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GMS Software Development The Next Five Years

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GMS Software Development

the next *five* years

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The original concept of a Globalization Management System (GMS) started in the late 1990s, during the height of the Internet boom. Millions of dollars of venture capital funding poured into a number of firms, all with the same goal to revolutionize the translation and localization industry by using technology to automate processes that traditionally had been accomplished manually.

Of course, the business models of these firms depended on selling literally hundreds of GMS systems. However, the exact number of sales required to be profitable is, at this point, a moot figure—forever lost when the Internet bubble burst.

The reality we know today is that no company will sell enough applications to ever pay back the original GMS investors at a profit. If there is anyone who doubts this conclusion, consider this: the total number of GMS applications sold in the last five years and currently in use is less than 75 for all GMS companies combined.
That said, GMS applications can and should still transform the way companies manage global content, but only with the recognition that the technology's value lies in a few critical areas of flexibility:

- critical task automation
- ease of installation and training
- market-clearing pricing

These ideas, translated into intelligent development, will drive the future of successful GMS technology.

Just as important to mention, however, are those things that successful GMS applications will not offer.

When I joined eTranslate as the senior software developer in 2000, I was confident that I could map the localization process to an automated system. At the time, development was focused on established and emerging technologies (HTML, XML, JSP, ASP, JAVA) and on integration with Enterprise CMS applications, which were gaining wide-scale acceptance as content platforms in major corporations.

The vision was very compelling. The excitement about building a new software solution, one that would revolutionize the industry, made it fun to come to work and put in long hours. We had a large software development staff, and we were quickly making great progress on our GMS solution. It was called ULTRA, an acronym that stood for Universal Language TRanslation Application, and it was the latest offering to hit the market.

We were going to make localization management so automated and simple that a company could easily manage the process by plugging in freelancers or in-house translators. They would work like cogs in the GMS wheel. Investors loved the idea of high profit software and wanted to tap in. They had one thought in mind: whoever could build the most comprehensive functionality and get the product ready the fastest would emerge as the industry standard and take over the market.

You might imagine why development budgets are not the primary concern when world domination of a budding market segment is the goal—and we spent accordingly! We tried to automate every last task, workflow step, and file manipulation.

At eTranslate, we had many talented people from the localization and software industries, people with track records of success. We fully expected to emerge as the GMS market leader.

If you look at the GMS market today, however, only a handful of players are left. None of them has yet fulfilled the great promise of becoming a standard, let alone selling enough application licenses to make a profit. Each GMS vendor today has only a limited number of installations, and many of those implementations have been abandoned or would be labeled unsuccessful by the same companies who purchased them only a few years ago.

Having been a part of the GMS vision since 2000, I have seen firsthand how the industry has struggled to evolve.

Basically, the grand vision was flawed. It looked fantastic in a PowerPoint presentation, which is how it attracted so much funding, but no one ever correctly assessed what the market really wanted, or what a critical mass of companies would be willing to spend on GMS technology.

In 2002, after the Internet bubble burst, and the venture funding dried up, the software assets of eTranslate were purchased by a successful translation services company: Translations.com. At that time, I was one of the few technology veterans left at eTranslate. I brought my knowledge of the code and vision with me to Translations.com.

As you might imagine, I was more than a little concerned with how the vision of the automated localization process via GMS was going to meld with the philosophy of a translations services firm. In my estimation, the marriage was not a formula for job security, to say nothing of my original vision for GMS.

Figure 1: GlobalLink Repositories Screenshot

My first conversation with the CEO of Translations.com, Phil Shawe, was about the most elementary of business principles. That is, what can the software do for our clients, and what will they be willing to pay for it?

That one meeting changed my job description from a software developer who worked for a business to a businessman who developed software.

What happened next, I believe, was a microcosm of the same debates and discussions that take place in every closed-door client evaluation of GMS. We had a technology summit to examine closely what was happening with GMS systems in the market and evaluate what customers really needed. Phil Shawe, along with his business partner Liz Elting, had built two successful localization companies, Translations.com and TransPerfect Translations, from the ground up to over $50 million in annual revenues. Phil was not interested in trying to be a stand-alone software company, but rather to use the technology to complement the service side of localization, to solve real business problems of existing customers, and to focus on the functionality that contributed most to client value.

After consulting with the experienced project managers at Translations.com and surveying longstanding clients with varying levels of annual localization needs, the harsh assessment was that ULTRA was not what customers needed or wanted. Too many of its features were not particularly useful to the target market of the

Fortune 1000, or to any client for that matter. Companies want to focus their efforts on growing their businesses, not on running their own internal translation services organizations. Once this evaluation was complete, we focused development on the core value added functionality that would emerge as a completely new and streamlined GMS, called GlobalLink.

