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# LIONBRIDGE REAL-TIME TRANSLATION VS. PUBLIC MACHINE TRANSLATION ENGINES: UNDERSTANDING THE DIFFERENCES

CONSIDERATIONS FOR SELECTING THE RIGHT REAL-TIME  
TRANSLATION TECHNOLOGY FOR YOUR ORGANIZATION

There are significant differences between Lionbridge's real-time translation solution and public machine translation engines like Google Translate and Microsoft Translator. This whitepaper details the most salient differences, including:

Translation Quality | Translation Customization | Continuous Translation Optimization  
Security and Data Protection | Pre-Built Integrations

# WHAT IS REAL-TIME TRANSLATION TECHNOLOGY?

*And who needs it?*

**R**eal-time translation technology (RTT) is exactly what it sounds like: a tech-driven solution that instantly translates content from one language to another.

Everyone can use RTT—to make quick fact checks, get a “gist” translation, and cobble together communication with someone who speaks a different language. At the enterprise level, RTT can enhance efficiency and improve the customer experience by enabling organizations to interact with customers across hundreds of languages—all while using their existing contact centers, service desks, and staff. For global organizations, RTT is a game-changer. It reduces the need to hire bilingual agents while connecting the organization with consumers, employees, and partners who were previously unreachable.

For many global organizations interacting with multilingual customers, the question is not *whether* to employ RTT. It's *which* solution to use.

**Several machine translation (MT) RTT options—from Google Translate to Microsoft Translator and beyond—exist. At Lionbridge, we've developed our own comprehensive MT-driven RTT tool. How does Lionbridge RTT differ from public MT solutions? In several ways:**

1. Translation quality
2. Translation customization
3. Continuous translation optimization
4. Security and data protection
5. Pre-built integrations

*In this paper, we dig into each of these factors, lending some insight to enterprises struggling to decide which RTT tool is best for their needs.*

## WHAT IS LIONBRIDGE RTT?

Lionbridge's comprehensive RTT solution provides global enterprises a full suite of translation and interpretation solutions. Our technology is powered by Virtual Linguist, a proprietary AI-powered core customized and trained specifically for each client. Virtual Linguist ensures multilingual consistency and accuracy across languages, channels, and use cases while maintaining each brand's unique context, brand terms, acronyms, and jargon. This customization ensures the best possible RTT quality, regardless of source and target languages.



## TRANSLATION QUALITY



*RTT-driven translations differ fundamentally from translations performed exclusively by humans, because the goals for machine-based translations and human-based translations differ somewhat.*

Organizations considering machine-based translations prioritize immediacy, comprehension, and actionability. They constantly struggle to balance, therefore, translations that are as fast as possible and as high-quality (or near-human) as possible.

### **Translation Quality: Public MT**

One challenge inherent to public MT engines? The output can only be as good as the input—that is, the quality of the translated text depends heavily upon the quality of the source text.

That applies considerable pressure to the source text. Is it grammatically accurate? Are words spelled correctly? If not, the translation may be incomprehensible. Likewise, nuanced

or idiomatic text may create confusion. For example, the English word “flat” can be either a noun (meaning “apartment”) or an adjective (meaning “level”), depending on context. Public MT engines do not understand such nuances.

While it’s true that technical innovation and rapid progress contribute to the continued improvement and reliability of public MT, it’s also true that an uptick in quality correlates strongly with human involvement and customization. MT algorithms improve as humans train them. To ensure high-quality translations—particularly for less common language pairs—organizations often need to blend in-house expertise with an MT tool to be successful.



## Translation Quality: Lionbridge RTT

Lionbridge RTT leverages Virtual Linguist, its AI-powered core, specifically to overcome the inherent limitations of public MT engines. This eliminates the need for customers to be language and translation experts themselves. The tool does this in three ways:

### 1. Bespoke MT Engine Selection

Each MT engine has its own strengths. Some excel at translating certain language pairs; others are particularly well-suited to a given use case or industry. Lionbridge uses those varying strengths to the customer's advantage.

Every Lionbridge engagement begins with our language experts selecting the right MT engine(s) for Virtual Linguist based on that specific client's use case, language, channel, and industry mix. For example, the Lionbridge team would likely recommend that a client who wants to deploy chat across Japanese and Spanish for Level 1 support should use two different baseline MT engines to ensure best translation quality every time.

### 2. Text Normalization

Unlike public MT engines, Lionbridge RTT applies normalization rules (i.e., linguistic business rules) to clean and edit source content before it undergoes translation. This allows clients to avoid typical MT errors caused by grammatical errors, misspellings, slang, acronyms, and idioms. Virtual Linguist supports two types of normalization: Input Normalization, which cleans text prior to translation, and Output Normalization, which corrects common MT errors post-translation.

**Input Normalization** is a technique that makes text more standardized and recognizable to MT engines by "normalizing" its idiosyncrasies. For example, most languages contain common acronyms that customers use frequently in

a chat environment. An English example is the use of "BRB" to mean "Be Right Back." Lionbridge's input normalization techniques change instances of "BRB" to "Be Right Back," ensuring that the machine translation tool generates the appropriate translation each time. This process allows Virtual Linguist to perfectly translate a sentence that public MT engines would translate incorrectly.

