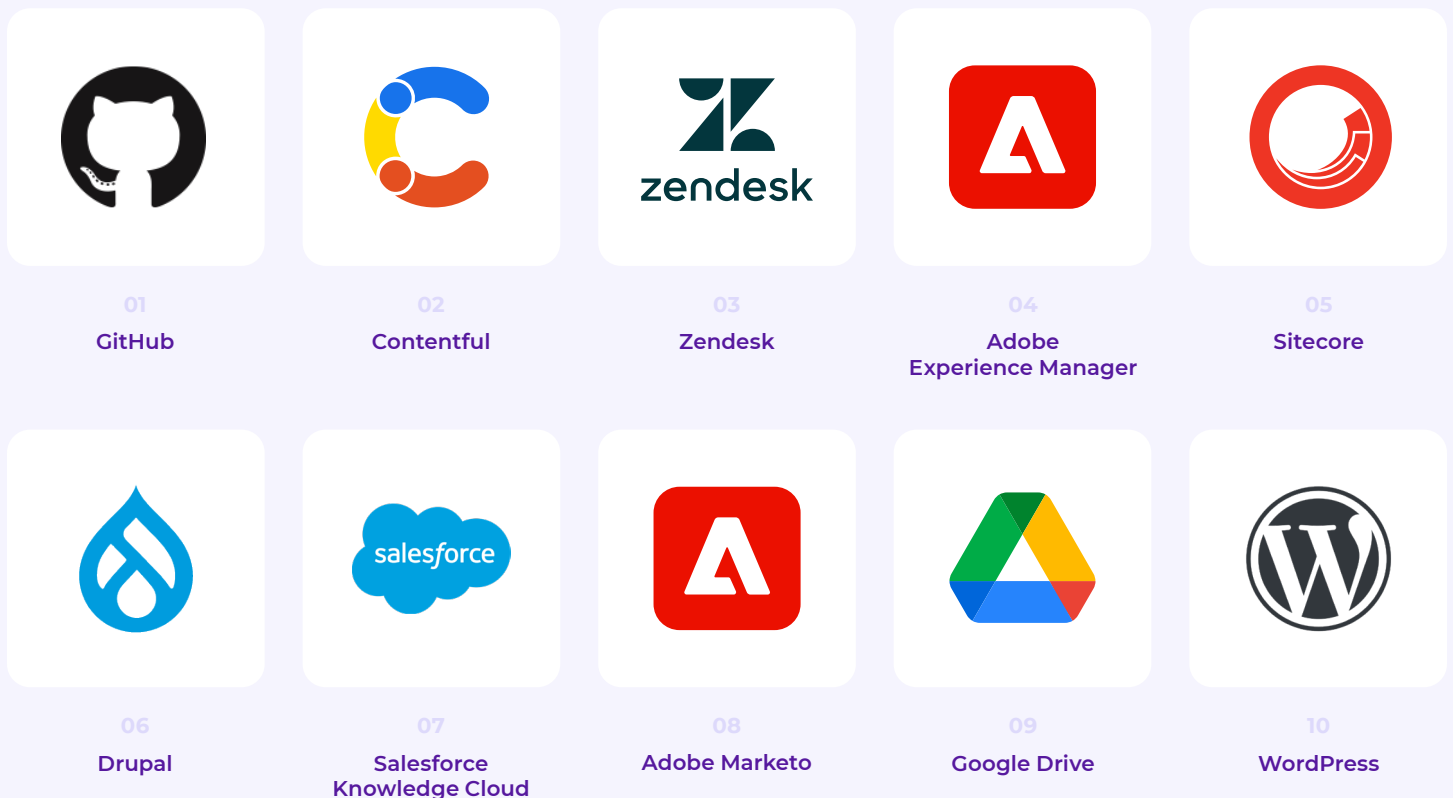
Smartling customers have the opportunity to automate with our customizable API, the Global Delivery Network — our translation proxy — or one of the more than 40 pre-built connectors for common content systems.

When we look at which connectors are most popular with our customers, we see that Github, Contentful, and Zendesk take the top three spots. In fact, more than one-fifth of our customers use our out-of-the-box GitHub connector.

More than one-fifth of Smartling customers use our out-of-the-box GitHub connector.

FIGURE 16.

Top 10 connectors



Linguistic assets and AI

Last but not least, let's talk about linguistic assets. Linguistic assets have been an important part of the translation process for a long, long time. Originally developed to give human translators the proper context and business knowledge needed to accurately translate, these assets are now being used to customize outputs of things like MT and AI to be more accurate and brand-compliant. In addition, translation memory offers companies a way to save on translation costs when used within a translation management system like Smartling that offers discounts for reused strings.