In the two years since Translations.com took over the technology from eTranslate, we have increased GMS sales by over 500 percent. As evidence of the success of this new model, we have happy customers like Avis and Hilton International, both who use the GMS as an integral part of their complex technology infrastructures. It has proven a mission-critical component of some of the largest globalization initiatives to date.

For one of our Fortune 500 customers, who evaluated all GMS applications on the market in a competitive bid, a content adaptor is being used to integrate GlobalLink directly into the customer's Interwoven® TeamSite™ workflows. As source content is authored and approved, it is then sent out for translation into multiple languages. The customer's employees have never had to involve themselves in the actual translation process. It has been like this for more than 3 million words in 10 languages. The translated content, once completed, is returned by GlobalLink into the customer's TeamSite system and published directly from TeamSite.

This client installation proved to me beyond any doubt that even the largest and most complex localization initiatives are an extension of CMS initiatives, and what they require from GMS is a distinct set of core functionality, not extraneous functionality that makes the entire localization initiative even more complex and cumbersome.

The next section touches on our re-assessment of our development efforts from each of the critical areas of consideration mentioned earlier:

- flexibility and adaptability
- critical task automation
- streamlined functionality
- installation and training

Flexibility and adaptability

Multiple content adaptors/extractors
Above all, multiple content adaptors are at the heart of a flexible and adaptable application. Content adaptors allow the GMS to interact with other content repositories, such as file systems, databases, or other CMS systems (such as Documentum™ Docbase, Interwoven TeamSite, etc). By providing hooks into content repositories, the GMS system can be integrated with the content authoring and editing systems and applications. Companies invest large sums and significant human resources in their CMS systems. They often have

additional translatable data in relational databases or file systems. CMS implementations often take months and costs hundreds of thousands of dollars, so GMS investment decisions are often made on the heels of expensive and complex CMS installations. In our experience, companies may be loath to undertake equally taxing GMS installations, even if the necessary ROI is self-evident.

Migration
Often companies have multiple CMS systems in use by different groups or divisions. Some companies migrate from one CMS to another, due to an acquisition or IT technology decision, and they need their GMS solution to continue to work with all of their content. The GMS should be a bridge to the use of new technologies and provide consistency in the localization process. Without the necessary off the shelf integration, migration to new CMS systems can have serious ramifications to the localization process, adding to the pain of migration rather than relieving some pain from that process.

Custom integration
Of course, no GMS company has developed integration with all possible CMS technologies. Thus, in those cases where migration (or a new installation) requires development work, the ability to complete integration in a timely manner and at a reasonable cost is critical to the future sales efforts of all GMS firms. This requirement increases the value of a streamlined GMS
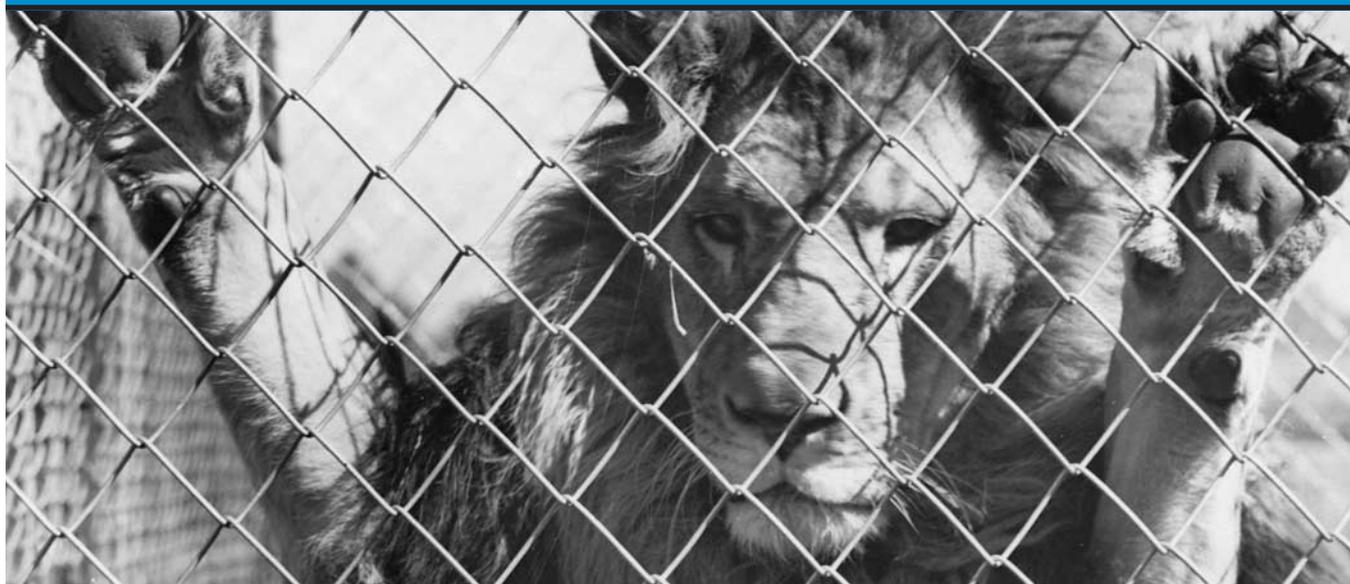
solution, because a lighter and less complex GMS solution necessarily means easier and less expensive custom integration. The more complex and extraneous functionality that is included in a GMS product, the more difficult integration is. I am aware of at least one case where a competitor's GMS product simply could not be integrated with a CMS application for which we were able to integrate GlobalLink in a matter of weeks.

