The Global Customer Experience: Sun Microsystems' Vision for the Participation Age

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For many industries, the U.S. market is essentially saturated. Hence, corporations are turning to emerging markets such as China, India, and Latin America for revenue expansion as well as increasing focus on existing European and Asia-Pacific operations. Hence, concentrating on the global customer experience is critical. This case study profiles Sun Microsystems and its commitment to achieving excellence in this arena. The company has achieved extraordinary results by viewing globalization as an enterprise-wide business practice and unifying content and translation business processes and technologies.

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Executive Summary

Interactively engaging prospects, customers, partners, and developers regardless of geography and cultural expectations, is no small feat. Heightened expectations from technology-savvy consumers for multi-channel, localized communications add to this complexity. This compels organizations to have a strong, Web, wireless, email and print-based presence that is context-specific.

Contributing to this challenge is the fact that simply engaging consumers does not guarantee sustained, satisfying, ongoing customer relationships. In fact, "just any old interaction won't do." Approaching today's market on the basis of minimal customer engagement is simply a flawed business strategy. According to authors B. Joseph Pine II and James H. Gilmore, today's market revolves around **customer experience**:

> "Goods and services are no longer enough. To be successful in today's increasingly competitive environment, companies must learn to stage experiences for each one of their individual customers. We have entered the Experience Economy, a new economic era in which all businesses must orchestrate memorable events for their customers that engage each one of them in an inherently personal way."

> *The Experience Economy: Work Is Theatre & Every Business a Stage*

Expanding worldwide footprints into emerging markets such as China, India, and Latin America expands the definition of the "context-specific" experience. It is clear that organizations with clear, multinational revenue and expansion goals must provide a **global customer experience** that addresses the expectations of multiple geographies, cultures, and vertical markets.

Achieving these criteria leads to high levels of customer satisfaction and loyalty. Clearly, businesses need customers. Customers patronize the business when they are satisfied. A consistent, interactive global customer experience begets long-term customers. According to Chris Denove and James D. Power IV, authors of *Satisfaction: How Every Great Company Listens to the Voice of the Customer,* these principles are quantifiably linked to market share, profits, and stock prices.

This is the story of Sun Microsystems' commitment to achieving excellence throughout its global customer experience. With an impressive base of international customers as well as global brand recognition for innovative technologies, Sun cannot afford to deliver anything but a compelling global customer experience. As Jonathan Schwartz, CEO of Sun Microsystems commented, "Innovation is about the only thing that matters in winning business."

Based on the combined power of content and translation technologies for localization, content subscription services, and rendering, Sun has been able to:

- Save more than $1.7 million over a three-year period.

- Provide multiple "targeted gateways" for marketing, product, and business communications based on geography, culture and industry.

- Provide simultaneous global product shipments with localized content.

- Decrease technical support inquiries while increasing customer satisfaction.

This case study profiles one organization. While Sun's approach may not be universal, its success in solving critical problems is indisputable. It is not possible to generalize the Sun approach into a universal formula, but there is much here that will be useful to other organizations with similar corporate goals.

In Their Own Words: The Sun Microsystems Perspective

How does Sun define the Participation Age?

"In the Participation Age, the network connects not only the computing power of each node, but also all the humans behind the power." *http://www.sun.com/aboutsun/index.jsp*

"It's important to understand open source as just one facet of the social change the global network has brought about. In this Participation Age, the move from closed to open affects security, software deployment and pricing and *customer engagement* as profoundly as it affects software development." *Simon Phipps, Chief Open Source Officer, Sun Microsystems*

What were the symptoms in the organization that brought the need for an intensified global customer experience to your attention?

"The disparity across our processes was too wide; we needed to close the gap." *William Snow, Senior Director of .Sun Engineering*

"It is no secret that cost control and operating efficiency are factors in any company's long-term success on the Web. Along those lines, for Sun, scalability and optimization of Web resources were paramount to ensuring the ability to sustain growth and meet our business' rapidly changing needs over time. We had to put the right solutions in place fast to support those factors, or we knew we'd always be playing catch-up." *Kristen Harris, .Sun Content Management Engineering Manager*

Which vendor(s) did you select and what were the overriding considerations?

"The low implementation cost of SDL and Interwoven's combined offering provided an affordable solution." *Youngmin Radochonski, Globalization Program Manager*

"SDL's open and manageable XML-based architecture has enabled rapid integration and improved Sun's quality and consistency of multilingual content. *William Snow, Senior Director of .Sun Engineering*

"As with most of our systems, we needed a solution which would meet our immediate needs, but which would be able to scale to meet needs as they evolved and shifted in the future. The SDL and Interwoven offering fit that criteria." *Joe Mocker, .Sun Engineering Lead Architect*

How do you know the solution is working?

