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A better localization experience.



GUIDE TO LOCALIZATION MANAGEMENT



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LOCALIZED PRODUCTS IMPROVE WORLDWIDE SALES.

The more you streamline your localization process, the more your company can leverage its localization investment and increase global revenue.

By improving localization return on investment (ROI), you assist your company to expand globally and enjoy worldwide success now and into the future!

INTRODUCTION

Effective Localization Management

Localization can bring a great deal of value to a company. Many world-class companies already generate in excess of 60% of their revenue outside of their core domestic market, forging relationships with many global markets rich with opportunities. It is only logical that for many products and services, localized versions generate better results and engender deeper loyalty with your target audience.

However, localization can be a complex process and requires effective management. Effective localization management can generate tremendous cost efficiencies in the production process. Taken to its optimal level, it can change the way in which a company develops its core products and authors its source content. A company ideally translates these efficiencies across departments, resulting in further localization production gains in an ongoing efficiency-generation cycle. This can lead to solid “production return-on-investment (ROI)”.

Producing versions of products and services to be sold globally can generate significant revenue increases. Through proper collaboration with executive management and other departments, localization management can help the company to achieve not only production ROI, but also “business ROI” objectives. These would include increasing global revenue and market share, satisfying global customers, enhancing global brand equity, reducing relative support costs and positively affecting the company’s share price.

The Localization Manager

The Localization Manager faces many challenges. You may need to ship three products in ten different global markets, and you probably need to do so yesterday. Your tasks may include the organization of internal teams located around the world, selection of outside localization specialists, management of linguistic, technical and visual quality, coordination with in-country staff, management of costs and motivation of team members. The list goes on and on.

Managing localization projects successfully is not easy. Yet, with the proper strategy, you can produce high impact results. For example, you can release high quality products consistently and build a solid, scalable and sustainable localization operation. You can also shorten localization time-to-market, reduce costs and help your company to achieve its global business objectives.

About this Publication

Guide to Localization Management was created to assist the Localization Manager in planning, budgeting and executing a successful localization strategy. The publication seeks to provide a roadmap for managing localization efficiently with top quality results. The guide outlines various aspects of the Localization Manager's responsibilities, discusses the value that the Localization Manager brings to the corporation and then explores the different issues underlying localization project management and keys to its success.

The guide is intended for Localization Managers with years of experience, as well as those new to the profession. However, it is not intended to be comprehensive. To cover every issue that a Localization Manager will eventually face would require a much longer publication.

Instead, we are hoping that you find the Guide to Localization Management addresses the major management issues that are key to localization success and serves as a useful reference as you evolve in your role as Localization Manager. We hope that it makes your job easier and furthers your ability to manage complex localization projects. If the Guide to Localization Management enables you to manage localization more effectively at your company, then it will have been a worthwhile endeavor on our part. If it further enables you to change the way that other departments work, that executive management values localization and that your entire company collaborates in the international product development and release cycle, then we will be thrilled.

We hope that you find our publication useful!

About Rubric

Rubric is a leading provider of localization, translation and testing services to companies expanding their global business. The combination of Rubric's extreme customer-focus, organizational consistency, operational flexibility and rapid scalability lead to a powerful combination focused on your localization success. For further details, please reference the About Rubric section at the back of this guide or visit www.rubric.com. Rubric can be contacted at info@rubric.com.

Acknowledgements

Guide to Localization Management is a collaborative effort. The contents have been created with the input of more than 25 Localization Managers. Their comments, feedback and suggestions were invaluable.

We are grateful to these individuals. Thank you!

VALUE TO THE CORPORATION

The Value Proposition

What is the value of localization to a company? This is critical information that ideally the Localization Manager can communicate clearly to the rest of the company. These days most companies are scrutinizing value and costs across the corporation. Return-on-investment (ROI) is a common objective sought by executive management. However, localization is often seen as a “cost center” without a clearly defined return. More and more the industry is experiencing the corporate purchasing department getting involved in localization decisions, focusing hard on cost reductions. As corporations look for budget cuts, “cost centers” are an easy target. This scenario does not bode well for localization departments.

Instead of being seen as a “cost center”, localization can be seen as adding value to the company, and as playing a strategic role in helping the company to achieve its overall business objectives.

If the value of effective localization management can be communicated to executive management as well as to the rest of the company, though, then this perception can be reversed. Instead of being seen as a “cost center”, localization can be seen as adding value to the company, and as playing a strategic role in helping the company to achieve its overall business objectives. In order to accomplish this, questions worth addressing include:

- What value does localization bring to the company? Can it be quantified? What is effective localization management worth to the company, from a production standpoint as well as a business perspective?
- How can the Localization Manager better align the localization team with the overall business objectives of the company?
- How can the localization team collaborate with other departments most effectively?
- How can all of this value be more clearly communicated to others in the corporation?

Recognizing the Big Picture

To add strategic value to the overall product release process, it is important to identify, define and communicate the business need to the team. What are you trying to achieve? Instead of viewing the objective as merely the completion of the project, understand how this project brings value to the entire company. Understand what issues and results are of interest to executive management. What are the priorities? What are the showstoppers? What would make people thrilled? The project may be to localize software, help and three manuals into five languages. However, how will the company measure, track and judge the success of the entire effort (not just the localization aspect of it)?

Even with the most beautifully translated text and an efficient localization process, if a company does not make sales in the target market, then the entire effort cannot be viewed as a success. If a company winds up localizing 10 manuals into five languages, yet the company could have done just as well from a business standpoint localizing five manuals into those languages, then two potential problems need to be addressed. One is that the company is spending more time, money and resources

than it should for the same return. This is a waste and reduces ROI. The other issue is whether the company really needs 10 manuals in the first place. It may learn that in fact it really only needs five or seven manuals even for its domestic market, or that text length in the documents could be reduced by 10% easily. In such a case, assuming that the company takes corrective action, it benefits through reduced cross-departmental, source language and localized product costs.

ROI Metrics

In order to identify, define and communicate value, the Localization Manager can look to ROI metrics. Such metrics can demonstrate production efficiencies, production improvements and an alignment of production with overall business objectives. Metrics can be used to benchmark how your company is performing relative to industry standards. They can be tracked over time, thus proving that certain production or business “pain points” are being properly identified and corrected, and that the company is moving in the direction of reaching global business objectives.

In a localization context, there are basically two types of ROI metrics: production metrics and business metrics. Production metrics focus on measuring process- or production-related efficiencies. Business metrics focus on measuring value to the overall company. Both of these types of metrics are important, but they do serve two completely different yet complementary purposes. These metrics are examined in further detail later in this section.

Pain points and corporate objectives evolve over time. As you resolve certain pain points or achieve certain objectives, the need to identify, track and resolve other areas becomes more urgent. For example, if you are new to a market, your pain points are probably going to be much different than if you have been entrenched in the market with localized products for more than a decade. Metrics in use at your company can and should evolve as the company grows and matures.

However, it is important to remember the aspect of time in relation to ROI metrics. Without historical data, it is difficult to fully understand ROI metric calculations and to put them to use. For example, one large software company published a report announcing that it had reduced its cost-per-page over an eight-year period by 30%, from approximately US\$90/page to US\$60/page. The value of the metrics for this company was in the ability to track progress over eight years. Put another way, if you calculate that your per page cost on a given project was US\$60, how do you know if this result is a vast improvement over prior projects or whether costs are creeping upwards? If you want to determine the optimum mix of internal and external resources for reaching your localization objectives, you need to track metrics such as throughput-per-person and cost-per-person for multiple projects over time. This is the only way to reach meaningful conclusions.

The first step with any metrics initiative is to collect data. Rather than focusing on metrics initially, it is actually data that should be the core focus. Define, collect and track as much data as you can. These might be production-related, or business related. Some of the data might be controlled fully by the localization department, whereas other data might need to come from other sources, such as sales or marketing or technical support. Data is the first step, and it is absolutely critical.

As mentioned above, your pain points might change over time as you solve problems and improve processes. However, if you have the data at your fingertips, then data mining is a tool in your toolbox that can help you to make informed decisions quickly and accurately, and in a language that executive management can understand and appreciate. You can slice and dice data in many, many ways. As you decide to track and solve more complex issues, this data becomes increasingly valuable. However, if you are not collecting the data to begin with, then metrics lose much of their value and you will be quite limited in the type of metrics that you can even calculate.

Since the spring of 2003 a number of companies including Cisco, eBay, Documentum, HP, Macromedia, Palm, Powerquest, PTC, Siebel, Sun, Veritas and others have been meeting twice a month focusing on localization metrics. The Localization Metrics Initiative (LMI) is a voluntary, collaborative effort, organized by The Localization Institute, which is attempting to create localization industry metrics and benchmarks. LMI was started in early 2003, and it is open to new members from the client side of the localization business. Vendors are currently not permitted to join. LMI will allow participating companies not only to track progress internally, but also to compare internal values with industry averages. Localization Managers interested in learning further about LMI can contact The Localization Institute at www.localizationinstitute.com.

Production Impact and ROI

As mentioned above, production ROI metrics measure the efficiency and cost-effectiveness of your localization process. For example, you have a task of localizing Product ABC into 10 languages. How can you do that most efficiently and cost-effectively, while still meeting the necessary level of quality? Production ROI metrics are important in confirming your team's effectiveness from a purely operational perspective. These metrics do not reveal anything strategic regarding the intrinsic value of what you are measuring. For example, you might discover that your cost per word for localizing into Brazilian Portuguese is lower than the industry average, but this does not explain whether you should be localizing for the Brazilian market in the first place.

Production metrics are extremely beneficial to a company. They can clarify high cost areas or production bottlenecks. They can help you to determine whether doing certain tasks internally or outsourcing is most cost-effective. They can help you to determine the appropriate staffing levels. They can assist you in tracking your progress in reducing costs and increasing efficiency.

Examples of production ROI metrics include:

- Cost per word
- Cost per page
- Cost per graphic
- Cost per correction
- Cost per round of retrofitting (due to lack of internationalization, etc.)
- Number of rounds of retrofitting per project

- Cost per one day delay (due to server downtime, delays in development, etc.)
- Number of days delay
- Percentage of text re-use (100% matches, fuzzy matches, etc.)
- Cost per reduction (or increase) in text re-use
- Agent-to-agent transaction costs
- Number of transactions per project
- Headcount vs. throughput
- Internal employee costs vs. the costs of outsourcing
- Costs of single-sourcing vs. multi-sourcing
- Time-to-market vs. volume, etc.

Metrics can be used to increase operational throughput, efficiency and cost-effectiveness not only within the localization operation, but also cross-departmentally. Localization teams add a great deal of value to the overall company when they introduce these benefits to other departments.