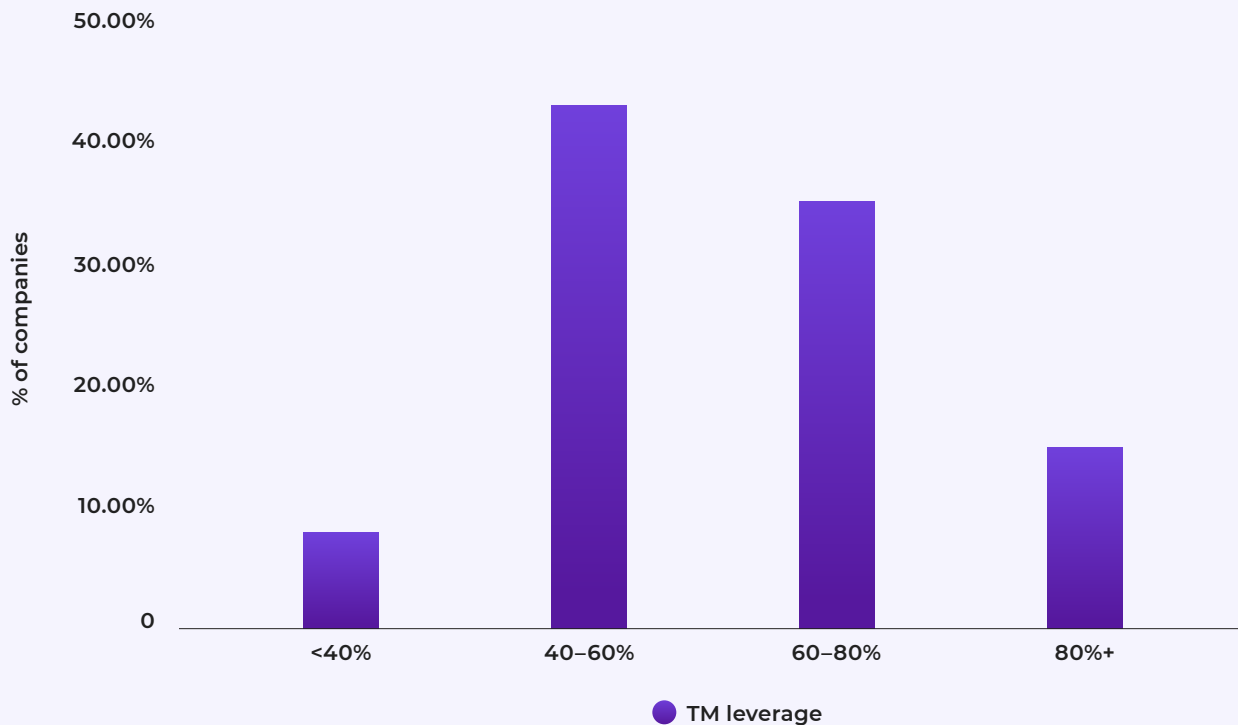
Translation memory allows companies to reuse previously translated material to avoid paying full price for the same or similar translations. The industry benchmark is 40% reuse, on

average — and this level of reuse provides major savings and is a great target.

Even so, augmenting translation memory with AI can significantly boost that percentage and lead to even greater savings. For example, at Smartling, those with only 40% reuse are in the minority. Over 90% of Smartling customers are exceeding the industry benchmark, with the average leverage at over 60%. In other words, over half of the content the average company using Smartling submits for translation is discounted, resulting in enormous cost savings.

FIGURE 17.

Average translation memory leverage



The push for translation efficiency

One new development this year in the area of translation memory is fuzzy match repair. At Smartling, fuzzy match repair is just one part of our Adaptive Translation Memory feature which updates translations in real-time using AI learnings from human and machine translation inputs. Adaptive TM captures terminology and tone of voice from legacy translations and glossaries, and ensures our customers' brand consistency. It also expands leverage, and customer cost savings, through the use of fuzzy match repair.

