

# PTC

## Highlights

As an information technology supplier operating in many local markets, PTC had a long track record in localising product documentation and strong in-house capabilities in terms of Web and infrastructure technology. When a corporate level decision was taken to globalise the company Web site and transform it into a major customer-relationship channel, it was therefore able to leverage internal technical resources and assets. But it also had to overcome organisational sticking points to achieve clear responsibilities for implementing the new strategy.

Central to this new e-content initiative were:

- a stated corporate objective of becoming a ‘global company’;
- a careful content audit and content authoring policy;
- effective mobilisation of in-house technical and service team knowledge;
- the application of a Global Content Management solution;
- detailed reporting processes to measure ROI.

**This case study highlights good practice in the design and implementation of a strategy for Web globalisation, and e-content localisation involving an in-house localisation service.**

### Snapshot

<b>Company Name</b>	<b>PTC</b>
<b>Globalisation vendor</b>	Idiom
<b>Locations</b>	Australia, China, Denmark, Finland, France, Germany, Hong Kong, India, Italy, Korea, New Zealand, Norway, Russia, Spain, Sweden, Taiwan, United Kingdom, United States
<b>Industry</b>	Software
<b>Revenues (2001)</b>	€754 million
<b>Global Reach</b>	18 countries
<b>Number of Employees</b>	4300
<b>URL</b>	<a href="http://www.ptc.com">www.ptc.com</a> and country-specific sites
<b>eGlobalisation challenge</b>	Globalise the corporation’s Web site

## Company background

### History and evolution

For 15 years, PTC has been a technology leader in product development applications. With more than 32,000 customers, they focus on transforming the product development process. The company is a leading maker of mechanical computer-aided design, manufacturing, and engineering software (CAD/CAM/CAE). Its flagship

Pro/ENGINEER 3-D and its collection of add-on software tools have been used by organizations to create 3-D computer models for everything from aircraft engines and car bodies to cellular phones and dollhouses. Parametric also offers its Windchill software suite, which enables collaborative product lifecycle management from design to supplier sourcing and production over the Internet. Customers include Motorola, NASA, and the US Department of Energy.

## Making the business case

### Establishing the business objectives

PTC understood the contribution of appropriately localised content to their business at global, regional and local levels. They had been translating their products and associated materials for over 10 years. Given the highly technical nature of PTC's products, their approach for their international products maintained a relatively literal translation. The engineers using the products were more interested in accuracy than artistry. In fact, the majority of the engineers using PTC's products spoke English yet early on PTC saw the value of translation, and were able to use it as a competitive advantage and increase their international market share.

This early appreciation of the value of tailoring their products to the needs of their clients provided a precedent when faced with the questions involved in globalising their Web sites. They realised the importance of matching the desired client experience with the method of tailoring. PTC wanted to achieve a more intimate, emotional experience for their clients via the Web, so they made their site more localised and personal and took extra steps to do more cultural adaptation.

They had a documented and internally codified strategic globalisation plan to deliver appropriately localised content. The years of international product development had yielded a well-oiled machine that was well funded. Their globalisation plan had adequate resources and was driven by a proven team who were knowledgeable about the methods and relevancy of localisation for their business. This coalition of departments was led by a senior executive and had participation from numerous other managers within the organisation.

### Assigning funding responsibilities

Securing resources for their international Web initiatives, however, proved to be more of a challenge. Although the primary budget was funded out of the Marketing department, they experienced challenges internally to think of the Web as a corporate function. They were working to achieve the mindset that valued [www.ptc.com](http://www.ptc.com) as the face of PTC that the world sees, and needed to understand how this impacted their approach to supporting the sites. Given that the site was not funded as a centralised function, but within the realm of Marketing, the prevailing view within the company was that Web initiatives were also Marketing issues. A contributing factor was the multiple groups and cross funding involved. Although the Web site was seen as an important element for their go-to-market strategy, they were wrestling with concentric spheres of influence from various groups, including Sales, Marketing, and IT.