"Translation throughput has decreased time-to-market and the total cost of translation. The system will also ensure other divisions in Sun have the ability to benefit from translation memory and our customized workflows." *William Snow, Senior Director of .Sun Engineering*

"This joint solution improved the accuracy of our Web-based resources, while preserving our key messages and reducing the time needed to go live with local content. It has proved to be very effective." *Youngmin Radochonski, Globalization Program Manager*

Sun Microsystems Company Background

Since 1982, Sun has brought together the world's brightest technical minds to solve the world's biggest technical problems. The vision of "Everyone and everything participating on the network" means that when people are networked, they share, they interact, and solve problems. A singular vision -- "The Network Is The Computer" -- guides Sun in the development of technologies that power the world's most important markets.

Sun's philosophy of sharing innovation and building communities is at the forefront of the next wave of computing: the Participation Age. Sun can be found in more than 100 countries and on the Web at http://sun.com.

The Problem: Intensify the Global Customer Experience

"Sun views our global web experience as core to our doing business and views this practice as the standard way we do business. We strive to achieve the best possible web experiences for our customers as critical to achieving our company's goals for brand management, continued customer reach around the world, and overall customer satisfaction."

*Curtis Sasaki, Vice President, Sun Web Properties*

Sun consistently demonstrates its commitment to the Participation Age. A key part of the vision focuses on ongoing, two-way global communications with consumers. Hence, it is critical for the company to intensify the impact of the global customer experience for prospects, customers, partners, and developers.

Fostering interest, participation, and loyalty requires a corporate focus on three strategic areas:

- Information management infrastructure

- Globalization and localization process management

- Content distribution lifecycles

A global customer experience requires a 360-degree view of the customer lifecycle, from prospecting to retention to up-sell opportunities:

Figure 1: The Customer Lifecycle
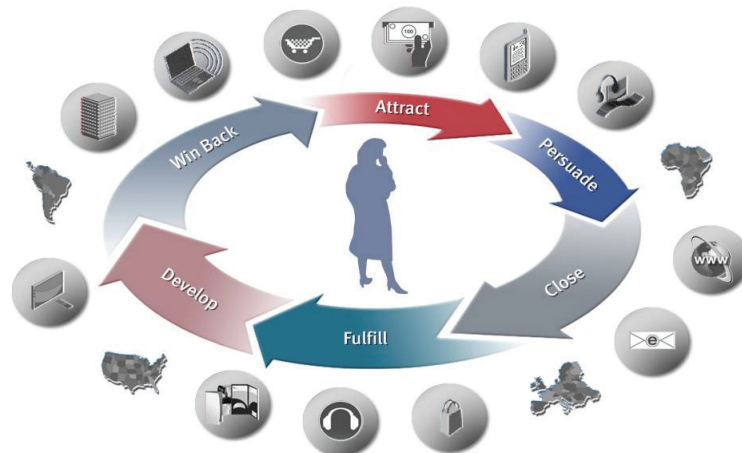
Within each lifecycle segment, there is opportunity for attracting new customers, building and strengthening customer relationships, and enhancing individual loyalty. Opportunity however, is directly dependent on *how* the target audience experiences the human and information-driven interactions that take place within them. In essence: How does the prospect or customer feel about what they saw, read or heard? Was the experience personal enough to make a strong impression? Did they perceive it as genuine and compelling?

Sun's global customer experience strategy is highly focused on consistently gaining insight from the answers to these questions through a strong customer loyalty research program. In addition, the company maintains over 100 "targeted gateways" based on vertical industry and business requirements.

To its credit, Sun views globalization as an enterprise-wide business practice as part of its commitment to a worldwide customer base. The company also had the foresight to renew focus

on the global customer experience based on increasing revenues in international markets as opposed to reacting to the common pitfalls of large global companies – brand mismanagement, customer retention issues, and inconsistent product availability.

Still, even Sun was challenged to strategically evaluate, reengineer, and optimize the cross-departmental and external business processes required to:

- Ensure brand consistency across multiple vertical markets, geographies, and cultures.

- Increase the availability and distribution of localized content.

- Align globalization and localization business processes with product launches.

A team led by Will Snow, Sun's Senior Director of .Sun Engineering and Kristen Harris, Content Management Engineering Manager, set out to tackle these challenges head-on by focusing on key Web access points to Sun's technology, product, and training resources.

Assisted by Youngmin Radochonski, Globalization Program Manager, Jed Michnowicz, Engineering Lead and other key players in the publishing and engineering groups, the team included the range of skills needed to design Sun's Global Customer Experience platform. The following sections provide details on the team's success criteria.

