GLOBAL CONTENT MANAGEMENT

The 18 Most Frequently Asked Questions

By Howard Schwartz, Ph.D., VP WW Business Consulting, TRADOS Incorporated
and Alison Toon, HP Global Translation & Localization Program Manager,
WW eBusiness Content Management Services

▪ *Executive Overview*

Multinational corporations often derive forty to sixty percent of their revenues from global markets. The generation of this global revenue depends on the corporation's ability to efficiently deliver product and marketing information to a worldwide customer base. This process of adapting content to global markets is called global content management or simply content globalization. Companies that can efficiently manage this process are driving quicker revenues, cutting costs and creating greater customer satisfaction. These Frequently Asked Questions are for those Business Executives who are seeking to improve the way their organizations manage global content. Based on best practices developed by competitive global organizations, these questions and answers provide a broad framework for measuring your company's maturity in its approach to global content. More specifically, these questions focus on how global organizations are achieving new efficiencies and cost savings by marrying language technology with their content management systems.

▪ *About the Authors*

Howard Schwartz runs TRADOS' WW consulting organization. An expert in content management and globalization, Howard has worked with numerous Global 1000 companies helping to improve their global content management processes and implement best practices. A Ph.D. in humanities from Brown University and author of several books, Howard is also adjunct professor at Santa Clara University.

Alison Toon is the Global Translation and Localization Program Manager for HP's WW eBusiness Content Management Services. Alison has worked for HP for 12 years and has led HP's efforts to develop best practices around global content management, translation and localization.

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The 18 Most Frequently Asked Questions

It's a fact:
Often companies spend twice as much to globalize content as they spent on the authoring of the original content. Companies that have improved their global content management process have saved from $5-$50 million over a five year period.

Question 1:

Are content management and *global* content management the same?

In principle, the answer is yes. An enterprise content management process should *obviously* include a global dimension. Large multi-national companies ship products to many countries and therefore deliver product-related information to many local target audiences. The adaptation of content to local audiences is critical to the whole product lifecycle and content management process. The key difference between content management and *global* content management is the ability to efficiently handle the process of adapting content from one source market into another target locale.

Unfortunately, many companies roll out a content management strategy without thinking through the "global" dimension of content management. They make the mistake of tackling the global dimension of content management in phase two, after their initial business processes and systems have been designed and deployed. They assume that if the content authoring process is defined, the translation and localization process is a simple add-on. Also, headquarters is typically responsible for content management, but the countries are typically the ones who best understand the issues in adapting content to local markets. But treating the global dimension of content management as an afterthought is often a costly mistake.

Question 2:

Why should the global dimension of content management be part of a "phase one" and not a "phase two" project?

It is the recommended approach to examine the "global" dimensions of your content processes from the beginning and ensure that all designs consider how multilingual content and processes will work in a future state. It can be a serious and costly mistake to wait until *phase two* to examine the global aspect of your content management process. Like others you might find you have to redesign and re-architect your underlying content model and workflows to consider global content delivery. This can be a costly and time-consuming correction. Companies have spent millions on *phase one* of their content management design only to start over in *phase two* because they did not take into account the *global* dimension of their content management processes.

Question 3:

Why does a repeatable *global* content management process matter?

Think about it: global companies often achieve forty to sixty percent of their revenue from global markets. It is a key competitive advantage to globally deliver products and product- related information rapidly and cost effectively. As worldwide competition increases, the ability to move products rapidly and more efficiently to global markets becomes vital. This enables companies to improve time to market, offer products at a lower price, and deliver relevant product information to customers in a form they can use and understand. Content is a key part of a product's delivery. On a global basis, companies need to deliver technical manuals, help files, websites, marketing collateral, product catalogs, and press releases.

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Question 4:

What are the potential upsides of an efficient global content management process?

Cost-Reduction
Companies often spend twice the costs of authoring the original content when they globalize it. These costs are often invisible because they are buried in marketing budgets of local offices. Costs come from the process of tracking content changes, notifying global users that changes have occurred in source languages, tracking which pieces of information are relevant in which country, reusing localized chunks of information, and managing translation vendors. Companies that have improved their global content management process have saved from $5-$50 million over a five year period.

