

Ter·mo·lo·gic

61 Wellington St. E., Aurora, Ontario, Canada L4G 1H7 Tel 905-726-0384
W306 HHYC, 157 Pak Sha Wan, Sai Kung, New Territories, Hong Kong Tel 5968-0306
www.termologic.com / kara@termologic.com

Developing a business case for managing terminology

By Kara Warburton, PhD

Part 1 – Introduction to terminology and its business case

This White Paper is the first of a series of articles about the benefits of managing terminology in commercial settings. This first issue introduces some basic concepts about managing terminology in commercial settings and some high-level business case strategies. Subsequent issues will provide specific examples of business case metrics that justifies the implementation of a terminology management program in companies. Next topics will include industry studies on the ROI of terminology management, case studies and sample business cases, and more.

Terminology's introduction into commercial settings

Although relatively unknown compared to related fields such as lexicology, linguistics, and translation, *Terminology* as a scholarly pursuit and professional vocation has existed for over 50 years. Its focus is to develop best practices for using accurate terminology consistently in *Languages for Special Purposes (LSPs)* in order to facilitate communication. An LSP is typically understood to mean one of the unique variants of language that are used in specialized domains, such as legal, scientific or technical fields. *Terminology*, in this context, refers to the words and expressions that are unique to an LSP, or common words or expressions that have assumed a meaning that is unique to an LSP. For example, in the field of computing, the terms *random access memory* and *mouse* are examples of the former and latter respectively.

However, the need for managing terminology exists also in fields at the lower spectrum of specialization, such as in the humanities and social sciences. Evidence of this fact can be found in the multitude of terminology departments and terminology databases maintained by governments of multilingual countries, where they are needed to effectively deliver information to the citizenry, much of which is of a “general” nature. Likewise, the proven methodologies of Terminology are increasingly attractive to commercial enterprises, where they can be applied to improve business communications, such as for marketing campaigns and product information.

The work carried out by practitioners of Terminology (terminologists) include collecting, reviewing, and storing terms and information about terms in a database, often called a termbase because it contains terms rather than data in the conventional sense. The termbase is made available to writers, translators, and other communicators, typically on a Web site, who consult it like a dictionary to verify that they are using terms correctly. Many government termbases are also made available to the general public, while company termbases tend to be restricted to employees. Termbases are a capital investment, and there are also ongoing maintenance costs. Therefore, the benefits need to be clearly demonstrated before a decision is made to implement a termbase.

It is universally recognized that the key component of a terminology management program is a central database. "You have to have a central tool in which to put your terminology and organize it so that everybody can find whatever they look for and whoever does the research shares it with everybody else so that they don't do the research twice. Having terms in a central repository relieves individuals from time-consuming tasks, such as research efforts and deliberating between different terminology options. Without a termbase, organizations leave themselves wide open for errors and inconsistent usage of terms."¹

In government settings, implementing and maintaining a termbase are often key elements of a language policy that is designed to protect minority languages. The language policy may even be supported by language laws, such as in Canada and Switzerland. In these cases, the terminology resources are considered strategic elements of government operations and there are less pressures to justify them, as compared to commercial enterprises.

In contrast, everything a company does has to be justified with a strong business case, also referred to as a return on investment (ROI) or cost/benefit analysis. Presenting a business case to top-level executives, and gaining their buy-in, is the first step towards developing a terminology management strategy for a company.

In this article, we present elements of a business case for implementing a termbase and associated processes in a commercial enterprise or large non-governmental organization.

Some business case assumptions

The economic value of managing terminology is hard to estimate, mostly because it is difficult to separate terminology work from the overall content development process, making it challenging to measure costs and benefits that are directly attributable to terminology work. The terminology function forms such an integral part of the writing-translation-revision cycle that it is virtually impossible to identify its inputs and outputs². In a typical organization many people are doing ad-hoc terminology work. Writers, managers, and translators routinely have to take time to ensure that they are using the correct terms in their communications.