Similarly, **Output Normalization** replaces errors or inconsistencies in translated text and replaces them with words and phrases we know our customers want. Output normalization can help solve inconsistencies caused by:

- **Regional Differences:** To date, no major MT engine offers regionally-specific versions of any languages (e.g., Canadian French). Lionbridge does. We use Output Normalization to change Latin American Spanish vocabulary into European Spanish Vocabulary, or American English vocabulary into British English, etc.
- **Formal vs. Informal Speech:** Unlike public MT engines, Lionbridge RTT can search for formal pronouns (for example, "vous" in French) and their associated verb forms (e.g., êtes) and change them to informal pronouns ("tu") and verbs ("es"), depending on context and client goals.

### 3. Industry Experience

Lionbridge has 20+ years of experience across industries communicate globally. That experience has generated significant industry expertise, which optimizes Lionbridge RTT through industry-specific language models that layer atop a customer's selected and trained MT engine(s). Lionbridge expertise extends to industries, channels, languages, and specific use cases, and clients can draw upon the lessons and successes of two decades of prior customers.



## TRANSLATION CUSTOMIZATION



*Every organization has its own unique vocabulary.*

Companies have specific terms for products and services that are core to their brand. At the enterprise level, maintaining the consistency and relevance of these terms is critical—and they can't be lost in the translation process.

For this reason, translation customization—adapting translation systems to particular circumstances for a given organization—is crucial for companies weigh their RTT options.

### **Translation Quality: Public MT**

Customizing a public MT engine without significant in-house language and translation expertise and resources is extremely difficult. MT engines do not organically recognize branded products and services that are unique to a given organization—and that can have negative ramifications on clarity of message and customer experience, particularly in a highly personalized or customer-centric use case such as a contact center.

Using public MT engines that are unable to translate custom terms precisely can reduce context and clarity for customers, and that can drive down quality metrics such as CSAT and NPS. When customers need to work harder to understand a company's message, they become more frustrated.

### **Translation Quality: Lionbridge RTT**

Lionbridge leverages its decades of expertise in linguistics and translation to customize Virtual Linguists for every client.

Our language team works closely with clients to identify the brand terms and vocabulary unique and important to their organizations. Our team then loads these assets into the client-specific Virtual Linguist. This ensures correct translation of these terms—regardless of output target language—every time.

To ensure effective customization, Lionbridge works with clients to develop three primary types of linguistic assets:

#### **1. Do Not Translate (Brand Terms)**

These are the company, product, and other terms that should remain in the original language even after translation. For example, the company name “Subway” is never translated—it appears in English in every market and every language.

#### **2. Glossaries**

These are terms with required translations in every language. Lionbridge works with clients to review transcripts, translation memories, emails, and other multilingual communications to identify frequently-used terms and add them to the glossary.

Our team also identifies how terminology is used in practice vs. in theory. For example, a glossary may include a term like “Lionbridge real-time translation,” but agents typically write “L RTT.” The distinction is important—and identifying it allows the language team to create a rule that leads to appropriate translation of both the short and the long forms of the phrase.

#### **3. Frequently-Used Sentences and Phrases**

We often observe that agents and staff in contact centers and related environments have their own sets of frequently-used terms disseminated from an anecdotal internal knowledge base. The Lionbridge language team works with clients to identify such phrases to ensure their completely accurate translation every time.

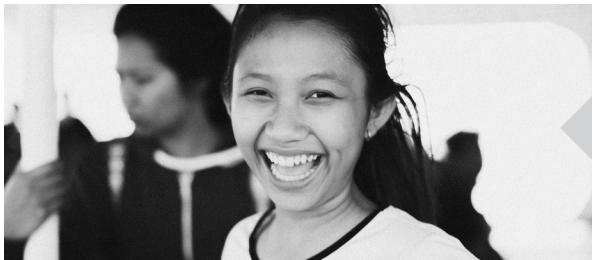
## THE POWER OF THE LIONBRIDGE VIRTUAL LINGUIST



*Lionbridge's customized Virtual Linguist AI core is a powerful tool that only improves with continued use.*

*It integrates into each of Lionbridge's distinct modules, creating customized translation consistency across the enterprise.*

Once customers have built their customized Virtual Linguists, they **can easily add** them to future use cases. For example, customers already using Lionbridge for digital channels can more quickly ramp up Lionbridge for chat and ticketing by leveraging the same Virtual Linguist.



Customers can use the self-service Lionbridge Customer Portal to **translate content instantly** leveraging their customized Virtual Linguist.

The Lionbridge Customer Portal allows customers to **manage their linguistic assets**, including brand terms, which contributes to continuous improvement of the Virtual Linguist.



Customers can **amplify the success** of their multilingual communications by leveraging their customized Lionbridge Virtual Linguist across communication channels and content types.



## CONTINUOUS TRANSLATION OPTIMIZATION



*AI-driven tools are living entities. They work best by learning—by constant refinement and optimization.*

**R**TT tools are no different—they are most effective when they receive language- and channel-specific feedback from users and customers.

