# Designing and managing multilingual websites

**Michael Leiser, Philip Morris International**

# What I'd like to cover in the next 45–60 minutes

- Introduction

- Designing multilingual websites
  - → Multiple languages, multiple locales
  - → Regulatory, linguistic and cultural adaptability
  - → Testing, prototyping and rollout

- Reconciling local initiative with global consistency

- Integrating content management and translation management

- Improving translation processes

- Choosing a globalization vendor

- Questions & answers

# Internationalization + localization = globalization

- Internationalization
  - → Designing a system (e.g. a website) so that it can be adapted to various languages and locales
  - → Strictly speaking, you can't use an internationalized system anywhere in the world until it's been localized

- Localization
  - → Adapting a system to meet the unique requirements of a specific locale
  - → Typically involves translation but covers a good deal more

- Globalization
  - → Combining internationalization and localization into design methodologies, business processes and services

# Websites are simple – they consist of content and functionality

- Websites are quite simple – they consist of only two things:
  - → Functionality
  - → Content

- Content and functionality complement each other
  - → Functionality is what the site does
  - → Content is what the site says or shows
  - → Without content you'd never know about the functionality

- Both content and functionality rely on technology, which tends to complicate things
  - → The best cars are those where you never have to lift the bonnet
  - → The best sites are those where you never see the technology

# Websites – in whatever language – work best when they're designed for specific audiences with specific needs
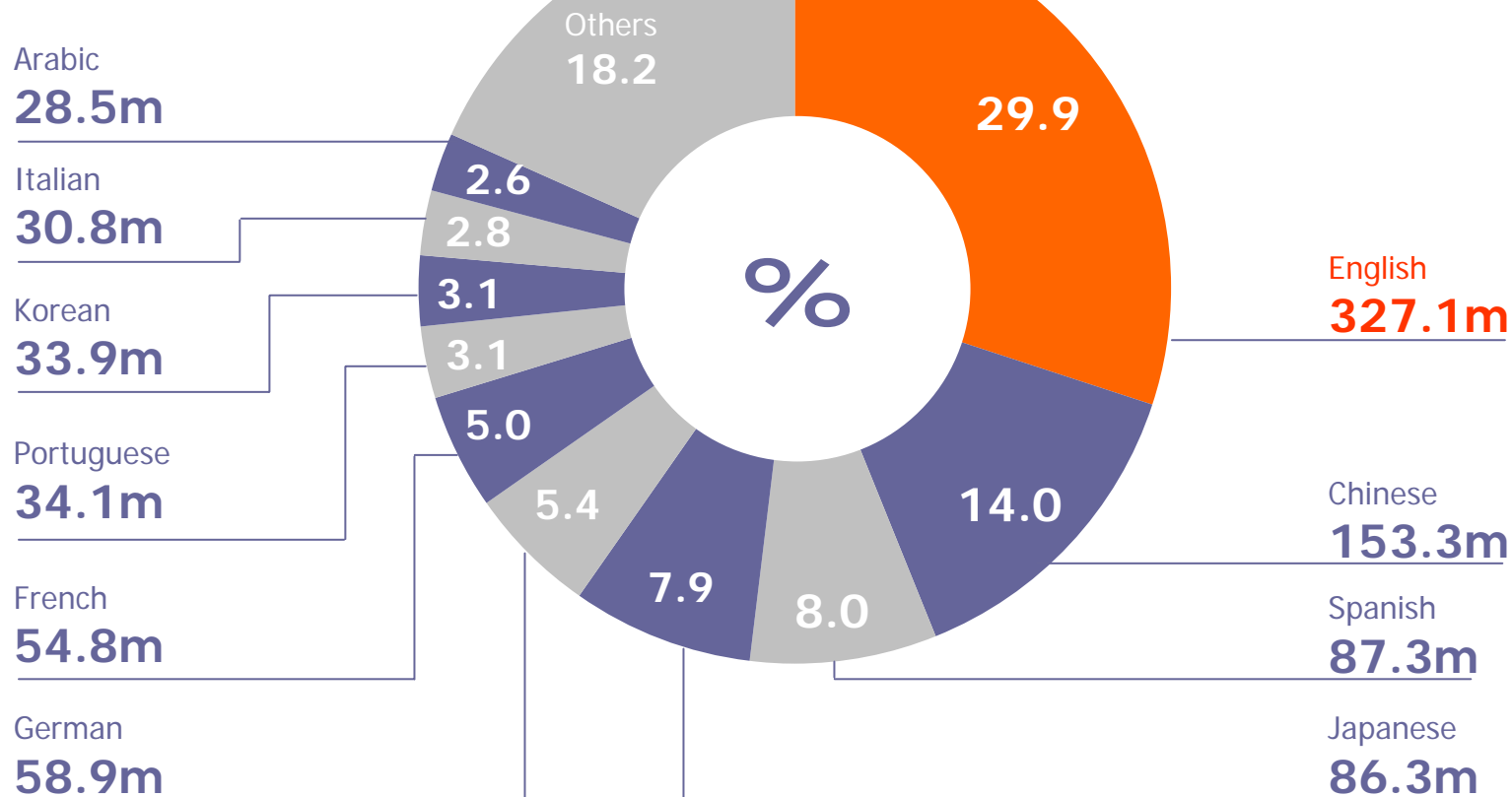
## Profiles