For example, one software company that is religious about metrics has its technical authors run a Translation Memory (TM) analysis on their content every day as they progress through the authoring process. In this way they are able to identify text consistency and re-use trends immediately, during the original authoring process, rather than reactively during localization when it is too late. This enables them to examine why re-use may be drastically down suddenly, for instance, and to take corrective actions whenever possible. For a company that localizes into five or 10 languages, the resulting cost savings during localization can be quite significant.

Business Impact and ROI

Business ROI metrics focus on measuring overall value to the company. These are “big picture” issues that the CEO and executive management would typically be interested in. For example, what is the incremental revenue if Product ABC is localized for Japan? If we reduce localization time-to-market by one month, what is the effect on the company’s revenue, market share and share price?

Business ROI metrics do not reveal whether your process is efficient, or whether you are particularly cost-effective in getting certain work completed. What they do offer is strategic insight into what adds value to the overall company, and value can be defined in different ways. For example, you may be relatively inefficient in localizing bi-directional language versions of your software. However, if you experience huge revenue and earnings spikes as a result of localization, then the business metric of (sales of localized versions) vs. (sales of non-localized versions) is still of interest to the CEO. As another example, you might discover that for every day that you are able to reduce time-to-market of your localized releases you experience \$1 million in incremental revenue.

Identify, define and communicate the business need to the team. What are you trying to achieve? Instead of viewing the objective as merely the completion of the project, understand how this project brings value to the entire company. Understand what issues and results are of interest to executive management. The project may be to localize software, help and three manuals into five languages. However, how will the company measure, track and judge the success of the entire effort (not just the localization aspect of it)?

Examples of business ROI metrics include:

- Localized product sales vs. non-localized product sales
- International sales vs. shareholder value
- Proactive sales vs. passive sales
- International sales vs. localization costs
- Market share vs. localization costs
- Time-to-market vs. sales
- Number of localization staff members vs. localized product sales
- Localization department costs vs. international revenue

It has been written that localization professionals tend to focus too much on production metrics and ignore business metrics. That they do not speak the language of the CEO, and that this is a central reason why localization is still seen by many companies as a cost center rather than a strategic link in the international product release chain. If localization professionals hope to increase the value of the localization organization as perceived by the CEO, by the board of directors, and by sales and other departments, then it is imperative that the Localization Manager speak the language of the CEO and apply business metrics to the conversation. In this way, localization transforms from a perceived cost center into a strategic value-add operation.

For example, in the scenario above where the company experiences US\$1 million in incremental revenue for every day that time-to-market of the localized releases is reduced, this value needs to be weighed against the potential cost reductions such as cost per word, cost per page, etc. Although you might be able to squeeze out localization cost reductions of US\$50,000 for a given release, compared with the value of reducing time-to-market by even just one day, the impact of the production cost savings are insignificant in the bigger picture. Although it is good to minimize costs, in this case it could be argued that the better, more effective strategy would be to go all out in an attempt to optimize processes, automate as much as possible and reduce time-to-market. If the localization team could achieve a 10-day reduction in time-to-market and communicate to executive management that it just enabled the company to bring in US\$10 million more per release (regardless of any production cost reductions), the perceived value of the localization team would be significantly different than if the team communicated only about US \$50,000 in production cost reductions.

SKILLS THAT BENEFIT THE LOCALIZATION MANAGER

Localization Manager Profile

The Localization Manager's job is complex and challenging. In one sense, you are the CEO or Managing Director of your localization projects. Managing successfully requires skills in people management, resource allocation and coordination, planning, scheduling, budgeting and finance, tools and technology, quality assurance, among other areas. For technology companies, global business success can often hinge on getting localized products to market in a timely manner. Missed launch dates and flawed products can seriously affect a company's top and bottom lines.

The Localization Manager is the Master Organizer of the team, in many cases orchestrating the efforts of dozens of people located around the world.

With this in mind, how can the chances of success be maximized?

The reality is that there is no single "cookie cutter" profile of the Localization Manager. However, as described below there are certain common characteristics that tend to enable a Localization Manager to get projects done efficiently and effectively, while consistently meeting corporate objectives.

Useful Skills

The following skills are highly useful in localization management:

Planning: Planning skills greatly facilitate the Localization Manager's job. The earlier planning is done, and the more preventative in nature it is, the greater the likelihood of a smooth localization process.

Organization: Localization involves endless details—linguistic, administrative, technical and cultural. In addition, you need to coordinate with multiple internal departments, in-country reviewers and your localization partner. Organizational skills such as the ability to multitask, to keep on top of schedules and to bring everything together in an efficient manner are of great use to a Localization Manager.

People Management: People management skills facilitate the management of localization projects. The Localization Manager coordinates with a multitude of organizations and people. Internally, this might include sales & marketing, development, product management, engineering, QA, technical publications, executive management, in-country agents, etc. In addition, you will likely interact with an outside localization specialist, whose team might consist of managers, linguists, engineers, testers, desktop publishers, etc.

Communication: Communication skills are absolutely critical in localization management. When dealing with global teams under tight deadlines, it is important that communications protocols are defined and agreed upon. Furthermore, communications need to be well-managed, concise and clear.

Technology Savvy: Localization projects can be highly complex, involving emerging and cutting-edge technologies that are new to product teams that have not localized before. This means that there is a learning curve with many projects, and being technology savvy can assist in intuitively understanding issues and planning appropriately.

Flexibility: Localization projects involve a great number of variables. Being able to shift priorities nimbly in order to keep the overall project on course is a useful skill in localization management. As challenges arise during a project, flexibility enables you to work out solutions quickly and creatively.

PLANNING

The Importance of Planning

Effective planning is a prerequisite for successful localization projects. Lack of planning can derail a project and cause missed ship dates and even cancelled products. Planning enables the Localization Manager to schedule realistically, secure and allocate resources sufficiently, team up with the appropriate localization specialist, and ensure an efficient and reliable localization process. The end result is high quality. Quality that pleases your upper management. Quality that pleases end-users in your global markets. Quality that helps you to distinguish your company in these markets.

Proper planning and a preventative approach are two of the most critical factors in ensuring localization success.

Planning is not something that is limited to a single individual. It is imperative that planning include many players involved in the localization process. Internally, this means, for example, sales & marketing, development, technical publications and in-country agents. Externally, it means collaborating with a localization partner. Localization should not be treated as an entity divorced from the company's other operations. Rather, in an ideal scenario it is tightly integrated with the interests, efforts and activities of other departments aiming to increase business globally. Only in this way can a company maximize the ROI of its localization efforts.

The Value of a Preventative Approach

A "preventative approach" to localization planning can save you time and money. It can also enable you to get more done with fewer team members and can allow you to enjoy your weekends rather than spend them dealing with crisis management.

The underlying principle here is that preventing problems is more time- and cost-effective than dealing with problems reactively. In fact, rework caused by poor planning is one of the single biggest factors in causing protracted ship dates and increased costs in localization.

You can start the planning process by educating the different players within your organization. If, for example, developers understand the impact of localization, the product can be developed properly with localization in mind. Integrating localization requirements into your core code and documentation development greatly expedites the localization process by eliminating the need for wasteful rework. As a result, it frees up your valuable resources to focus on core development.

Looking outside of your company, the planning that you do with your localization partner can be done in a collaborative, preventative manner, thus increasing the likelihood for project success. Up-front, preventative mechanisms should be introduced at the file set analysis stage, as well as the project kick-off stage. Specific preventative mechanisms that can be implemented with your localization partner will be discussed and examined in detail later in this guide.

Localization Process Overview

The localization process on the client side can be broken down into the following phases:

- Planning
- Localization-readiness testing
- Handoff of Localization Kit to the localization partner
- Supporting the localization partner
- Reviewing interim deliverables
- Receiving the localized deliverables
- Functional testing
- Beta test
- Release

Planning Activities

Localization planning must address each of those phases. The planning phase can be further broken down into the following activities:

- Requirements Specification
 - Workflow Design
 - File Management
 - Infrastructure Planning
 - Resource Planning
 - Localization Partner Selection (see Selecting a Localization Partner)
- Budgeting (see Budgeting for Localization)
- Scheduling (see Scheduling)

Requirements Specification

As with any type of product development, it is important to specify requirements in advance. Since internationalization is a prerequisite to localization, requirements specification for localization must consider both internationalization and localization issues.

Internationalization and localization requirements are often documented within a more general requirements specification for the product release.

The following checklists can help you ensure that your requirements specification addresses the issues relevant to your product / target market. Not every issue will apply to every project, but every issue that applies should be addressed. In practice, some of the more generic issues listed below could be covered in a development guidelines document instead of the requirements specification.

High Level Requirements

Target Locales

The requirements specification should start by describing the target locales (international markets) for this release.

Supported Platforms

The requirements specification should specify the platforms on which each installable component (client, server, etc.) will be supported in each target market. This should capture the supported versions of operating systems, databases and other third party software that make up the environment in which the software product runs.

Be sure to identify those platform components for which there is a localized version that must be supported.

You may also need to specify relevant configuration information about platform software. For example, you may support running against databases configured for some text encodings (character sets), but not all.

Requirements per Interface

In simple software products, specifying a single set of high level requirements may suffice. More complex products, however, typically have multiple categories of user (the installer, the administrator, the end user, the programmer developing custom add-on modules, etc.), each using a different interface (the installation utility, the administration screens, etc.). In such cases, you often need to specify requirements per interface, since the degree of localization required for each category of user may vary.

For each product interface, the requirements specification should generally address:

- On which platforms will it be supported? (Depending on how the product is packaged, it may or may not be necessary to specify platform support per interface.)
- When and how will locale be determined (build-time, install-time, at startup, when client connects, when user changes settings, etc.)?
- Is the ability to process international text and data (input / output) required?
- Are localized UI and messages required?
- Is localized help required?
- Is localized documentation required?
- Are there other associated materials that must be localized (training, etc.)?