Sun on the Web

- sun.com
- sun.com/training
- java.com
- catalogue.sun.com
- developers.sun.com
- java.sun.com
- network.com
- sunconnection.sun.com
- fr.sun.com
- id.sun.com
- blogs.sun.com
- sunsolve.sun.com
- forums.sun.com
- storagetek.com

The Need: Eliminate Content Mismanagement and Disparate Business Processes

Like many large organizations, the evolution in the volume and number of content-centric processes within Sun had resulted in divisional, departmental, and individual silos. Lurking within each silo were the inevitable hazards of mismanaged content resources:

- Organic, disorganized growth resulting in multiple, unique, and manual processes according to specific groups and project managers.

- The use of desktop productivity tools such as email and spreadsheets to manage translation processes, including external contributors.

- Unmanaged and uncoordinated FTP and email-based content distribution.

- Content inconsistencies and inaccuracies across multiple Web sites.

Mismanagement creates obvious risk for redundancy, errors, and inefficiency. Without project controls for content and translation management, Sun experienced cost control issues, project delays, and in the words of team members Jed Michnowicz and Youngmin Radochonski, "undesired repetition and unpredictable outcomes." Because translation processes were not effectively shared, it was not uncommon for one source file to be translated multiple times – and in different ways – by different groups. Clearly, this would not be the path to a consistent, global user experience.

First and foremost on the agenda for the Global Customer Experience team was to unify and automate the global information lifecycle – from authoring and management to localization and publishing. The team's analysis, combined with surveys and interviews with content authors, country-specific business owners and Sun's Global Services group, quickly revealed a set of requirements with "unified infrastructure" written all over them. They included:

- Remove ad-hoc tools and provide a scalable technology architecture for content management *and* translation management.

- Implement centralized controls that would be more flexible than authoritarian, such as transparent version control for source and localized content, terminology management, and group and role-based security.

- Establish a library of content templates for authors to streamline the development process for corporate content types such as product descriptions, knowledge articles, training course descriptions, and learning path requirements documents.

- Implement a formal translation memory system that "remembers" and reuses previous translations to build a corporate knowledgebase for translating from one language to another.

- Deliver hybrid process management that combines automated and interactive inter-departmental workflow and cross-collaboration to accommodate the need for language-specific tasks such as linguistic and dialect reviews.

- Inject workflow automation into complex, manual, and repetitive translation processes, particularly for catalogue.sun.com.

Criteria for Success: An Operational Infrastructure for Global Information Management

The content and translation management ecosystem achieved through these efforts would:

- Reduce the risk of brand and product mismanagement.

- Enable Sun to establish corporate ownership of brand resources.

- Maintain accurate product content across multiple Web sites, or "targeted gateways," based on vertical industry and business requirements.

- Provide centralized controls and cost reductions.

The Need: Increase the Volume of Relevant, Localized Content

Getting the right content to the right individual at the right time is imperative for all organizations. A global customer experience raises the bar for this mandate by stressing the need to respect cultural nuances and sensitivities when delivering localized content.

With an annual translation throughput larger than most companies can imagine, Sun's challenge to increase the volume, availability, applicability, and quality of localized content would seem insurmountable. However, the team understood the core principle for success: balance brand management and operational efficiency with customer-driven, geographic, and culture-specific expectations.

For example, operational efficiency would require that process owners, authors, and translators have a unified view of previously translated content versus new localization requirements. This would enable more collaborative decision-making within operational areas such as technical support, sales, and training. In addition, this same audience would need to understand the requirements for "corporate" versus "region-specific" content as well as have the flexibility to accommodate cultural nuances by intertwining the two content types.

- For corporate content, the objective was to "speak with one voice worldwide," thereby creating synergistic and consistent brand messaging across all geographical reasons. This would require mandatory, distinct translations of Sun messaging such as "The Network Is

the Computer," "The Participation Age," and other corporate branding. High-level, product-specific brand messaging would also require this approach.

- For region-specific content, the objective was to empower country-specific brand and product managers with the ability to provide *persuasive* or *emotional* content to convey appropriate cultural, regional, and dialect characteristics.

It is the latter that speaks directly to consumers and creates an experience that fosters interest, participation, and loyalty. By understanding this significance, the team made the following additions to the infrastructure requirements previously defined:

- Establish business rules that guide Sun requirements for corporate and region-specific content, enabling reuse and flexibility across a worldwide channel of authors and translators.

- Provide visible translation memory for the channel to compare and contrast existing versus new localization requirements.

- Centralize terminology management to extract and define correct corporate and product terms, ensuring the quality and consistency of terms used across the business.

- Design a language-specific metadata framework to link content and translation business processes with content relevancy objectives for specific geographic markets.