Revenue Escalation
Because product shelf-life is decreasing due to faster technology innovations and competition in the market, products have shorter life spans. As a result, a product's time to market is critical in maximizing its lifetime revenue potential. A delay of even a month can mean lost overall revenues throughout the product's life. Companies that are shipping dozens of products to multiple global markets can maximize top line revenue potential by moving the product to global markets faster. But often there is a delay between the launch of a product in its original territory and its delivery globally. The ability to reach global markets simultaneously often means millions of dollars of revenue gain that otherwise would be lost, by a delay in time to global markets.

Knowledge Sharing
Less tangible than cost savings but no less important is the ability to share information across a global organization. Many global organizations are still in an evolutionary stage where the countries and regions have difficulty accessing updated source content. They are often forced to browse the company's own web site to find the latest product information. This situation creates an information lag across global organizations and can lead to poor productivity, dissatisfied customers, and in some cases, missed revenue opportunities. Most global organizations are inefficient in storing and reusing previously localized chunks of information. More often than not, companies have many external vendors adapt their content to local audiences but have no mechanism for storing, sharing and reusing that localized content.

Branding / Customer Satisfaction
The ability to move more content to global markets ultimately results in increased customer satisfaction. Customers want access to relevant marketing, corporate and product information and feel frustrated when they can't find critical information in their own language. Indirectly this undermines a company's brand and can lead a customer straight to a competitor.

Question 5:

What considerations should be weighed in designing or improving a global content management process?

Organizations that are successful in achieving efficiencies in their global content management processes do so by establishing a repeatable process and gaining commitment across the global organization. They look at three areas: people, process and technology. First, and most importantly, it is critical to have an executive sponsor who understands the importance of global content, and who is willing to help drive change through the organization.

Organizations that are successful in achieving efficiencies in their global content management processes do so by establishing a repeatable process and gaining commitment across the global organization.

The executive sponsor needs to create champions in each region and country who are rewarded for adopting new practices. Second, it is important to understand and document your current processes as they exist today and map an achievable future state. Third, it is important to put technology in place that enables your organization to store and reuse its global content, and to automate the manual processes that today hinder efficient global content processes.

Question 6:
Does a content management system *alone* suffice for global content management?

No. Companies need language technology in addition to their content management systems. Many companies make the mistake of thinking a content management system solves all their problems. Content management systems are good at helping with many of the problems in managing content: versioning, workflow, publishing and source language reuse. Unfortunately, they are not designed to handle many of the challenges in managing the global dimension. Specifically, they lack the language technology that helps with the transformation of content from one locale to another.

This transformation or adaptation of content involves two key processes called translation and localization. Often confused, these two processes are actually somewhat different. Translation is the activity of transforming content from one language into another. Localization is the process of adapting the content to a specific market. If a printer, for example, has different parts such as special electrical adapters for the European markets or special trays for A4 and Letter-size paper, the content cannot simply be translated. It must be adapted or localized to the target market.

Global content management requires language technology for efficiently translating and localizing global content. Many companies treat translation and localization as processes outside of content management. But some hard-learned lessons prove that these processes are a key component of global content management.

Question 7:
What is language technology?

Language technology refers to software that can intelligently store, analyze, reuse and standardize content as it goes through the processes of global adaptation. There are two different types of language technology that supplement the core content management functionalities: Translation Memory and Terminology Management. Translation memory sometimes abbreviated to "TM", refers to software that can store and reuse chunks of translated content. Terminology Management standardizes the words used in content authoring and translation processes.

Question 8:
How does Translation Memory work?

People often confuse translation memory with *machine translation*. Machine translation refers to software that performs translation automatically. Because machine translation cannot understand the context of human language, it is at best 60% accurate and is therefore not adequate for business translation processes. There are many funny stories of mistranslations that occur through use of machine translation. For example, the sentence "my browser accepts cookies" might show up as "my cow eats small cakes" when run through machine translation into French. This is because a computer can't know that the context of this sentence is "computers" and not "animals" or "food".

Global content management requires language technology for efficiently translating and localizing global content.

