LIONBRIDGE

Delivering the Next Phase of Localization Value

The role of tech-first, engineered workflows in transforming translation

> The goal [of engineering agentic translation] is to achieve the same quality as humans but with less human intervention because that's where most of the cost is in translation.

Vincent Henderson | Lionbridge
Chief Product Officer

What Is the Next Phase of AI-Powered Translation?

As global businesses strive to engage with audiences in every language, the need for faster, more accurate, and cost-effective translations is at an all-time high. The rise of Large Language Models (LLMs) and advanced localization technology has ushered in a new era in which translation is not only powered by AI but also engineered for measurable business results.

What defines this next phase? It's about moving beyond basic Machine Translation (MT) and tapping into the full potential of agentic AI, Retrieval-Augmented Generation (RAG), and AI post-editing processes to achieve translation quality at scale. At the same time, responsible AI ensures that automation enhances linguistic authenticity without sacrificing human expertise or compromising your brand.

If you've ever wrestled with the limitations of traditional workflows, wondered how much human review is still needed, or sought practical ways to reduce costs without losing quality, this eBook is for you.

What Are the Key Webinar Takeaways?

- Responsible AI is essential for transparency, reliability, and usefulness in localization technology.
- Lionbridge's TRUST and REACH frameworks ensure that we know our goals and that AI translation helps us achieve our business objectives responsibly and effectively.
- Agentic translation workflows with Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG) deliver better translation quality and continuous improvement.
- AI post-editing and Auto LQA processes reduce human effort and turnaround time while improving accuracy.
- Customization, benchmarking, and human-in-the-loop reviews remain critical for maintaining translation quality and linguistic authenticity.
- A technology-first platform, such as Lionbridge Aurora AI™, orchestrates advanced workflows for AI translation, AI content creation, and AI validation to deliver scalable, high-quality global content.

How Lionbridge's TRUST and REACH Frameworks Guide Responsible AI

At the heart of Lionbridge's approach are two guiding frameworks: TRUST and REACH. These frameworks ensure that AI-powered translation is both responsible and effective.

The TRUST acronym stands for Transparent, Reliable, Useful, Scalable, and Timely. This framework ensures that AI helps us achieve your goals through auditable decision-making, consistent performance, the achievement of specified objectives, and the handling of increasing workloads, all in a timely and relevant manner.

The REACH acronym stands for ROI, Engagement, Audience, Control, and Human-in-the-Loop. This framework ensures we understand your goals and maintain control to align AI-powered translation with business outcomes.

How Engineered Agentic Workflows Transform Translation Quality

Traditional localization workflows — such as MT combined with Machine Translation Quality Estimation (MTQE) — rely on Translation Memories (TMs) and reference segments to guide new translations. In these workflows, MTQE models score outputs, and segments that fall below a predefined threshold are sent for human review.

However, this method has its limitations. MTQE models often plateau at around 85% accuracy, and real-world translation involves much more than simply verifying sentence correctness. Glossaries, style guides, tagging,

and nuanced context play vital roles, yet most standard systems don't fully address these complexities.

Engineered agentic workflows overcome these limitations by deploying specialized AI agents to improve translation quality. Each segment is categorized and routed through targeted checks — such as numbers, acronyms, lists, tags, terminology, headings, and local context. This focused approach ensures that each aspect of the translation receives precise, context-aware attention. Asking an LLM for less at each step improves overall accuracy.

With agentic workflows, organizations benefit from:

- Higher translation quality through precise, context-aware interventions
- Lower costs through reduced human review, as AI agents identify which segments truly need editing
- Faster turnaround times, accelerating content delivery and time to value
- Continuous improvement, with benchmarks updated as new data is gathered

How AI Post-Editing and Automated Linguistic Quality Improve Efficiency

AI Post-Editing is a process in which enhanced agents review and correct translations, not only for accuracy but also for compliance with real-world requirements — style, terminology, formatting, and even contextual references. Automated Linguistic Quality Assurance (Auto LQA) agents validate the final output, scanning for any errors that might have slipped through.