- Provide exceptional ease-of-use to enable efficiency and flexibility for all participants in the content and translation lifecycles.

Criteria for Success: Consistent Global Brand Management

The content and translation management ecosystem achieved through these efforts would:

- Increase brand consistency based on corporate content reuse.

- Provide relevant localized content for multiple products to multiple markets.

- Enable process owner decision-making and analysis of translation ROI per project.

- Support multiple translators with a configurable translation workflow and business rules for different groups.

- Provide the ability to track Web site usage and customer satisfaction per language and geography.

The Need: Simultaneous Global Product Shipments with Localized Content

Market researchers in the customer loyalty arena agree that about 70 to 80% of all products are perceived as commodities. Given Sun's competitive arena, this makes product marketing a formidable challenge in terms of "standing above the rest."

Catalogs, long a staple in marketing broad product offerings, have become even more important in an Internet-enabled world. Standard customer expectations include the availability of electronic and print catalogs, and depending on the product, customers often prefer the former.

Sun's focus on catalogue.sun.com was a critical piece of delivering a global customer experience. It was also one of the more challenging, as the company releases a new product approximately every 2 weeks. The "negative buying experience" was simply not in the global customer experience team's vocabulary. The goal was not to meet customer expectations, but to exceed them.

Simultaneously releasing localized, Web product catalogs with worldwide product launches would require:

- Automated communication and event-awareness between the content and translation management systems to enable timed, batch transfers of localization requirements based on new or updated product content.

- Scalable transfer, or throughput capabilities based on large volumes of content assets.

- Predictable localization "turn-around" time.

- Inter-departmental collaboration to allow process owners, authors, and translators to evaluate and prioritize objectives based on product lifecycles and marketing strategies.

Criteria for Success: Decreased Time-to-Market and Customer Satisfaction

The content and translation management ecosystem achieved through these efforts would:

- Provide instant and accurate visibility to project controls through the Web.

- Conduct simultaneous worldwide product and campaign launches.

- Decrease global time-to-market, enabling earlier revenue recognition.

- Increase customer satisfaction and reinforce loyalty through timely, up-to-date information and ecommerce resources.

Solution Components: Introducing the Starlight Platform

The Starlight Platform, Sun's internal name for its global information management infrastructure, became a reality through a multi-year, strategic project:

- 2001: the vision for a common Web platform for global information management is born; the project team conducts surveys and interviews with country-specific business owners and Sun's Global Services group to understand specific issues and validate requirements.

- 2002: the project team completes market research, solution evaluation and vendor selection.

- 2003: the platform goes live in July after a 2-month setup and pilot phase.

The noun "platform" is important to note, as Starlight replaces all previous, unique externally-facing Web content at Sun, and the translation management methods and systems used to manage that content at Sun.

Product Components and Architecture

The Starlight platform is an integrated solution from Interwoven and SDL International, providing Sun with the "ideal common Web platform," according to Youngmin Radochonski, Globalization Program Manager.

The Interwoven and SDL solution manages more than 140,000 Web content assets and over 100,000 catalog content assets, fulfilling Sun's vision for a centralized, integrated architecture for source and localized content assets. Most significantly, the joint solution provides the business process optimization platform required for complex, interactive workflows as well as high-throughput, automated workflows.

The following illustration provides an overview of this integrated content and translation management ecosystem:

Figure 2: The Starlight Platform
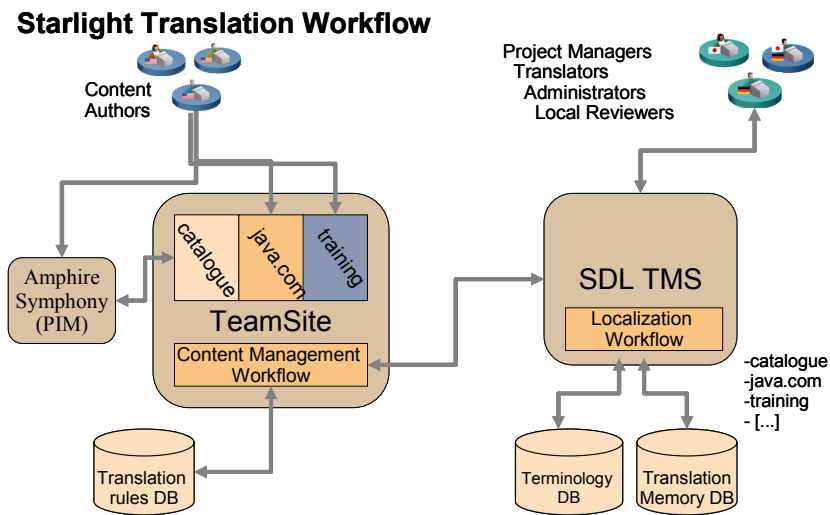
The integrated Interwoven and SDL solution is inherently aligned with Sun's Participation Age vision as well as the company's desire to intensify the global customer experience. As global leaders in their respective areas of technology expertise, the two solution providers are synergistic in their views on the role of customer experience as linked to brand management, market share, customer satisfaction, and ultimately, competitive advantage.