PTC has ensured that the people, processes and technology required to deliver their globalisation plan are consistent with the wider policy of the organisation. Having developed an internal localisation department, the requisite expertise was already in-house. They had a good understanding of the cross section of groups because they were very inclusive in their requirements gathering. Their globalisation plan, and the reasoning behind it, had been communicated from the executive team and embraced by stakeholders at all levels. Three years ago, PTC set itself the corporate goal of becoming

a “global company.” Globalisation was one of the CEO’s top five initiatives for the company. Today, 60% of their revenue comes from outside of their domestic market. This understanding helped them to get the funding to help support their successes.

PTC made a local and global distinction of content types by developing a matrix of countries and languages. The implementation of this plan, however, was more problematic than initially thought. They wrestled with the distinction of a “language site” versus a “country site” and how this might be managed programmatically. For example, they wanted a Canadian site in English and French, but this presented usability issues due to the multiple options for any given locale. They asked themselves the question: “How should we go about managing marketing campaigns in the different locales?” PTC wrestled with content latency, especially with technical information. Their approach was to pick a language and country combination, then once the English was completed, translate the language and country combination so that there was no more than a 30-45 day latency between the source content and the target content. They had also sequenced local product releases to map to the timing of launching localised content. They had chosen not to translate the source content until it was live because they had significant amounts of editing up until the minute the content went live. There had been discussions of doing simultaneous release for new letters, but this was yet to be attempted.

Optimising and integrating their content strategy, creation and delivery processes and technology with their globalisation strategy was an ongoing initiative. Analysts conducted competitive analyses every quarter by visiting various reference sites. These reference sites consisted of direct competitors as well as companies viewed as leaders in global Web development. PTC’s globalisation strategy and tactical plans were regularly reviewed by the globalisation team and key stakeholders. Globalisation was addressed company-wide during annually budgeting cycles. Investments in target markets were based on existing revenue contributions and the potential for growth.

### **Prioritising markets and languages**

PTC localised their content and products into 9 languages for 25 countries. They were looking to add another 4 languages (Swedish, Finnish, Norwegian, and Danish) as well as locale-specific modifications for Spanish and Portuguese. In-country staff helped craft profiles for the target markets for which their content was being localised and compared how they differed. These adaptations were made country by country after the original content was authored, rather than during original development. The more technical materials were translated literally, whereas the marketing and sales materials were adapted to match the local flavours identified by in-country employees.

Having researched the needs of their customers, they confirmed that the needs of an engineer in one market were almost identical to those of an engineer in a different market - modelling a wheel in Germany was much like modelling a wheel in France. However, the marketing and sales materials in France and Germany needed more tailoring to achieve the desired emotional responses to PTC’s products and services.

PTC had four primary mechanisms for mapping their localisation drivers and priorities:

- **active product user groups** with whom they discuss the incremental development needs of their products. These development modifications were worked back into the localised products.
- **extensive content reviews** were performed for the source content. These content reviews helped improve the quality of the localised sites.
- **satisfaction surveys** were used extensively to guide future investments and subsequently their approach to localisation.

- **in-country public relations firms** were used to help develop and manage local marketing initiatives. This approach helped to bolster their existing in-country staff to support peaks and valleys in their marketing cycles.

PTC used these to conduct marketing and advertisement programmes in each of their target markets. PTC's internal localisation group maintained involvement for purposes of consistency and cost management. The centralisation allowed them to follow similar processes for all of their global content. It was important to note, however, that they used different translators for their marketing content compared to their technical product content.

### **Ensuring brand consistency**

Securing domain names in their target markets had not been a major priority for them. Although they were going through a review and acquiring domains that have yet to be purchased, procuring all domains relative to all of their brands had proven to be cost prohibitive. To the more than 200 domains that they owned, PTC may add domains for key markets like France where such decisions are appreciated. They opted for focusing their resources on local search optimisation by registering with local search engines and localising key metadata.