One major customer of Translations.com was in the process of implementing the Percussion® Rhythmyx CMS, but also had an existing in-house application built on top of a relational database. GlobalLink adaptors were used to extract the database data, send it out for translation, monitor it for changes, and handle the entire in-house application project, while the Rhythmyx implementation was ongoing. Once it went live, GlobalLink was configured directly into the Rhythmyx workflow so that translation of content is part of the existing process. No new applications needed to be installed, and no additional training was necessary. GlobalLink is now part of the day-to-day process of keeping content in multiple languages up to date for multiple different applications.

Critical task automation
Automated change detection and notification or reporting
Keeping track of changes within CMS and database content is essential if a company is to maintain parity between it's source and localized repositories. This can present a problem when the content resides in a database or is wrapped in CMS logic. Any successful GMS must automatically track changes on any content repository to which it is linked and produce detailed change reports (at user defined intervals). Most importantly, files identified for localization need to be automatically routed for translation or notification, and reports must be sent to client managers to approve localization of new and changed files. As you would expect for such a critical function, most GMS applications do this well.

Automated content type parsers and mark-up technology
This feature involves the automatic parsing of a variety of content types and extraction of the translatable text. In the development efforts at eTranslate, this was considered a key feature because once the translatable text was identified, it could be broken down into segments and automatically matched against the embedded translation memory. The real challenge here is not just parsing the myriad of file types and converting them into a format that the translation memory tools can process, but re-generating the original document type after the translation is complete.

Ask any localization manager, and they will tell you that there are too many exceptions to the automated parsing functions that require human attention, such that the promise of automation remains woefully unfulfilled. The idea of providing automated content parsers for

common file types goes over fantastic in a carefully controlled demo. However, in real localization scenarios, there are just too many exceptions that require some kind of human intervention. For example, Internet browsers are very forgiving with malformed HTML and will attempt to display it anyway, even if some tags are missing. Conceptually, this is similar to the problems with machine translation. To deliver the highest quality translation, to deal with language subtleties, and to avoid mistakes, machine translation is not sufficient. A human translator is still required. In the same sense, to get quality localization done, experienced localization engineers are required to process the files that present exceptions to the algorithms that drive the automation.

Streamlined functionality
Customizable localization workflows
Given than CMS users already have authoring and publishing workflows in place, it makes more sense to be able to integrate GMS functionality into these existing workflows, rather than stepping outside of them and routing translatable text through entirely new GMS workflows. GlobalLink's CMS adaptor development efforts are specifically designed to achieve this goal. In addition to saving thousands of client dollars that would otherwise be spent on custom GMS workflow creation, a tight integration that leverages the power of robust and configurable CMS workflows makes it easier to train localization managers.

Embedded translation memory technology
The idea behind embedded translation memory is that 100% matches can be automatically populated once the content is parsed, and the embedded TM will always be up-to-date even though the translators may be working independently and be geographically dispersed.

I use the term "embedded" instead of "centralized" intentionally, as these terms are commonly interchanged, but should never be. The important thing about centralized TMs is simply that updated TMs are available to all translators and managed "centrally" by qualified language managers. In that regard, making updated TMs available to all translators is simple and does not require that the TM be embedded within a GMS. Moreover, since the decision of altering TMs is not a task that should be given to all translators, because multiple translators with the ability to alter the same TMs will result in out-of-sync TMs or, at best, delayed access to a TM that is under modification. Ironically, these are the problems that embedded TMs were originally designed to solve. In addition, embedded TMs, by definition, restrict the client from selecting a TM from all available products on the market and force clients to use whatever TM comes embedded with in the GMS application.