Interwoven and SDL International's joint desire to unify and automate the global information lifecycle for customers has resulted in significant achievements including:

- Integrated workflow architectures that enable deep levels of automation.

- Combined usability expertise to design business owner-driven project management environments.

- Integrated best-of-breed capabilities such as terminology management, Web analytics, and multi-channel publishing.

- Combined professional services for implementation and support.

The synergy between the two solution providers was as important to Sun as its technology-driven requirements. As with all technology buyers, cost and implementation time were critical. As team member Youngmin Radochonski commented, "The joint solution's low implementation cost provided an affordable solution; this was a key business requirement."

The combined Interwoven and SDL ecosystem provides Starlight with:

- Componentized content authoring – provides business owners and content authors with intuitive TeamSite-driven authoring templates, eliminating content layout tasks and ensuring presentation and rendering consistency.

- Content reuse architecture – provides a metadata-driven foundation that includes both author components and translation components. This foundation enables Sun to specify and track language attributes, manage corporate and elective content as defined by Sun's brand management program, and drive the Starlight Subscription Service.

- Translation memory management – maintains active content relationships between the content and translation management systems; automatically analyzes content for existing

versus new localization requirements and filters the results; provides cost estimates and project controls.

- Terminology management – enables corporate reuse of approved and controlled terminology, phrases and glossary information.

- Lifecycle process management – provides flexible, configurable workflow and business rules that support multiple product groups with varying translation routing and approval requirements.

- Project controls – provides process owners, authors, and translators with a unified view of project requirements, status, and history to monitor the progress of localization projects.

- Security – provides secure, automated, system-to-system transfer processing using HTTP; establishes and enforces group and role-based security.

- Scalability – provides significant levels of automation and management of multiple, simultaneous projects without sacrificing performance.

Results

As of May 2006, java.com, sun.com/training, and catalogue.sun.com are available in 14, 11, and 9 languages, respectively. The volume of source and localized content continually grows as Sun expands its worldwide footprint with new innovations and products.

The company's investment in a content and translation management ecosystem has increased the depth and breadth of Sun's Global Customer Experience according to the project's original success criteria.

Starlight Statistics
- 140,000+ web assets
- 100,000+ catalog assets
- 15+ venues
- 15+ locales (en, ja, es, etc)
- growing every day

Key Translation Users
- java.com
- catalogue.sun.com
- sun.com/training

Success Factor: An Operational Infrastructure for Global Information Management

Given a complex product market for content technologies, integrating process-specific solutions appears daunting for many organizations. In fact, making certain that an ecosystem vision becomes reality requires consistent collaboration between a customer and its vendor choices for best-of-breed technologies.

For the Starlight project, the established levels of integration between Interwoven's TeamSite and SDL's TMS were seamless and impressive, removing this "intimidation factor." Obviously, a large company like Sun has a breadth of highly technical resources. However, Sun's goal was the same as any small to mid-size company: *an easy and fast integration with a low implementation cost.*

Interwoven and SDL delivered. The joint Global Customer Experience solution integrates Interwoven content management, brand management, and multi-channel publishing capabilities with SDL translation and terminology management, workflow, and language services. Perhaps most significantly, the solution boasts API-level, bi-directional, and automated workflow services that enable true business process optimization.

Note the number of automated processes in Sun's current workflow diagram for the java.com and sun.com/training translation processes:
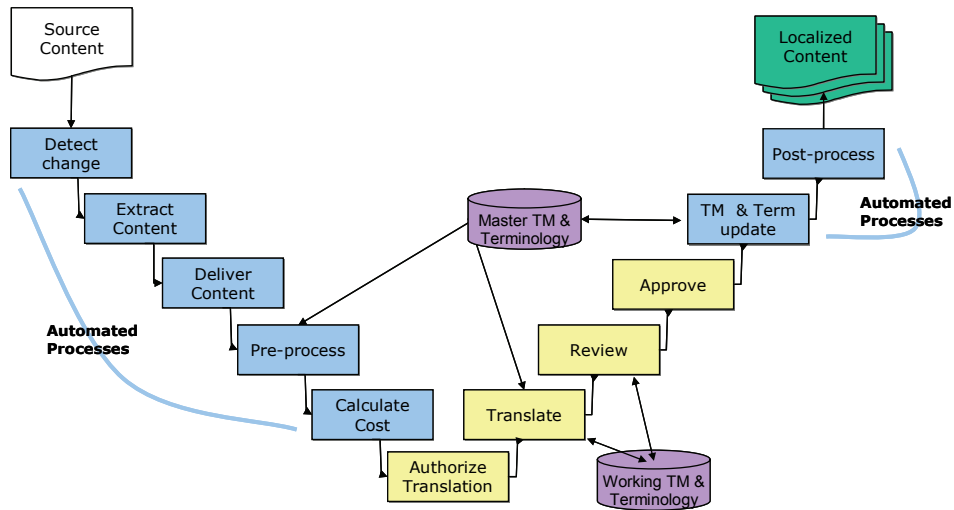
Figure 3: Sun's Current Translation Workflow

