

Content Technology Works Case Study

Broadening Product Lifecycle Management:

Club Car's Strategy for Multilingual Product Communications

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Executive Summary

During mid-2000s, Ingersoll Rand Club Car, the world's largest provider of golf cars and commercial utility vehicles, reached a crossroads. Ingersoll Rand's Club Car division had grown at a rate 15% CAGR from 2001 to 2005. The company boasted #1 multi-year rating for its golf cars and utility vehicles. In parallel, the Club Car brand as the global leader of zero-emission vehicles was steadily expanding, complimenting Ingersoll Rand's 100-year tradition of technological innovation and market position as a \$17 billion global diversified industrial company.

Paradoxically, the pace of innovation in product design and manufacturing created a gulf between product availability and the creation and delivery of technical publications to support them. At the same time, Club Car faced a rising demand for multilingual product communications, a ballooning backlog of product changes undocumented in non-English materials, and significant delays in global publishing. Underlying these factors was a concern that postponing significant action could generate deeper, more systemic problems, and negatively affect customer satisfaction, regulatory compliance, and product quality.

Following a long tradition of product excellence, Club Car made a conscious decision to broaden the company's Product Lifecycle Management (PLM) strategy in response to significant market expansion. The commitment brought new opportunities to apply this strategy to other parts of the business, including technical publications and how their materials could best impact regional sales.

This case study describes how Club Car met these challenges by introducing a Global Content Value Chain (GCVC) focused on product content. It explores the business issues that drove Club Car to seek change, the ambitious solution they developed and introduced to address these concerns, and the benefits realized from a GCVC tooled according to the company's product, business, and customer satisfaction requirements. We will also take a step back, and look at what Club Car achieved with this undertaking. Using Gilbane's GCVC Capability Maturity Model, we will examine where Club Car was in 2005, where they are today, and where they are headed.

This case study profiles one organization. While Club Car's approach may not be universal, its success in solving critical problems is indisputable. It is not possible to generalize the Club Car 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 Ingersoll Rand Club Car Perspective

"As a global company, our vehicles are known by many names: golf carts, golf cars and even golf buggies. We simply call them the best. Because of an ongoing commitment to innovation, quality and customer satisfaction, Club Car has manufactured the #1 rated golf cars and utility vehicles, year after year. *http://www.clubcar.com*

"Automating the complete desktop publishing process was a major milestone for Club Car. Our implementation in 2007 produced better than expected results – faster time to global publishing, quicker localization turnaround, higher quality publications, and more translations for less money." *Jeff Kennedy, Manager of Engineering Information and Systems*

"Club Car distributors, particularly in Latin America, have become more positive in their commitment to Club Car since we increased the availability of multilingual product communications. They truly appreciate that multilingual Owner's and Maintenance & Service Manuals are delivered faster and with greater quality and consistency worldwide." *Jane Whittington, Manager, Sales Support*

"We trust our Language Services Provider (LSP) and hold them accountable for quality and proactive approaches more than add-on services such as desktop publishing." *Gloria Gill, Editor, Technical Publications*

"Our investment in XML produced a domino effect across all product documentation, improving consistency and preventing errors." *Natalie Roberts, Technical Publications Specialist*

Ingersoll Rand Club Car Company Background

Club Car is the largest manufacturer of golf cars and utility vehicles in the world, with 1,200 employees and hundreds of millions in revenue. The company provides products to a variety of markets, including education, outdoor recreation, government, and hospitality. Club Car has sustained consistent growth, with an increasing amount of that growth occurring internationally. Its worldwide distribution network includes over 600 distributor, dealer, and branch locations. Club Car is a product group within Ingersoll Rand, a \$17 billion manufacturing giant that generates a significant portion of their revenues from outside the U.S.

Club Car's golf cars are renown throughout the industry for their aluminum frames, which are more durable than steel frames. As the company's global golf business expanded, their market share increased significantly.



Club Car Revenue & Market Share Growth

During this time, Club Car also expanded into non-golf markets, with utility, hospitality, and off-road vehicles soon accounting for a significant portion of their sales worldwide.

The Problem: Introducing Manufacturing Innovation into the Global Content Value Chain

Product innovation is a core competence for Club Car, and a growing share of the business involved the introduction of new products to meet new commercial and consumer needs while utilizing emerging electric vehicle technologies. At the center of this innovation was a strong Product Lifecycle Management (PLM) strategy, which incorporated industry best practices for product design, engineering collaboration, and common engineering environments. As a result, Club Car engineering was releasing product enhancements and new products at a faster and faster pace.