Detailed Requirements

Application Issues

For each target locale, the requirements specification should generally address the following questions related to the application:

- What language / dialect / writing system is required?
- Which characters or character sets must be supported (for input and display)?
- What are the input method editor (IME) requirements (which IME(s) will be supported, where must they appear relative to the text field, etc.)?
- What date, time, and calendar formats must be supported?
- What integer (thousands separator) and float (decimal and thousands separator) numeric formats must be supported?
- What currency format(s) must be supported? (If applicable, be sure to address how cross-locale formatting will be handled, such as Yen in French and Euros in Japanese.)
- Are there keyboard accelerators that must be localized?
- What other data formatting changes are required (personal name honorifics and titles, address and phone number formats, etc.)?
- What are the requirements for text processing functions such as text search, line wrapping, word-breaking, case conversion, etc.?
- Will localizers require the ability to re-order the arguments in formatted messages?
- What are the requirements for copying/pasting of text?
- Are there any special printing requirements (paper size, etc.)?
- What fonts families, styles, and sizes must be supported?
- Are there any requirements related to sound, speech, video, or animation?
- What aesthetic / graphical changes will be required (color scheme, icons, etc.)?
- Are there any special screen layout requirements (vertical text, bi-directional text, etc.)?
- What collation is required?
- Are there functional requirements related to local business rules?
 - Cultural / conventional differences in user behavior
 - Legal differences affecting user or application behavior
 - Tax or financial practice differences affecting application behavior
 - Etc.

Database and File Issues

For each target locale, the requirements specification should generally address the following questions related to files and databases:

- What database and file text encoding(s) will be supported (particularly for files received from or written for other applications or users)?
- How is the text encoding of a file labeled / determined?
- Are target language filenames supported?
- How will dates, times, and numbers be formatted within the database/file?
- Will files and databases be sharable across different language versions of the product?
- In what language(s) will pre-populated database and file text be (English, localized, multilingual)? How will the language be determined and recorded?
- In what language(s) will user-entered database and file text be (English, local-language, multilingual)? How will the language be determined and recorded?
- What is the database upgrade path to future (planned) international capability (multilingual capability, etc.)?
- What upgrade combinations will be supported (from/to same language, to new language)?

Other Interfaces

For each target locale, the requirements specification should generally address the following questions related to communications and programmatic interfaces, such as APIs, Email, Fax, etc.:

- What text encoding(s) will be supported?
- How is the encoding used in/across the interface determined?
- How will dates, times, and numbers be formatted in/across the interface? How will that be determined?

Localization Efficiency Requirements

The requirements specification should list any linguistic requirements that the source language localizable material (documentation, help, user interface, and messages) must meet in order to increase the efficiency and effectiveness of localization. These requirements might address issues such as the following:

- Using terminology consistently.
- Using correct grammar.
- Creating easy-to-understand text.

- Avoiding embedded text in graphics.
- Linking, rather than embedding, graphics into pages.
- Using relative paths for HTML links.
- Using universally-appropriate icons.
- Using ample whitespace in documentation to facilitate the formatting of localized versions.
- Limiting the number of fonts used.
- Avoiding humor.
- Avoiding visual puns and culture-specific references.

Miscellaneous Translation

For each target locale, the requirements specification should generally address the following questions related to translation of smaller documents:

- Must release notes and ReadMe files be translated for major releases? For patches?
- Will the End User License Agreement (EULA) be translated, or changed to identify which language version takes precedence?
- Will copyright notices be translated?
- Is there a product registration (paper or online) form to be localized?
- Do portions of the company's website (such as technical support information) need to be localized?
- Is technical support or sales contact information (phone number, email address, Web site URL) different for different locales?
- Does the product include links to the Web site? Do those pages need to be localized?

Other Requirements

To help ensure nothing is overlooked:

- What else, specific to the nature of this application, introduces special requirements?
- What else, specific to the nature of this target market, introduces special requirements?
- What else, in addition to the product, requires localization?

Workflow Design

Localization is a complex process involving multiple workflows spanning your company, your localization partner and your in-country reviewers. For these workflows to operate reliably and efficiently, they should be designed in advance.

The most critical workflow involves the localized materials. You need to plan how, and by whom, the following steps will be performed:

- Preparation of the Localization Kit
- Delivery of the Localization Kit to the localization partner
- Delivery of updates to the localization partner
- Receipt of localized files from the localization partner
- Validation of the localized files (checking for in-transit file corruption, appropriate file format, correct text encoding, etc.)
- Checkin of the localized files into source code control

You also need to specify how you want the localization partner to return files to you:

- Naming conventions and locations for localized files
- Text encoding for localized files
- File formats (whether the files should be packaged using zip, tar, etc.)

Another important workflow involves questions from the localization partner. In order for the partner to stay on schedule, your organization must respond to questions quickly. You need to determine:

- Their point of contact for questions
- To whom in your organization different categories of questions will be forwarded (software questions, documentation questions, installation questions, testing questions, etc.)
- How these issues will be tracked to ensure they receive a timely response.

Other workflows to be designed include:

- In-country reviews (glossary, style guide, sample chapters, etc.)
- Software bugs reported from the localization vendor, which must be reproduced, analyzed, fixed, and tested before a software update is delivered back to the vendor.

File Management

Localization transforms each English file into multiple localized files, complicating file management. You will need a tracking mechanism that notifies you of the need to change (or at least check) localized files in response to the following types of events:

- When the English file changes, localized versions of that file may or may not need to be updated as well (depending on the nature of the change).
- Other types of changes (e.g. the decision to revert a previously-translated term back to English) may necessitate a change to all localized files without any change to the English file.
- When a bug is found in a localized file, it may affect only that file, or it may affect other localized files (all localized files might have the same bug).

If your product is customized by an implementation or consulting team, there may also be customer-specific changes to localized files to track.

Infrastructure Planning

Localization places new demands on the infrastructure used during product development. For example:

- The source code control system will need to manage files containing target language text, possibly in a variety of text encoding schemes.
- The bug tracking system will need to record bugs that may reference target language input and output text.
- Automated QA scripts may need to be localizable for testing in various languages, and may need to support target language text input / output.

Capabilities like this should be checked, so solutions to any issues can be planned in advance.

Resource Planning

For each phase of the localization process, you need to determine what (human) resources will be required. These resources will generally be drawn from a variety of sources:

- Internal resources (engineers, writers, etc.)
- In-country resources (reviewers)
- External resources

As Localization Manager, you are responsible for estimating what kind of help will be required, when and from whom. Most critically, those individuals / teams whose help will be needed must agree in advance to provide that help.

One common pitfall you should work hard to avoid is allowing the product development team to become fully committed to a new project as soon as the source language version ships. You need to ensure that sufficient time is allocated to supporting the localization phase of the project.

Your localization project will need help from the core product development team in areas such as the following:

- Preparing the Localization Kit.
- Setting up build and test environments.
- Answering the localization partner's questions about the product, the meaning of product- or domain-specific terminology, whether or not certain text is localizable, the context in which certain text appears in the software, installing the product, testing the product, software file formats, documentation formatting issues, etc.
- Troubleshooting problems encountered by the localization partner.
- Building the localized product.
- Fixing bugs encountered during localization or functional testing.

Another pitfall to be aware of is that it is natural for two native speakers to disagree on how a term or phrase should be translated. This can be particularly problematic if you use different reviewers on the same project, resulting in conflicting feedback to the translator. If you use one reviewer per language, you can avoid this confusion.

Your localization project will also require other types of resources, such as hardware, software and software licenses. When planning the project, be sure you will have the necessary hardware, software and licenses for:

- Localization-readiness testing
- Building localized versions
- Functional testing (localized operating system and other localized platform software)
- Reproducing and troubleshooting problems encountered by the localization partner, in-country distributors, and customers
- Source code control for localized resources
- Bug tracking

ORGANIZATIONAL MODELS

Callout: Who Should Perform the Localization?

The approach to localization that you take can greatly influence your success and the ROI of your localization efforts. However, you may not be aware of the different options available to you to localize your products and services, or of the benefits and drawbacks of each localization business model.

Localization is a cross-functional activity, involving people and functions across the company. The Localization Manager leads and coordinates that activity towards the common goal.

The following are three of the most common approaches to localization:

- In-house translation team
- Distributor-managed localization
- Outsourcing to a localization services provider

There are certain tradeoffs associated with each approach. Experience, priorities, budgets, customer demand, timing and other factors play a role in which approach is the best for you.

Localization's Place in the Organization

The Localization Manager must work closely with the teams that produce the material to be localized (software, documentation, Web site content, etc.). As a result, the Localization Manager will typically need to work closely with, influence the work of, and recruit assistance from multiple departments across the company. This presents a dilemma: into which department should the Localization Manager report?

There is no single right answer, but you need to consider the Localization Manager's relationship with each team the manager works with:

- Is there a logical place in the organization for highly cross-functional coordination roles? In some companies, there is a product management or program management group that might be appropriate.
- How will the Localization Manager's place in the organization affect the manager's ability to influence the teams that develop material to be localized? In many companies, certain departments have greater influence over the rest of the company than others.
- What is the relative magnitude of the localization effort, cost and risk for the material produced by that team? If software localizability will be the biggest challenge, then perhaps the Localization Manager should report into the software development organization. On the other hand, if the localization cost is 90% documentation, then it may be better to locate that position in the documentation group.

When considering the organizational model for localization, it is important to consider the following characteristics of the localization process:

- The teams producing the localized materials must feel responsible for producing material that can be localized efficiently and economically. The existence of a Localization Manager or group to lead the localization effort does not absolve the rest of the company from this responsibility. Therefore, teams producing material to be localized must involve the Localization Manager in their development process, and be willing to accept input and feedback about what they can do to streamline localization.
- The teams that produce the material to be localized play an important role during the localization project. The localization project should be seen as a joint effort shared by the team that produces the source material and the Localization Manager/group (with the Localization Manager playing the project lead role).

Localization's Place in the Product Development Process

Localization is not a post-development step, but an extension of product development. Localization-related work takes place at every step along the product development process, from business planning through release and maintenance.

Here is a sampling of localization-related activities spanning the product development process:

- The business plan should contain revenue projections for global markets.
- The product requirements must identify which product components and documentation will be localized for which languages.
- Product management must address issues of media, packaging, part numbering, fulfillment, etc. for localized versions of the product.
- Software design must produce a localizable product, design a Localization Kit that enables efficient localization, and design installation tools that support localized versions.
- User interface design should consider the impact on localization of the use of graphics with embedded text, culture-specific icons, space-constrained dialogs, etc.
- Documentation and help development should consider the impact on localization of screen shots, graphics, inconsistent use of terminology, etc.
- Development infrastructure planning must ensure that development tools (source code control, build tools, bug tracking system, etc.) will support localized files and content.
- Source code management planning must account for the need to fix core (internationalization) bugs encountered during localization.
- Localization-readiness testing must ensure completeness of the Localization Kit, viability of the localization process, quality of the internationalization work and quality of core product functionality.

- QA of the localized product must validate both linguistic and functional quality of the localized product.
- The beta program should generally include testing of at least some localized versions.
- Maintenance procedures must account for the need to localize patches.

As a Localization Manager, you are almost certainly not directly responsible for all of these activities, but you can improve your chances of success by working to ensure that each of these issues is adequately addressed.