PTC also put much effort into drafting and publishing their corporate style guide for branding elements within target markets. It had been very important for them to maintain brand consistency across markets. Adherence to their style guide was achieved by centralising the publishing process for global sites and limiting the number of people who have publishing capabilities. The small group of content publishers then confirmed their adherence to the style guide. They developed a brand protection and exploitation policy and allocated resources responsible for implementing and monitoring the policy. The Creative Director was responsible for brand stewardship and their legal team assists with the enforcement of policies when necessary (i.e. trademark and copyright).

One step in maintaining their global brand consistency was through their efforts in working with their partners. There were strict use requirements between PTC and its partners. As the marketing group identified partners that have gone astray, they worked with them to bring the content back into alignment. This proved to be easily accomplished with smaller partners, but had at times been challenging when large or strategic partners had conflicting brand dilution requirements.

PTC's plan for approaching local advertising and marketing involved using local field marketing offices to maintain close contact with clients. These local offices then fed information back to the corporate office for subsequent inclusion in their content and product development efforts.

## **Developing the content strategy**

PTC defined the scope of their initiative as:

- a corporate Web site that served as a channel to deliver Marcom and Sales information to their worldwide customers, prospects and influencers;
- an online customer support channel;
- a business-to-business/business-to-consumer exchange.

### **Content needs analysis**

They determined their company's business objectives for this initiative by leveraging both global and local content. Extensive efforts were taken to strike the proper balance between the various site constituencies. Over 150 interviews were conducted with

customers and internal employees. Country Marketing Managers were enlisted to discuss the local marketing needs that should be reflected in the site. Approximately half of the interviews were conducted with internal stake holders. The other half of the interviewees were clients of various profiles.

PTC organised the interviewees into four different categories:

- the CXO level (who were interested in growing their company),
- the SVP level (who were the decision makers),
- the Engineers (who were using the products),
- the managers of the Engineers.

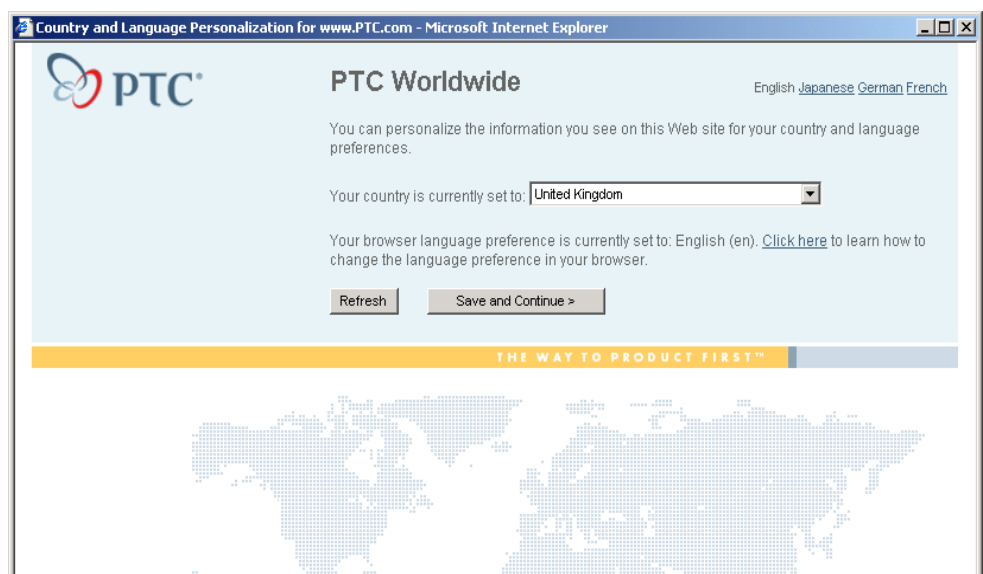
This exercise provided a very accurate representation of the content needs on the site. In conjunction with their extensive interviewing, the Web team performed an exhaustive inventory of the site content. They tallied over 5000 static pages of content. From this inventory baseline, they used their research to hone down the site for a more focused impact.