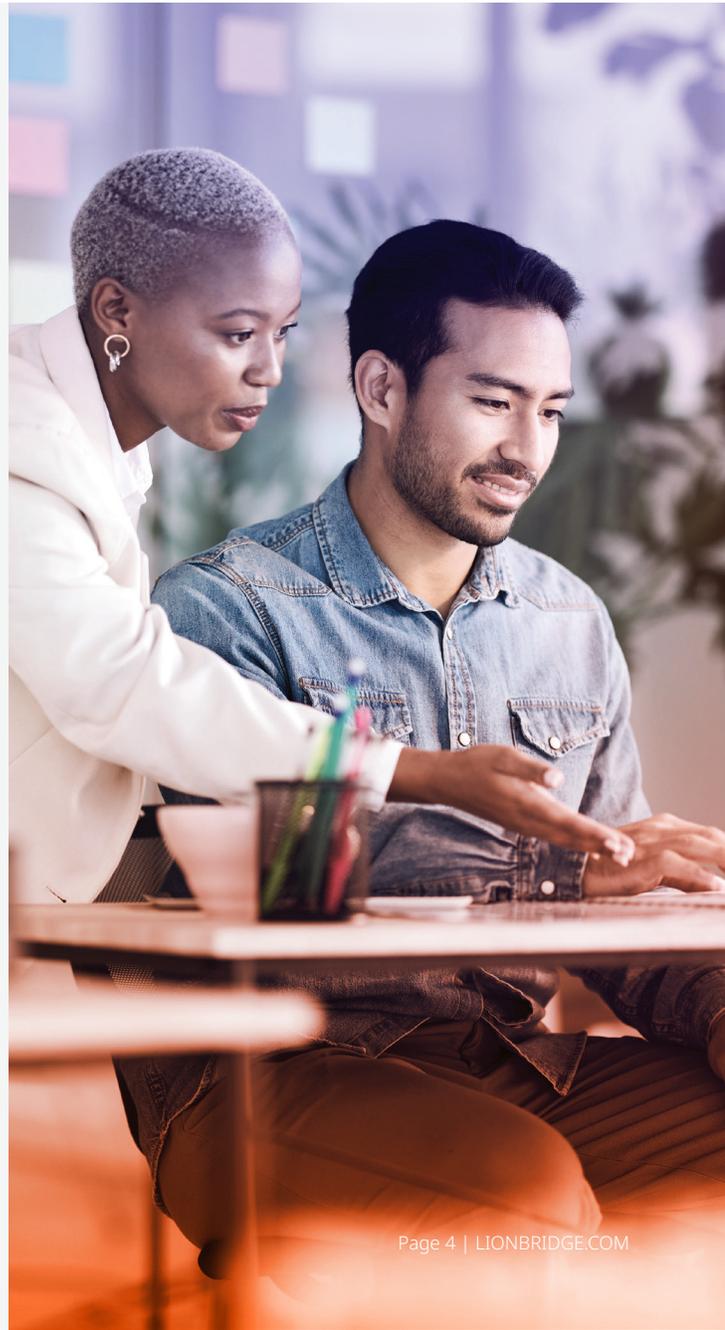This multi-agent, multi-step approach means that only the necessary segments go to humans for review, and even then, different levels of editing (quick check, light review, light edit, full edit) are applied based on the desired target accuracy. The system is benchmarked so teams know precisely what quality level to expect.

It's a continuous improvement cycle: AI agents learn from feedback, humans update instructions and reference assets, and the whole process gets more efficient over time.

How Engineered AI Workflows Impact Cost and Turnaround Times

One of the most compelling outcomes of engineered agentic translation is the dramatic reduction in human post-editing effort. As AI agents take on more of the quality assurance workload, the cost of technology and asset management becomes the primary driver of expense — not human labor. Humans design the process and are reserved for higher-value contributions.