By contrast, translation memory is a software that stores and reuses translations performed by a human being. When a person translates content, translation memory is stored, sentence- by-sentence, in a database. The source sentence is stored with a pointer to its translated sentence in as many languages to which it has been translated. This makes it possible for the translations to be reused in the future. If an English sentence has been translated, and it later appears in another document or another version of a document, translation memory automatically identifies the previously translated material and presents it to a translator for validation. In this way, once content is translated it never needs to be translated again. Translation memory, then, guarantees the fidelity of human translation while bringing into play the greatest possible automation of software. It is the best of both worlds. Many companies are realizing 40-80% savings in translation costs by recycling their earlier work.

Question 9:
How does translation memory differ from single sourcing and xml reuse?

Companies sometimes confuse translation memory with a new form of XML reuse called "single sourcing". Single sourcing and translation memory are fundamentally different types of reuse.

Single sourcing is a means of reusing one chunk of content in other contexts typically during the authoring process. For example, a "procedure" for installing a print driver could be written once but used in a user guide, online help, and a support FAQ. A person who is creating a new document can reference a "chunk" of data that has already been written. Single sourcing is a means of authoring content once and reusing it multiple times. Single sourcing relies on human intervention to decide which chunk of content can be reused in which context.

Translation memory, by contrast, is a form of reuse in the translation process and relies on linguistic algorithms to automatically identify units of text that have been previously translated. As content is translated, translation memory stores a source sentence and its translation for future reuse. When that same sentence appears in another document or in a revision of the same document, the earlier translation is automatically pulled out of the translation memory database and reused by the translator. Translation memory also applies linguistic algorithms to identify what are called "fuzzy matches", translations that are close but which may require some modifications.

Many companies use *both* single sourcing and translation memory to maximize their savings. Single sourcing makes it possible to reduce the amount of content requiring translation, while translation memory reduces the costs of content that still needs translation.
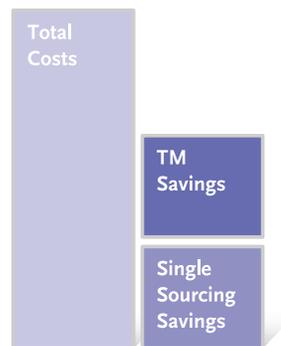

Figure 1: The combination of single sourcing and translation memory maximizes savings

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How does translation memory save costs?

Professional translators and agencies charge companies based on the number of words translated. Typical costs range from $.15 - $.35 per word of translation, plus additional project-management and desktop publishing charges. Translation memory cuts costs by reducing the total number of words that require translation. Companies typically can save between 40-75% of their translation costs by using translation memories.

Consider for example a single division of a global company and the amount of translation costs it has on a yearly basis. Imagine the possibility of saving 40-75% of this company's translation costs.

Publication type	Pages per year	Target countries	Updates per year	% Updates per year	Total pages per year	Costs for localization
Sales material	5,000	20	1	20%	19,000	$1,520,000
Websites	100	2	2	30%	60	$4,800
Press releases	300	2	2	80%	480	$38,400
Contracts	1,000	20	1	20%	3,800	$304,000
Operating manual	10,000	18	1	20%	34,000	$2,720,000
Training manuals	10,000	4	1	20%	6,000	$480,000
Service manuals	10,000	4	2	20%	12,000	$960,000
Other catalogues	400	4	2	10%	240	$19,200
R&D documents	10,000	4	2	5%	3,000	$240,000
Control documents	500	4	1	5%	75	$6,000
Diagnostics	1,000	4	1	5%	150	$12,000
Company-wide communication	10,000	4	2	50%	30,000	$2,400,000
					1 Year Total	$6,544,400
					1 Year Potential Savings (@60%)	$2,617,760

Taking cost and savings across a five-year outlook, this organization projected a $14.5 million savings. It also estimates that this amount of translation represents only 30% of all translation occurring in the company.