PTC wanted to balance global versus local content needs. The rule of thumb used by the team was an 80/20 pyramid. Corporate content, which was leveraged across all geographies, represented 80% of the site and local content represented 20% of the site. The local content consisted primarily of market-specific press releases and promotions. The in-country offices had free reign for making use of this content as they saw fit.

Based on current revenue, PTC prioritised its target markets -- the countries and/or language groups that it wanted to address. Their markets in order of priority were Japan, Germany, France, Spain, and Italy. They recently began incorporating growth targets in their market prioritisation exercises and consequently began targeting China.

Moving away from country-specific sites, they opted for language sites that were subsequently tailored to a particular country. This enabled site users to select their preferred language as well as country preferences.

### Country and language personalisation



Their country and language personalisation functionality was a move towards a broader international focus, helping them service the world more equally. It was also easier for

international site visitors to find the most appropriate content and have it delivered in their preferred language.

Each piece of content on the site needed to have a purpose. The function and purpose of the content was mapped back to their business objectives and the market requirements gathered during the interviews. The message to their customers was “You tell us what you want to see and we’ll build it.” From that point, the site went through several iterations of internal discussions as they aligned the site with customer and corporate objectives.

During this process, the Marketing organisation mapped the content lifecycle onto the product lifecycle. They did not want to include content for older products that had either been replaced or were older versions of existing products. Part of this discussion addressed the fact that different content had different value to different people. They looked at each piece of content and analysed its relative use and longevity. For example, they asked analysts and investors about the desired lifecycle of content pertaining to legal issues. This group wanted the old press releases going back 4 years. Not wanting to post this many articles directly on the site, they opted to archive the press releases after 2 years yet make the archive publicly accessible. Product white papers on the other hand, followed a different lifecycle. The white papers mapped to the life of a product. Since they did not know the length of a given product, they monitored and managed the content more closely. They used tags with predefined life spans and then once the life span flag was raised, they made the determination whether or not to archive or remove the content all together. Whenever a new white paper was brought in, the older versions were pushed down on the site.

There was also a Web store for customers to download test licenses or additional seats. This channel was more for serving existing customers than for attracting new ones. PTC has been intentionally slow to launch their Web store in multiple markets. They decided that the global complications of selling their product on the Web did not warrant significant globalisation investments at this time. For example, their site was set up for credit card purchases. Their customers in Japan would not use a credit card for such purchases and were wary of associated corporate regulations. These customers preferred to use a PO and maintain a personal relationship with their PTC representatives. Preferences such as these were researched in collaboration with PTC’s field offices.

### **Benchmarking the competition**

While developing the site to be more tailored to the needs of their customers, they maintained a solid understanding of the competitive landscape with respect to their multi-market initiative. They viewed companies like IBM and EDS as their primary competitors. The area of competition revolves around large professional services engagements to implement enterprise applications to help companies speed product development. Certain large system integrators have aligned themselves with different products and thus introduce competition. PTC also faced competition from other software companies, such as SAP, who developed product development front ends to an ERP system. All three of these competitors had made significant investments in their global presence.

For example, IBM had an impressive global Web site along with offices all over the world. Because of these significant investments in globalisation, their larger competitors had deep roots in these countries and were more likely to know the local “lay of the land” better. They have been able to counter the large investments with the fact that the development and implementation of such products was a small percentage of the larger players’ revenue.

PTC on the other hand has been a longstanding provider of these products and services and was solely focused on this segment. Their greater focus and longer experience has been a competitive advantage. This focus had been expressed in their global Web site.

They had also done globalisation-specific competitive discussion sessions during which they surf their competitors' sites for insights into how they might tailor their content – particularly mistakes they wished to avoid.