- Combine demographic and psychographic data with user research information to "invent" media users
- Tried and tested method of representing target audience in both traditional and new media
- Encourage communication teams to think about their audience
    → As real people rather than "segments" or "users"
- Promote fast development and testing of audience hypotheses
- Efficient as one only needs 4–6 profiles; if you meet their needs and expectations you'll meet 80% of those of others
- Provide a working hypothesis that can be tested through user research

## Scenarios

- Tell the story of a profile coming to our site to perform a task or achieve a goal
    → Stories are an excellent way of communicating audience needs inside the organization
- Allow holistic view of audience, in their own environment and seen from their point of view
- Ask: what are the specific needs of our specific audience when they come to our site?

# Less than a third of the people online today are native speakers of English

**Internet users by language**
January 2007

Arabic
**28.5m**

Italian
**30.8m**

Korean
**33.9m**

Portuguese
**34.1m**

French
**54.8m**

German
**58.9m**

Others
**18.2**

**2.6**

**2.8**

**3.1**

**3.1**

**5.0**

**5.4**

**7.9**

**8.0**

**29.9**

**%**

**14.0**

World total
**1.09bn**

English
**327.1m**

Chinese
**153.3m**

Spanish
**87.3m**

Japanese
**86.3m**

Sources: internetworldstats.com, Guardian, January 2007

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# Technology isn't your only or even most difficult challenge when designing multilingual websites

| | |
|---|---|
| **Ownership** | Organizational tensions over branding, site and technology ownership, vendor management, content... |
| **Process management** | Choice of pilot locale, top management sponsorship, integration of localization workflows with content management, training, ongoing maintenance... |
| **Content management** | Local/global content model, workflows to support content management across multiple sites, adaptable date, address and currency formats... |
| **User experience** | Globally consistent branding vs. local initiative, templates that allow for varying character counts, localized imagery, translation of non-HTML elements... |
| **Technology** | Single, flexible architecture and code base, Unicode support, translation memory, separation of code from content and formatting... |

# Design a single, centrally managed architecture that will support multiple languages and locales

- Define a single, centrally managed architecture
  - → Technology reuse produces economies of scale and speeds up rollouts
- Ensure all technical components support Unicode (UTF-8)
  - → Essential for Asian languages, with alphabets of up to 6,000 characters
- Choose a search engine that can handle all target languages
- Develop a single source code and keep it separate from both content and formatting
  - → Facilitates content translation and ongoing updates
  - → Avoids cost associated with multiple, redundant or diverging code bases
  - → Can be used across all locales without engineering changes
- Design for backward compatibility and keep your pages light (< 100Kb)

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# Design for regulatory, linguistic and cultural adaptability

- Allow for changing regulatory environments
  - → Advertising and marketing restrictions (e.g. pharmaceuticals)
  - → Labelling requirements (e.g. consumer electronics, toys)
  - → Payment options and consumer protection (e.g. invoicing, returns)

- Enable entry and display of various name, address, date, currency formats
  - → Number of fields, field lengths, formats and labels, and their placement
  - → Decimal point or comma, thousands separator
  - → Follow global standards for front and back-end validation

- Ensure the design can expand to accommodate all target languages
  - → On average, English text translated into French, German or Spanish will expand by about 30%
  - → Individual words may expand by up to 400%

# Avoid text-based images (e.g. buttons, header graphics) and consider replacing labels with international icons

Cart

Winkelwagentje

Can't you just say "cart"?

