



Lost in Translation: A Look at Localization

An Author-It White Paper



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Introduction

More and more businesses are expanding into international markets. A critical success factor for this expansion is high quality, cost effective, and punctual translated content. Responsibility for this typically falls on internal translation departments or localization partners. Unfortunately, translation comes at a high price often exceeding the cost of writing the original content after only a few languages.

So, how do the really successful international brands get their message across to different cultures in different languages? The answer: very expensively! Localization of product documentation and supporting literature or collateral, in all its forms, takes a great deal of time, effort, money, and significantly increases your time to market. Additionally the costs and delays multiply with every additional language and product update.

Current approaches to localization rely on technologies and processes that have minimal scope for improvement. The localization industry is under increasing pressure to find new ways to improve cost efficiency, quality and time to market.

In this whitepaper, we explain the challenges associated with localizing content for global markets and how component-based authoring, management and publishing can drive massive “hard-dollar” cost savings in this process.

Localization, Globalization, Internationalization...What Does It Mean?

Globalization, Internationalization, Localization, Translation... All terms and processes that easily create confusion! So what does it all mean?

Let's take the example of a popular North American fast-food chain. It expands and opens new chains worldwide, across Europe, South America, Asia, Australasia... This process is known as **globalization**.

By thinking ahead, the company plans and creates its products so they can easily be adapted to suit different locales. As part of the expansion, the fast food chain may adjust the menu to cater for Indian countries, or one soft-drink brand for another in others. This process is known as **internationalization**.

Localization refers to adapting a product or service to a particular language, culture or other needs of the target market or 'locale'. In the majority of cases a large part (and cost) of localization involves the **translation** of content from one language to another.

However, localization is more than just translating text. Localization can include:

- Ensuring the content uses appropriate regional standards, such as measurement terms (metric vs. imperial), date/calendar formats (mm/dd/yy vs. dd/mm/yy), paper size (A4 vs. Letter) and so on.
- Including the correct legal requirements in a warranty statement, or the appropriate contact information and telephone number of technical support department.
- Replacing diagrams or graphics, particularly those that contain text or a screen-shot of a differing user interface.
- Recognizing any factors that may be specific to a culture or country, such as a traffic light (also referred to as a 'stop light'). In the US these lights are red, yellow and green. However in Japan, while the colors look the same they translate to being red, orange, and blue.

As you can see, the list goes on. Use the wrong term or the wrong graphic, and your viewers can be left scratching their heads in confusion, or highly offended by your innocent mistake.

What are the Challenges of Localization?

It's complicated and expensive

Whether you choose to manage the translation in-house or to outsource it to an external vendor, localization can be a complicated and expensive process. On the first mention of localization the immediate reaction from your financial department may be to reach defensively for their wallets. Costs can be unpredictable and can quickly get out of control, particularly if you do not know what to expect. Let's look at an example to put this in perspective: The average cost a translator will charge is around 25 cents (US) per word. Take a document with 500 pages and an average of 200 words per page. That's 100,000 words, so you're quickly looking at \$25,000 just for the initial translation.

In addition to the base translation cost, text expansion, right to left languages, and pagination mean there is a requirement for desktop publishing to ensure that the translated content is correctly presented to the reader. These additional activities can contribute anywhere from 30-50% to the overall cost of localization. IN our example, this would conservatively add another \$10,000 bringing the total to \$35,000!

Costs can be unpredictable and can quickly get out of control

Now remember, that cost is just for the initial translation. There will be more costs when you make modifications to the original document and need it retranslated. Most translation agencies use translation memory tools to help reduce the effort involved in re-translating a document, but they still charge for the whole document (albeit at a reduced word rate for the text already translated).

Translation memory tools return a "fuzzy" match when a text segment is similar but not identical to text that you translated previously. The translation memory tool returns an exact match (100%) when there is no difference or variation between the two segments. Translators and translation agencies charge different rates for exact matches, fuzzy matches (with the match falling between a certain percentage), and new previously untranslated text.