Five-year outlook	Year 1	Year 2 @ 10% growth	Year 3 @ 10% growth	Year 4 @ 10% growth	Year 5 @ 10% growth	5 Year Total
Costs	$6,544,400	$6,871,620	$7,215,201	$7,575,961	$7,954,759	$36,161,941
Savings	$2,617,760	$2,748,648	$2,886,080	$3,030,384	$3,181,904	$14,464,776

Table 1 + 2: Cost savings sample

Companies can save up to 40-60% of the costs of globalizing their content by standardizing repeatable processes and reusing their content.

My localization agency says they have translation memory – why does my company need translation memory in-house?

Translation memories represent a company's intellectual property. Your organization pays for the translation and has the rights to reuse those translations just as the source content is your company's intellectual property. As intellectual property, your memories should be leveraged and reused as widely as possible within your global organization. Remember the more translation pushed through a central memory, the greater your savings.

For this reason, it is advisable that you store your memories centrally. If you leave your translation memories with your vendors, then it is impossible to leverage your memories across multiple vendors, or across multiple projects. It also becomes more difficult to share your memories across your global organization. This reduces the value of your memories and reduces your savings.
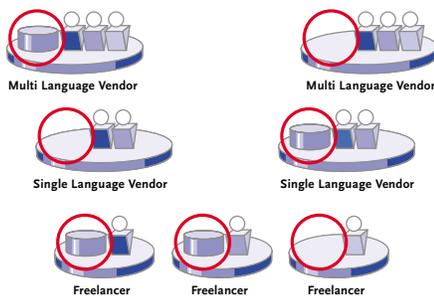

Figure 2.1: Inconsistent translation memory supply chain.

Translation memories applied inconsistently in the translation supply chain. This leads to lost savings, loss of intellectual property and inconsistency in global branding.
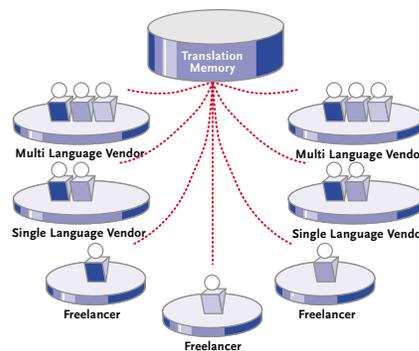
Figure 2.2: Consistent translation memory supply chain.

Translation memories applied centrally and consistently in the translation supply chain. This approach enforces use of translation memory, ensures leverage across vendors, maximizes savings and consistency, and protects intellectual property.

Translation Memories should be applied centrally and consistently in the translation supply chain to ensure maximum reuse, savings and consistency.

Question 12:

Should I outsource to one or multiple localization agencies?

Many companies find it helpful to use multiple localization agencies rather than just simply one large multi-language vendor. By using more than one vendor you can drive competition between them and achieve better pricing. The large multi-language vendors tend to all rely on the same single language vendors, who typically charge less than the multi-language vendors and are closer to local markets. By going directly to these in-country single language vendors, companies are removing the middle layer of costs and receiving lower per word costs.

Companies also find it useful to allow their in-country teams to choose local vendors who are closer to and better understand target markets. This empowers local offices by giving them a degree of control over the quality of the translations and helps create buy-in across the global organization. For all of these reasons, most global companies choose to use more than one localization agency.
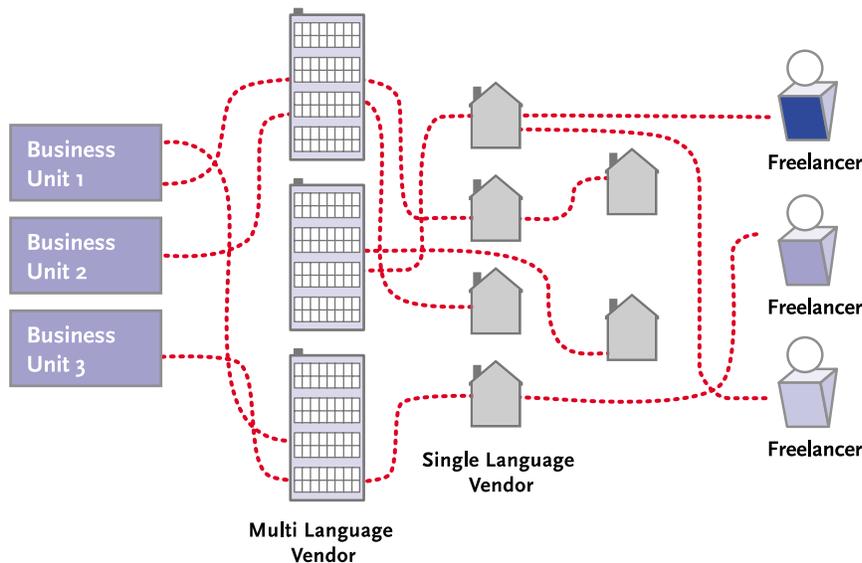