Company Support for Localization

Localization cannot be effectively managed in isolation. It ideally involves a corporate-wide commitment to globalization and international markets. Ideally, senior management has clearly communicated the importance of localization in the context of company priorities and goals.

If this has not happened, you may find that you need to be an advocate for localization, communicating its value to others within the company. It is a good idea to be ready to educate people on the current or potential positive revenue impact of localization. The more the importance of localization is understood, the more the busy people you depend on will be willing to carve out time for it.

To ensure that you have the internal support that you need, it is important to consider the following questions:

- Who in the company is actively involved in planning, coordinating and implementing global product releases?
- Have you identified the departments you need to work with in order for your localization project to succeed?
- What are the specific resource requirements of each department to support localization?
- Have these been communicated clearly, and in turn, have these been signed-off by the relevant department?
- Have specific individuals been assigned to the support effort?
- Have time expectations and commitments been clarified?

Because their support is so critical to successful localization, you should work to build your relationships with the teams that produce the software and other material to be localized. Learn as much as possible from them about the software, the documentation, and the issues that affect localization. Make sure those teams understand that the product development project is not complete until localization is complete, and that their involvement during localization is essential.

You will also need the support of in-country personnel (usually from the local sales office or in-country distributor) for reviewing localized material: glossaries, linguistic style guides, sample documentation chapters, etc. Not only does this help ensure the quality of the translation, it also helps to ensure their buy-in to the final localized product that you ship.

Localization is a team effort. Receiving sufficient support from development, design, technical publications, QA, in-country agents, etc. helps to ensure a smooth, efficient localization process. It also acts as a means for overcoming technical hurdles during the localization process, when fast-response problem solving is critical to meeting time-to-market demands.

Coordinating Company Resources for Localization

With so many team players involved in the localization process, it is important to coordinate effectively. To do so, you should develop a well-defined coordination plan.

One example of this is the Cross-functional Team Meeting. This physically brings the various departments together on a regular basis to discuss not only the current situation, but also plans for the future. It engenders a learning organization, so that localization experiences can be shared. Also, localization tasks can be executed more efficiently and reliably. To maintain momentum, it is recommended that the Cross-functional Team Meeting take place weekly (at the very least monthly).

Meetings, however, are only one part of the equation. No matter what type of on-going coordination structure is implemented, there is also the need for a formal system for tracking tasks, issues and solutions. Otherwise, learning, accountability and scalability can easily be lost. One tracking mechanism used at various companies is the Status Report, which can be issued weekly or bi-weekly by the Localization Manager. These reports keep everyone informed, clarify responsibilities and expectations, act as a reference point and force the team to track its own progress.

To expedite the generation of the Status Report during actual localization, you may want to start with your localization partner's status report and alter it as necessary for your internal needs. Also, try to guide the information generation task further upstream to those doing the hands-on work. For example, for information about software files, try to encourage your developers to publish all the required information about the files. By documenting issues at the source, the process becomes more streamlined.



Complementary to the Status Report, an internal localization-specific mailing list can be set up. Not only can this be used for broadcasting the Status Report, it can also be used for questions relevant to the entire team, and for specific, pre-determined types of communications with your localization partner. On-going communication among your company's various departments is critical, so that the project gets the visibility and resources that it needs.

In addition to the Status Report, keep everyone informed of the project schedule, especially upcoming internal tasks. Clarify internal deadlines and make sure that everyone is aware of the ramifications of any missed dates.

To tie the project information together and facilitate information sharing and communications among your team members, you can maintain project-related information within your corporate Intranet.

In addition, you should develop internal protocols for keeping executive management informed of potential problems. One Localization Manager at a large enterprise software company developed a flag system for communication of danger points to executive management. For example, a yellow flag was raised if scheduled events were not happening, if there were any delays or if specific departments were not being cooperative. This would change to an orange flag when progress stalled and escalation was needed. Finally, a red flag would be raised when there were serious problems, such as a stoppage to work or a definite delay to ship dates, etc. The important principle here is that a gradual communications structure is useful to executive management, which tends to not like sudden surprises.

Coordinating Global Teams

Localization projects are often executed by teams that are distributed around the globe. For example, the core product development team, the localization partner's production center and in-country reviewers may each reside on a different continent. Coordinating such distributed teams can be challenging.

The primary challenges that global teams face relate to:

- Communication, complicated by factors such as time zone differences, distance, language, etc.
- Rapport, complicated by the difficulty in meeting face-to-face, cultural differences and language barriers.

Steps you can take to address these challenges:

- Schedule regular person-to-person meetings (by phone or video conference).
- Always be on the alert for opportunities to meet face-to-face. If a business trip brings any team members within reach of each other, see if the trip can be extended to include a face-to-face meeting.
- Confirm in writing any important information that has been exchanged verbally. In addition to the usual reasons for doing this, it provides a check against miscommunication caused by team members doing business in a second language.

BUDGETING FOR LOCALIZATION

The Importance of Budgeting

Budgeting affects the Localization Manager's ability to complete localization projects successfully. By obtaining the proper funding, you are able to secure the appropriate resources internally and externally. In addition, budgeting enables you to plan. As mentioned earlier, planning is absolutely critical to the localization process and can be a major determinant in the success or failure of a project.

Remember to budget for updates, an area sometimes forgotten during the initial planning stages.

Do you know what resources and costs are required? How accurate do you think your budgetary numbers are? Have you consulted with other internal departments? Is historical data available? Have financial goals been clarified?

Have you consulted with your localization partner? Have you provided your partner with files for review and analysis? Have you received an itemized file set analysis report and itemized price quote from your partner? If the files are still in the early stages of development, have you at least provided sample files to your partner for a preliminary budget estimate?

In addition to costs allocated for outside partners, never forget internal costs when budgeting. They can add up and become substantial. One way or another, in the end, all tasks incur a cost, whether external or internal.

A real challenge to long-term localization budgeting is that when attempting to create an annual budget, the products themselves have not yet been developed and so project scoping can involve a good deal of guesswork. Consequently, when looking to commence a new localization project during the year, sufficient funds may not be in the budget. It is important to be aware of this and to try to be as conservative in your budgeting as possible. With this in mind, always include a buffer.

An area that is sometimes forgotten with companies new to localization is planning and budgeting for updates. It can be difficult to budget accurately for future updates, as there are variables that could swing the costs up or down quite easily. Again, it might be helpful to discuss your planned updates with your localization partner so that you have a better grasp of how to budget for them. For example, what are the anticipated volumes, timing and frequency of the updates? What about the nature of the updates—are they code-only changes, or will translatable text be affected? Will they be entirely new files, or will the changes be to existing files? Will the modifications be contained within a few files, or will the changes affect the majority of the files? What level of QA and testing will be required as a result of the updates? All of these factors can affect your localization costs and therefore should be taken into consideration when budgeting.

Budgeting for localization can be difficult, as it often involves a moving target. However, by taking the time to address the issues listed above, you are likely to have sufficient funds to carry out your localization projects to completion without cutting corners. Even with budgetary numbers, though, your job is not over. The Localization Manager at many companies is still required to make the case to corporate management for the requested funds and to maximize ROI, as described below.

Presenting the Case to Corporate Management

Your department may experience greater success in securing a higher localization budget if it can be perceived as a strategic planner in the overall corporate international business development chain, rather than viewed as a stand-alone service organization. To do so, though, you may need data that piques corporate management's interest.

Not everyone understands the value of localization. What is the market potential? What are the sales opportunities with a localized product vs. one without? What is the competition doing? What will the effects be if the competition is already localizing for a specific market, yet your company has not even established plans? In what is corporate management most interested? Is it time-to-market? Costs? Increased sales? Higher productivity?

Prove how your team is improving its performance. Study, track metrics and then broadcast the results. For example, to what extent has your team reduced corrections per page and localization time-to-market project over project? Have the number of transactions between agents been reduced, and to what level have per-transaction costs been lowered?

Involve a wide range of people from different parts of your company. Strategize how to convene a meeting that gets others' attention, involvement and input. One software company timed a meeting to coincide with a global company-wide meeting, at which all of the country managers would be present. Another strategy is the informal approach. By holding highly informal meetings, preferably outdoors and with food, the enjoyment factor and the breakdown of political barriers can help bring people together and result in a more collaborative, team-oriented approach.

With a strategy to communicate with corporate management, you need to define specific methods for reducing risk while improving financial results of your localization efforts, as described below.

How to Save Money

There are various ways to spend wisely on localization, eliminating as many extraneous costs as possible and optimizing your production ROI. The following are examples of how localization costs can be minimized:

- **Test the Market with Less than “Everything”**

Sales may want “everything” localized for a specific market. However, further analysis of market needs often yields surprising results.

For example, which is most critical to the user: the user interface, on-line help, or on-line/printed documentation? What about product demos, marketing materials and Web pages? What about corresponding training and support materials?

In certain cases, especially when entering a market for the first time, you may be able to test the market with less than “everything”. In cases where your Web site or documentation set is extensive, you may be able to localize only part of the entire set, focusing at first on only the most critical components to the end-user. Or in certain cases, you may decide that even if an entire set is required, perhaps not all output formats are required. For example, if your domestic product ships with PDF and HTML documentation, you might be able to ship only PDF in your target market until sales justify the additional conversion and QA/testing expense.

- **Launch Incrementally**

Launching localized products incrementally is another way of spending wisely on localization. What this means is that instead of an all-or-nothing approach, where the attempt is made to launch in five or ten markets around the world concurrently, it is often better to start with your most critical target market, and then to increase your localization efforts incrementally from there. Localization involves a learning curve for any company, any product, any target market. You will likely achieve a greater ROI after you have learned and refined your localization process as much as possible prior to attempting to localize into all potential target markets. In addition, based on market feedback, you will learn which components truly need to be localized, where others may not be as critical.

- **Invest in Planning**

A Localization Manager at a world-leading technology company once commented that in her company's experience, the more planning, the more successful the project. The opposite was also true: the less planning, the more likely the project was to fail or to not meet business and production objectives.

Invest the time and resources in planning for your localization projects sufficiently. In this planning effort, take the time to have a dialogue with executive management, or convince those in a position to do so to take action early and understand the business objectives of the project. Identify the pain points in the production cycle, and then work on solutions to those problems.