Let's get back to our example. You now modify 15% of these pages, and add 20 new pages. Without allowing for fuzzy matches, the cost of re-translation can quickly approach \$15,000:

20 new pages - 4,000 words @ 25 cents per word	\$1,000
5% change - 5,000 words @ 25 cents per word	\$1,250
95% unchanged - 95,000 words @ 8 cents	\$7,600
Desktop Publishing 30%	\$4,220
Total cost of update	\$14,070

Over time, these costs quickly mount up. Our example was just one document into one language. Translate that same document into 10 other languages, and multiply the cost 10 times. Translate a further 10 or 100 documents into multiple languages, and watch your costs skyrocket!

It's Time Consuming

The entire localization process can be time consuming. This is because there are a number of human touch points and discussions required in the process. The nuances of written communication and the vagaries of different languages along with cultural aspects mean that with current technologies only human translators are able to produce high-quality translation.

To make this point, consider these sentences:

- 'The man saw the woman with the binoculars'- who has the binoculars?
- 'Turn right here' turn to the right or turn here?
- 'They are hunting dogs'- are we describing the hunters or the dogs?

Even with recent advances in machine translation, it is obviously very difficult to establish the correct translation of these sentences without context and human intervention. This takes time and adds cost to the translation process.

In addition, the current processes for writing and managing localization includes a number of steps or human touch points. A typical localization project could include:

- ✓ Source content development, review and editorial
- ✓ Preparing and sending source content to localization service provider (LSP)
- ✓ Translation
- ✓ Copy editing and proof reading
- ✓ Engineering and file processing
- ✓ Desktop publishing (DTP)
- ✓ Quality assurance
- ✓ In-country review
- ✓ Project management

Quality vs. Cost vs. Speed

You've probably heard the old manufacturing axiom, "Good, Fast, Cheap: Pick Two". The same choices apply to localization. Quality, cost, and speed drive all decisions about the execution of a localization project. You may be aware of some of the infamous translation mistakes, such as the soft drink company whose name was initially translated in Chinese with the meaning "bite the wax tadpole". Many are hilarious, but they prove the point that localization is a very different process from simply translating words from one language to another.

Quality cannot be disconnected from the other two variables of cost and speed. High-quality translation, including industry or domain expertise and quality assurance with in-country review, is going to be a lot more expensive than machine translation. It is also going to take a lot longer.

Component Authoring, Management, and Publishing****

The center of the problems around the high costs of localization is an approach to creating content and documentation for a global market centered on files and documents. This approach means that you are forced to send complete files for localization, with little or no thought of reuse content, content in previous translations that has not changed at all, or the

actual requirements of the localization process. If traditional files and documents are part of the problem, what is the alternative?

The answer is to work with content as components of information. Think of these components as reusable chunks of information that can be arranged in a hierarchy forming a document, help system, website, or any other type of content. A component can be as small as a word or as large as several paragraphs. In most cases it will be the content that exists between two headings in a document. Components can also take the form of graphics or hypertext links.

Component authoring, management and publishing are overall processes for creating and managing content across the enterprise, and then publishing that content to any output. This should be an end to end process providing the ability to track, manage, and control what happens to your content at all stages of the content life cycle from authoring and importing, to storage and document assembly, and multi-output publishing.

So, what is the difference between managing content as components or managing files? The answer to this question is the key to how component authoring, management and publishing, provides so many benefits over traditional file-based authoring and management systems.

The key aspect to managing any kind of data is to manage how you create and change the data. This is the cornerstone of enterprise applications of all types and is the only way you can truly manage information. The next step is adding value to it. One popular approach to document and file management is to move the files from the file system into a document management system. These files are stored in exactly the same format in which they are created. These document management systems typically provide access and version control, metadata tagging, and search capabilities. However, they provide little control over the modification or creation of the files in the first place, relying entirely on other applications to do that. This is where component authoring, management and publishing steps in.