Global teams developing and localizing content for java.com and sun.com/training now utilize a hybrid process management environment which combines automated and interactive inter-departmental workflow. The following steps provide a summary of a Web-driven scenario:

1. Process owners create or update content in TeamSite using a set of pre-defined templates that enable componentized reuse.

2. Process owners select content objects and choose one of multiple pre-defined translation workflows that are invoked from TeamSite.

3. TeamSite triggers a "Job Request" message to TMS via an HTTP post. The system automatically assembles a translation package that includes content object(s) and metadata such as required object IDs and relationships, language(s) required, and project priority.

4. TMS responds to TeamSite with an HTTP response. The system automatically creates job ticket(s), performs reuse analysis based on the source and target language(s), creates cost specifications, and requests authorization from process owners.

5. Once approval is received, TMS runs common tasks in parallel for efficiency and speed. Process owners and translation administrators use a Web interface to access project controls and information status.

6. Upon job or item-based completion, TMS automatically updates its status. Upon confirmation from the process owner, the system re-assembles and transfers the translation package according to the original package structure, adding additional metadata such as translation version and other attributes.

7. TeamSite alerts process owners on content object(s) availability and triggers the approval segment of the workflow.

For the catalogue.sun.com translation process, the levels of automation are significantly deeper. The Starlight focus on time-to-market and high throughput for this venue resulted in a decidedly "hands-off" workflow that delivers significant ROI. In fact, the catalogue's 2-week cycle Web updates are published from a single auto-exported XML file derived from an integrated TeamSite and TMS automated batch process. The result is extraordinary:

- At a run rate of 5.2 to 5.3 million words per year for catalogue.sun.com, Sun has saved more than $1.7 million over a three-year period.

- 50,0000+ new content assets were localized during a peak period with 1.8 million words in a single request over one week.

- The Sun Catalogue team no longer procures internal product management services, saving at least 10% of the cost per each 2-week project.

Success Factor: Consistent Global Brand Management

One of the initial drivers for Sun's renewed focus on its global customer experience was the continual increase in international revenues year-to-year. While surely good news, this trend also compelled the company to "take out more brand insurance." In other words, consistency across global corporate and product information sources became more and more critical as Sun's footprint expanded.

The Starlight platform is a significant part of Sun's brand management program. It enables the company to *own* its language resources, eliminating the "forgetful translation memory syndrome" that occurs when globalization business processes are uncoordinated, redundant, and lack project controls. Far more damaging is when the syndrome inevitably produces conflicting brand messaging across geographic regions or worse, unintentionally insults a particular culture.

Sun's content and translation management ecosystem goes beyond preventing the syndrome by empowering country-specific business owners with a controlled, but non-authoritarian environment that:

- Enables content reuse processes for all content authors and localization experts, ensuring consistent and accurate corporate brand materials, product-specific content, and language-specific terminology.

- Provides the flexibility to drive translation processes based on content type and consumer expectations, providing uniform levels of localized content across multiple languages as well as a cost containment methodology. For example, knowledge articles and product descriptions are usually localized to many languages, whereas low-level product specifications are suitable for "English-only" versions.

- Drives the Sun-designed Starlight Subscription Service, a centralized, accessible, and "publish and subscribe" mechanism that enables country-specific business owners to spend more time addressing local market requirements than designing corporate brand materials.

- Provides automated content rendering and distribution services to multiple "targeted gateways" based on vertical industry and business requirements.

Success Factor: Decreased Time-to-Market and Customer Satisfaction

According to Jed Michnowicz, the "trifecta" effect of Starlight is "the combined power of content and translation technologies for localization, content subscription services, and rendering." It is clearly providing the company with quantifiable, rapid market reach and increased customer satisfaction:

- A continual rise in the volume and quality of localized content is enhancing the value of global customer experiences, which in turn, is improving customer satisfaction. In fact, Sun has seen a significant decrease in technical support inquiries for java.com as more and more content is localized.