- **Define & Track Metrics**

In order to reduce costs, a good first step is to define the different types of costs associated with a project. These might include costs associated with project management, translation, language management, engineering, QA/testing, layout, publishing, to name a few. There are also process costs such as review time, number of transactions between agents, rework, etc. Breaking these down further, you can collect data and define metrics to measure and track your progress in reducing costs over time, adjusting your strategies project-to-project in order to improve results. For example, you may want to track the cost of a project per word and per page. Your costs for internal headcount vs. throughput. The cost of dealing with many errors in deliverables from a vendor. The cost of rework due to lack of internationalization or due to insufficient planning prior to the project start. The cost of doing certain tasks internally vs. outsourcing. For more on this topic, please reference the Value to the Corporation section earlier in this guide.

- **Avert Rework**

One of the most common causes of cost increases (and project delays) is the need for rework during the localization process. It follows that one of the most effective ways to streamline the process and minimize costs is to avert rework during the localization process at all costs. This takes a concerted planning effort and discipline in executing the project plan, yet the results are undeniable. It is far easier and more cost-effective to identify and solve issues early in the source product rather than reactively during the localization process. Similarly, it is most efficient to conduct each step in the localization process once, or as few times as possible given the product release objectives, rather than rush to tasks in the hope of “speeding up the process”, only to introduce needless repetition of tasks.

- **Integrate Internationalization with Core Development**

An effective way to save on costs begins at the development stage. By internationalizing your software, web site or documentation properly, you eliminate retrofitting costs for each locale.

For primers that explain methods for developing world-ready products that reduce localization costs and time-to-market, you can download several localization guides and check lists from our web site at www.rubic.com.

The handbooks are especially useful to those new to localization.

- **Test During Development**

To ensure that your code is being developed with localization in mind, your developers should conduct internationalization testing during development. Such testing should include testing of a pseudo-translated version of the product, and should include checks for the effect of pseudo-translation on the building and running of the application, as well as the on-screen appearance. This type of preventative testing need not be limited to one round during development, as the more that it can be interwoven with the development process, the more likely that downstream time and costs will be reduced.

- **Reduce Text Volume**

Documentation can contain unnecessary text and content, redundancies, wordy writing, vague phrases, modal auxiliaries, and similar yet needlessly non-identical text segments. A straightforward method for cutting your translation, layout and publishing costs is to eliminate these items. Conduct a documentation audit. Remove unnecessary or repetitive text. Any similar text that differs purely for stylistic reasons can be made consistent across your documentation set. Look at the big picture. If you have 20 manuals for your source language product, review and re-assess whether all 20 are necessary. Can you support the costs of localizing all 20 for all of your target language versions? If the answer is no, then reevaluate why the ones that are not supported in target languages are even necessary for your source language product. You may uncover ways to not only reduce your localization costs, but also your documentation costs in general.

- **Be Consistent / Adopt Standards**

For your software, the more consistent your coding process, the greater potential for cost savings in localization. More consistent code enables easier understanding by your localization partner and just as importantly enables tools development by your partner that supports your entire file set. In addition, the more your team follows strict glossary and linguistic style guidelines, the greater the re-use capabilities and consequently the lower your localization costs. If possible, implement corporate-wide glossaries and style guides, rather than product-by-product.

For your documentation, the more consistent your original authoring process, the greater the potential for cost savings in localization. For example, the more your authoring team follows strict glossary and writing/layout style guidelines, the greater the re-use capabilities and consequently the lower your localization costs.

The cost benefit of greater consistency is not limited to localization, but also extends to technical and customer support. Consistency leads to greater understanding by your customers. The easier your product is to understand, the fewer technical and customer service inquiries you will receive.

Consistency also applies to your processes and technologies. Implement standards. The most effective time to implement standards is during the project planning phase. Standards may include file formats, technical standards, delivery protocols, communication protocols, change order protocols, etc.

- **Measure & Enforce Consistency**

Following on from the prior point, it is critical to not only implement actionable means for achieving greater consistency, but it is also just as important to define metrics to measure and track your success towards this goal. For example, one software company has its technical authors run a Translation Memory (TM) analysis on their content every day as they progress through the authoring process. In this way they are able to identify text consistency and re-use trends immediately during the core authoring process, rather than reactively during localization when it is too late. This enables them, for example, to examine why re-use may be drastically down suddenly and to take corrective actions whenever possible. For a company that localizes into five or 10 languages, the resulting cost savings during localization can be significant.

- **Move to a Single-source Documentation Model**

You will lower your localization costs if your technical publications group can generate multiple forms of output from the same source text. For example, many software companies use the same single source text for both their help and printed manuals. This is a cost-effective and scalable documentation strategy.

- **Implement Strict Deadlines for Updating the Source**

Regulate the content of updates. Making a style change from commas (,) to semi-colons (;) might be a nice last-minute touch, however, it adds no value in relation to the additional localization costs and any delayed time-to-market. Limit late changes to only those that truly affect the content and understanding of your end-users.

- **Understand the True Costs of a Vendor Quote**

It is important to realize that a cheap price estimate from a potential vendor does not always equate to an inexpensive bill at the end of the project. Nor does it always reflect the true potential overall cost to your company.

One of the greatest ways to reduce costs is to find a localization partner who is reliable. Getting projects done without the need for retrofitting and rework can save you a large amount of money (and time). Missing ship dates can increase production costs while reducing revenue.

Furthermore, poor quality can affect your sales and reputation in the target market for years to come. Is it worth saving a bit of money on a particular project, even though the potential damage to your company could be extensive?

A low price does not necessarily translate into low quality, nor a high price into high quality. The point, though, is that you need to look beyond the immediate numbers to see the true cost of doing business a certain way.

- **Leverage Prior Translations**

Through the use of Translation Memory (TM) and other methods, you can leverage existing translations from prior versions of your product (or products) and re-use text that is repeated within the same release. For a product containing a high degree of identical text segments and for small product updates where only a small percentage of the text has changed, leveraging prior translations can reduce your translation costs substantially.

- **Partner for the Long-term**

Partnering with a long-term outlook with a localization specialist, you will have the opportunity to collaborate in developing more efficient and cost-effective means of getting work done.

- **Review Pricing Periodically**

Periodic pricing reviews allow you to monitor your localization costs. One large management software company reviews its vendor pricing on an annual basis, each time looking for cost-efficiencies to match the current situation.

- **Request Price Guarantees**

Request that your localization partner provide fixed, guaranteed pricing. Of course with changes of project scope and with new updates, there would be price implications. However, for anything that has been handed-off to and analyzed by your partner, a price guarantee is a reasonable request. It ensures that your partner has analyzed the project exhaustively up-front and that your budgetary planning is not a work of fiction.

- **Use a Knowledge Portal**

Communication, logistics and reporting can be inefficient when teams grow in size and therefore can increase your costs. Be sure that your localization solutions provider offers online portals such as an extranet and online bug database, which can help to reduce these hidden costs. For example, is your localization partner publishing an updated project schedule every day accessible to all team members? Is the schedule dynamically configurable to enable each team member to find the specific information that she/he is seeking? This type of information sharing via a central repository reduces the friction caused by departments and team members needing to contact the localization project manager every time they are interested in confirming scheduling requirements, commitments and expectations. It also ensures version control of the schedule, averting time that would be lost due to different team members working off of different schedules.

LOCALIZATION KIT

What is a Localization Kit?

The Localization Kit is a set of files and documentation that enables someone outside the development team to localize your product. It includes the supplementary material (over and above the product itself) required for localization.

Automating the creation of a Localization Kit will save time and avoid expensive errors.

The Localization Kit serves two functions:

- It contains the material a potential localization partner needs to prepare a proposal (plan, price, and schedule) for localizing your product.
- It contains the material the selected localization partner needs to perform the localization.

A good Localization Kit is:

- Complete: it contains everything that the development team must supply over and above the product itself.
- Usable: it includes clear and complete documentation on how to use the contents of the kit.
- Generated quickly and reliably, using an automated procedure.

Developing a good Localization Kit involves:

- Requirements definition: Determine who will use the kit and what their needs are. (See the checklist below.)
- Design: determine what will be included, where it comes from, and how it will be organized. (See the checklist below.)
- Development: automate the generation of the kit.
- Documentation: Explain what's in the kit and how to use it. (See the checklist below.)
- QA: Test that the kit is complete (that your product can be localized using only the product plus the kit) and usable (that the documentation is complete and clear). This is a component of localization-readiness testing.

Ideally, you will create corporate guidelines and a checklist for the development of a Localization Kit, so that it is consistent regardless of manager or product. This will help ensure a high quality kit, will eliminate time spent on rework to the kit, and will enhance the efficiency and scalability of your localization processes. In addition, in the case that you do have a long-term relationship with a localization partner, turn-around time on the generation of localization proposals/plans should shorten and projects can commence sooner due to the efficiencies gained from the consistent nature of the kits.

Preparing for the Localization Analysis

A good way to assess potential localization partners, or to enable your selected partner to assess a project and develop a localization proposal/plan, involves the Localization Kit. By constructing an easy-to-understand set of materials, you will enable localizers to work faster and will avoid time-consuming Q&A sessions.

When requesting a localization proposal, include instructions for the localizer regarding requirements and expectations. In these instructions, specify the project deadlines as well as the deadline for submission of a localization proposal by the localizer.

If the Localization Kit includes an inherited translation memory (“TM”), include your assessment regarding the quality of the existing TM. For example, should the localizer “blindly” use the existing TM without making any adjustments? Or, should the localizer be commissioned to do an up-front review of its quality?

Localization Kit Preparation Checklist

Your team can use the following checklist to help ensure that the Localization Kit is both complete and usable.

Defining Kit Requirements

- Determine who will use the kit (localization specialists within your company, a localization company, your customers, in-country distributors or other third parties, etc.).
- Given the level of localization expertise of the users of the Localization Kit, determine the level of detail that will be required in the documentation. For example:
 - A kit intended for your customers will require more detailed “how to localize” documentation than a kit intended for localization specialists.
- Determine what tasks the localizer will perform, and what they’ll need to do it. For example:
 - If the localizer is responsible for building localized versions of the software, the kit may need to include utilities used in the build process.

Designing the Kit

- Determine what will be included (files to be localized, proprietary tools to assist or validate localization, documentation, etc.). Collect input from the teams responsible for the source material: software development, documentation, etc.
- Determine how the kit will be generated.
- Determine how it will be organized.