## Integrating process and technology

### Process audit and re-design

Given their long history of product localisation, building processes for localising their Web content was not difficult. Their IT infrastructure was already internationalised. This allowed them to begin localising content immediately and efficiently without having to re-engineer applications. They already had a seasoned, internal localisation team who were familiar with their products and terminology. Their key task, therefore, was to modify their processes to account for the differences between the localisation needs of their products and the localisation needs of their Web content.

PTC had an established process that included the approval of standard and non-standard electronic responses to customers. They had an award winning Customer Care department that was being expanded to further support international customers. They also had a Global Web Strategist who championed the cause for international customers and Web sites. They had established processes for monitoring the quantity and efficiency of electronic communications with customers, and formed a committee devoted to understanding as well as setting policies for sending such communications to clients.

They already had existing relationships with translation vendors. The processes for working with these vendors were already in place. In addition, their vendors were already familiar with PTC's products and terminology as a result of their product localisation history. As a result of this experience, they were able to improve the turnaround time, cost, and quality of their localised Web content. The internal localisation group was responsible for managing vendor processes and relationships. They used service agreements to monitor and improve vendor services. Vendors were required to performance against target metrics, such as through put, articulated in these agreements.

### Globalisation Management System

Localising and maintaining their Web sites were done via a series of projects. Defining the project involved describing the source content, the target content and the mapping between the two. These projects were initiated based on the business objectives of the company. They were the tactical manifestation of strategic goals such as “What markets do we want to target?” and “How important is this content?” Their globalisation management system (GMS) was implemented to match their globalisation model of a source and a target locale. Business rules were established between these locales to determine how and when the assets were to be globalised. Their localisation cycle was a sequence of steps that were repeated at either regular or irregular intervals. The cycle was executed when the source Web site content changed and an update entered the system.

Not all of their Web site's content was in one location (i.e. the CMS or file system). Other repositories included file systems, legacy systems, and databases. As a result, it was necessary for a globalisation technology solution to interact seamlessly with all content repositories as though they were an extension of the CMS or content repository. Their GMS addressed this need by providing integration with the existing Web environment and allowing users to “play the data where it lies.” They were not required to replicate the content out of the underlying data structures or locations. This eliminated costly, error-prone, and time-consuming file processing steps. Users could work with content wherever it was stored, including files, databases, XML repositories, commercial content

management systems (CMS) or proprietary formats, and guarantee the integrity of the content.

They monitored the source Web site, detected changes and initiated action. Change monitoring operated both continuously and at regular intervals. Changes were triggered by a variety of mechanisms: file modification dates, checksums, etc. The open APIs of their GMS enabled them to easily integrate the application with their existing architecture. Any stored content could be accessed by the GMS and linked to any other content. They defined the set of rules governing how content was re-used or adapted, allowing users to define the relationships between various content no matter where the content originated. When changes were made to a site, any associated rules triggered either predefined, automatic actions or change notifications to the Web globalisation team responsible for the linked Web sites. The triggering of these rules could be timed to meet the company's schedule of Web site updates.

For example, some local sites needed to be updated immediately while others needed updates on a less time sensitive basis. The people responsible for content decisions could manage the site assets at multiple levels of variable granularity. In other words, one rule could be applied to automatically update all services information in 5 languages, while another rule could be applied to update only the \*.GIF file in a product description for 3 languages. This resulted in the user having the flexibility to manage as much or as little as they chose.

Each piece of content in need of translation had a list of attributes; source and target languages, for example. They were able to group data elements into one or more projects. The projects could be created on the basis of number of files, file types, target languages, priority, etc. Their GMS recorded a broad spectrum of information about tasks as they passed through the localisation process. This allowed them to see where each person fit in the globalisation process and what other steps were – or would be – taken by other users. They could also access this information for a variety of auditing tasks. Their GMS enabled users to create workflow tasks, even when content had not changed. For example, users could find a section of a translated Web page that had been mistranslated and take action to correct the problem. While the workflow automatically routed tasks, users could also re-route tasks, based on individual permissions.