“Component authoring, management and publishing is an overall process for creating and managing content right across the enterprise, and then publishing that content to any output.”

“Content is translated ‘one time’ reducing costs by 90% annually saving over \$3m”-Global Consumer Products Company (25 writers and 5 linguists, 20-25 languages supporting 100s in R&D)

Component-based and Database Driven***

Let's look at this problem from a different perspective. Let's say your organization is using spreadsheets to manage your financial accounts. At some point this approach becomes unmanageable for a variety of reasons. You decide to move to an accounting system that uses a back-end database, allows multiple users, provides audit trails, has financial reporting, and manages the information properly. Would you just move the spreadsheets as they are into a file management system and expect it to magically create a profit and loss statement, or chart of accounts? Of course not. That would be impossible. Instead, you would move the data from the spreadsheets into the predefined relational database structure provided by the accounting system. Now you would be able to get all your reporting and ensure data were entered correctly, have multiple users editing without fear of overwrites, and exercise a much greater degree of security over your data.

Would you expect to be able to continue editing your accounts in the old office productivity suite? Of course not. The information is no longer in spreadsheet format, and doing so would bypass your controls and auditing. You would now edit the information in a controlled fashion in the accounting system. You would not longer get an unbalanced transaction or have information edited by unauthorized sources. All of your reporting is a mouse click away.

Component authoring, management and publishing provide the same evolutionary leap for content. It provides a more effective and efficient form of authoring, managing, publishing, and localizing your organization's documents, images, and web content.

Why Do You Need This and Now?

Your content is an asset. Generating content takes time and money and often times a great deal of both. As such, content should be treated as the valuable business asset that it is. To get maximum value from your content resources, you can do a variety of things:

- ✓ Re-use content across documents and other deliverables without copying, writing only once and maintaining it in one place regardless of how many times you use it
- ✓ Use content created for one purpose equally well in other contexts and purposes
- ✓ Translate re-used content once and it is automatically reflected everywhere it is used
- ✓ Publish to print, help, and web outputs without having to modify or make different versions of your content.
- ✓ Involve more people in the content development process, including subject matter experts, application developers, localization teams, and trainers. Ultimately improving the quality and consistency of your documentation, reducing the cost and time involved in producing it, and increasing the value generated from every piece of content created.

Control is Essential

Valuable business data that you have invested time and money in developing needs control. Assets are of limited use if you cannot efficiently manage them. Having content that you cannot find, organize, protect, or use effectively is simply a waste of time. Involving more people is a good idea, but requires serious organization. Wider access can be a disaster if the system cannot cope. You must be able to:

- Set and enforce your standards to ensure the consistency and quality of your documents.
- Control who in the organization can create, see, use, and publish content
- Find the content components when you need them
- Manage the content life cycle through drafts, reviews, localization, release, and archiving

- Control what can be published to each output channel.

How Component Authoring Can Reduce Translation Costs****

The unique way content management products can store and manage content, your organization can quickly realize savings.

You only translate content that has actually changed since the last localization cycle. For example, let's revisit our 500-page document that we have now updated. Rather than sending the translator all 500 pages again, only the 20 new pages and the 5% of modified pages are sent out for translation. Using our previous example, this would reduce the cost of retranslation from \$9,800 to **\$2,250 per language!** One of the biggest strengths of component authoring and content management is reusability.

The XML files sent out for translation should not contain character formatting. When the same text string is found using different character formatting, translation tools do not always identify it as an exact match. As the XML files from a component authoring solution should not contain character formatting, this helps to increase the exact matches found.