- Determine how localized material being returned to you will be organized and formatted.
- Automate the creation of the kit by developing a build-kit utility.
- Automatically generate a Bill of Materials (BOM) that includes the names and version numbers of all files included in the kit.
- The build-kit utility should alert you of any missing files, and flag the missing files in the generated BOM.
- Package the files into a single archive file (Zip, tar, etc.) to facilitate delivery.
- Use a directory structure that organizes files within the kit, and enables the localizer to:
 1. Avert the time-consuming and error-prone task of guessing directory structures
 2. Build the product (in the case of software)
 3. Share files among your different departments seamlessly
 4. Maintain version control in the case that file names are duplicated within a file set
 5. Perform proper QA checks of links
 6. Replicate the source directory structure for the target language directory when preparing the localized version.
- In the case of an update, include the prior version's source language files as well as target language files.
- Include the source files for product documentation and help.
- Include a compiled version of the help, if applicable (e.g., WinHelp), and the final output format of any on-line documentation (e.g., PDF).
- Include any existing corporate or product glossaries. Ideally these are bilingual, but English-only is an alternative if this is all that is available.
- Include any existing TM.
- Include any existing linguistic style guides for the target languages.
- Include all localizable graphics in source form.
- Include the individual graphics in the Localization Kit even for graphics that are embedded into pages.
- Be sure to exclude extraneous files from the kit.

Developing Localization Kit Documentation

- Show the basic software architecture with an architecture diagram.
- Explain how the kit is organized.
- Explain the function of each file in the kit.
- Explain how localized files are to be returned from the localization partner (file naming convention, location in directory structure, file format, text encoding, etc.).

- Explain the procedure for localizing each type of file.
- Explain how to use any proprietary tools included in the kit.
- Specify the off-the-shelf tools (including version numbers) that are required for the localization process.
- Specify the platforms on which the tools should be run.
- Specify the runtime system requirements for the localized product.
- If there are components or sets of files that can be leveraged from one another, these should be clearly mapped and clarified to the localizer.
- Specify whether you require the deliverable of translation memory (TM), and if so, in what format (e.g., TRADOS).
- Specify the application(s) used to generate all graphics, including platform and version number.
- Specify whether you are responsible for capturing screens for documentation, or whether the localizer is responsible for this.
- For screen captures, specify the computer configuration and software settings, such as color depth and screen resolution.
- Specify the source applications and tools used to create the help and documentation, including platform and version number.
- Outline the HTML-generation or filtering process, if applicable for help and documentation.
- Map any duplication (MS Word - HTML, etc.) and explain the correlation of the files.
- Specify any font requirements.
- Specify the platforms, browsers and browser versions, etc. on which the Help and on-line documentation should be tested.
- Clearly identify non-localizable text either in the kit documentation or, where possible, at the point in the localizable files where the non-localizable text appears.

Testing the Build-Kit Utility

- Verify that all required files have been included.
- Verify that all links work properly within the kit's directory structure.
- Use the kit to pseudo-localize the product.

Checking the Kit Prior to Localization-readiness Testing

- Unpack the archive.
- Check for missing files (examine the BOM generated during the building of the kit).
- Perform a spot check on any problem areas uncovered during prior localization or pseudo-localization.

LOCALIZATION-READINESS TESTING

The Value of Localization-readiness Testing

As mentioned earlier, prevention of potential problems is critical to a successful localization process. Prior to commencing a localization project, it is important to verify that the product is ready to be localized.

Rework increases costs and protracts time-to-market. Localization-readiness testing is aimed at the proactive elimination of rework.

Testing for, finding and fixing Localization Kit and internationalization bugs during a scheduled, in-house QA cycle is much more efficient than waiting until your localization partner encounters them. Localization-readiness testing provides the following benefits over starting localization without it:

- It makes better use of your internal resources, since testers and developers can work closely together during a test / fix phase that can be compressed into a relatively short time period.
- It avoids localization delays that would occur while blocking issues are analyzed, fixed, and tested.
- It avoids rework necessitated by unplanned software updates during localization.
- It is more efficient, reducing both cost (effort) and time-to-market.
- It is more predictable, resulting in more accurate project plans, schedules, and budgets.

Localization-readiness Testing Objectives

The primary objectives of localization-readiness testing are:

- Verify the quality of the internationalization work, including localization (internationalization testing)
- Verify the quality (completeness and usability) of the Localization Kit (Localization Kit testing)
- Prove that given a valid set of localized resources, the software will function correctly in the target market environment.

Planning Localization-readiness Testing

Localization-readiness testing typically follows the core product development cycle, before localization begins. It is often executed concurrently with the standard QA performed in the source language for domestic customers.

Your localization partner will do its own localization-readiness testing, so be sure to coordinate your planning to ensure both sets of plans make sense when considered together.

As with other types of QA, localization-readiness testing should be planned out early in the product development process. Since localization-readiness testing should become an integral part of your product development process, you should develop written test plans and scripts for it. Testing should be a scheduled before code freeze, so core software fixes can be applied without disrupting the schedule.

Guidelines to consider when developing localization-readiness test plans and scripts:

- If actual localized resources (from an earlier version of the product) are not available, perform a pseudo-localization to use as a basis for testing (see Pseudo-Localization below).
- Test in the computing environments used in target markets (localized versions of the operating system and other platform software, local keyboard layouts, etc.).
- Perform the testing using the pseudo-localized product, verifying that complete localization is possible. This should include pseudo-localization of software resource text as well as localization of date/time formats, etc.
- Test that all internationalization / localization requirements have been met (text processing, localizability, etc.). (Refer to the checklists in the Planning *β* section under Requirements *β*).
- Test that internationalization features function correctly (locale determination, region-specific features, local business rules, etc.).
- Test for generic internationalization / localization issues (see Generic Internationalization / Localization Issues *β* below).

Pseudo-localization

Pseudo-localization involves localizing your product into an artificial language that includes target language characters but is still readable by your testers. This is ideally done using an automated or semi-automated process.

Your localization partner should be able to perform text pseudo-localization for you using their tools.

Pseudo-localization makes it possible to perform the following quality checks during localization-readiness testing:

- Validation of the completeness and usability of the Localization Kit (files and documentation).
- Validation that the pseudo-localized software builds successfully.
- Validation that target language characters display correctly.
- Validation that screen text strings are not concatenated from fragments.
- Validation that screen layout accommodates expanded localized strings.
- Validation that non-localizable software resources are identified and documented.

Pseudo-localization is most valuable when your product has not been localized before. It is also important when localizing to a language that is unlike any currently supported language (for example, the first time localizing for a language that uses multibyte characters). As your product matures (from an internationalization / localization perspective) you will probably scale back your use of pseudo-localization.

Guidelines for pseudo-localization:

- Simulate the localization process (documented in the Localization Kit) as closely and completely as possible: pseudo-localize text and graphics, change fonts, date formats, etc.
- Simulate the localizer's environment as closely as possible. Perform the pseudo-localization on a "clean" machine, not on a development machine.
- Include target-language characters in the pseudo-localized strings.
- Choose target language characters that are most likely to be problematic. (The Generic Internationalization / Localization Issues list below provides some examples.)
- Make string boundaries (beginning and end) obvious so string concatenation will be apparent during testing.
- Increase the length of pseudo-localized strings to simulate what often happens during translation.
- Insert target language characters at the beginning of strings, at the end of strings, and around string separators such as tabs and newlines. This makes it easy to distinguish localizable strings from non-localizable strings during testing.
- Re-order the arguments in at least a sampling of formatted messages, and test that these messages then appear correctly.
- During testing, you may discover software resources that, in fact, must remain as-is for the software to function correctly (hopefully these are not visible to the user). As you discover them, be sure to identify these strings, preferably using comments in the resource files, or in the Localization Kit documentation.

Generic Internationalization / Localization Issues

The following checklist can assist in designing tests for generic internationalization / localization issues (mentioned above under Planning Localization-readiness Testing):

- Confirm that local language text can be entered (using an IME if appropriate) and correctly displayed.
- Test that local language text is correctly stored (encoded) in the database.
- Test with characters that might produce false matches with ASCII characters: in some multibyte text encoding schemes, trailing byte values coincide with ASCII byte values. If not internationalized correctly, software can be fooled by false matches on these byte values.

- Test with non-standard characters: Enter characters that your users might reasonably expect to use that might cause problems for your software. For example: The (Shift-JIS-like) Windows CodePage 932 supports some non-Shift-JIS characters that software designed for Shift-JIS may not support; the (ISO-8859-1-like) Windows CodePage 1252 supports some non-ISO-8859-1 characters that software designed for ISO-8859-1 may not support.
- Test input field length limits (enter maximum length strings).
- Check that all localizable text is, in fact, localizable (that is, check that it has been pseudo-localized).
- Check for any problems displaying the target language characters used in the pseudo-localization.
- Check for screen space issues; ensure that screen text has sufficient room for growth during translation.
- Message construction: ensure messages are not constructed by concatenation of fragments.
- Confirm that graphics that require localization are, in fact, localizable (using the contents of the Localization Kit).
- Check for text in graphics. If any remains, be sure the Localization Kit documentation makes it clear that these need to be localized, and (if appropriate) explains how to do it.
- Test pseudo-localized keyboard accelerators.
- Check for correct bi-directional display for bi-directional languages such as Hebrew and Arabic.
- Check that terminology has been used consistently across all localizable materials.
- Check that text to be localized is grammatically correct, easy to understand, and free of slang and culture-specific references.
- Check that the documentation makes ample use of white space to facilitate formatting as the text expands during translation.

Core Product Quality

Core product quality is also an important prerequisite to localization. Your project plan should also contain some provision to verify core quality before localization begins. This is often accomplished through the normal testing that is performed in the source language for your domestic customers.

SELECTING A LOCALIZATION PARTNER

Defining Your Selection Criteria

To help ensure that you select a localization partner that meets your requirements, you should first determine what you need them to do, and then decide how to evaluate a company's ability to do it.

How a localization company handles a Localization Kit analysis is a good indication of how it will perform during an actual project.

Before beginning the localization partner selection process, you should have completed the following planning steps (discussed in the section Planning):

- Requirements Specification
- Workflow Design
- File Management
- Resource Planning

As a result of those efforts, you should have a fairly clear idea what you need your localization partner to do. The next step is to determine criteria for evaluating their ability to do it.

Characteristics to consider for your selection criteria include the following:

- **Target market expertise:** The partner should have experience localizing software for the geographic markets you are targeting now, and plan to target in the near future.
- **Localization process:** The partner should follow a well-defined localization process that ensures terminology and stylistic consistency, leverages previously-translated words and phrases, preserves file integrity (preservation of file format and protection of non-translatable elements), manages file versions using source code control, and records and tracks bug and other issues. The process should include some mechanism for capturing the learning (answers to questions, solutions to problems, etc.) that occurs during the project.
- **Engineering checks:** Every file should be checked by an engineer before it is delivered to you for format, text encoding, code integrity, etc.
- **Automation:** The partner should make use of various types of automation to enable everyone to work more efficiently. They should be able to pseudo-localize your software resources using their tools.
- **QA process:** The partner should follow a well-defined testing process that includes linguistic and visual (screen layout) testing. If you also plan to rely on the partner for functional testing, then the partner must be capable of performing rigorous functional testing as well.
- **Technical expertise:** The partner should be able to demonstrate technical experience with specific development technologies, software file formats, desktop publishing software, help systems, etc.