The technical publications group did their best to accommodate the mounting volume of product enhancements and introductions, but the infrastructure, personnel, and processes could not keep pace with the company's international product expansion. Moreover, product-driven innovations did not benefit this group, but instead just added to the workload. Regulatory compliance and a commitment to excellence had produced a focused and proactive technical publications group within the company, focused on providing clear and consistent product operations manuals in a number of languages. As the number of products destined for global markets rose over the years, the number of corresponding manuals grew, increasing localization/translation requirements in tandem.

Over time, the rapid development of new products coupled with growing international sales seriously stressed the company's ability to adequately create, manage, and distribute multilingual product communications. With technical publications operating as a siloed department during these formative years, the group was isolated from the benefits of a broadening PLM strategy. Although the group was committed to delivering on-time, high-quality product communications in 14 languages, they were inhibited by the lack of a corresponding increase in budget or resources.

The mission? Reduce complexities, lower production costs, and speed time to global markets. The approach? A methodology that would install the appropriate infrastructure (people, process, and technology), and unify Club Car processes for delivering product content to global markets. Gilbane defines this overarching strategy as a Global Content Value Chain (GCVC), illustrated in Figure 1 based on product content requirements.



Figure 1: The Global Content Value Chain (GCVC) for Product Content

The GCVC's central premise is that value can be added to content as it moves through the chain by applying people, process, and technology elements at each phase. First and foremost, however, organizations need a solid understanding of the problems to be solved, the improvements to be made, and the benefits to be realized.

Club Car set out to do just that. Following their long legacy of product quality, the company recognized that tapping into product design and development could create great efficiencies for outbound product communications. Championed by Jeff Kennedy, Manager of Engineering Information and Systems, the company committed to an integrated strategy for moving product content from creation through consumption to meet global customer expectations.

The Need: All-Inclusive Content Creation for Global Product Communications

Because Club Car's markets span the globe, demand was high for multilingual product communications. From some time, the Club Car technical publications group had been delivering manuals in 14 languages, but the list of languages was expanding and there was more and more demand for local-language content. It is not difficult to imagine the challenges inherent to an increase from one Owner's Manual translated from English into another language in 1997 to 102 translations of Owner's Manuals in 2001. The number of translations of Owner's Manuals continued to increase, growing to 134 in 2003 and 196 in 2005.

Quality and consistency issues, however, were not limited to localization/translation. As described earlier, the technical publications team also acknowledged and set out to solve quality and consistency issues within English-language source documentation across different media and multiple products. The key concerns were:

- The introduction of five or more customer-service manuals at 400 to 500 pages each (sometimes over ten times the size of Owner's Manuals).
- 20% the product content in the documentation changed each year, and such changes rippled across multiple products and document types.
- The introduction of new liability warnings on products that impact multiple products and document types.

The output from the technical communications department now included Owner's Manuals, Maintenance & Service Manuals, illustrated part lists, and Kit Manuals (for specially modified vehicles). Any strategy for multilingual product communications was expected to embrace these types of technical publications.

Given that the team, resources, and budget for producing and translating these manuals remained essentially the same over this entire time, the technical publications group translated content changes only if the modifications were substantial and seriously affected the use of the products. Despite a change-driven scope, translated manuals were often delivered substantially later than English versions. Due to omitted translations, the gap between English-language changes (source-language changes) and other-language changes also began to widen incrementally year over year. Ironically, executive management observed that the translation budget had not been fully utilized, and sought to reduce it, unaware of the rising demand for localized materials and the expanding gap between English and other-language documentation.

How could Club Car get their arms around the burgeoning volume of translations, and retain the consistency of key terms and passages across multiple languages?

For technical publications, a major factor in alleviating the business pressures and meeting the demand for high-quality product communications was to focus on making sure the source content – as it was written in English – was right from the beginning. Increasing the accuracy, quality, and translatability of source content became a key business driver.

