

Research Report

## Multilingual Product Content:

Transforming Traditional  
Practices to Global Content  
Value Chains

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**The Gilbane Group**

**Extract: Cisco  
Best Practices Profile**



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**THE GILBANE GROUP**

## Cisco Systems

Founded in 1984 by a small group of computer scientists from Stanford University, Cisco is a worldwide leader in networking that transforms how people connect, communicate and collaborate. The company's offerings span the full range of hardware, software, and services used to create the Internet solutions that make networks possible. Cisco revenue for 2008 totaled \$39.5 billion, up 13 percent from fiscal year 2007.



Bringing more than 250 new products to market in 2008, Cisco boasts more than 66,000 employees worldwide that serve five geographic theaters – United States and Canada, European Markets, Emerging Markets, Asia Pacific, and Japan. Focus on expanding presence in the Emerging Markets and Asia Pacific theaters is strong, China and India in particular. 92% of all Cisco's customer orders arrive through the Internet.

Ranked number #2 in the Silicon Valley 150 Cisco's 2008 foreign sales accounted for 47% of its business. International sales represented a growth of 20%, a rate four times higher than the company's overall 5% sales growth.<sup>1</sup> As such, it is no surprise that the company's commitment to multilingual product is comprehensive.

## Focus on Learning

Cisco has long demonstrated a deep commitment to facilitating learning and knowledge sharing across the global workforce that designs, implements, administers, and expands networking technologies. From a business perspective, an investment in the support and expansion of the networking profession is a natural characteristic of the company's widely-recognized customer advocacy and satisfaction mantra.

From the perspective of corporate responsibility, the investment in creating and sustaining highly skilled technical workforces represents far more. Worldwide economic growth across all industries is at risk without the professional development of the human resources to apply various technologies within profit, non-profit, and government entities. IDC predicts a 40% "talent gap" between the demand and supply of technical networking skills by the year 2012. At Cisco, addressing the global networking skills gap is a commitment driven by an obligation to foster industry growth.

To that end, the launch of the Cisco Learning Network in June of 2008 was a significant milestone in the evolution of the company's forums for mass market education, certification, and professional mentoring programs. As described in a press release launch, "Designed for both the seasoned professional as well as individuals considering a career in IT, the Cisco Learning Network is a collaborative Web 2.0 site that enables the creation of a global networking professional community that shares, discusses and

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<sup>1</sup> The Mercury News Silicon Valley 150. [http://www.siliconvalley.com/sv150/ci\\_12109399](http://www.siliconvalley.com/sv150/ci_12109399)

exchanges ideas in a dedicated online environment.” In just one year, the community had proven its worth:

- Over 100,000 members and 1.7 million unique visitors
- Membership demographics that span 229 different countries
- A Jobs Portal that serves as a resource center for 100,000 IT industry job searches, resulting in activities such as 5,000 job applications

The Learning@Cisco organization develops and manages the training content that drives Cisco Certifications globally, as well as the Cisco Learning Network (<http://www.ciscolearningnetwork.com>). Chartered with providing resources critical to accelerate the productivity of customers, partners, and employees, the group’s overriding objective is to address the global networking skills talent gap. Doing so requires the creation, management, and delivery of “terabytes of content” for use in instructor-led and virtual training courses, certifications, and self-assessments. The Quality Assurance Services (QAS) team within Learning@Cisco ensures consistency, accuracy, and usability of the content in this vast library.

## **Content Globalization Challenges**

A foundation in editing, production, and web services expertise provides the QAS team with a content-centric perspective on supporting the business and industry objectives for the Cisco Learning Network. The team champions the role of information quality in defining customer experience and in turn, facilitating strong customer relationships. Marc Asturias, a QAS Team Lead notes, “The adoption, growth, and impact of the Cisco Learning Network are intrinsically linked to the value of the information it provides.” From this perspective, the ability of the Learning@Cisco group to meet or exceed corporate requirements for measurable customer satisfaction, expanded global reach, and decreased time to market is highly dependent on information quality and depth.

The QAS objective is clearly linked to customer-driven business goals with a mission to “enable Learning@Cisco client success by providing editorial, desktop publishing, graphics, web, new-media, and rich-media services that deliver quality built on scalable and efficient processes, tools, and best practices.” However, the pervasive growth of the Cisco Learning Network presented new challenges to delivering consistent results. To ensure the quality of an ever-expanding content library, the QAS team combined editorial process know-how with content analysis to identify a core set of scalability challenges:

- Internal style guides represented admirable efforts over many years, but resulted in “ungainly resources” for content developers.
- Although style and terminology guidelines included overall usage criteria, content deliverables such as assessments and marketing resources, for example, required different conventions than courseware.
- Editorial focus on copyediting (i.e., sentence structure, punctuation, or grammar) had escalated to a level that prevented focused developmental editing (i.e., clarity, information flow, and consistent branding.)