### **Streamlining workflow**

Once a project had been approved, the work was distributed to one or more resources in one or more countries. They wanted to route content according to business needs such as the workload and skill sets of translators. For example, one translator might be more skilled at the translation of technical product information while another might be better suited for advertising collateral. They had the ability to triage content accordingly by mapping any localisation process. These processes involved a wide variety of people, steps, and policies. These processes could involve automatic tasks, such as directly copying content or executing programmes to transform the content, or manual tasks, such as translation, localisation, and content review. Their workflow templates could easily be personalized to the specific task at hand.

Their GMS supported the needs of translators to ensure they worked effectively. It included a complete set of localisation tools designed to handle the localisation of content (i.e. text editing, translation memory, context preview, etc). These tools could run either in a Web browser or as a standalone Windows application. These alternative modes allowed users to choose between working offline in the Windows application (and saving possible dial-up charges) and working online through the browser interface.

The translated content was then routed for review (editing and proofing). Since their GMS leveraged existing application servers to access the content, a translator could view a piece of data in full Web context, including related content and images dynamically assembled at run time by the application server. By providing the translator with the full

context of what was being translated, they were able to reduce review cycles, thereby improving translator efficiency and reducing translation costs. Translators were able to preview source or target content in context or as original source format. Translators and editors could view the original and translated Web content in the context of a full Web page, which minimized errors during translation and validation. They were presented with both source and target content and previous and current versions of source content (difference viewer). When adapting text, this functionality helped authors understand changes made in the source site so they could make appropriate updates.

### **Review management**

The resulting work was then tested before being published. Users were able to preview the current source and target assets at any time in the globalisation process. This preview capability was provided within the full context of the site, allowing users to see exactly how the content would be displayed. This also enabled them to compare the differences between the previous version of the content and the current version, allowing reviewers to readily identify areas of change and focus their review on these areas.

Their GMS provided the mechanism for ensuring that all the appropriate review steps were taken before content was published. In addition, it had a built in issue tracking system that supported the collaboration between reviewers and translators. It was used both during translation and review as well as when arbitrary mistakes and errors were found on a site. Issue tracking ensured that all issues were recognized and handled appropriately (e.g., content did not go live that might have been considered inappropriate). The GMS provided an issue or bug tracking system for a translation project to track general issues about the site or specific task-related issues. Users could browse issues either for a specific task or for the overall site.

At each step in the globalisation process (such as translation, adaptation, and review), the assigned user choose to either complete the task by sending it to the next step in the workflow, or to return the task to the previous step. For translation steps, the appropriate repositories (such as translation memory) were updated upon step completion. The final work was delivered to the target Web sites through their CMS. Delivery did not interfere with content development or site operation. Their GMS enabled them to deliver the content back into the original content repositories the same way it came out.

### **Technology strategy**

PTC had examined the need for a comprehensive corporate approach to localisation technology, and had dedicated resources to support the architecture for globalising [www.ptc.com](http://www.ptc.com). The IT organisation believed that proper internationalisation was everyone's job. They always asked themselves the question "How does this effect international?" This philosophy took many forms and everyone in the department was involved in supporting globalisation in some way.

They deployed an integrated content creation and localisation technology solution that could be easily tailored to their content volumes and typology, locales, media, and delivery channels. PTC built an infrastructure upon which they could build effective, scalable content localisation processes and applications. They wanted to ensure that the application selected would function properly in their WebLogic J2EE architecture with little or no modifications to the environment. Therefore, the IT group participated in the benchmarking and selection of a GMS (WorldServer).