China, France, Germany

VIEW BASKET
UK

カートを見る
VIEW CART
Japan

# Design for regulatory, linguistic and cultural adaptability, pt 2

- Allow for local sort orders
  - → Swedish: z, å, ä, ö
  - → Japanese: phonetic

- Choose fonts that support multiple scripts (Latin, Cyrillic, Greek, Thai...)

- Minimize the use of non-HTML elements
  - → Header graphics, video files and Flash are more difficult to localize
  - → Provide text transcripts for rich media
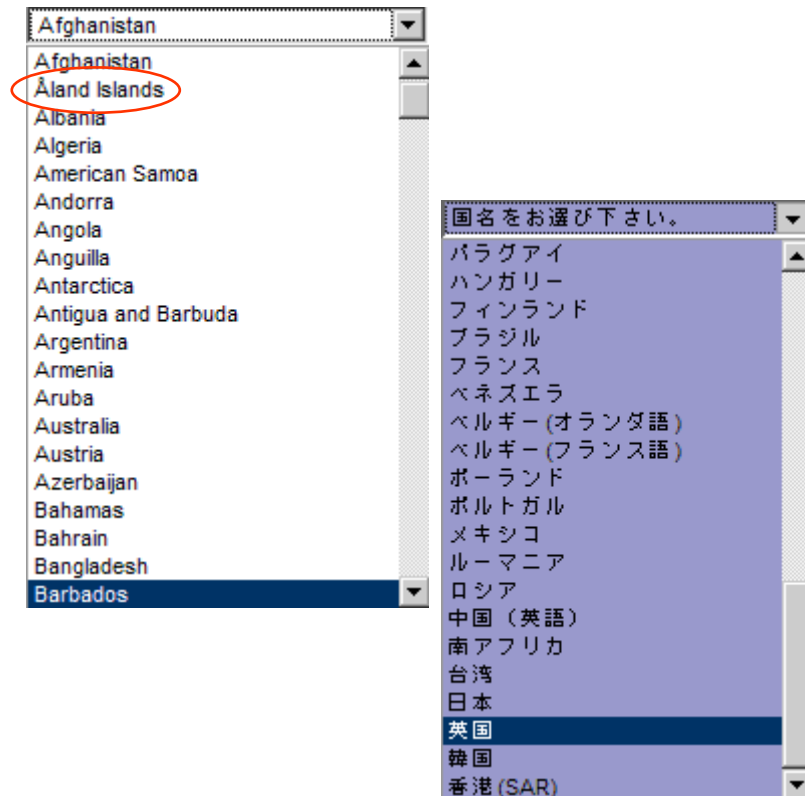
# Be wary of claims about "culture dimensions" and the cultural connotations of colour

- Hofstede's "dimensions of culture"
  - → Power distance, individualism vs. collectivism, feminity vs. masculinity, uncertainty avoidance, long term vs. short term orientation
  - → Assumes congruence of political and cultural boundaries as well as cultural homogeneity within those boundaries

- Organizational and professional cultures often outweigh national traditions

- Define a global set of building blocks as well as rules for their combination
  - → Thoroughly test claims that colour X means Y
  - → Make sure your design works in black and white, and use colour only to reinforce a message that works without it
  - → Provide colour palettes that are acceptable in all target locales
  - → Allow for image localization in both visual and technical design