- Ensuring the continuous improvement of source content was impossible without ongoing evaluations, but processes to do so were subjective, inconsistent and expensive.

In effect, traditional processes for ensuring content consistency, accuracy, and usability had diminished the value of editorial processes.

## The Solution

A Strategic Editorial Quality Initiative (SEQI) endorsed by a cross-functional group of Learning@Cisco executives provided the QAS team with an organizational foundation for a cohesive, centralized approach. Clear business objectives for the global expansion of the Cisco Learning Network served as metrics for driving improvements. Process and content analysis revealed the groundwork required to deliver results.

Armed with responsibility and focus, the team set out to formalize a program for continuous information quality management that would provide internal and customer-facing benefits. The first step toward infusing quality throughout the organization's Global Content Value Chain (GCVC) started at the source, or point of content creation. Removing the inaccessibility of terminology, style, and editorial guidelines during the instructional design and development processes was key. In fact, one of the primary productivity issues facing courseware developers and editors was not the absence of quality guidelines; it was the abundance of them. Process analysis also revealed that although content creators had knowledge of various Cisco-specific quality guidelines, it was difficult to know which rules to apply in various contexts.

Integrating quality standards directly into content creation environments, or implementing quality-controlled authoring, provides technology-driven governance from the authoring function forward. The team felt strongly that this approach—providing real-time, in-context, and automated feedback to content creators on linguistic rules, best practices style guidelines, and Cisco-specific terminology—would enable *accessible* quality control. At the same time, the approach would eliminate costly and lengthy editorial cycles overburdened with monotonous tasks such validating the proper use of networking terms and phrases. Finally, it would enable third-party developers to meet Cisco quality standards for learning content.

The QAS team selected and is currently piloting acrolinx IQ and other technologies to improve information quality and implement a technology-driven governance software solution. Guided by the three C's—Compliant, Correct, and Consistent—the team aggregated sources such as Cisco corporate guidelines, courseware and assessment-specific styles, and the “Networking Master Terminology List (NMTL)” to design a rules-driven knowledge base of information quality conventions.

Combining the knowledge base with the terminology management and natural language processing capabilities of the technology-driven governance software solution provides a scalable foundation for an evolving information quality management program. The solution also enables the team to track and report on Cisco-specific quality control metrics specific to global customer satisfaction levels through

integration with content creation environments such as Microsoft Word and PowerPoint.

## **Results**

According to Asturias, the implementation of technology-driven governance aligns intrinsically with the core business objectives of Learning@Cisco by supporting a “controlled focus on quality to help learners absorb information consistently and most importantly, learn quicker.” Measuring the customer-facing impact of this focus is a realistic and manageable activity given ongoing collection of customer satisfaction data within Learning@Cisco and enterprise-wide.

The QAS team expects to further increase the organization’s impressive customer satisfaction levels through quality-controlled authoring and terminology management. The team has also projected internal cost savings through operational efficiencies within Learning@Cisco. Based on the delivery of thirteen new courses for Cisco Certifications, for example, process analysis pinpoints a projected 28% cost savings from increased efficiency. Enabling editors to concentrate on substantive editing such as logic and flow rather than on low-level edits related to style, grammar and terminology rules produces what Asturias refers to as an “immediate ROI.”

Initial results have garnered attention throughout Learning@Cisco and across other product content domains, centralized organizations such as the Enterprise Translation Services Group, and Cisco’s Globalization Board. As a result, the QAS team has begun pre-pilot efforts with other teams to create “a viral approach to quality.”

## **Gilbane Group Perspective**

Quality assurance as a formal operation within product design, development and testing arenas has been status-quo for decades. Ensuring the quality of the content that supports manufactured products and consumer services, however, has traditionally been a “grass-roots” effort driven by one or more operational champions. For many organizations, “quality assurance for product content” consists of ad-hoc, reactive, and inevitably expensive editorial tasks. The challenges of transforming these kinds of practices into coordinated and measurable processes can seem insurmountable.

Efforts within the Learning@Cisco organization at Cisco demonstrate that a proactive approach is the key to establishing a formal information quality management program. Establishing QAS as a services organization, linking its mission directly to customer satisfaction objectives, and supporting its activities through the executive-sponsored SEQI agenda are the building blocks for enterprise-wide awareness. In turn, the QAS team’s ongoing implementation of centralized, technology-driven governance provides the foundation for measurable quality improvements driven by content creators. Through proactive cross-functional collaboration with teams such as Enterprise Translation Services, there is little doubt that these benefits will further strengthen an impressive enterprise commitment to global customer satisfaction.