PTC strove to employ guidelines to cultivate proper international development practices. One such step was storing their content in UTF-8. Another such step was to facilitate localisation processes with technology. Their GMS could parse a wide variety of Web content formats and separate content from non-textual components such as HTML mark-up and scripting languages. This enabled the translator to see only the text to be

translated, making translation easier, reducing errors due to mark-up, etc. When desired, they could also deactivate this feature so the translator could view and edit the code.

PTC inventoried the technologies used by their clients to access their global content. They used WebTrends to track percentages of browsers used on their site, but did not optimise to any one in particular. Their plan was to support any browser that is more than 1% of their visit sessions. This ended up being Netscape 4.x, Internet Explorer 5.x, and Opera 6.x.

Their GMS used translation memory to leverage previously translated material, thus reducing time and cost while increasing quality. The end result was for each text segment, a list of matches and a classification of these matches into exact matches, fuzzy matches of various precision (90%, 80%, etc.), glossary matches, automatic translation “matches”, etc. All matching was designed to maximize consistency in translation and reduce translation costs. Their GMS translation memory had the following capabilities:

- Guaranteed matching – the same translated block was found in the same position in the same document, (same source text, same meta data). This provided “guaranteed matches” ensuring that if a document was translated, a change was made, and then retranslated, the application regenerated all unchanged parts of the document.
- Exact matching – the same translated block was found in a different document, or in a different place in the same document (same source text, different meta data).
- Fuzzy matching – some source text was different, yielding similar translations. All possible translations were presented (different source text, different meta data). The translation memory normalized the segment to make it as similar as possible to the current segment.
- Multiple matching – multiple translations were accepted for the same source text. All possible translations were presented, and translators could select the most appropriate translation.

In addition, their GMS was able to interact with that of other applications, including Trados, SDLX, and other TMX compliant tools.

## Organisation & resources

### Centralised organisation

PTC implemented a centralised resource strategy for managing the work associated with the globalisation initiative. As part of this centralisation effort, the core competencies and highly sensitive functions were executed internally, while the bulk of functions prone to significant workload volatility (i.e. translation) were outsourced.

Marketing devised the strategy for local and global content while the localisation team performed the tactical implementation of Marketing strategy. They established communication channels between the various groups involved with the initiative. There were weekly meeting for Marketing, which pulled in other resources as appropriate from IT and Localisation. During the launch of new content, the Marketing, IT, and Localisation groups meet on a more tactical level to review schedules and open issues.

PTC had a mature and well staffed internal localisation group who was responsible for global e-content deployment and had an established position in the company’s organisation. The Localisation department handled localisation for all of PTC’s global content including products, technical support knowledge base, and Web site. The team was comprised of over 20 localisation professionals. The department was divided by

product lines – one team for each of PTC’s major projects (ProEngineer and WindChill). The staffing of the team was as follows:

- 12 translators covering French, Italian, German, Spanish, Chinese, Japanese, and Korean
- 3 project managers
- 2 internationalisation engineers
- 6 QA testers
- 1 vendor manager
- 1 localisation director

The staffing for the localisation of the Web site was based on the time and effort involved in the localisation of their software products. For example, they built their staffing plan for project management around the number of estimated transactions necessary to effectively manage similar transaction volumes as the project managers for the localisation of their software products. They had one Project Manager who was dedicated to the localisation of [www.ptc.com](http://www.ptc.com). This person worked with their translation vendors and internal resources to quickly and effectively execute the localisation. In-house translators provided intermediate quality assurance on the translations provided by their translation vendor.

They had a Vendor Manager who works to continuously improve their relationship with their external vendors and other partners for global e-content deployment. They met with their vendors, 3 multilingual vendors and 5 single language vendors, on weekly basis. The Vendor Manager proposed project awards, works with vendors to establish agreements and pricing, monitors RFQs.