The first step in developing better content was to unify the processes of product design and manufacturing with technical authoring. The key obstacle was the tradition of book-centered authoring (epitomized by older versions of technical authoring programs), and the need to migrate the documentation process to XML-based, component-centered writing. Embracing XML authoring would not only streamline the flow of content across the GCVC, it would help leverage approved content (text, illustrations, and graphics) from engineering for use in many forms of product documentation.

Leveraging XML to help align the product content GCVC however, brought forth a whole new set of trials, which required people to learn new ways of authoring and new tools. It necessitated different interactions between product engineering and technical authoring, and between authoring and localization services.

Criteria for Success: Concurrent, Streamlined Product Design and Content Creation

The need to achieve all-inclusive content creation for global product communications distilled into a few key business drivers:

1. Improve the quality of multilingual product documentation.

As an example, while a new oil change procedure was introduced quickly into an

English manual, it was another three years before the procedure was included in other language documentation. A product content GCVC strategy would make technical publications accountable for timely, high-quality content in multiple languages.

Metric for success: Lack of errors and inaccuracies. High rate of customer and distributor satisfaction.

2. Accommodate international business expansion.

International growth was so great that Club Car was adding about one new language per year, most recently adding Chinese, Czech, and Polish (in addition to the initial 14 languages). Relying on XML and new component-based processes to separate content and format would help in meeting volume challenges. A product content GCVC would enable a "write or change once, deliver many" approach for Owner's Manuals, Maintenance & Service Manuals, and other technical publications.

Metric for success: Write or change once, publish many.

The technical publications team designed these metrics to help Club Car closely monitor the migration and benefits of a unified product content GCVC. These metrics enabled the team to show that not only were they meeting requirements for product communications, but were leveraging the company's PLM strategy to incorporate content from product design, development and manufacturing into their technical product documentation.

The Need: Accelerated Multilingual Content Production

Like the mainstream automotive industry, every year the utility vehicle sector introduces all new product models in August. This means that all Owner's Manuals – in English and in the host languages for the top geographic markets – were expected, and in the European Union required, to be available at the time of product release. Since in many cases the product changes were minimal, Club Car could easily make these changes in the English version. Incorporating those same changes into all supported languages, however, proved to be a daunting challenge. Sometimes, there were as many as 100 Owner's Manuals and Maintenance & Service Manuals in translation at the same time.

In the years 1999 and 2000, Club Car attempted to improve the technical publications process by moving the responsibility for localizing and translating technical product communications (including the personnel who managed these operations in technical publications) from the product design and development organization to the sales organization, which relied upon the regions and worldwide sales support to manage it. The regions primarily used employees to do the translations. However, because the localization/translation was a secondary responsibility for regional employees and processes were determined on a tactical basis, the delivery of local language manuals was compromised. For example, final publication was frequently delayed and the

resulting documentation exhibited inconsistent formats and uneven levels of translation quality.

In 2001, the localization/translation function for these materials (and the accompanying personnel) moved back under the realm of the product organization, relying on an outsourcing model for project execution and management, while continuing to tap worldwide sales support to solicit field input and make translation decisions. The good news was that translation quality improved. Still, the company faced challenges with timeliness and accessibility.

One frustrating result of outsourcing, however, was the lack of control of, and visibility into, the outsourced process and, more significantly, access to translation memory (TM). This limited access restricted the ability of technical publications to use other translation resources to accommodate and accelerate the delivery of localized information during peak periods. It also prevented Club Car from consistently scaling the reuse of approved translations.

There were also problems with excessive post-processing after localized information was returned to Club Car. Translated content had to be converted into formats suitable for publishing. Extra resources and more time were required, for example, to convert and align the translated information into PDF, which was the standard format for published manuals. These conversions incurred an incremental expense of over \$1,300 for each language for each manual, including charges for pagination, textual flow, and format conversion. Reformatting also added time to the production and publishing process, thereby delaying the availability of product documentation and sometimes, the accompanying products.

The goal of product communications was not only to prepare multilingual product documentation, but to publish it – globally, and on a timely basis. To achieve this aim, Club Car would need to build a GCVC for product content that integrated localization/translation and publishing with authoring, as well as implement workflow to drive the flow of information through the process. To accelerate the rate of publication, they would need to streamline, clarify, and formalize the balance between what was done in corporate, primarily in the technical publications group and product design/development, *and* what was done in sales (sales support and regional sales operations). Similar to the technical publications, these enhancements would leverage the company's PLM strategy and deliver multilingual, engineering-approved content. Most importantly, these improvements would automate the GCVC, and ensure rapid delivery of multilingual product documentation.