As this model matures, we predict that translation costs could drop by up to 80%. Turnaround times will also speed up because less manual review is required, and AI can process content at scale. The unit cost of translation is likely to continue to fall, enabling more content to be globalized while keeping costs in check.
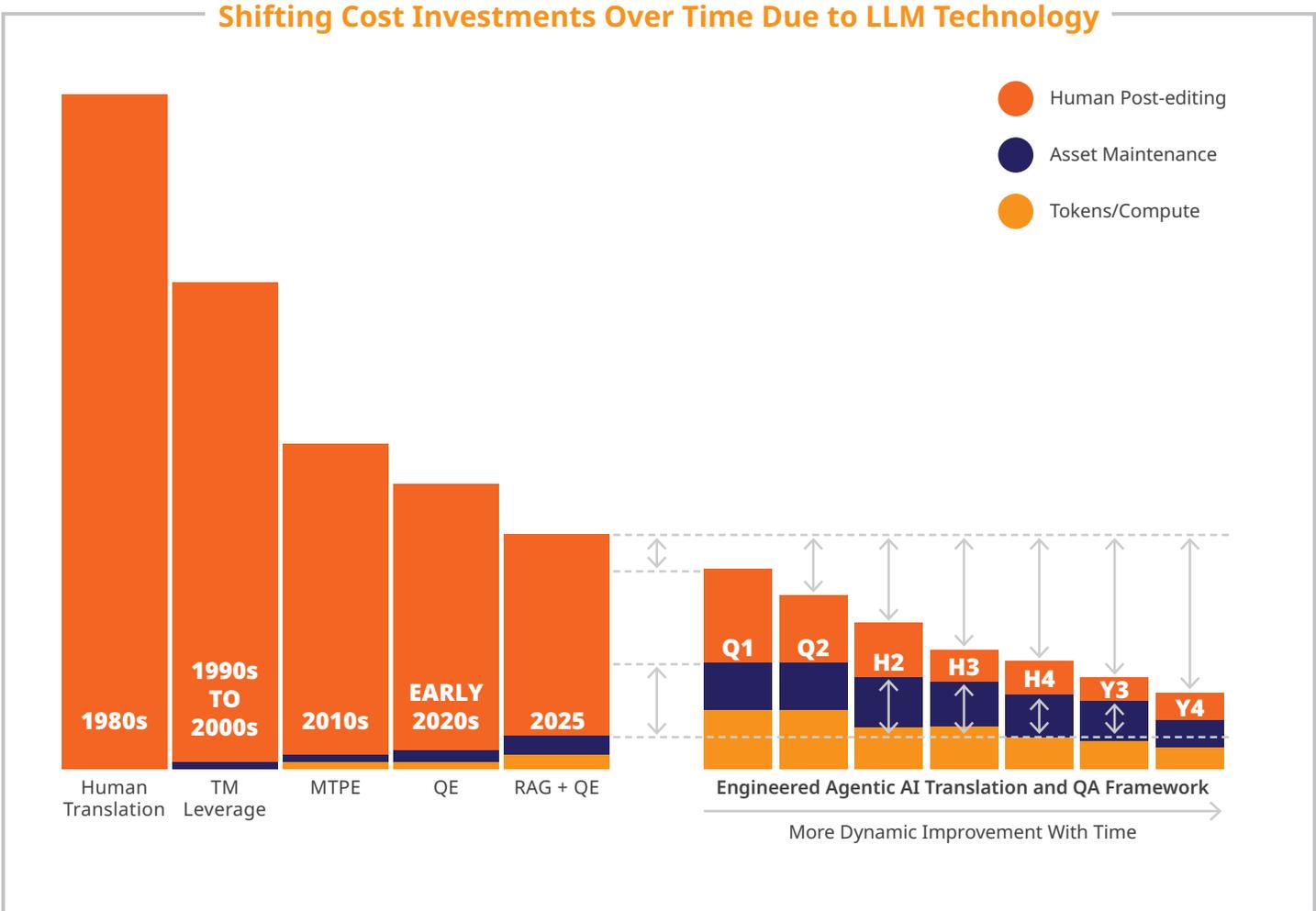
Shifting Cost Investments Over Time Due to LLM Technology

Legend:
- Human Post-editing
- Asset Maintenance
- Tokens/Compute

Bars: 1980s (Human Translation), 1990s TO 2000s (TM Leverage), 2010s (MTPE), EARLY 2020s (QE), 2025 (RAG + QE)

Q1, Q2, H2, H3, H4, Y3, Y4 — Engineered Agentic AI Translation and QA Framework

More Dynamic Improvement With Time

Figure 1: As technology and asset maintenance investments rise, overall translation costs decline over time

How To Maintain Linguistic Authenticity While Increasing Automation: Customization and Human Expertise

Despite the power and flexibility of LLMs, maintaining linguistic authenticity remains a challenge. The best results come from combining well-crafted glossaries, style guides, and reference materials with strategic AI instructions. Rather than relying on black-box training, it's about engineering the right context and controls, so the AI reflects your brand's voice and cultural expectations.
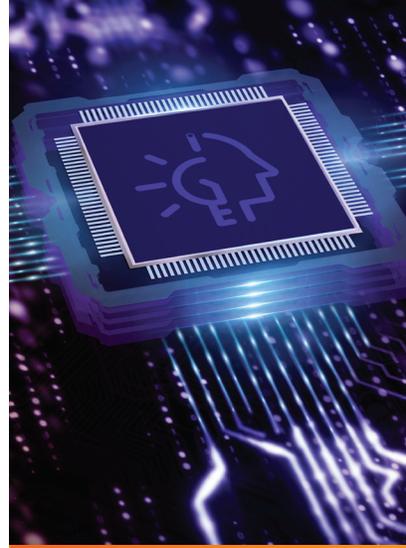
Human-in-the-loop remains critical, not as a final checkpoint, but as an active participant in continuous improvement, benchmarking, and nuanced feedback.

Ready to Take the Next Step?

Whether you're looking to streamline workflows, improve translation quality, or reduce costs, Lionbridge offers the expertise and technology to support your journey through the latest advances in AI translation. Our tech-first approach, delivered through the Lionbridge Aurora AI™ platform, combines expert knowledge and advanced AI pipelines for culturally relevant AI translation, real-time AI content creation, and AI validation, ensuring your AI models deliver the expected results.

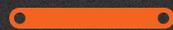See how we can help you achieve your global content goals.

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ABOUT LIONBRIDGE
Lionbridge partners with brands to break barriers and build bridges all over the world. For over 25 years, we have helped companies connect with their global customers and employees by delivering translation and localization solutions in 350+ languages. Through our world-class platform, we orchestrate a network of passionate experts across the globe 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' clients. Based in Waltham, Massachusetts, Lionbridge maintains solution centers in 24 countries.

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