Further Benefits for Localization

When you manage your content at a more granular level there are a number of things you can do that just are not possible with whole documents. Some of the specific benefits to localization are:

- ✓ **Translate Content Once:** The system knows what content is translatable, has been previously translated, is reused, or has been added or changed since the last translation. You only have to send content that actually requires translation, which significantly reduces word count and cost of translation.
- ✓ **Faster time to Market:** Localization and content creation can run in tandem, allowing translation to finish much sooner. You create content in small discrete components that can immediately be sent for

- translation. This avoids the costly exercise of translating drafts or waiting for completion of the entire source content.
- ✓ **Automated Single source Publishing:** Once source content is translated and reviewed, you can publish it directly to print, Help, and Web formats without tweaking or rework. This eliminates inconsistencies in translation across delivery formats.
 - ✓ **Cleaner Translation Memory:** Translatable XML contains only text and semantic markup, increasing translation memory accuracy, and reducing the impact of formatting in memory matches
 - ✓ **Improved Accountability:** Each piece of content has an accurate word count recorded and is visible to all parties in the process, avoiding any surprises or disputes

Overall Benefits Component Authoring, Management and Publishing

Overall, working in components provides significant benefits and cost savings over traditional document or file-based authoring and maintenance methods.

Benefits of component-based authoring, management, and publishing include:

- **Faster Time to Market:** Because authors spend far less time creating and recreating the same content, reviewers spend less time reviewing, and translators spend less time translating. Publishing to print, Help, and Web formats is fully automated. This is achieved by controlling standards, eliminating duplication, and effectively managing creation, localization, and publishing of content.
- **Efficient Use of Resources:** By eliminating repetitive creation, maintenance, more of your resources can be devoted to improving the quality of the content and adding value to your documentation. Many clients report savings in excess of 20% through reuse of content.
- **Major Production Cost Savings:** Savings flow naturally from the efficient creation maintenance, and management of documentation content. With component-based authoring, you effortlessly achieve

- more documentation for less outlay, and it takes half the time to produce a page, when compared to traditional authoring tools.
- **Slashed Translation Costs:** Content is translated only once no matter how often it is reused. Translators only ever work on new or edited source content, so you do not pay for them to handle unchanged text. Real projects have shown reductions in translation word count in excess of 30%.
 - **Improved Quality and Usability of Content:** Through easy definition and enforcement of standards you can guarantee consistent documentation structure and formatting, increasing readability and usability. Using single-source content ensures 100% consistency wherever it appears.
 - **Improved Workplace Satisfaction:** Free authors from tedious, time-consuming tasks such as formatting and repetitive updates, so they can concentrate on creating and improving content. Reviewers' benefit by reviewing content only once, regardless of the number of end deliverables. Writers can save 95% of the time they usually spend formatting content.
 - **Increased Customer Satisfaction:** Consistent, accurate documentation of all types means fewer calls to customer support, because you are providing the right information, at the right time, in the right format.

“50% reduction to localization expense with faster turn-around annually saving \$1.2 million”- Global Technology Company

About Author-it Software Corporation

Author-it Software Corporation (ASC) is changing the way the world works with complex business documentation. While other solutions such as financial applications, supply chain management, PLM and ERP have evolved into database driven enterprise applications, Documentation has languished in the stone-age still essentially replicating the typewriter. This has caused in a myriad of content issues across the world's enterprises that result in 20 hours of lost productivity per week for every information worker.

Author-it solves these problems by centralizing the content creation process, writing in components, and storing the pure content in a database. This innovation drives content reuse. It supports assembling and generating this content into multiple documents, and allows real-time collaboration in authoring and conducting document reviews. Author-it clients report a doubling of author productivity, experience faster document release cycles, and large reduction in the cost of translating content for global markets. Author-it can be used to improve efficiency in many industries and documentation applications including; product manuals and user assistance, training and eLearning, compliance documentation, operations manuals, customer support portals and sales proposals/RFPs.

With the release of Author-it Cloud, ASC has become the world's first end-to-end Enterprise Authoring Platform on the Cloud. Author-it is used in over 50 countries, by over 3,500 clients and chosen by Fortune 500 organizations for worldwide developments. ASC has offices in; San Jose, Auckland, Sydney, and Dubai. For more information go to www.author-it.com.