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# Be wary of claims about "culture dimensions" and the cultural connotations of colour

| Color | China | Japan | Egypt | France | United States |
|---|---|---|---|---|---|
| Red | Happiness | Anger, Danger | Death | Aristocracy | Danger, Stop |
| Blue | Heavens, Clouds | Villainy | Virtue, Faith, Truth | Freedom, Peace | Masculine, Corporate |
| Green | Ming Dynasty, Heavens | Future, Youth, Energy | Fertility, Strength | Criminality | Safety, Go |
| Yellow | Birth, Wealth, Power | Grace, Nobility | Happiness, Prosperity | Temporary | Cowardice, Temporary |
| White | Death, Purity | Death | Joy | Neutrality | Purity |

By contrast, low UA cultures tend to have higher caffeine consumption, lower calorie intake, higher heart-disease death rates, and more chronic psychosis per capita. Businesses may be more informal and focus more on long-range strategic matters than day-to-day operations. These cultures tend to be less expressive and less openly anxious; people behave quietly without showing aggression or strong emotions (though their caffeine consumption may be intended to combat depression from their inability to express their feelings.) People seem easy-going, even relaxed. Teachers may not know all the answers (or there may be more than one correct answer), run more open-ended classes, and are expected to speak in plain language. In these cultures, what is different may be viewed as simply curious, or perhaps ridiculous.

Sources: Lionbridge, Best practices in web globalization, 2005;
Aaron Marcus and Associates, Inc. Cultural dimensions and global web design, 2001

# Test throughout – with sample content in your target languages, with native speakers and in the target locales

- Test all elements repeatedly throughout the development process
  - → Information architecture, navigation, naming schemes, colour palettes...
  - → Start testing early, using mockups, interactive wireframes, screenshots
  - → Test with native speakers and users in target locales

- Translate sample content into all target languages
  - → Do visual and technical design support double-byte characters?
  - → Can the user interface accommodate varying character counts?
  - → Will it expand horizontally without requiring horizontal scrolling?
  - → Will it expand vertically without requiring excessive wrapping or hyphenation?

- Test for usability in your target locales
  - → Does your local audience find the design intuitive?

# End-to-end project and process management are critical

- Follow prototyping approach to reduce the need for large-scale modifications
    - → If you need a pilot choose a European locale, where dealing with multiple languages and cultures is part of everyday business

- Assemble a multilingual project team

- Manage translation of global content centrally to generate economies of scale and ensure consistency

- Stagger the rollout process to manage risk

- Define processes for ongoing maintenance and technical support

- Roll out consistent communications and user training
    - → Ensure documentation meets local needs

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# Clarify ownership early on to head off governance issues

- Local control (Tribalism)
  - → Pros: Offers flexibility, agility, proximity to local trends and ensures close match of online presentation with local needs and conventions
  - → Cons: Risks inconsistency, duplication of effort, poor reusability and high operational cost

- Central control (Absolutism)
  - → Pros: Ensures consistent branding, offers cost savings through consolidation (e.g. infrastructure) and sharing of best practices
  - → Cons: May not realize cost-saving potential due to bureaucracy; stifles local initiative and creativity; can be slow to respond to local needs

- Distributed control (Federalism)
  - → Pros: Combines advantages of global model with local responsiveness; driven by customer needs rather than internal organization
  - → Cons: Requires a high degree of coordination across the whole company

# Defining who owns what can help avoid friction later on

**Brand**   Standards controlling the presentation of the corporate brand

**Information architecture**   Common approach to structuring content and user navigation

**Look & feel**   Standards (e.g. presentation of links) that determine look and feel

**Taxonomy & metadata**   Content organization for efficient search, reuse and tailored delivery

**Process definitions**   Publishing rules that determine who does what how and when

**Funding**   Budgeting and resource allocation for ongoing activities

**Reporting & measurement**   Metrics to optimize quality and performance

**Template development**   Development of data entry and presentation templates

**Data types, programming & protocols**   Standard file types, formats and development practice

**Authoring tools**   Use and integration of 3rd-party content tools

**Language & localization**   Localization and translation standards

**Authorization & access**   Permissions to access, edit and publish content

**Migration of legacy content**   Best practices for migrating content to the web

**Storage & systems architecture**   Technical infrastructure supporting content management

# Pages on our local sites use mandatory global content (and consistent rules) to support local flexibility

# You can build shared ownership (incl. rules, such as maximum word counts) into your content management system

# Corporate guidelines – style guides, glossaries, specifications – and training also help maintain consistency

## Country site toolkit



- HQ provides country site toolkit
  - → Tools for competitor analysis, content inventory, editorial planning
  - → Tone of voice, style guides, guidelines for writing for the web
  - → Detailed user manuals
  - → Ongoing support