- Project controls and hybrid process management that combines automated and interactive inter-departmental workflow enables faster, more predictable localization processes. In addition to decreasing time-to-market, these capabilities enable Sun to align product launches with marketing strategies and information availability.

- The move to componentized authoring based on Starlight's content reuse architecture drastically reduces global Web site updating processes. Less complexity, more automation, and the elimination of page-based design enables instantaneous redesign and rendering of specific global elements and content assets.

Best Practices and Organization Changes

Sun's success in intensifying the global customer experience is due to the project team's core belief that a combined content and translation management ecosystem would be *the* foundation for the future. A strong commitment to principles such as "usability above all," "centralized but non-authoritarian," and "accuracy + consistency = quality" was unwavering throughout the project.

The team offers the following best practices advice to others facing similar challenges:

- Componentized authoring, i.e. chunks versus pages, ensures the ROI for processes such as cross-departmental authoring and reviewing, timely Web site updates, and flexible localization processes.

- Hybrid process management capabilities are usually mandatory. Make sure that workflow and cross-collaboration technologies combine automation with the need for human intervention.

- Initial requirements and specifications do not always mesh with actual usage patterns. Plan on at least 1 month for a pilot program with interface testing driven by process owners.

- Have a strong relationship with your professional services providers. Scalability testing was critical for Starlight. Any growing pains experienced by the ecosystem were quickly resolved by the Interwoven's and SDL's joint professional services team.

- Project controls, reporting and audit trails are key capabilities. In addition, Web usage analytics is an important driver of customer segmentation and targeted content distribution strategies.

Conclusions: The Gilbane Report Perspective

For many industries, the U.S. market is essentially saturated. Hence, corporations are turning to emerging markets such as China, India, and Latin America for revenue expansion as well as increasing focus on existing European and Asia-Pacific operations. Unlike large global companies such as Sun, many organizations have a 40% international, 60% U.S. revenue profile that may not sustain them in the years to come. Hence, concentrating on the *global* customer experience is critical for most companies.

When the Gilbane team evaluates a potential case study for our Content Technology Works initiative, we specifically look for elements of the deployment that are useful lessons for other adopters of content technologies. We think that the following universal factors are key to the success that Sun Microsystems has achieved thus far.

- **Customer experience is linked to profit and loss** – Business Week's Best of 2005 issue increased the significance of research from authors such as Chris Denove and James D. Power IV by stating that "profit margins are much higher on 'experiences' than actual products or services." Customer experience is linked to profit and loss in today's global arena via customer satisfaction and retention; sending the same message to all will backfire.

- **Aligning content and translation management strategies is a key success factor** – A first step toward alignment is to uncover unique and inconsistent content authoring and publishing business processes buried deep within multiple departments. A failure to expand

the analysis to localization processes, notoriously ad-hoc and manual, will eventually thwart a global expansion program.

- **Address localization processes like any other market segmentation issue** – Geography and culture are both market segments to be evaluated for the revenue, brand presence, and customer base they can provide. It is difficult for any company to translate all content. In fact, mass translation may not be prudent. Prioritization based on geographic market analysis should drive any decision to increase the volume and depth of localized content.

- **Unified content and translation technologies are a must** – Savvy organizations with strong globalization expansion plans should be unwilling to make technology commitments without understanding how a solution provides unified business processes.

- **Componentized content enables reuse and repurposing** – Although "content management 101," this success factor is overlooked by many organizations. Component-based localized content is key to providing contextual information for a targeted geographical market. In essence, a global customer experience is the *exact opposite* of mass marketing.

Sun Microsystems' Participation Age vision is clearly aligned with the goals of a global customer experience. The company's investment in customer loyalty research, technology innovation, and contextual customer communications embodies an organization that understands that the experience *is* the product. **The Gilbane Group** thanks Sun and its employees for sharing their story.

About Content Technology Works

Content Technology Works (CTW) is an industry initiative, administered by **The Gilbane Group**, to develop and share content technology best practices and success stories. The premise is that when given enough proven recipes for success, enterprise consumers will be able to adapt and replicate that success for themselves—increasing productivity and confidence.

Success stories are written by **The Gilbane Group,** with final editorial control resting entirely in the hands of the adopter. The result is that:

- Vendors do not control content.
- Success stories are as opinionated and as jargon free as the adopter prefers.
- Analysis is included from **The Gilbane Group** and invited contributors.
  - The stories are not just about technology, but also focus on what matters to the adopter in terms of business requirements and other objectives.