Installation and Training
Many of the all-purpose GMS systems on the market cost as much to implement as a CMS system, and take months to get operational. After shelling out a lot of
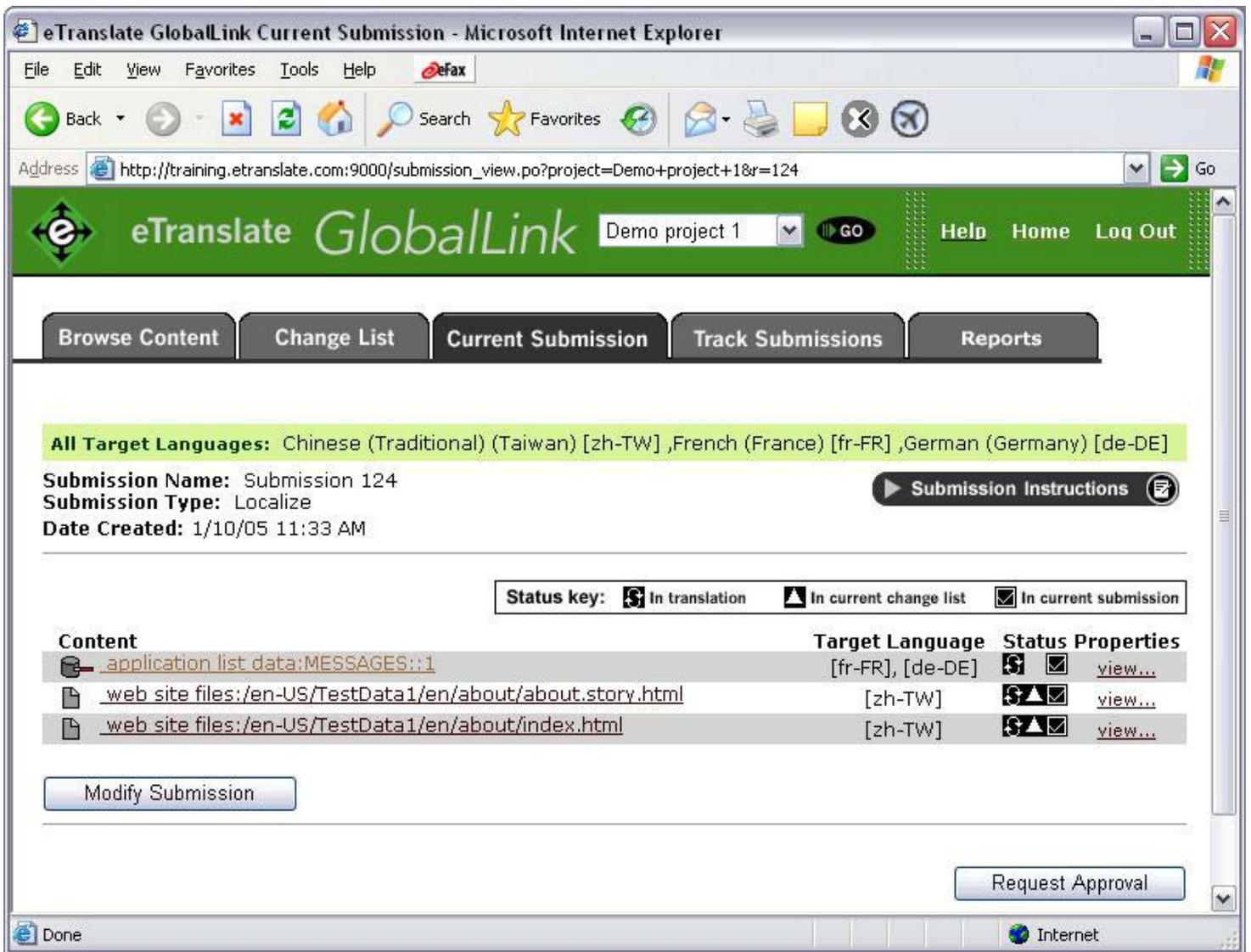
money to buy a GMS system, no company really wants to spend a lot extra on consulting to get the system installed, configured, and operational. Not to mention the extra cost for training all of the system users and translator resources. The ideal solution is a GMS that installs easily and is up and running in days, not months, with minimal extra cost and minimal user training. The typical GlobalLink installation today takes 1/20 the time to install and configure compared to ULTRA. In fact, installation, configuration, and training are typically complete within three days.

So where is GMS going?

Just as my objectives as a software developer were driven my the market, I believe future GMS development will be driven by the market. In my case, my market driver was a new boss from a services company, but the hard questions that Translations.com asked of me when eTranslate was acquired are the same hard questions that the market is asking of the GMS industry. From a developer's point of view, I can attest to the palpable increase in the interest level of potential GMS customers

when we give a demonstration and strip down the discussion of the localization process to its core, and have an honest discussion about the value we can provide in real world situations.

Translations.com has no magic crystal development ball, but the circumstances that led this software developer to think like a services vendor have resulted in a development path that I'll bet on. Focusing squarely on the most valuable benefits we can offer our clients and guarding against anything that distracts from that goal is always a winning strategy.

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