- **Project management:** Localization projects face much of the same complexity faced by the software development projects for the same product, but typically also require the coordination of teams at different companies in different locations. As you evaluate the partner's project management practices, you should expect them to be at least as robust as those followed by your own product development projects.
- **Update management:** The partner should be able to efficiently handle mid-project updates to the English source material. They should also be able to handle post-project updates quickly and efficiently (for software patches).
- **Domain expertise:** Ideally, the partner should have experience localizing products that are similar to yours (similar function, similar targeted customers, etc.).
- **Translators:** The partner should only use translators that are native speakers of the target language, are trained in translation, and have up-to-date language skills (the longer a translator is away from their native country, the less they will sound/read like a native speaker).
- **Portability:** You probably want the partner to provide key interim deliverables (glossary, style guide and translation memory) to you at no extra cost, and in portable (standard) formats.
- **Integrity:** You should feel comfortable that the partner will be honest with you about unrealistic schedule demands, and the tradeoffs they would need to make to meet them.
- **References:** The partner should be able to provide you with at least three references from current or previous customers, ideally involving projects similar to yours.

The following is a checklist of potentially useful background information about localization partner candidates:

Experience

- When was the company founded? By whom? What was the impetus for the business?
- What distinguishes the company from others?
- What specific services does the company offer?
- Does the company have any areas of specialty? What are some examples of this?
- Who are the company's customers? What types of projects have they localized?
- What related products, services or technologies has the company localized?
- What is the company's customer retention rate?

The Team

- What is the project manager turnover rate? (Is their employee retention rate high enough that you will gain from the natural knowledge base that is developed through the consistency of working with the same manager on multiple projects?)
- What is the translator selection process? Can you expect the same translators to work on future projects for you? Is translator turnover low?

Scalability

- Can you provide examples of the company's ability to scale for projects?
- How much advance notice would the company require for a 10-language localization or testing project?
- How many platforms and target languages does the company support?

Infrastructure

- Does the company have T1 broadband connection to the Internet?
- Does the company have a firewall?
- What are the anti-virus mechanisms in place for both incoming as well as outgoing files?
- What are the back-up and recovery mechanisms in place?

Financial Stability

- What are the company's annual revenues?
- Is the company financially sound? Are they profitable?

Face-to-Face Meeting

- Would the company agree to a face-to-face meeting?
- Would you be able to talk with a variety of employees during the visit?

The Localization Manager will likely find the partner selection process more efficient and successful if the selection criteria are discussed, agreed upon and documented prior to the actual search. The decision making process should be a cross-functional team effort involving sales, marketing, development, technical publications, QA and upper management.

Collecting Proposals

Once you have identified your selection criteria and identified some candidates, it is helpful to get a glimpse into how the company operates. One of the best ways to evaluate a company is to supply a Localization Kit and ask for a localization proposal based on the Kit. (You should, however, have all potential partners sign your company's standard non-disclosure agreement prior to the provision of the Localization Kit.) In essence, their analysis of the Kit acts as a mini localization project. More likely than not, you can learn a great deal about a company's approach, expertise, thoroughness and responsiveness based on how they handle the analysis of the Kit.

For example, during the analysis process does the vendor ask you relevant and insightful questions? Do they teach you things that you were not aware of? Do they raise red flags? How do they package their questions to you—are the questions well planned, organized and help you to understand the factors for a successful localization? Or, do questions seem scattered and random? Note that a company that does not ask questions during the analysis may not know what to ask or why certain questions are critical. Localization is a collaborative effort, and open, productive communications will be required during the project. Therefore, you should expect the same during the analysis.

In the localization proposal, is the file set analysis performed by the vendor transparent? Have they demonstrated a true understanding of the files, or is the proposal entirely boilerplate? Is the price quote itemized and clear? Have they provided a detailed production schedule, including what is required of your company? Have they defined exactly what they mean by "QA"? Does the proposal include the creation and application of test scripts? Can you receive these scripts as part of the deliverables? Have they provided fixed pricing, or are they being vague about what it will take to complete the project? Be wary of a vendor that is willing to offer only hourly rates rather than an assessment of the total cost.

Has the vendor identified any problems with the Localization Kit? For example, a common problem with Localization Kits is missing graphics, where the graphics are referenced by a file or files within the Kit, yet are not themselves in the Kit. In such a case, does the vendor notify you of these files, including a list of their file names and locations? Does the vendor identify the referring files as well? Another would be extraneous graphics that are included in the Kit but not referenced by any file within the Kit.

Face-to-Face Meeting

Many localization buyers send out Kits to potential vendors, and from there they select a short list of vendors whom they are truly interested in evaluating further. Meeting in person with the vendors on your short list, and to talking with a variety of employees can provide additional information on which to make your final decision.

KICKING OFF A PROJECT

Project Kickoff

Once a localization partner has been selected, the Localization Manager should focus on the project kickoff. The kickoff happens after:

- A contract has been signed between your company and your localization partner
- The PO has been issued, and
- The Localization Kit is ready.

The project kickoff finalizes the plan and launches the localization project.

At that time, it is important to confirm and clarify who will be on your localization team for the duration of the localization process, supporting the internal effort as well as supporting your localization partner. If the files provided in the Localization Kit for the proposal have been updated in the interim, then you will need to provide the updated set of files to your partner for analysis, preprocessing and an updated schedule and price quotation.

Kickoff Meeting

In order to confirm the project plan, verify that expectations are in sync and ensure that your project commences smoothly, a kickoff meeting should be scheduled between you and your localization partner.

It goes without saying that a meeting without an agenda will not be as efficient, focused and productive as a meeting with one. Therefore, make sure that your localization partner proposes a clear meeting agenda covering all relevant issues. Agree to an agenda and distribute to all participants ahead of time. Make it clear who is responsible for talking about which issues.



Standard items to cover during the kickoff meeting include:

- Definition of each team member's role and responsibilities
- Confirmation of the production process
- Confirmation of the project schedule
- Confirmation of in-country review cycles
- Establishment of the communications plan and protocols
- Establishment of the extranet setup
- Confirmation of deliverables
- Identification of any risks and resolution plans
- Identification of immediate action items
- Any pending questions or confirmation points from both sides

Following up after the meeting, your localization partner should provide minutes of the meeting to you to ensure that both sides understand the issues and that action items are documented and trackable. To skip the kickoff meeting leaves the door open for misunderstandings and disparate expectations. It also sends the wrong message to the rest of the localization team—that taking the time up-front for proper planning, communication and collaboration is not important and not worth the effort of a single meeting. It is much better instead to take the time for the kickoff meeting with attendance by cross-functional departments and your localization partner, to document the issues, and to commence the project smoothly, with an eye towards prevention of potential problems.

In addition to the kickoff meeting, it is at this early stage that your team needs to revisit the schedule and confirm scheduling protocols, as well as ensure that the proper processes are in place to ensure technical and linguistic quality, as described below.

The Schedule

The localization schedule should be confirmed during the project analysis and proposal process, and then again at the time of project kickoff. The schedule should be itemized to cover every task in the process and should detail the duration of each task. As the schedule is one of the most critical components in managing the localization process, it is discussed in further detail as its own topic later in this guide.

However, it is important to mention here that you and your team should go through the schedule in detail, and confirm if your resources are sufficient. There are multiple tasks that your team will be required to perform. This includes items such as glossary, linguistic style guide and translation reviews. It includes your own testing of deliverables and providing change requests to your partner. Is the time allotted in the schedule sufficient for your team to complete the tasks? If your team will require more time to complete its own tasks, this should be clarified at the project start. It is much better to plan realistically than to set an optimistic yet unrealistic schedule that would likely change often due to missed milestone dates.

COMMUNICATIONS

The Importance of Good Communications

Localizing your products involves countless details. On a macro level, due to the nature of constant change in technology you can expect these details to evolve and change through the course of the on-going globalization process. Maintaining open communications with your localization partner during the development process can greatly assist your company's international product development efforts.

An extranet benefits communications; it is accessible 24/7/365 and averts version control issues surrounding schedules and project status reporting.

On a micro level, you need to keep in sync with your localization partner through the entire localization process for each individual project. Clear, consistent and thorough communications during a localization project increases the likelihood of success.

Communications Protocols

Proactively ensuring that communications with your localization partner will be clear and thorough throughout the localization process is important. To that end, the Localization Manager should agree to communications protocols up-front with the localization partner.

How are communications to take place during the localization process? E-mail, ftp, extranet, telephone, on-site meetings, online database, etc.? Do you use freeform messages, or a structured form of communication? An example of structured communications would be an online database. This can be used for logging linguistic issues and questions, and of course you would want to implement an online bug tracking and reporting system for software QA/testing purposes.

In addition to all of the freeform communications that naturally flow during the course of a project, it is always better in the long run to maintain an issue tracking system. The benefits of this kind of standardized, structured communications by a global team are that:

- Such communications are more easily, quickly and accurately distributed among the global team members.
- Communications are trackable, minimizing the risk of something falling through the cracks.
- Communications can be categorized, enabling managers to compile communications at the end of each project and to identify trends in problems and obstacles.
- Communications are processed quickly and efficiently, so team members experienced with the communications structure can quickly find the information they need.
- You reduce the risk of relying on the inherent randomness of an individual's memory in order to have a successful project.

In addition to communication formats, you should agree to certain basic terminology definitions. For example, what exactly do your developers mean when they say that the files are “frozen”. The meaning can vary depending on the company and even the individual, and consequently agreeing to the meaning of critical terms can help to ensure that the localization plan is accurate and appropriate.

Define channels of communication clearly. To that end, you should consider your role as the Localization Manager as the one person ultimately responsible at your company for the success of the localization. The more dispersed responsibility becomes without such a single point of contact, the greater the chance of communication breakdowns and the harder coordination becomes. Regardless of the number of team members on your localization partner’s side, you should expect a person to take the same role there as well.

Communications should be funneled as much as possible through you. Although certain communications may take place directly between your engineers and your localizer’s engineers, or between your reviewers and the translators, it is important that you are copied on all e-mails and kept informed.

In addition, the roles and responsibilities of team members of both sides should be clarified, as mentioned in the section Kicking Off a Project.

Some Localization Managers find it useful to set up an internal mailing list. Although all communications from your partner might be directed to you, the Localization Manager, you can instruct your partner to copy the mailing list on certain predefined types of communications. This can expedite communications when you agree internally up-front regarding the responsibilities of each team member.

