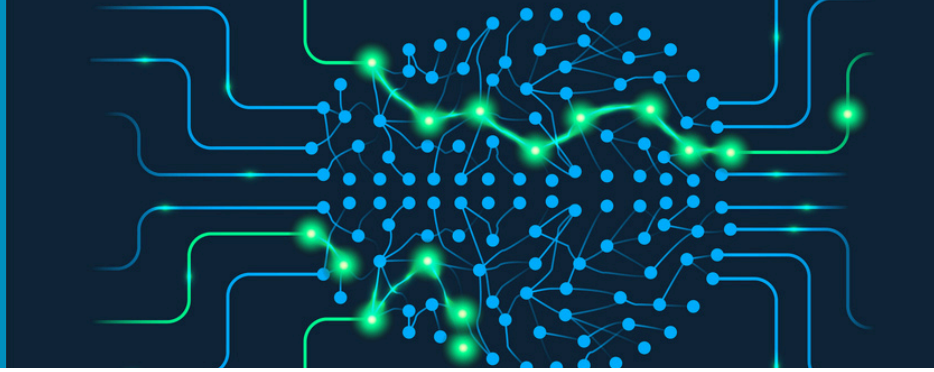

Vistatec Enables Global Clinical Technology Leader to Scale Multilingual Operations Through Structured Neural MT Adoption

Client

Our client is a global Life Sciences technology organization growing towards €10 billion in revenue. Their products support biopharmaceutical and medical device organizations in managing clinical data, accelerating research, and minimizing regulatory risk.

Operating across a highly complex digital ecosystem, the client currently offers their products into 120 languages. Approximately 30 percent of these languages represent rare or emerging market locales and dialects.

Vistatec has partnered with the organization for over ten years, supporting UI and software localization, clinician- and patient-facing content, eLearning, multimedia, including voiceover and subtitling, as well as legal, marketing, and internal communications. The content environment spans multiple product families, user types, and regulatory contexts, requiring consistency, governance, and scalability across systems.

Critical Challenges

As the organization expanded globally, language volume and operational complexity increased significantly.

Each major world language exceeded five million words for translation annually. Despite this scale, the client had not identified a sustainable method to reduce per-language cost or improve throughput.

Several structural challenges emerged:

- No internal machine translation capability for high-risk content.
- Established use of TMS since 2017, but no integration with MT engine.
- A separate third-party UI localization tool is integrated with TMS, creating additional workflow dependencies.
- Process steps between systems, creating an inefficient process with many manual dependencies.
- No formalized benchmarking framework to measure MT quality and quality evolution.

Critical Challenges

Stakeholder resistance compounded the challenge. Internal teams in Japan expressed strong hesitation toward Neural Machine Translation adoption, citing concerns about quality, regulatory risk, and reputational impact. Japanese was both a high-volume language and the region with the highest internal skepticism. The client required a solution that would:

- Reduce cost per language at scale.
- Improve turnaround times.
- Maintain established governance across regulated content.
- Ensure quality was not impacted by the use of MT.
- Secure regional stakeholder confidence before broader rollout.

This was not a simple MT deployment. It required a structured adoption model grounded in evaluation, transparency, and controlled implementation.

Solution

Structured Evaluation and Stakeholder-Centric MT Adoption

Vistatec designed a phased approach centered on assessment, controlled training, integration feasibility, and continuous benchmarking.

Phase 1: Forensic Engine Assessment

Vistatec evaluated four Neural MT engines:

- Microsoft
- Google
- Amazon
- DeepL

Japanese was selected as the pilot language due to the high degree of stakeholder resistance and volume concentration.

Initial benchmarking revealed that only 32 percent of segments were fully or mostly comprehensible without significant human intervention. This baseline confirmed stakeholder concerns and provided a transparent starting point.

Solution

Phase 2: Controlled Training and Testing

Vistatec selected representative samples of established Japanese translations and conducted limited training rounds across the four engines.

Parallel workflow testing was conducted to assess:

- Integration compatibility with TMS.
- Automation feasibility.
- Performance within the client's third-party UI localization tool.
- Potential system disruption.

Following controlled training, the Microsoft engine demonstrated measurable improvement, achieving 58 percent leveraging and significantly enhanced comprehensibility.

Phase 3: Integration and Governance

The client selected Microsoft Neural MT based on:

- TMS native integration capability.
- Compatibility with the UI localization tool.
- Automation feasibility.
- Governance controls.
- Measurable performance improvement.

Direct integration with TMS eliminated manual import and export steps and enabled a fully automated process across systems.

Quality benchmarks were formalized. Stakeholders, including Japanese regional representatives, were directly involved in reviewing outputs and validating performance thresholds. This inclusion proved critical in securing internal buy-in.

Phase 4: Continuous Optimization

The MT engine is trained quarterly using validated linguistic assets.

Performance metrics are monitored, documented, and reported to stakeholders. This established a structured, continuous improvement model rather than a one-time implementation.

Results

Measured Performance Improvement Over Three Years
The impact evolved progressively as the engine matured and strengthened.

Current Results

18% Cost Savings	**77% Leveraging**
Average timeline reduction of 25 days	**4 to 5 weeks faster time to market**

These improvements were achieved over a 36-month period, without compromising human oversight or regulatory integrity. The performance trajectory reflects cumulative training, structured benchmarking, and stakeholder collaboration.

Strategic Value and ROI

The value of this initiative lies in its compounding effect.

Neural MT adoption was structured, rather than a technology experiment. The engine continues to be trained and evaluated quarterly. Quality improves over time, increasing leverage and accelerating delivery.

Key strategic outcomes include:

- Ability to scale high-volume languages without proportional budget increases.
- Procurement recognition for sustained cost avoidance across three consecutive years.
- Documented improvement in time to market across regulated product releases.
- Formalized quality benchmarking framework.
- Expansion from Japanese into additional languages using the same controlled adoption model.
- Reduced process friction across multiple integrated systems.

As noted by procurement stakeholders, the organization gained the ability to do more without increasing budgets.

The model also supports expansion. While acceptable quality MT was not initially available across all 120 languages, the structured evaluation framework enables continued controlled adoption as technology evolves.

Client Feedback and Partnership Impact

The most significant differentiator was stakeholder alignment.

By selecting the most resistant region as the pilot, Vistatec addressed skepticism directly rather than bypassing it. Japanese stakeholders participated in evaluation sessions, reviewed outputs, and observed measurable improvement through training and benchmarking. This transparency built trust.

The success in Japan created a replicable framework for additional languages. Each subsequent rollout followed the same structured evaluation, integration testing, and benchmarking process.

Vistatec evolved from a service provider to a strategic advisor in multilingual governance. The localization program now operates with a scalable framework that supports:

- Continuous quality improvement.
- Cross-content consistency.
- System-level integration.
- Sustainable cost management.
- Enterprise-grade oversight.
- Year-over-year cost avoidance.

Learn more about Vistatec Life Sciences today!

Visit vistatec.com/life-sciences