

The logo for Lionbridge Life Sciences is located in the upper right quadrant of the slide. It consists of the word "Lionbridge" in a white, sans-serif font, with "LIFE SCIENCES" in a smaller, blue, sans-serif font directly below it. The text is set against a solid orange rectangular background.

Lionbridge  
LIFE SCIENCES

**Going Global:**

**Best Practices in Creating Content for Global Audiences**

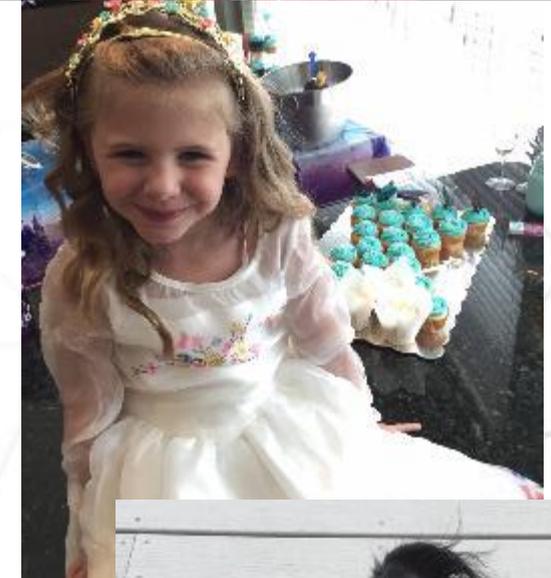
**Presented by: Michael Webb – July 2016**

# Goals for Today

- Provide you with comprehensive best practices creating content that will be “translation friendly” and resonate with international audiences
- To do so I will expound upon best practices in creating global English content within the Life Sciences ecosystem
- I will cover everything from Documentation and Labeling to Software and User Interfaces.
- My goal is to provide you with a roadmap for how you can begin optimizing for translation during the authoring process

# About me

- CO Native (Just try to get me to leave)
  - Hobbies: Skiing, Biking, Waterskiing, time with my Wife, 5 year old daughter, and dog.
- B.A. of Sociology from University of Colorado, Boulder
- Started in Translation/Localization in 2007
  - Focus on Life Sciences and healthcare account management
  - Worn many hats in localization roles
  - Eventually ran multi-state client services team spanning all industries
  - Moved to Lionbridge Life Sciences in January of 2016 where I manage Life Sciences operations for the Western US.
  - Very process focused, allows me to work with the most complex and high risk projects and clients.



# Before I Begin...

- Please don't hesitate to ask questions!
  - I want this to be of the most benefit to you, so please feel free to raise a hand with questions, hopefully I'll have the answers



# State of the Medical Export Market

- U.S. exports of medical devices were valued at approximately \$45 billion in 2015  
[http://trade.gov/topmarkets/pdf/Medical\\_Devices\\_Executive\\_Summary.pdf](http://trade.gov/topmarkets/pdf/Medical_Devices_Executive_Summary.pdf)
- U.S. exports of drugs and medicine during 2015 totaled \$24.6 billion.  
<http://www.worldstopexports.com/drugs-medicine-exports-country/>



**Figure 1: Near-Term Medical Device Export Market Rankings**

|                |                   |               |            |               |
|----------------|-------------------|---------------|------------|---------------|
| 1. Germany     | 5. Belgium        | 9. France     | 13. Norway | 17. Denmark   |
| 2. Japan       | 6. Switzerland    | 10. Australia | 14. Sweden | 18. Singapore |
| 3. Netherlands | 7. United Kingdom | 11. Mexico    | 15. Italy  | 19. Ireland   |
| 4. Canada      | 8. China          | 12. Austria   | 16. Korea  | 20. Israel    |

[http://trade.gov/topmarkets/pdf/Medical\\_Devices\\_Executive\\_Summary.pdf](http://trade.gov/topmarkets/pdf/Medical_Devices_Executive_Summary.pdf)

# Today's Agenda

- General Content Authoring
  - Voice, tone, verbiage, text expansion
- Mapping/Defining the user's language
  - Best practices for choosing a language and making it accessible
- IFUs, User Guides, and other Patient Facing Content
  - Clinical/Regulatory and patient facing documentation
- Device Labeling and Interfaces
  - Best practices
- Software/User Interface
  - Best practices, Pseudo Localization, Numbers, GUI, and Testing
- Bringing it all together



# General Content Authoring

# Don't let Translation be an afterthought

Creating documentation without thinking about the eventual need for translation comes with a cost.

However, if best practices for translation are incorporated into the authoring process you can reap the following benefits:

- Reduced costs for translation and layout
- Faster time to market
- Increased consistency between projects
- Documentation looks like it was authored for the target country instead of it being translated from the English version