Figure 3: Fragmented localization outsourcing structure

■ *Question 13:*
What is the best way to integrate translation memory into a CMS process?

There are several ways to integrate translation memory into your content management process. If you already have a content management system, you can automate the pickup of translation memories and the various manual processes that typically accompany translation and localization. There are two different approaches to this, and the appropriate approach depends on your content management environment, your company's philosophy, and your current processes.

One scenario is to integrate translation memory directly into your CMS environment and to rely on your CMS environment for all the workflows associated with localization. In this scenario, translation memory is a backend process. The CMS system calls the translation memory server, processes files against it, and then routes translation packages to vendors.

The second scenario is to run your translation and localization process outside of the CMS system. In this scenario, the CMS triggers a translation project that is submitted to another system that manages translation and localization. This system has a centralized translation memory and its own workflow. The workflow drives the process automation for translation and localization. This approach is preferred by companies that have multiple content management systems or repositories or file-management processes, all of which must use one centralized translation memory.

In either case, the content can be pushed or pulled from the content management environment and run through translation memory and localization.
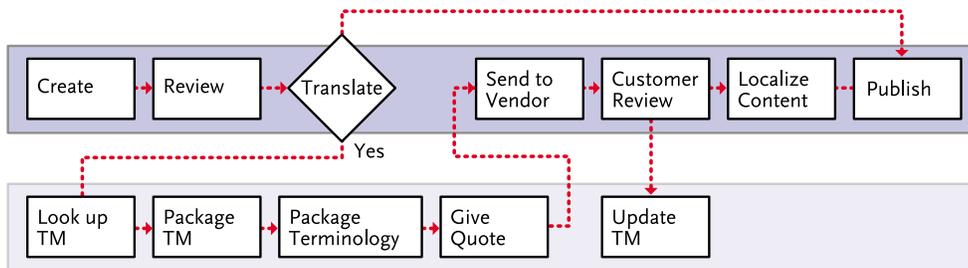
Figure 4: Language Technology tightly integrated into content management process

■ Question 14:

What transaction costs savings can be achieved beyond translation savings?

There are many manual steps in the translation and localization process that are time consuming and costly. By automating these, a 30-40% efficiency gain can be achieved. These tasks can be broken down into the following categories:

Communications:
There is a great deal of communication for each project undergoing globalization. These communications occur between corporate personnel, translation vendors, design agencies, and country and regional offices. These communications are often in hard-to-track email and faxes, and telephone messages. They are used to clarify the project expectations, the meaning of content, the schedule, pricing, status and review.

Project Oversight
Translation and localization projects typically use a black-box process. The content goes to the vendor and disappears. Has the translation been completed yet? Is it ready for review? Where is it in the lifecycle? Providing ongoing visibility to the status of projects at each stage of the localization lifecycle makes everyone more efficient.

Process Automation
There are hundreds of manual steps and many people involved in managing a project through a localization lifecycle. These are the costly transactions surrounding a localization project. With cycle times of content updates decreasing, especially for content delivered to the Web, the ability to efficiently manage these transactions can create significant time and cost savings. The various steps in the process typically done manually include: generating a cost estimate for a project, looking up previous memories, managing terminologies, notifying vendors of a project, emailing content to people in the workflow, relaying the status of projects, alerting people to delays, and sending content to reviewers.

Reporting
Reporting on localization costs by project, vendors, languages and business units is critical for visibility into ongoing costs. Today, reporting is often a manually distributed process done in spreadsheets. The automation of reporting can significantly reduce project management time and resources.