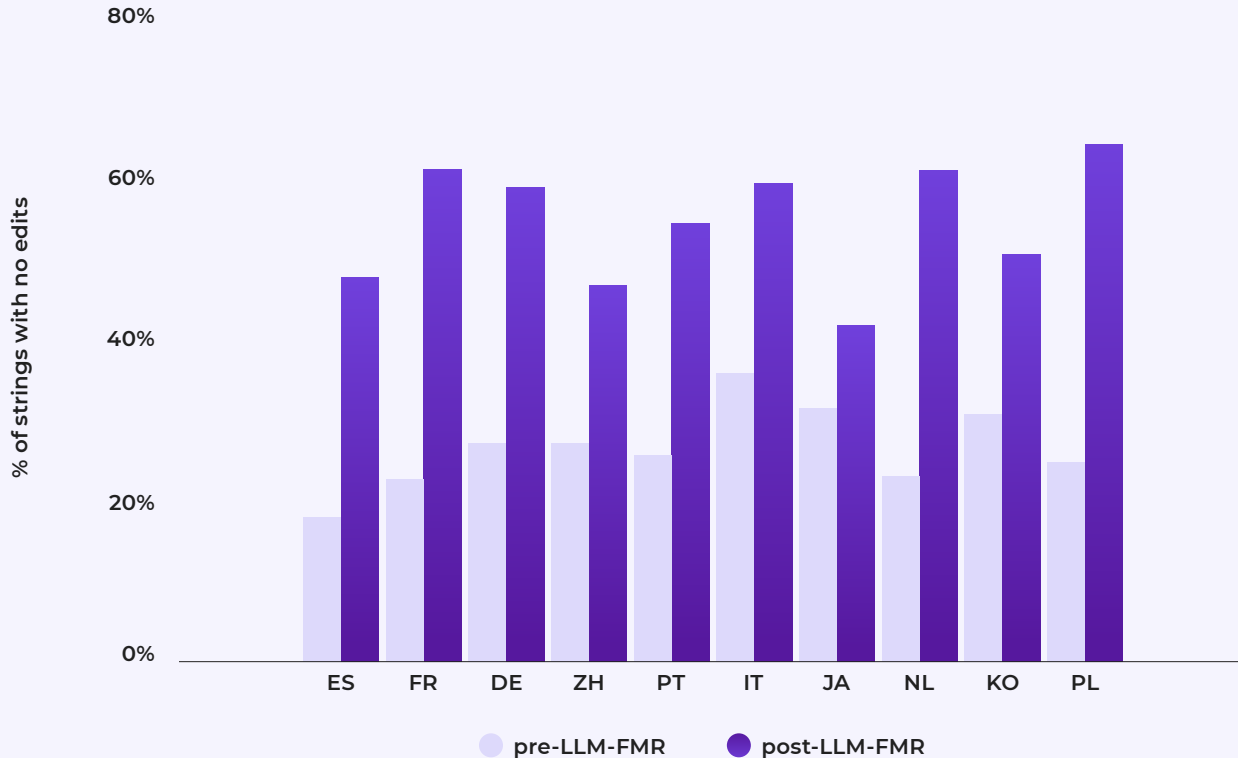
We see that LLM fuzzy match repair is quickly becoming integral to many companies' workflows. The reason? It has the LLM adjust or "repair" a string in the translation memory to work for a match that is close but falls outside the original fuzzy-match threshold. That, in turn, allows companies to use more of their existing translation memory. On average, there

is a 13-point increase in fuzzy match score when fuzzy match repair is used. The lower the original score is, the more dramatic the impact — up to a point. The sweet spot for the highest gains seems to be an original fuzzy match score between 50% and 60%. Once "repaired," those strings see an average jump in their fuzzy match rate of around 30%. In contrast, matches that score closer to 65%–69% only achieve around 23% increases.

And so on. The higher the original score, the less we can improve. So, the impact of fuzzy match repair depends on the customer's translation memory and the content submitted for translation. If a company submits very similar content for translation over and over again and has very high matches to start with, fuzzy match repair can't add much value. Finally, let's cover glossaries, another linguistic asset that has been available for a long time but has even more use in

FIGURE 18.

Impact of LLM fuzzy match repair



The push for translation efficiency

the age of AI. Glossaries are a list of your approved translations for specific terms in your source and target languages and across multiple target languages. In some cases, like distinct products or sub-brands, you may have more than one active glossary at a time, though only one would be in use for each project to avoid confusion.