Conversely, if RTT systems run for extended periods of time without evaluation or feedback, the quality of their output can decrease.

### **Continuous Translation Optimization: Public MT**

Most organizations don't have in-house language and translation expertise. That means that most organizations also don't have the resources needed to continuously update, refine, and optimize public MT systems, whose "out of the box" solutions are not inherently customized for a given organization.

### **Continuous Translation Optimization: Lionbridge RTT**

Lionbridge language experts take the guesswork out of ongoing RTT optimization. Each client's language team begins the client relationship by conducting due diligence on the organization's business, communication channels, and terminology. This allows them to build a customized Virtual Linguist, and it puts them in an ideal position to refine and optimize it.

The Lionbridge language team meets regularly with clients to conduct Optimization Sessions.

In these meetings, the language team collaborates with the customer to evaluate every aspect of the customer's RTT instance, including:

- Is the selected MT engine(s) still the best fit for the customer's linguistic and business goals?
- Are there opportunities to improve the performance of individual languages or language pairs?
- Can this client leverage additional Lionbridge RTT libraries?
- Are the existing Do Not Translate, Glossaries, and Canned/Frequently Used Messages lists effective? Do they need updates?
- Should new Do Not Translate, Glossaries, and Canned/Frequently Used Messages lists be created?
- Is the team following the communication channel-specific best practices?



## SECURITY AND DATA PROTECTION



*Data and information security is a paramount consideration for RTT.*

**T**his is especially true for organizations whose content includes customer, financial, and/or personally identifiable information.

### **Security and Data Protection: Public MT**

Don DePalma, Chief Strategy Officer of Common Sense Advisory, a leading research company focused on language services, **posits** that security is an often overlooked aspect of public MT solutions. Using such applications might have the unintended effect of your “employees and your suppliers...unconsciously conspiring to broadcast your confidential information, trade secrets, and intellectual property (IP) to the world.”

Indeed, some MT engines do not comply with organizational data security and usage policies. Many global companies do not have established policies themselves, and thus they are not aware that a data leak is occurring or could occur.

DePalma adds that, “MT sites can use your data in ways you did not intend. While content ownership remains with the creator, free MT providers claim usage rights under their terms and conditions.” This means that organizations using such tools may give their creators a global license to use their content.

### **Security and Data Protection: Lionbridge RTT**

We designed Lionbridge RTT with security in mind. The SaaS-based solution does not store or record any source text or corresponding translations. Any translations performed via Lionbridge are encrypted while in flight, and the data never remains at rest.

Equally importantly, all PII and PCI data is masked. If you have EU Data Privacy concerns (Privacy Shield), Lionbridge has data centers in Europe that ensure data never leaves the EU. Lionbridge has passed security audits with many of the world’s largest and most trusted companies.





## PRE-BUILT INTEGRATIONS



*To be most effective,  
RTT must also be easy to use.*

When organizations consider which system to use, they need to consider ease of use as an additional deciding factor. How do they plan to deploy the RTT? Do they have the technical resources and expertise needed to optimize it? How will the selected RTT fit into the organization's existing tech stack? These are important questions for organizations to ask as they evaluate public MT and Lionbridge RTT.

### **Pre-Built Integrations: Public MT**

APIs make adding an MT engine to an organization's homegrown applications relatively easy, provided that the application was built with RTT in mind. But providers of public MT engines likely find that it is cost- and time-prohibitive to build integrations between their systems and commercially-available communications platforms. This can make the translation process unwieldy and inefficient for organizations using public MT engines.

### **Pre-Built Integrations: Lionbridge RTT**

Lionbridge has already built integrations with leading contact center, service management, and enterprise communication and collaboration platforms.

From chat and email to ticketing and forums, these pre-built integrations speed time to implementation. Often, our language experts only require two to four weeks to build a customized engine for our clients.

These integrations have passed rigorous certification programs from our partners, so customers can be confident when adding them to existing platforms.

## THE CHOICE IS CLEAR

For organizations striving to provide fast, customized multilingual support across the omnichannel, Lionbridge is the clear RTT choice.

With Lionbridge, organizations can:

- Add multilingual capability to existing service management platforms
- Deliver seamless multilingual support across every channel in every language
- Achieve better customer experience
- Accelerate issue resolution
- Improve productivity and employee satisfaction
- Ensure brand consistency in every language



GET STARTED.

**CONTACT US** TODAY TO LEARN MORE ABOUT  
ADDING LIONBRIDGE RTT TO YOUR TECH STACK.

**GEOFLUENTSALES@LIONBRIDGE.COM**

## About Lionbridge

Lionbridge partners with brands to break barriers and build bridges all over the world. For more than 20 years, we have helped companies connect with global customers by delivering marketing, testing and globalization services in more than 300 languages.

Through our world-class platform, we orchestrate a network of 500,000 passionate experts in 5,000-plus cities, who partner with brands to create culturally rich experiences. Relentless in our love of linguistics, we use the best of human and machine intelligence to forge understanding that resonates with our customers' customers. Based in Waltham, Mass., Lionbridge maintains solution centers in 27 countries.



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[LIONBRIDGE.COM](https://www.lionbridge.com)

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