Criteria for Success: On-Time, Simultaneous Product Shipments

The need to achieve accelerated multilingual content production distilled into a few key business drivers:

1. Automate linkages between authoring, localization/translation, and publishing.

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Extensive reformatting of content puts an extra, unnecessary burden on the GCVC. File integration, workflow, and conversion should be implemented and automated to ensure rapid delivery across global markets.

Metric for Success: Accessible reports and status on localization/translation processing available to multiple organizations. Shorter processing time.

2. Ensure simultaneous shipments of product content.

International markets expect new products or updates to be released at the same time as they are made available in the host country, in Club Car's case, the United States. These markets also place a high priority on the availability of local-language product information with updated or new products.

Metric for Success: Manuals published in the 14 languages on the product release date. Clear balance between centralized and regional localization/translation operations, expressed in a formal, published policy that articulates roles and responsibilities.

Solution Components

Club Car realized early on that efficient multichannel publishing requires getting the content right the first time, so it can be reused in multiple publications. This focus on quality at the source also extends to ongoing localization/translation so that multilingual content is also reused in the same and other documents.

Club Car chose to transition from unstructured to structured content authoring, which enabled the technical publications team to author and manage content in specific "chunks" that are updated and incorporated across multiple products and documents. XML is at the heart of this process, enabling:

- A closer connection with product design and development processes, as they now directly access and leverage the latest engineering materials
- Specific extractions to localization/translation processes, and
- Automated publishing to various media

Club Car's operational foundation illustrated in Figure 2 clearly demonstrates globalization and product leadership as key business pillars. By overlaying a series of integrated policies and processes that integrate different facets of the business, defined as the Business Operating System, the foundation drives the appropriate use of people, process, and technology across the organization.



Figure 2: Club Car Strategy for Operational Excellence

Broadening the company's PLM strategy to encompass content globalization resulted in a strong focus on integration of product design and development with the product content GCVC and, then, automation of key activities to facilitate streamlined processes. Although the investment in XML authoring and publishing was clearly strategic, the technical publications team struggled to construct a business case that projected more than a soft ROI based on better use of existing resources.

Enter the growing demand for multilingual product communications. The team strengthened their case with specific and substantial cost savings that would be realized *immediately* from the integration and automation between authoring and localization/translation. Adding in the cost and time savings of ancillary tasks such as post-processing and desktop publishing increased the cost savings ROI. Case closed. The team moved onto innovation, demonstrated by the following integrated solution components.

The team improved the *authoring* component through these key features:

- XML authoring with Arbortext Editor.
- Dynamic stylesheets to protect global branding while adapting text and graphic components to fit multichannel and multilingual requirements.
- Streamlined process for utilizing CAD graphics and data from PTC Pro/ENGINEER during the authoring process.
- Online submission & retrieval of files, as well as online capability for authors to invoke localization/translation workflow.
- Future enhancement: Club Car plans to introduce a new form of technical illustration that takes files from product design, and then links the illustration function for use within the authoring environment.

The team evolved the *localization & translation* component utilizes Sajan's Global Communication Management System (GCMS[™]) and broad range of linguistic and localization/translation services for:

- Comprehensive Total Quality Management (TQM) program that aligned to Club Car's PLM strategy, incorporating ISO certification, certified linguists, a Chief Quality Officer, and formalized quality processes for localization/translation.
- Improved management of overall localization/translation process, including content translation, translation memory (TM) management, linguistic analysis, and project management.
- Streamlined file submission and retrieval, project status reporting, and intercompany communications through the Sajan online portal.
- Proactive, deepened partnership between Sajan and Club Car, including faster, more timely interaction, Sajan presence on extended Club Car teams, validation of translations with corporate and regional organizations, proactive consultation to accelerate GCVC evolution, and use of ancillary, high-value services such as onsite interpretation.
- Integration between Sajan GCMS[™], the Sajan online portal, and Club Car's authoring applications to ensure layout and content accuracy and consistency.

 A strategy to introduce authoring assistance into Club Car's applications and processes through Sajan's Authoring Coach[™] solution, providing authors with English writing guidelines for content translatability as well as visibility into text with approved translations in place.