### **Local involvement**

In addition to the Localisation department, the corporate office had other human resources supporting the international sites. There was one Webmaster for international, one Content Strategist (50% allocated), and one System Administrator (50% allocated) to support the GMS. There were two dedicated people in the field – one in Asia and one in Europe – to support the content coordination of the in-country offices. These in-country resources worked to coordinate updates, facilitate content development, and review content before going live. It was worth noting that there were also significant and ongoing contributions from many other people in the field offices. The IT department did not budget specifically for globalisation per se, rather they had existing resources who were able to monitor and maintain the servers delivering the international sites.

Three years ago PTC had a relatively disjointed localisation effort. Due to the efforts of the Localisation department, they had been able to bring together the disparate localisation needs and drive greater efficiency in the company. The Director of the Localisation department performed a significant amount of evangelising in order to bring together the various localisation needs within PTC. Their internationalisation team also played an important role in this effort by working closely with product development to internationalise the products properly from the start rather than going back and reworking the code for localisation. The Localisation Director worked with the Development Managers, Technical Support, and Marketing to identify localisation needs and gain consensus on the appropriate path.

## Monitoring and measuring results

PTC employed both qualitative as well as quantitative measures for assessing their globalisation initiative. Financial targets and constraints, throughput estimates, and one-on-one feedback provided them with the data necessary to make appropriate decisions regarding their globalisation performance.

The building of globalisation budgets was a collaborative, inter-department activity. The Marketing, Localisation, and IT departments worked closely together to estimate the amount of work and cost involved in their ongoing globalisation initiatives. Adequate resources were allocated to the various functions including defining business requirements, executing their plans, and maintaining what was created. The Web team estimated the volume of content needed to be localised by estimating page counts and/or word counts. The Localisation department then applied a fully loaded rate per word to estimate the total cost to the company for localising the content. If there was a need to add or modify the supporting infrastructure, then IT would assist with estimating their hardware and labour costs.

### Financial measurement

The financial factors were contained within an established reporting process that defined needs, mechanisms, frequencies, and recipients. The process for globalisation mapped to their monthly, quarterly, and annual budgeting cycle. The foundation of the translation business is built on the “pennies for words” principle. Service buyer and provider use the individual word (or various groupings of words such as strings, pages, etc.) as the basis for estimating the costs associated with a given project. In order to help them build their globalisation budgets they used their knowledge of the size of their Web site and the established pricing agreements with their vendors.

Key performance indicators existed for outsourced tasks such as translation. They had an agreement with their vendors to translate 10,000 words between 2 translators per week. This benchmark was utilised on a regular basis for maintaining their site. PTC set a monthly maintenance cycle during which not more than 10,000 words would be added or modified per month. The maintenance cycle was scheduled to happen each month for one week. This allowed both PTC and their vendors to prepare and staff the updated appropriately.

Traditionally difficult to measure, PTC’s site content was periodically assessed for effectiveness. They made use of standard metrics like click throughs, time on the site, and progression of a users visit, but they acknowledged the problem with mapping such statistics back to real value. In addition to the complications present by such statistics for a domestic site, these issues were compounded by the international nature of their site. For example, a prospect at Ingersoll Rand might browse their site looking for information. Although the contact might have their browser settings configured for German, the person could be sitting in the UK. High level measurement was easy, but the details were difficult. PTC measured the overall success or failure of their globalisation initiative via the combination of increasing revenue and market share by target locale as well as qualitative feedback from in-country Marketing Managers.

## Conclusions and future prospects

PTC was in a good position to reach its globalisation objectives for several reasons.

- senior management commitment to globalisation provided them with the foundation necessary to build their initiative.
- globalisation projects were properly funded and remained an important focus for all participants.

- mature internal localisation skills enabled PTC to accelerate the pace of their Web globalisation initiatives while avoiding the common pitfalls due to a lack of insight.
- resources were focused on the appropriate functions at the appropriate times.

Lastly, and perhaps the most important, PTC had a clear understanding of their clients needs. The extensive interviews of both external as well as internal clients gave them the insight needed to set a course for their globalisation work that was in line with their strategic business objectives.