- Affiliates provide local expertise
  - → Adaptation to local audience needs and preferences
  - → Review of translated corporate content
  - → Creation of local content (images, text, links)
  - → Local project management
  - → Resource planning beyond launch

# Even if you follow the tools, rules and schools approach, there probably will be some global/local friction nonetheless

- There's always a trade-off between global consistency and local flexibility
  - → Central technology management is a must
  - → Content ownership is negotiable

- Agree on content ownership
  - → 80:20 in centralized organizations, 30:70 in decentralized ones
  - → Define and document: business objectives, branding, processes, business rules, criteria for success
  - → Establish core content
  - → Agree content approval and publishing processes

- Assign local ownership to native speakers

# Your globalization system should integrate with your CMS and import from/export to a variety of content repositories

- Change detection or manual export

- Tasks
  - → Export file(s)
  - → Assign business rules
  - → Assign target locales and languages
  - → Synchronize locales
  - → Reimport file(s)
  - → Publish
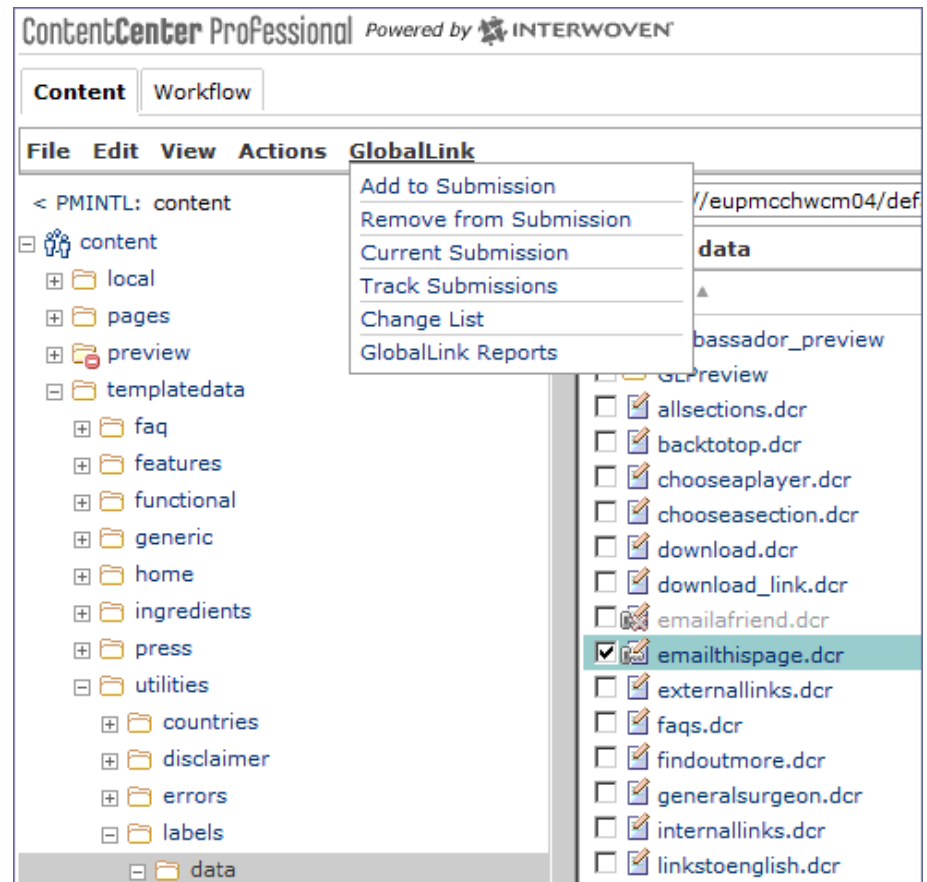
# Your globalization system should allow you to assign business rules, target languages and locales to translation projects