One of the major headaches for Club Car had been taking PDF files returned from a former LSP and reformatting them into the target authoring format. Technical publications was tasked with revamping each new document for each language in the format for publishing. An integrated GCVC resolves these issues so that the **publishing** component now:

- Uploads translated files in publish-ready formats for editorial review, using the Sajan portal
- Permits online review of each document in both XML and the target format for publishing (PDF) in the authoring environment
- Enables authors to correct translated content errors within the authoring environment
- Invokes multichannel, multilingual publishing directly from the authoring environment, using Arbortext Publishing Engine.

The Blended Organization: A Tech Pubs / Sales Support Partnership

Club Car's GCVC solutions components powerfully altered the company. Today, execution of localization and translation operations resides with the Technical Publications Department. Sales Support, a worldwide function within the sales organization, manages decisions on what and when to localize, as well as the budget for localization and translation. With this blended responsibility model, Club Car effectively bridges the divide between centralized, corporate localization services and regional local-language requirements.

Sales support typically determines the scope of language and regional localization and translation on the basis of sales volume for a particular product in each language, leveraging records on localization which span back to the mid-1990s. Moreover, sales support communicates regularly with the regions about the quality, timeliness, accuracy, and usefulness of local product information, while maintaining fluid communications with technical publications on these issues. The Technical Publications team provides localization/translation services only after sales support has vetted the language and the particular document, and a go/no-go decisions have been made.

To solidify and promote the globalization process and the organizational balance that supports it, Club Car educates and trains employees extensively, and today there is a high level of awareness of globalization across Club Car. As much as possible, this training and the accompanying materials are provided in the local language. Sales support and technical publications also collaborate to provide product managers with checklists for qualifying whether product communications should be offered in the local language for a particular geographic market.

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Sales support maintains the relationships with Club Car distributors. Sales support is constantly being pushed by regional distributors for localized manuals. As one Club Car manager remarked, "It's crazy to give someone on the line – someone who doesn't have an extensive English background – English-only materials. Those guys in the cart barns need Owner's Manuals, Maintenance & Services Manuals, and illustrated parts lists in their own languages."

To address requirements for localization in languages where a country or region does not have the requisite sales volume to warrant the incremental translation costs, sales support relies upon regional distributors to translate Club Car materials. They provide coop marketing funds to aid distributors in this effort. Thanks to the processes already in place, Club Car is able to guide these partners in the preparation of multilingual materials.

Sajan: A Technology-Enabled Language Service Provider

In order to ensure the GCVC operated fluidly and delivered the appropriate results, Club Car tapped Sajan to fulfill the need for specialized translation services, and adherence to Club Car style guidelines. As described by the technical publications team, "Sajan was proactive about accelerating the localization process, raising the level of quality, and automating localization/translation operations." Examples of Sajan's high value approach for Club Car include the following:

Category	Function	Sajan Added Value
Localization Process	Reporting	Report back to Club Car within an hour after submittal to estimate localization costs and turnaround time
	Project management	Online portal for job submission, retrieval, status
	Turnaround	Rapid turnaround for small translation jobs, usually providing same-day service
Communications	Ongoing Engagement	Act as an extended member of the technical publications team to ensure regular communications and accountability
	Proactivity	Localization/translation guidance on continual process improvement, including efficiency, turnaround, cost, and quality
	Business Alignment	Provide guidance on globalization strategy that supports company goals and objectives.

Category	Function	Sajan Added Value
Quality	Compliance	Quality control for localization and translation tailored to ensure regulatory compliance
	Interpretation	Provide onsite simultaneous translation at global distributor conferences as needed. "Distributors remarked that this service made them proud to be part of the Club Car community," said Jane Witttington.

Results: PLM-driven Multilingual Product Communications

Club Car achieved impressive results through investment in the product content GCVC:

- Improved reuse in source and multilingual product content, resulting in higher levels of consistency and accuracy.
- Better and faster validation of technical product data within documentation due to integration with product design and development processes.
- Shorter time for creation and delivery of multilingual content.
- Simultaneous shipment of multichannel, multilingual content to multiple geographic markets.

Satisfaction with the product content GCVC continues to be quite positive. Club Car's quarterly distributor management meetings and subsequent surveys report a high level of partner satisfaction. Customer satisfaction surveys, concerned particularly with product quality are affirmative as well. Club Car also gathers feedback through regular customer experience tours, orchestrated meetings with customers that include satisfaction ratings for product communications. As Jane Wittington, Manager, Sales Support noted, "During a recent tour, customers noticed the increased quality of our manuals, citing consistent language use, common look and feel, and information flow."