For the business case provided in this and subsequent issues, we are measuring the benefits of developing a centralized termbase and associated procedures and workflow for company terminology and making this termbase or relevant parts of it available to employees as well as to external contractors and vendors providing content-based services, such as freelance writers and translators. In order to realize the benefits, standards and best practices recognized in the field of Terminology need

1 Common Sense Advisory - CSA, 2009

2 Champagne, 2004, p. 11

to be respected. For example, the termbase has to be properly designed in order to be usable for different purposes and by different users³. A well designed dedicated software – called a Terminology Management System (TMS) -- is needed to manage the termbase.⁴ Mistakes in designing a termbase or selecting a TMS can be very costly.

The procedures and workflow for collecting and managing terminology need to integrate into existing production processes as seamlessly as possible, therefore they vary from company to company. Determining the best approach requires an in-depth study of the company's existing processes and information technology infrastructure. Describing terminology procedures and workflows is out of the scope of this article, however, the business case assumes that appropriate ones will be put in place. For instance, in a company with large-scale translation volumes for many languages, a centralized, in-house process for extracting source-language terms from content and pre-translating them into the various target languages can realize significant productivity benefits in the translation process. In this case, an automated term extraction tool must be considered, and a best practice for using the tool needs to be developed. As with other components of a corporate-specific terminology management strategy, evaluating term extraction tools and implementing an effective process for using one requires specialized knowledge and skills. Out-of-the-box solutions rarely work and are frequently rejected by those they are supposed to serve.

Developing a business case as well as high-level recommendations for termbase design, TMS selection, and appropriate workflows, should be outsourced on a consultancy basis to an experienced terminologist, as rarely can the appropriate skills and knowledge be found in-house. This process, which can be considered a “feasibility study”, can take from several months to a year.

Direct, indirect, and strategic benefits

The benefits of implementing a terminology management program can be direct, indirect, and strategic. Direct benefits are tangible and measurable cost reductions, productivity improvements, and production of valuable new information products. Indirect benefits are usually not measurable, but position the company more competitively by facilitating certain internal procedures. Strategic benefits support the company's core mission and values, and can be external facing such as increasing brand awareness and customer satisfaction.

How does terminology contribute to these benefits? We will provide several examples here, but more will be discussed, along with some sample metrics, in future issues of this series.

Direct benefits

Let's start with direct benefits, as these are the strongest elements of a business case, being more highly-valued than the other types by management. An example of a direct benefit would be improved productivity of employees and faster content production and translation turnaround times. For instance, the availability of reliable terminology on a company-approved Web site will save writers time when they come across a concept or term that they are unsure of and need to research. Their

³ See ISO 16642 in the bibliography.

⁴ See ISO 26162 in the bibliography. TermWeb by Interverbum is an example of a well-designed Terminology Management System.

terminology research time will be significantly reduced⁵. But often, writers do not know when they are using incorrect terminology and may not realize the need to carry out this research. Consequently, incorrect and inconsistent terminology remains in their text. Editors who review the content produced by writers, if available in the company, also need to check the terminology, and time will be saved again at this stage if a reliable Web site is available. If the text is not edited, the erroneous content is sent to translation, its originators unaware of the errors.

Translators frequently point out that a text that contains consistent, clear, and precise terminology is easier to translate than one that does not exhibit these features. “Easier translations” means “faster translations”, and less effort at the revision stage, all of which can be measured in terms of productivity savings and faster turnaround. Do not underestimate the value of shortening translation times; in certain industries, time to market has a direct impact on the company's bottom line.

It is a proven fact that inconsistent or incorrect terminology in a text multiplies in translated versions of that text (terminologists refer to the *source language* and the *target language*). For instance, if two different terms are accidentally used by writers to name a product function in a given text, the translated versions of that text are likely to contain three or more different terms for the same function. This is a common phenomenon in the translation process, and is not a reflection of the qualifications of the translators. Translations are more “inconsistent” than their corresponding source text. The problem is further aggravated when multiple translators are working on a set of content, such as on the documentation for a specific product, a situation which is standard for global companies today.

