LIONBRIDGE

CISCO NETWORKING ACADEMY CASE STUDY

SCALING MULTILINGUAL EDUCATION WITH AI POST-EDITING

ABOUT THE CUSTOMER

Cisco Systems, Inc. is a global technology company specializing in networking hardware, software, and telecommunications equipment. Headquartered in San Jose, California, Cisco leads in delivering integrated network solutions. A significant proportion of global internet backbone traffic flows through Cisco equipment and software.

15M+ WORDS

14 LANGUAGES

24 COURSES

Cisco Networking Academy — Cisco's global social responsibility initiative — aims to transform lives through technology education. It provides access to training and job opportunities in the IT sector for people worldwide, regardless of their affiliation with Cisco. The initiative offers a leading-edge curriculum of self-paced courses in networking, cybersecurity, programming, AI, data science, sustainability, and professional skills through its progressive education technology platform. The program serves 24 million learners in 191 countries who speak a wide array of languages. Cisco Networking Academy partners with governments, academic institutions, and nonprofits to deliver educational opportunities.

THE CHALLENGE

Cisco Networking Academy continuously updates and expands its course catalog to reflect rapidly changing industry requirements. This practice enables learners to build the practical skills and in-depth knowledge they need to harness new technologies and participate equitably in our global economy. Localization is critical for maximizing the initiative's impact and must be an ongoing process, ensuring that translated and adapted materials remain current and effective for diverse audiences. However, the program's scale — including its goal to serve an additional 25 million people by 2032 — combined with the need to deliver content quickly and cost-effectively, presents significant challenges. These demands make it difficult to maintain timely and high-quality localization across regions and languages.

THE SOLUTION

To scale its course offerings into more languages, Cisco partnered with Lionbridge to implement an AI-powered translation workflow featuring AI post-editing.
The solution involved the following steps:

- **Translation Memory (TM) Analysis** — performed to identify and lock 100 percent of In-Context Exact (ICE) matches from previously approved, human-translated segments.
- **Neural Machine Translation (NMT)** — applied to all other segments, chosen for its speed, cost, and consistency.
- **LLM-powered AI post-editing** — used to refine and enhance the NMT output.
- **In-context functional testing** — performed by human testers, with special attention given to complex languages.

THE RESULTS

The use of automated post-editing enabled Cisco Networking Academy to translate over 15 million words into 14 languages, supporting 24 courses, in just three months. Previously, translation was the bottleneck; however, with this approach, the holdup shifted to functional testing and staging — demonstrating significant efficiency gains. All this work was completed for $70,000, which is dramatically less than the cost of traditional methodologies. By leveraging LLMs for post-editing, Cisco can now release content in multiple languages simultaneously, significantly reducing the time lag between English and localized versions and expanding global access to its courses.

LANGUAGES PROCESSED

- Arabic
- Japanese
- Chinese
- Korean
- Thai
- French
- German
- Italian
- Polish
- Romanian
- Greek
- Welsh
- Spanish
- Portuguese

KEY TAKEAWAYS

- Automated post-editing with LLMs can significantly accelerate multilingual content delivery while reducing costs.
- Leveraging existing Translation Memories ensures consistency and maximizes the value of prior human translation investments.
- Human-in-the-loop workflows remain essential for quality assurance, especially for complex languages and specialized content.
- Scalable AI-powered localization enables organizations to support rapid growth and expand global reach without sacrificing quality.

“We are now seeing content translated at a speed and cost that we have never seen before. Automated post-editing allows us to localize content that we wouldn’t have been able to do otherwise because of budgetary constraints.”

Yolanda Cham Yuen | Cisco Systems