Club Car exceeded their original expectations, reaching the following milestones:

- Product content volume: Produced over 120 complete sets of manuals
- Localization/translation volume: Managed 430,000 English words translated into up to 17 languages up from the original 14.
- Localization/translation speed: Reduced the turnaround from 5-8 weeks to 3 days or less for translation and localization of changes to a typical Owner's Manual.
- Cost Reductions:
 - Limited the translation budget to less than \$300,000, while increasing the number of documents, number of languages, and types of media, and volume of translation.
 - Projected a \$450,000 savings over a three-year period.
 - Reduced expenses an average of \$1,360 per document ("hard" cost savings), due to:
 - Introduction of XML-based authoring, particularly its impact on automating desktop publishing
 - Efficiencies from Sajan technologies and services that streamlined localization and translation processes, and minimized required time and resources.

 Separation of graphics from text, used particularly in decals and product illustrations, eliminated a significant amount of post processing on translated content.

Best Practices and Organization Changes

Club Car evolved their product content GCVC organically over time to meet the most pressing needs according to seasonal business requirements. Over time, Club Car achieved a remarkable unification of disparate processes. A number of key best practices the product content GCVC emerge:

- Leverage PLM into product communications. Club Car draws from product design and engineering to speed the delivery and increase the accuracy and quality of product information as it appears in technical publications. This explicit connection simplifies the integration of design with authoring applications, enabling incorporation of engineering product images and data.
- Balance centralized and regional operations with clear roles for each department and region.
- Streamline decision-making process to optimize the balance between centralized and regional action, particularly the division of responsibilities between technical publications and sales support.
- Integrate!
- Share language assets, emphasizing portability and reusability.
- Increase and scale reuse of approved product information in both source (English) and localized versions of product communications.

Conclusions: The Gilbane Perspective

Ingersoll Rand Club Car has a clear strategy for its product content GCVC and is investing people, process and technology to ensure the chain's ongoing maturity. What truly distinguishes Club Car is the extent to which the company pinpoints intersections that require improvement, and applies phased levels of integration and automation that provide immediate results and long-term value.

Club Car deliberately chose best-of-breed solutions and services that are committed to industry standards like XML, are technically integrated, and adapt to the company's Business Operating System processes for execution excellence (Figure 3.) Through the efforts of the technical publications team, the company achieved a streamlined and consistent workflow between authoring and localization/translation management and publishing that leverages common language assets across all forms of product documentation. Results include faster time to market, improved quality, and decreased translation costs. These improvements should scale to support Club Car's business over the years to come.

Gilbane believes that there is clear value from reviewing Club Car's journey from the view of the GCVC Capability Maturity Model (CMM). The Capability Maturity Model[®], first developed at the Software Engineering Institute (SEI) at Carnegie Mellon University, provides a proven framework for GCVC initiatives. The CMM model was initially developed to help companies understand how to improve the application of software technologies over time. The CMM has since been generalized as "a process improvement model to help organizations identify best practices and enhance process maturity," and has been widely adopted across many industries.

Gilbane has applied the model to the GCVC, underscoring the value added to each maturity level based on content-driven objectives, and, in particular, multilingual communications processes. Figure 3 illustrates the result.



Labels from the Capability Maturity Model®, Software Engineering Institute at Carnegie Mellon University

Figure 3: The GCVC Capability Maturity Model

In terms of Club Car, it is interesting to note how the company evolved their product content GCVC. Prior to the people, process, and technology investments described in this case study, Club Car resided clearly in the *Repeatable* or *Accepted* phase of maturity, in which they had some content globalization processes in place, but globalization was not managed or delivered consistently, and responsibilities and tasks were executed in independent silos. Although operations such as product design and development firmly endorsed and implemented a PLM strategy, it was neither shared with nor leveraged into technical publications. Localization/translation processes were largely treated as a black box. Publishing was a costly, manual process and required an excessive amount of internal and external resources to produce mono and multilingual results. Moreover, Club Car was not able to consistently *simship* technical publications (that is, provide them to top countries and regions simultaneously).