In addition to specific questions that arise during the localization process, it is also highly useful to set up a regularly scheduled conference call between you and your counterpart at the partner firm. The call allows you to take a step back and to see the overall process, as opposed to many communications that will deal with very specific linguistic and technical issues. It also enables you to talk at length regarding issues, where an e-mail or quick call might not be sufficient, and where there is less sense of urgency. In other words, the regularly scheduled call acts as a complement to all of the other communications during the localization process.

Towards the end of a project with tight time-to-market demands, it is often useful to schedule more frequent calls. For example, whereas the calls may have been scheduled weekly during most of a project, the frequency may change to twice-weekly or even daily, depending on your needs. Increasing the frequency serves many purposes, including the likelihood that nothing “falls through the cracks”, the increased flexibility, the reduction in response times, and also on a more personal level, the reduction of stress levels.

Communications Tools

There are various methods for conducting communications during a localization project. As mentioned above, agreeing to a structured form for communications is highly beneficial.

For example, communications regarding linguistic and technical issues can be captured in a bug tracking system. The important thing is that both sides agree to implementing and maintaining a consistent means of communications.

A useful method of communicating information is through an extranet or knowledge portal. This can be used to publish and store whatever information you and your team may find useful. For example, the most current version of the schedule can be maintained here. Status reports and other project-specific information can be here as well.

The clear benefits of using an extranet are:

- Real-time access to up-to-date project information
- Global, 24/7/365 access to schedule, status, and language-related information
- Facilitation of communications
- Facilitation of file transfers
- Facilitation of bug tracking and reporting

SCHEDULING

The Importance of Proper Scheduling

Scheduling is one of the keys to a successful localization project. Done properly, scheduling enables the localization process to move along efficiently. It provides the framework so that objectives are clear and ship dates are met. Scheduling is the glue that holds the different components of the localization process together. It enables the localization process to come together into a seamless whole.

When scheduling, remember to factor in holidays, which vary from country to country.

Just as proper scheduling increases the likelihood for a successful international product launch, unrealistic scheduling can be dangerous. It can lead to good teams producing poor quality. It can also lead to a great deal of retrofitting and rework, which can be time-consuming and expensive. As a result, you are forced to spend much of your time on “fire fighting” and fixing problems that could have otherwise been easily avoided with some forethought and planning.

Ironically, scheduling with unrealistically aggressive expectations can protract a project’s turnaround well beyond what a realistic schedule would deliver, and in certain extreme cases, derail a project entirely. The most reliable method for delivering localized products with aggressive turnarounds is to discuss plans and collaborate with your localization partner, to prioritize components, to brainstorm time-saving strategies (such as which components can be done concurrently), to review resource allocations, to discuss any affects on quality, and to be flexible and to compromise where necessary.

Scheduling Protocols

How will schedules be structured? What information needs to be included? How will tasks be tracked? How will schedules be published and distributed? How frequently will they be updated? In the long run, it is better to maintain a structured format for scheduling from project planning through completion.

As mentioned earlier, the localization schedule should be confirmed during the proposal process, and then again at the time of project kick-off. The schedule should be itemized to cover every task in the process and should detail the duration of each task. It should also specify tasks that your localization partner is expecting from your team. During the localization process itself, the schedule should be monitored and reviewed regularly. Any updates should be published and distributed.

Developing the Schedule

The activities described in the section Planning enable you to determine project tasks and resources:

- What needs to be done
- By whom
- With what hardware and software resources

Scheduling determines the timing.

Make sure the schedule accounts for each task identified during the planning phase, plus any additional tasks that are required to ensure that hardware and software dependencies will be available and ready when needed. This may require building time into the schedule for obtaining purchase orders, ordering, delivery, and installation/setup.

Before finalizing the schedule, be sure you get buy-in from each person that will be involved in the project:

- Agreement that time allocations for that person's tasks are realistic.
- Agreement that the information and resources needed to perform those tasks will be available.
- That person's commitment to perform the tasks within the time-frames specified in the schedule.

Your schedule of client-side activities, and your localization partner's schedule of vendor-side activities need to mesh, so be sure to discuss both schedules with your localization partner to ensure that they are synchronized.

How to Avoid Scheduling Pitfalls

Localization is both complex and challenging, and schedules should include time for dealing with unforeseen issues, particularly during the final steps in the process.

Schedules also need to be realistic. Just because files come in at 3 PM on a Monday does not necessarily mean that translation begins at 3:01 PM the same day. Remember that all files need to go through the proper pre-processing and verification steps prior to any localization work on the files. In addition, files will occasionally be corrupt, and re-shipment would be required in those cases.

It is absolutely critical that when schedules are updated by your localization partner, you review and sign-off on them promptly. In the case that an updated schedule does not meet your needs, your immediate notification to your partner will enable both sides to collaborate and determine a mutually agreeable solution early, rather than deal with the consequences of disparate expectations late in the process. A quick and thorough review of updated schedules is one of the single best steps that you can take to ensure that your scheduling needs will be met at the end of the project.

In addition, remember to factor in holidays. Different countries have different holidays, and this needs to be considered, especially with multi-language projects where the translation/editing is taking place in-country.

POST-PRODUCTION MEETINGS

The Importance of the Post-production Meeting

Conducting a post-production meeting after each localization project is important, as it is an excellent opportunity to learn how to further refine the localization process for future projects. The meeting is also important in that it provides an opportunity for documenting issues and action items, which helps you develop a scalable localization organization.

Post-production meetings are an excellent opportunity for both localization buyer and provider to learn from one another and to agree upon concrete ways to improve the process.

Some of the items that would be included in a post-production meeting are as follows:

- Review the post-production log file
- Assess the production process
- Confirm linguistic quality
- Discuss scheduling
- Evaluate the communications infrastructure
- Discuss any other specific issues
- Establish action points for future improvement

Skipping the post-production meeting would mean losing the opportunity to benefit from lessons learned during the project. It would also send a message to the rest of the localization team that on-going process improvements are unimportant and not worth the effort of a single meeting. It also makes it likely that mistakes or inefficiencies will be repeated in the future. It is much better to take the time for a post-production meeting with attendance by cross-functional departments and your localization partner, to document the issues and to agree upon an improvement plan.

Documenting the Issues

In preparation for the post-production meeting, make sure that your localization partner proposes a clear meeting agenda covering all relevant issues. Agree to an agenda and distribute to all participants ahead of time. Make it clear who is responsible for talking about which issues.

Complementary to the post-production meeting agenda, your localization partner should document all other significant issues to be addressed during the meeting. These might include the quality of the Localization Kit, the schedule, communications, specific technical issues, problem resolution, escalation and any major challenges to the project. If one side is frustrated at how something is being done by the other party, the post-production meeting is an opportune time to discuss and resolve the issue in a collaborative, positive environment with a long-term vision for improving the process.

Just as important as documenting challenges and obstacles, is the documenting of exceptionally good practices by either party. For example:

- What did your partner do that truly expedited the localization process?
- What did your partner do that made your life easier?
- What heroic efforts were made?
- What automation did your partner introduce that resulted in reduced time-to-market or reduced costs?

Developing a common set of best practices will help your organization to refine its localization processes and to become more scalable.

Action Items

Documenting the issues is only part of the equation. Upon a healthy discussion of the issues, the result should be a list of concrete action items with clear target dates. This needs to be recorded and distributed to everyone involved.

When planning and launching future projects, team members should reference both the post-production log file of issues and the list of action items to ensure that lessons learned are affecting change and improving the localization process.

CONCLUSION

The Localization Manager

Consistently managing localization projects successfully is a complex and challenging task. Yet, with the proper strategy and process, the Localization Manager can manage effectively, reduce localization time-to-market and save money. In addition, you can release high quality products, maintain high team morale, improve localization ROI and build a scalable, successful localization operation.

Effective planning is critical to localization success. The more you plan, the better your results are likely to be.

As Localization Manager, you can assist your company to expand globally, which can make a critical contribution to the company's long-term success.

Focus on Continual Improvements to the Process

Guide to Localization Management was created to assist the Localization Manager in planning and implementing a successful localization strategy. Creating the proper roadmap for your particular company is an on-going endeavor, as the localization process is one requiring continual improvements and refinements. This type of open-minded, proactive and long-term approach is critical to the success of any localization program.

Thank You

Thank you very much for taking the time to read our publication. We hope that you have found it to be useful.

Rubric is second to none in rapidly scaling to meet the dynamic demands of global corporations.

ABOUT RUBRIC

Profile

Rubric assures a better localization experience. Specializing in globalization services for the high technology industry, Rubric brings flexibility, on-demand scalability and integrity to guarantee localization success. Rubric's refined processes adapt to the high tech sector's need for proactive localization planning, anticipation of dynamically changing requirements, and agile response capabilities. With offices in North America, Europe and Asia, Rubric localizes into more than 35 languages.

The Rubric Difference

Rubric is 100% customer-focused, with an unparalleled level of responsiveness to our customers. In the face of dynamically changing customer needs and late changes to project requirements, Rubric flexibly adapts and does whatever it takes to ensure localization success. Rubric gets results. This is evidenced by our unparalleled on-time shipment record and 95%+ customer retention rate.

Rubric's production model is geared for rapid, on-demand scalability. Through our global network of specialists, Rubric is able to scale capacity quickly to match each customer's particular requirements.

Rubric is unique in providing 100% transparency in everything that the company does, whether file set analysis reporting or project status reporting or enabling access to an online bug database. Rubric guarantees our quotes and schedules, providing tremendous value for our customers, who can maximize global market opportunities through reliable planning.

Rubric's focus on the customer and on delivering results, in combination with Rubric's operational flexibility, on-demand scalability and integrity, lead to a powerful combination that is leveraged for your localization success.

Rubric's Streamliner™ Methodology

Streamliner™ is Rubric's highly refined methodology. Streamliner™ provides a solid infrastructure, so that localization is efficient, reliable and scalable, with superior quality. Complementary to this solid infrastructure, Streamliner™ offers a great deal of customization and flexibility for each customer's specific needs.

Rubric's StreamNET™ Extranet

StreamNET™ is Rubric's highly versatile extranet. The system provides a solid infrastructure for many of the core components of the localization workflow, including scheduling, communications and status reporting, language management, file transfers and bug tracking. Based on an XML/ASP architecture, the modular structure is extremely scalable and enables Rubric to customize StreamNET™ for each customer's specific needs.

Contacting Rubric

Rubric welcomes the opportunity to discuss your localization plans and objectives, and to answer any questions that you may have. Please direct inquiries regarding Rubric's services to:



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