Question 15:

How does terminology management fit into content management?

Terminology management is another form of language technology that involves standardizing the ways key terminology is used throughout a global organization. Companies that insist on good branding often develop glossaries to define how certain product, technical or medical terms should be used. This standardization helps create a consistent brand, and is important to meet regulatory requirements and to prevent legal problems by using incorrect terminology. Companies standardize their terminology in both the content authoring and in the translation processes.

Question 16:

Does terminology management lead to cost savings?

Indeed it does. Terminology management has been shown to reduce customer support costs by helping to produce more understandable content. It also prevents legal problems by avoiding the misuse of inaccurate terminology and translations that can result in legal suits. Finally, good terminology management can improve search results on the website when customers are looking for correct information reducing the number of calls to a support call center with their associated costs.

Question 17:

Should I do anything to my source content to improve global content management?

Yes. The way that the original content is written affects single-sourcing, reuse, translation and localization. The style of the writing has a big impact on global content management. For example, a paragraph used to market a product in the USA may contain verbal imagery that would not make sense in another country, and which would be difficult to translate. A technical product specification may be written in such a way that it easily understood throughout the world. In either case, authors can help ensure good content management.

Content authors need to understand that the way in which they write can make a big difference to translation costs, and to the time that is needed to globalize content. Providing training, guidelines for creating "global" content, and a company style guide will help keep costs down. For example, short sentences using consistent terminology are more likely to be matched in translation memory. They are easier to translate, and easier to understand by someone who is reading the content in a second language. A company "style guide" can help reduce inconsistencies.

An analysis of the type of content that is being created will help. If it is more important that marketing messages include local imagery and metaphors, in order to attract a buyer, then this decision can help the organization to understand where country and regional effort must be focused. The workflow for marketing messages might include a localization or "regionalization" step before or after translation – or it may be more appropriate to create these messages locally, rather than translate them. The workflow for technical specifications might go directly from source content creation to translation and approval.

Consistency of terminology is critical to improve global branding, simplifying searches for support information on the Web and for meeting regulatory and legal requirements in local markets.

Question 18:
What are key features of quality translation memory software?

1. Resides on a scalable server.
2. Easily integrated with CMS systems and/or localization workflow.
3. Shared globally but can also be partitioned by attributes or TM groups.
4. Uses both reference and data records lookup to maximize different forms of reuse.
5. Accessed via the Internet.
6. Allows secure access to TM, based on user roles.
7. Allows both "contextual" and "global" forms of reuse.
8. Provides a search and replace functionality for cleanup.
9. Has an interface that translators are familiar with or can learn easily for leveraging translation memory.
10. Provides powerful linguistic algorithms that can identify and leverage different types of matches: 100%, Fuzzy Matching and "Replaceables" (for example, for ignoring numbers).
11. Enables automatic conversion of measurement units, numbers, dates, times based on target locales.
12. Provides a wide range of filters for processing file formats such as XML, HTML, Microsoft Word, PowerPoint, Quark, FrameMaker, Excel, PageMaker, InDesign, Text and others.
13. Identifies word roots for leveraging fuzzy matches by using "stemming" algorithms.

Checklist for Global Content Management

The following check-list is provided to estimate the global readiness of your content management process.

1.	Current and future state process mapped
2.	Executive sponsor identified and commitment secured to drive change. Stakeholders identified.
3.	Team educated on differences of content management and global content management
4.	Business case developed that estimates savings of efficient process
5.	Translation memory used as a matter of course in process
6.	Translation memory stored in-house and intellectual property captured
7.	Translation memory leveraged across vendors
8.	Content model and website design take account of global content processes
9.	Integration between TM and CMS designed and implemented
10	Vendor strategy developed that enables in-country and regional employees to choose their preferred vendors
11.	Localization workflows automated
12.	Terminologies developed and management process in place

Contact

TRADOS Incorporated (HQ)
1292 Hammerwood Avenue
Sunnyvale, CA 94089
United States

Phone: +1-408-743-3500
Fax: +1-408-743-3600
email: howard.schwartz@trados.com
www.trados.com