Deliberate and intelligent intervention helped the technical publications team at Club Car to transform siloed, manual operations into a product content GCVC. In its current incarnation, Club Car's GCVC has attained the *Defined* or *Operational* phase of maturity and is quickly evolving towards the *Managed* or *Collaborative* phase. They have a solid foundation for content globalization in place, and the key functions across the value chain – authoring, localization/ translation, and publishing – have begun to work collaboratively. Club Car now simships technical publications in 17 languages. Some performance metrics are in place, and customer and partner satisfaction are high.

The company continues to expand collaboration between the technical publications team and product design and development, as well as refine the processes driving globalization. Technical product content, including structured data, text, and images, flows directly from product design into technical authoring. Localization/translation management streamlines the submission of jobs, provides tactical and operational visibility into status, and enables the exchange, review, and retrieval of translated content.

Ingersoll Rand Club Car has demonstrated hard and soft benefits from its investment in a product content GCVC, aligning multilingual product communications with engineering, sales, distributors, and customers in selected markets. With their upcoming plans for authoring assistance, links to technical illustration, and other advancements, Club Car can be confident that they will soon solidify their gains within the *Managed* or *Collaborative* phase of the GCVC CMM.

A Supplier's Voice: Sajan Provides a Global Content Lifecycle Solution

The Gilbane Group appreciates the contribution of content for this section from Sajan.

The pains that Club Car came to Sajan with are all too familiar:

- Lack of Translation Memory (TM) access
- No transparency
- Lack of automation (and cost incurred post process due to this)

Sajan met and addressed these pains by connecting expert **people**, using proven **processes** and the absolute best **technology.** Sajan could demonstrate to Club Car the key functional components that would alleviate the issues they were experiencing and bring about significant cost savings at the same time. By supplying an end-to-end solution that encompasses the entire global content lifecycle, Club Car was able to access TMs at the authoring phase of their localization process.

Sajan provided a complete view of how technology-enabled translation services would enhance the pace of deployment for Club Car's multilingual communication. Sajan reviewed the need for changes in the global content lifecycle process and how those changes would improve cost savings, increase expansion to other markets and provide faster time to those markets.

Collectively, Club Car and Sajan worked on implementing a process that would provide lasting benefits for their international communications. Sajan's ability to work with Club Car on an incremental implementation strategy provides for immediate and continuing positive effects on return on investment and consistent global communications.

Sajan's **GCMS**[™] (Global Communication Management System) is the leading technology-enabled language translation management system. GCMS[™] offers automated project workflow and patent-pending translation memory management storage and retrieval in one centrally managed location, allowing for enterprise scalability and centralized real-time 24x7 collaboration to all project participants. GCMS[™] also offers an online portal with real time project status and a host of analytics, giving transparency to a once "black box" process. Additionally, Sajan had integrated quality control tools into GCMS[™], allowing for automated, in-process quality checks.

TMate Search Technology[™]: Sajan's TMate Search Technology is the next generation multilingual data search and match tool, which is embedded and integrated into the core Sajan products, GCMS[™] and Authoring Coach[™], and provides unparalled process times, match rates and accuracy and consistency rates.

Authoring Coach[™], which Club Car plans to introduce as part of their long-term strategy, is the industry's leading authoring memory tool that provides live, interactive access to existing translated content.

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Club Car will achieve their robust Authoring Coach[™] implementation through the use of **Sajan's X-Content Integration**[™] technology, which provides an open integration framework for all content management systems, file systems and other business applications. X-Content Integration[™] will facilitate the Authoring Coach[™] access to GCMS[™] where the Club Car multilingual data resides.

In this way, Sajan brings a wide range of solutions together to provide a complete GCVC solution:



About Sajan

Sajan is the innovative way to obtain language translation. Sajan's language translation services use advanced process and quality management through our next generation technology. Sajan's patent- pending data management and on-demand collaboration and workflow platform create a unique blend of technology and service, resulting in the most advanced and measurable solution available today.

As Sajan expands its technology functionality and method of delivery, it continues to provide customers with an open architecture platform that is adaptable to many configurations and translation capabilities. Sajan's view is that all corporations need to start with a strategy to build a centralized repository of all their translation memory – and that their technology platform enables clients to initiate a strategy at their own pace. Sajan's goal in technology is to provide enterprise scalability, an incremental approach on adoption and an industry standard for flexibility.