# Your globalization system should track the status of your translation projects and keep you up to date about them

- Change detection or manual export

- Tasks
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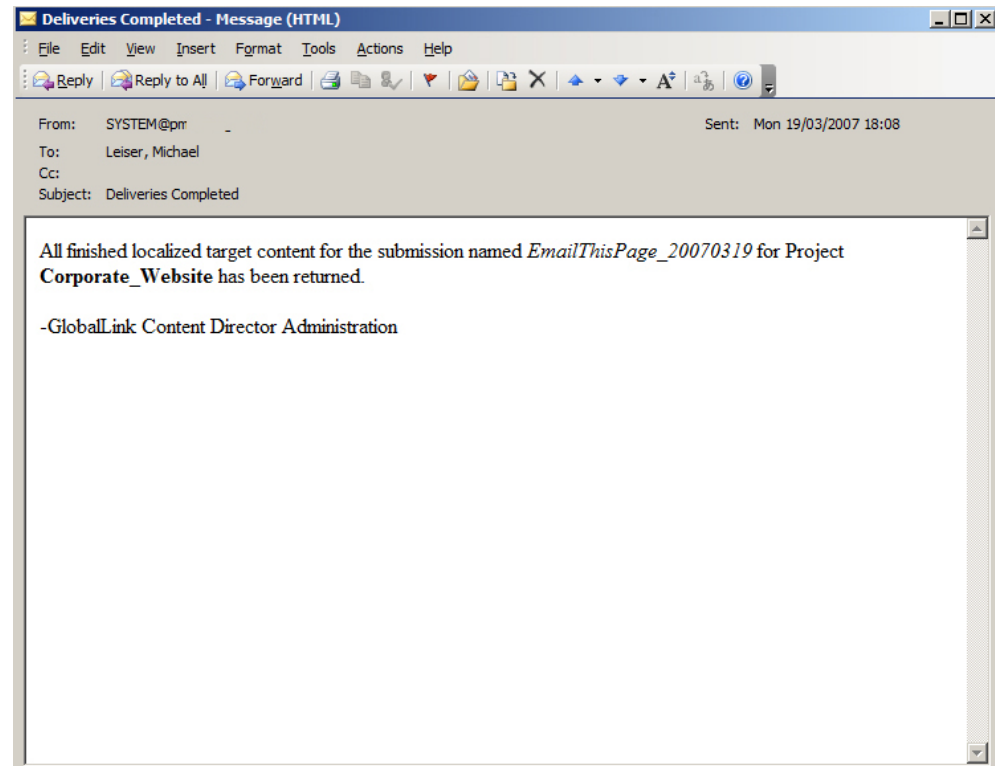
# Most major globalization vendors can integrate their systems with various content management systems

| Rank | Company | HQ | Revenue ($US, million) | Employees | Offices |
|------|---------|-----|------------------------|-----------|---------|
| 1 | Lionbridge Technologies | US | 400.0 | 4000 | 50 |
| 2 | L-3 | US | 372.3 | n/a | n/a |
| 3 | SDL International | UK | 142.9 | 1500 | 50 |
| 4 | Translations.com | US | 74.0 | 385 | 30 |
| 5 | RWS Group | UK | 66.4 | 332 | 8 |
| 6 | SDI Media Group | US | 65.0 | 200 | 23 |
| 7 | Xerox Global Services | UK | 60.0 | 200 | 4 |
| 8 | Euroscript SARL | LU | 59.2 | 580 | 10 |
| 9 | STAR AG | CH | 52.0 | 790 | 35 |
| 10 | CLS Communication | CH | 38.6 | 280 | 14 |

Top 10 globalization companies in 2005
Source: Common Sense Advisory, Inc., March 2006

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# Globalization processes are complex and so lend themselves to step-by-step optimization

A sample process might include:

1. Import
2. Code/content separation
3. Translation
4. Translation memory/term base lookup
5. Contextual review
6. Quality assurance
7. Export
8. Synchronization across multiple locales (e.g. fra, spa_MX)
9. Publishing
10. Workflow management