CTW case studies provide organizations with best practices in content technologies and strategies for securing funding, measuring actual value, and driving adoption. For more information on the CTW program, visit http://gilbane.com/ctw_description.html. Product, technology, and service names are trademarks or service names of their respective owners. For additional information on our editorial policy, see www.gilbane.com/editorial_policy.html.

A Supplier's Voice: SDL and Interwoven, Delivering a Global Customer Experience

The Gilbane Group appreciates the contribution of content for this section from SDL International and Interwoven.

SDL International, a leader in the emerging market for global information management (GIM) solutions, is partnering with Interwoven, a leader in enterprise content management and customer experience solutions, to help Fortune 1000 companies deliver a consistent and relevant customer experience around the world. This solution, which includes best-of-breed Interwoven and SDL technologies and services, enables organizations to optimize the global customer experience by clearly addressing local business, cultural, and language requirements across multiple communication channels while ensuring brand consistency.

Sun Microsystems' Web delivery of product catalogs, software information, and support is a good example of how an organization can effectively deliver a global customer experience. SDL and Interwoven worked closely with Sun to ensure that this joint solution produced the desired results.

The Challenge

The rapid growth of global corporate communications via the Web, email, wireless, and print has provided new access to international markets. Today, whether intended or not, brand and messages are shared instantly with the whole world. Faced with the exploding volume of content and escalating costs for delivering local information, many companies find that they are unable to clearly and consistently deliver relevant customer content across all customer touch-points.

When designed and implemented correctly, a global customer experience can become an organization's most powerful, cost-effective competitive advantage and addresses these challenges:

- Expansion into rapidly emerging markets.

- Publishing across multiple channels and customer touch-points without diluting or fragmenting brand.

- Addressing growing local language and cultural requirements.

- Eliminating of bottlenecks to communication delivery based on frequent updates and growing content volume.

- Reducing costs for marketing and sales content by enabling content reuse and removing manual processes.

- Reducing the complexity of supporting digital media assets.

Introducing Global Customer Experience Management

SDL and Interwoven dramatically improve the customer experience by enabling companies to communicate more rapidly with targeted, higher quality, local-language content. The Global Customer Experience Management solution integrates Interwoven content management, brand management, and multi-channel publishing capabilities with SDL translation management, authoring assistance and language services.

In this way, SDL and Interwoven provide a solution framework that determines the right combination of global processes, technology and services to meet customer experience needs:

- Integration of translation and localization solutions with enterprise content management and digital asset management systems

- Standardization of approved messaging and content across multiple languages and channels

- Language asset management and ownership that increases visibility into operations and provides ownership of language assets attains internal

- Integration of internal and external operations to optimize delivery of local content

- Automated systems for ensuring simultaneous product and campaign launches for world markets

This framework lays the groundwork for higher quality interactions with global customers, delivery of local-language branded content, dramatic increases in content reuse, customized content to meet local needs, and simultaneous global campaigns and launches. Not surprisingly, Sun Microsystems' results include faster time-to-market, increased customer satisfaction, consistent worldwide branding, and lower communication costs.

About SDL International
SDL International is a leading provider of Global Information Management solutions to the world's leading brands. SDL's role is to help companies manage their global content in order to drive consistency of brand across global markets and accelerate the time it takes them to deliver their product in different languages around the world. SDL does this by providing software and services that automate and the process of authoring, translating and publishing all information across the corporation. Global industry leaders such as Audi, Bayer, Best Western, Bosch, Canon, Deutsche Bank, Kodak, Microsoft, Morgan Stanley, Reuters and SAP rely on SDL to provide enterprise software or full outsourcing for their GIM processes. SDL has implemented more than 150 enterprise GIM solutions, has over 130,000 software licenses deployed across the GIM ecosystem and its global services infrastructure spans more than 50 offices in 30 countries. For more information visit: www.sdl.com.

About Interwoven
Interwoven, Inc., provider of Enterprise Content Management solutions for business, enables organizations to unify people, content and processes to minimize business risk, accelerate time-to-value and sustain lower total cost of ownership. Interwoven delivers deep industry-specific solutions which reduce business process cycle time from initial collaboration through design, production, sales, marketing, legal review, IT and service. Interwoven leads the industry with a service-oriented architecture today and easy-to-use, best-in-class components and solutions. Today, nearly 3,700 companies, law firms, and professional services organizations worldwide are Interwoven customers, including adidas, Airbus, Avaya, Cisco, DLA Piper, the Federal Reserve Bank, FedEx, HSBC, LexisNexis, Microsoft, Samsung, Shell International, Samsonite, White & Case, and Yamaha. Interwoven is headquartered in Sunnyvale, Calif., with offices around the world. For more information visit: www.interwoven.com.