Given this situation, then fixing inconsistent or incorrect terminology in the translated texts, during the translation revision process (if indeed one is in place in the company or at the translation vendor's site), will take even more time than it took, or would take, the editors to fix terminology problems in the source text. This time would have been reduced if the terminology was consistent and correct in the source language, as proportionally fewer terminology errors would therefore occur in the target languages. And again, if the translation revisors have access to a centralized, reliable termbase as a reference, they can determine the correct translation more quickly compared to searching across multiple Web sites and resources.

Additionally, if the translators had access to a termbase, they would introduce fewer errors in their translations in the first place, they would be able to carry out their own research more quickly, and the solutions they find will be consistent across all translators and will reflect “approved” company terminology.

The above scenarios demonstrate that a centralized, reliable termbase saves time at authoring, editing, translation, and revision. This time can be quantified by collecting information from employees, and then a financial savings can be calculated that corresponds to the productivity savings. But another benefit is realized that has not been mentioned: improved quality of information in all languages. A reliable company termbase is an indispensable tool that helps employees use correct terminology – terminology that reflects and strengthens the company's brand image and improves customer satisfaction. However, improved quality is an *indirect* benefit which we will discuss later.

Cost avoidance and cost savings

Financial benefits can be viewed from two perspectives, *cost avoidance* and *cost savings* (or avoided costs and saved costs). Implementing a centralized termbase and related processes such as term extraction allows certain things to be done on a scale that would otherwise not be possible. The difference between the cost of doing such tasks manually, on an ad-hoc, decentralized basis (without

⁵ See Guy Champagne, 2004

a termbase and associated organized procedures), and the cost of doing the tasks with the support of a systematic terminology process and termbase, represents a cost avoidance. A cost *savings* can only be claimed if some task is being done today which a terminology program would enable the company to either stop doing or do more efficiently.

For instance, consider the benefits of providing company-approved translations of key terms for a translation project to external translators: inconsistencies and terminology errors would be reduced, translators and revisors could work faster, and translation quality would be improved. This best practice is commonly referred to as *pre-translation* of terminology. Convince executives first that this is a good idea; provide concrete examples of terminology errors or inconsistencies that actually occurred in translations, and describe real situations where translation revision took longer than planned due to terminology problems. Then, size the effort to deliver this terminology to translators – both with and without centralized terminology management. The cost will be less with a centralized terminology management program than without it, since project-specific terminology can be pre-extracted and pre-translated more easily with centralized tools and processes. Most likely, the company isn't currently providing any project-specific terminology to external translators. Therefore, the cost difference of doing so with and without centralized terminology management is considered costs that are *avoided* in order to improve current processes.

To find examples of cost savings, consider any terminology work that is currently being done in the company. Are any monolingual glossaries prepared as part of product or service documentation? (If not, this raises the question, should they be? A study of one company's product Web sites showed that the glossary page was among the top 25% of the product pages, in number of visits.) Are translators developing and managing their own bilingual glossaries? A surprising number of translators do! Any existing terminology work can be done easier and faster when there is a centralized terminology resource in place. Again, calculate the cost of doing this work with and without a centralized terminology program; the difference in this case is a *cost savings*.

If company translators use a computer-assisted translation (CAT) tool that comprises translation memories (TM), a direct cost savings can be achieved when consistency of terminology in the source language is increased, and this is facilitated by providing content producers with company terminology. Over time, more consistent terminology in the source language increases the proportion of exact matches and fuzzy matches and decreases the proportion of no-matches in the TM. This decreases overall translation costs. The cost savings can be significant.

New information products

Implementing a termbase can make it possible to produce new information products at little or no extra cost, both for human users and for potential new natural language processing applications, such as new glossaries, CAT dictionaries for translators, lexicons for spell checkers, term lists for typeahead functions, and special dictionaries for controlled authoring applications. A terminology consultant can ensure that the termbase is flexible enough to respond to these and other needs of the organization.

Indirect benefits

As stated earlier, indirect benefits position the company more competitively by facilitating certain other procedures. One example is greater flexibility and ease to incorporate new writers and translators into the company by providing them with highly reliable company-specific terminology, which partially compensates for their lower company knowledge compared to experienced employees. Other

examples include the increased repurposability of content across diverse content types and increased retrievability of content by search engines. Consistent terminology makes it possible to reuse “pieces” of content in different products or deliverables, a strategy that is being taken very seriously by organizations that are adopting a topic-based architecture for their content, as exemplified in DITA (Darwin Information Typing Architecture), an OASIS industry standard for product documentation. Improvements in content retrievability can be realized due to better, more logical organization in content management systems and better recognition by search engines. Positioning the investment in a terminology management strategy such that it can serve such diverse needs raises its overall value.