× updates × languages × reviewers × job status
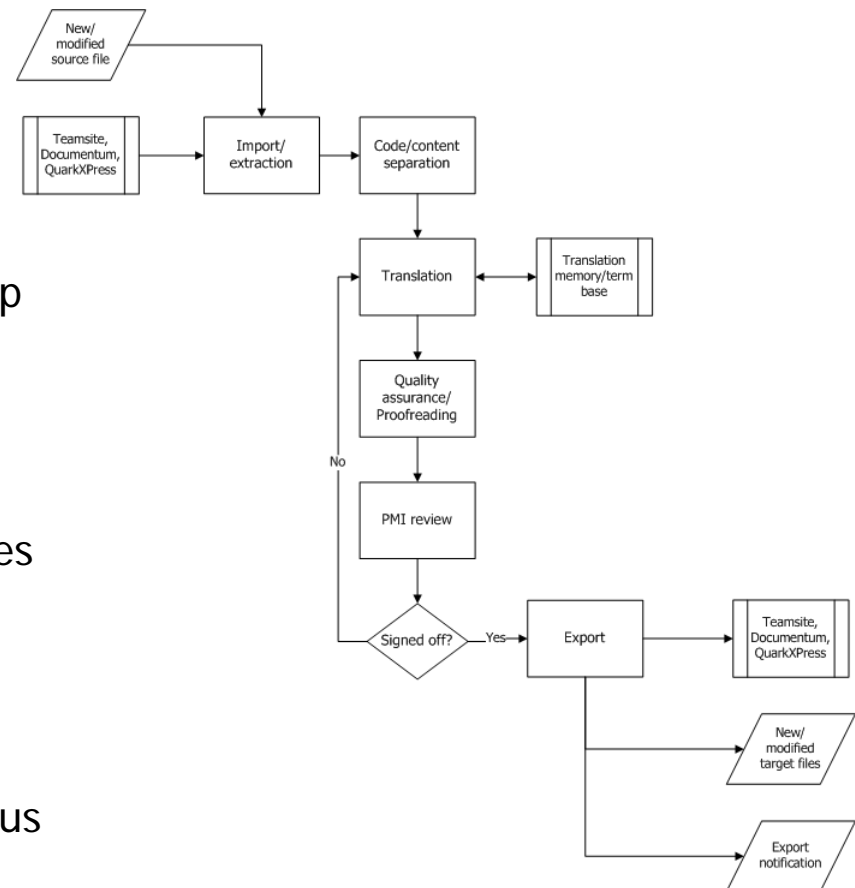
# Once your processes have stabilized, you can start automating or eliminating handoffs and individual steps

- Start with rudimentary workflow management

- Build workflows from basic rules, e.g.

  → Batch n updates into a single job

  → Synchronize content in language x across sites a, b, c

  → Disregard content elements x, y and z

- Progressively automate or eliminate individual steps or interfaces, e.g.

  → By replacing decision points (Y/N) with business rules

  → By implementing business rules in the GMS tool

  → By defining escalation paths (e.g. if review is x days overdue, then consider job signed off)

- Classic criteria (cycle times, error rate, cost, customer satisfaction) work fine

# Globalization processes can be complex, and it's unlikely you'll want to do everything inhouse

- Globalization is not a commodity: don't try to save a penny a word
  - → Project and process management
  - → Translation (by native speakers resident in the target locales)
  - → Review and quality assurance
  - → Ability to handle non-text content (e.g. audio dubbing)
  - → Technology (e.g. translation memory)

- Make sure you can take your translation memory with you when you change vendors

- Manage translation of global/corporate content centrally
  - → Economies of scale
  - → Consistency

# Websites are simple – they consist of content and functionality

- Websites are quite simple – they consist of only two things:
    → Functionality
    → Content

- Content and functionality complement each other
    → Functionality is what the site does
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    → Without content you'd never know about the functionality

- Both content and functionality rely on technology, which tends to complicate things
    → The best cars are those where you never have to lift the bonnet
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# Thank you.

**michael.leiser@pmintl.com**