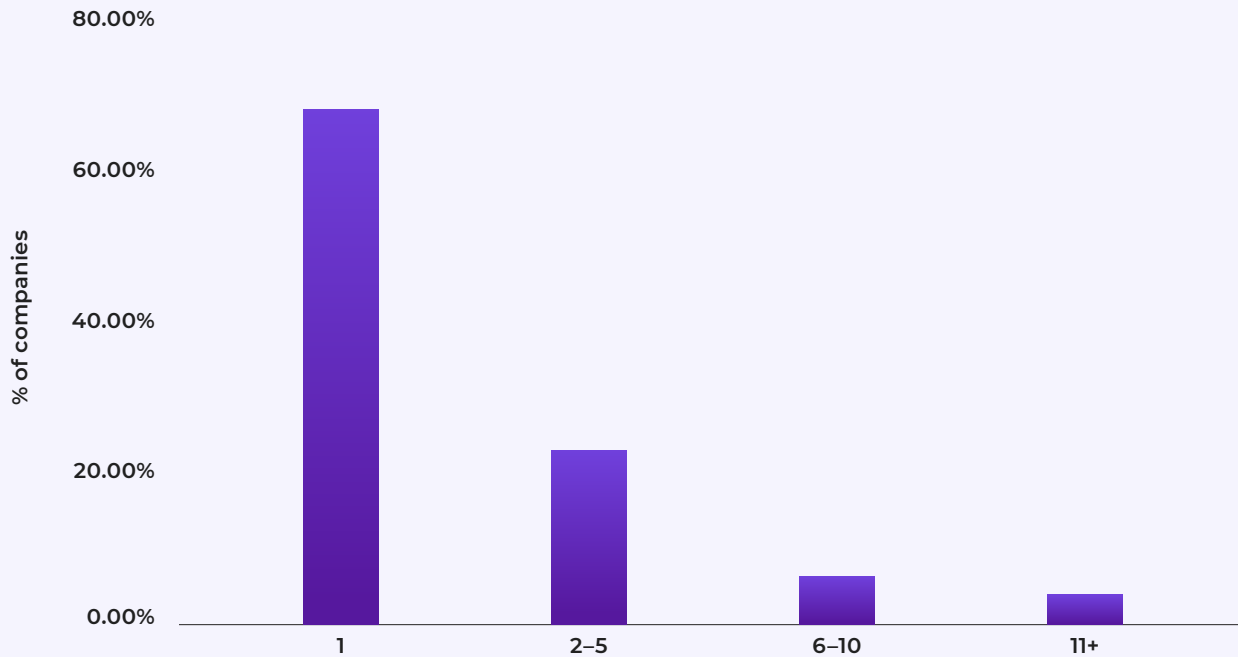
While some customers have adopted a multiple glossary approach, it appears from our analysis of active glossaries in the Smartling platform that the vast majority are focused on a single glossary. The companies using 10+ glossaries are primarily eCommerce or enterprise companies with multiple brands and properties to manage.

As we mentioned, glossaries are growing in importance with the introduction of things like enhanced glossary term insertion, where AI checks your text for glossary terms, and translations

are inserted automatically into the target text. However, unlike with traditional glossary term insertion, the surrounding text is smoothed out, and any required grammatical changes (such as adjusting for a different gendered noun) are made. In addition, automated quality checks or quality evaluations by LLM can take your glossary and style guide into consideration to customize your results.

FIGURE 19.

Glossaries per company



Conclusion

The overarching theme of 2024 has been one of uncertainty. While that can bring many challenges, it also gives rise to opportunity. The growth of new technologies, such as generative AI, upends the status quo and pushes the translation industry into uncharted territory. This compels businesses and translators to reimagine what is possible and redesign their roles to succeed in this new AI-powered world. In addition, economic constraints that put pressure on businesses to do more with less may seem onerous. But they often spur dramatic, long overdue changes to make workflows more efficient.

Throughout this year, we've seen these two forces — the growth of AI and the drive to do more with less — combine to enhance our customers' translation programs, even as the translation industry overall has struggled.

The number of Smartling customers experimenting with and adopting AI-powered solutions throughout the translation workflow grew immensely in 2023, and that has continued in 2024. That has precipitated dramatic changes to their translation mix. These same customers are also enthusiastically searching for other ways to automate.

As a result, they are unlocking human-quality translations while enjoying considerable time and cost savings. We see this continuing into 2025 and beyond.

Are you ready to learn how the trends we've discussed in this report can transform your translation program? Consider us as a resource. We're here to help you devise creative, technology-driven solutions to the translation challenges you face so that you can localize your content into any language at scale.

Smartling's LanguageAI™ platform is revolutionizing the translation and localization of the world's digital content. Named as the top translation management system by CSA Research and by users on G2, Smartling harnesses AI and machine learning to enable the automation of workflows, integrates seamlessly with existing tech stacks and measures and improves translation quality at enterprise scale for a fraction of the cost of traditional translation.

Smartling is the platform of choice for hundreds of B2B and B2C brands, including IHG Hotels & Resorts, State Farm, British Airways, and Lyft. Smartling is headquartered in New York with an office in Dublin.

hi@smartling.com

1 (866) 707-6278

smartling.com

LanguageAI™

Translate files to:

| | | |
|----|---------|---|
| EN | English | ✓ |
| ES | Spanish | ✓ |
| FR | French | ✓ |
| ZH | Chinese | ✓ |
| DE | German | ✓ |

Speech bubbles: Hello, Olá!, Bonjour!, Hallo

SMARTLING

AI

SEO et localisation: Quelques bonnes pratiques

SEO