Strategic benefits

Strategic benefits support the company's core mission and values. One example of strategic benefits is increased customer satisfaction and brand awareness arising from company information that contains more precise and consistent terminology. Indeed, improved quality is frequently recognized as one of the greatest benefits of terminology management, both in content authoring and in translation. Although the economic benefits of improved information quality can't be measured, quality is undeniably one of the strategic values of nearly any organization.

It is necessary to take special measures to protect and strengthen certain key branding terms -- names of products, programs, and marketing messages. Translating these terms can be particularly challenging; the translation industry is full of anecdotal stories of the disastrous effects of mis-translating certain company brands. Terminologists act proactively to assist content producers and translators to avoid such very costly mistakes.

The costs of NOT managing terminology

Another business case strategy is to identify and measure instances of duplication, redundancy, errors, and inefficiency that occur because there is no centralized terminology management process. One area of duplication is when different employees are maintaining their own glossaries. Some of the terms (and other information such as definitions and translations) in these separately-maintained glossaries will be the same. It is possible to take a sample of these glossaries and count the terms that they have in common (a terminology consultant can carry out this analysis for you). From this comparison, the number of “duplicate” terms across all glossaries in the organization can be estimated. Each duplication represents an unnecessary effort, the time and costs of which can be estimated. With a central termbase in place, these costs can be eliminated or at least reduced significantly.

An example of redundancy is the cost of the IT infrastructure required to store hundreds or thousands of individual glossaries compared to the cost of consolidation. The duplicated content across these individual resources represents redundancy in terms of IT storage and maintenance. But storing and providing access to a multitude of individual discreet resources is generally considered to be less efficient than storing and providing access to one larger consolidated resource.

When terminology is not managed properly, more terminology errors will occur. The number of errors can be estimated, using samples of company materials, interviews with employees, and industry benchmarks, and the cost of fixing these errors can then be quantified. Studies have shown that the earlier a terminology error is detected in the content production and translation process, the less costly

it is to fix⁶. One can leverage these studies to demonstrate that ignoring terminology problems until the translation revision stage is incurring unnecessary costs for the company.

Conditions that favour the ROI

Due to their makeup, certain companies and organizations will realize a greater ROI from managing terminology than others. It is generally acknowledged that the larger the organization, the more distributed its structure, the greater the number of languages and translation volumes, the more fluid its workforce, and the more diversified its domains of activity, the more these benefits will be realized. The benefits traverse the organization and are not limited to its translation division. The following factors increase the ROI:

- global distribution channels
- volumes of content produced and translated
- distribution of production and translation teams
- number of target languages
- use of external vendors
- use of computer-assisted translation tools
- diversified delivery media

Maintaining a realistic perspective

The biggest mistake you can make when presenting a business case for terminology management is to overestimate the benefits. Your arguments will be challenged and your position will be consequently weakened. Make sure your figures are realistic. You may even create a more positive impression and increase your credibility among skeptics by underestimating the benefits, but be sure to continually remind them that you have done so. You want to show due diligence by presenting a business case that is realistic and thus raise confidence among decision-makers that it is likely to be actually realized by the company.

Bibliography

Champagne, Guy. *The Economic Value of Terminology - an Exploratory Study*. (Report commissioned by the Translation Bureau of Canada). 2004.

ISO 16642: *Terminological Markup Framework (TMF)*. The International Organization for Standardization, 2003.

ISO 26162: *Systems to manage terminology, knowledge and content -- Design, implementation and maintenance of terminology management systems*. International Organization for Standardization, 2013.

Kelly, Nataly and Donald DePalma. *The Case for Terminology Management - Why Organizing Meaning Makes Good Business Sense*. Common Sense Advisory, 2009.

⁶ Reference to come.