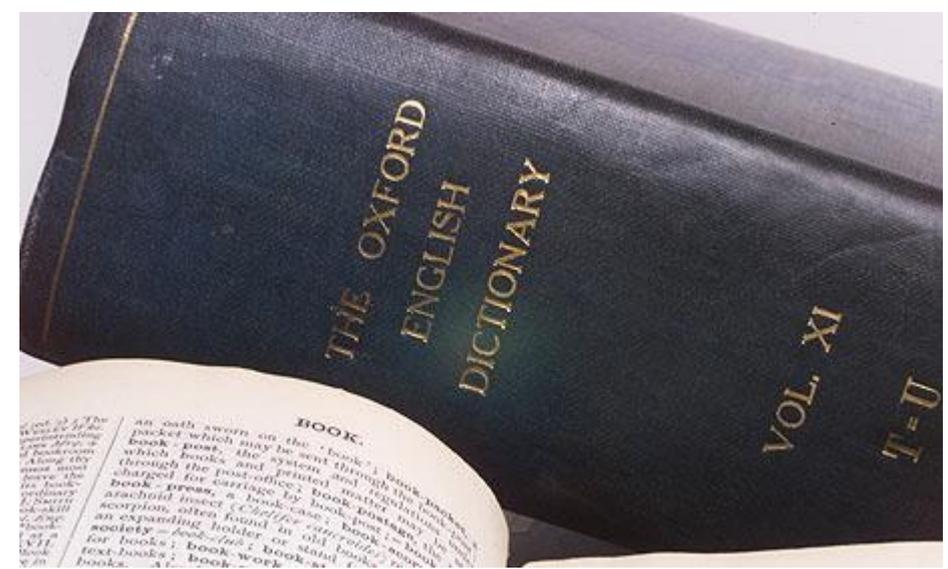
# Use Active Voice and Clear References

***BAD*** - *When the results were announced by the researchers, **they** were questioned by **others**.*

***BETTER*** - *Experts questioned the results announced by the researchers.*

- ***Does "they" refer to results or researchers?***
- ***Does "others" refer to results or researchers?***

# Use Standard English



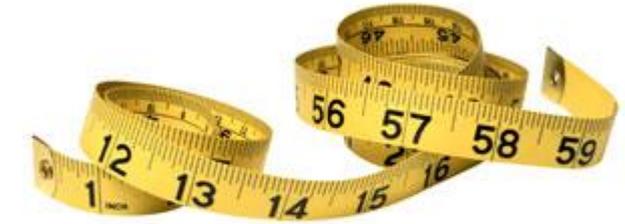
- Avoid colloquialisms, slang, idioms, Latin, humor, or other culturally centric phrases.
  - Example 1 – “No Fear”
  - Example 2 - The **out-of-the-box** configuration of the product
    - Instead use: The default configuration of the product
  - Example 3 – After the last two steps you’re **on the home stretch** of your installation
    - Instead use: After the last two steps your installation is nearly complete.
  - Example 4 – “etc.” This commonly used abbreviation is a Latin derivative and is often not understood in other languages

# Be Clear and Concise

- Truncate sentences containing unnecessary information
  - Reduce page count (lower print costs and ship weight)
  - Reduce number of words for translation (lower cost faster turn)
- Example:
  - Original: Insert the installation CD into your Computer's CD ROM drive
  - Truncated: Insert the installation CD
    - 10 words VS 4 words



# Measurements and Dates



- Measurements
  - Author English manuals with both Imperial and Metric units
    - Removes guesswork in conversations for translators
    - Ensures complete consistency in numbers across translations
- Dates:
  - US date format of **Month/Day/Year** is **Day/Month/Year** in most other locales
    - Best practice is to write out the month 8 Jun 2016
      - Is 6/8/2016 August 6th or June 8th?
    - Can use EU date format as well but that can become confusing for US market.

# Numbers

- Once again the way we reflect numbers in the US is in opposition to the rest of the world
  - US: \$1,000,000.00
  - Rest of World: \$1.000.000,00
  - Commas and decimals are switched



# Use of Plurals and Font Styles

- Always avoid using the optional plural notation of “(s)”
  - Very problematic in most other languages
- Font Style Considerations:
  - *Italic* and **Bold** are not used for Asian languages because they destroy the aesthetics of the characters and make them harder to read
  - No Exclamation mark or Punctuation mark in Thai or Japanese
  - Exclamation marks and question marks need the inverted one at the beginning of a sentence in Spanish (extra space)
  - Doublesigned punctuation needs a space before and a space after it in French (: ; ? ! %)
  - ; is used as the question mark in Greek

# Space Requirements

- When text is translated from English it typically **EXPANDS**
  - Most Romance languages expand by 25%
  - Many others expand by as much as 30% or more
- This creates SPACE ISSUES
  - 25% expansion means that a translation will take 25% more characters to say the same thing in another language.
    - Gendered nouns, grammar, syntax, and style all impact expansion
  - Design English documents and UIs with translation in mind
    - Leave space in text boxes and at the bottom of pages
    - Avoid hard coded text box sizes or margins
    - Linguists can also help support this process by being succinct

**Leave EXTRA Space Wherever Possible**

# Consistency

- Consistency in your English will result in significant benefits when it comes to translation.
  - 2 Main considerations for consistency:
    - Terminology
      - Define terms in English and use them consistently
        - Sprint or Run?
        - Apartment or Flat?
        - Verify, Check, or Ensure?
    - Overall content Strategy
      - Use single sourcing methods to create consistency across your English materials
        - Disclaimers, product features, warning statements, warranties all tend to be highly similar across a company's product line

**Consistency in English = COST SAVINGS IN TRANSLATION**

# Mapping/Defining a Language

# Language Best Practices

- NO Flags/Maps

- Can cause confusion



- Instead use ISO 639 Language Abbreviation or Native Language name, then list alphabetically:

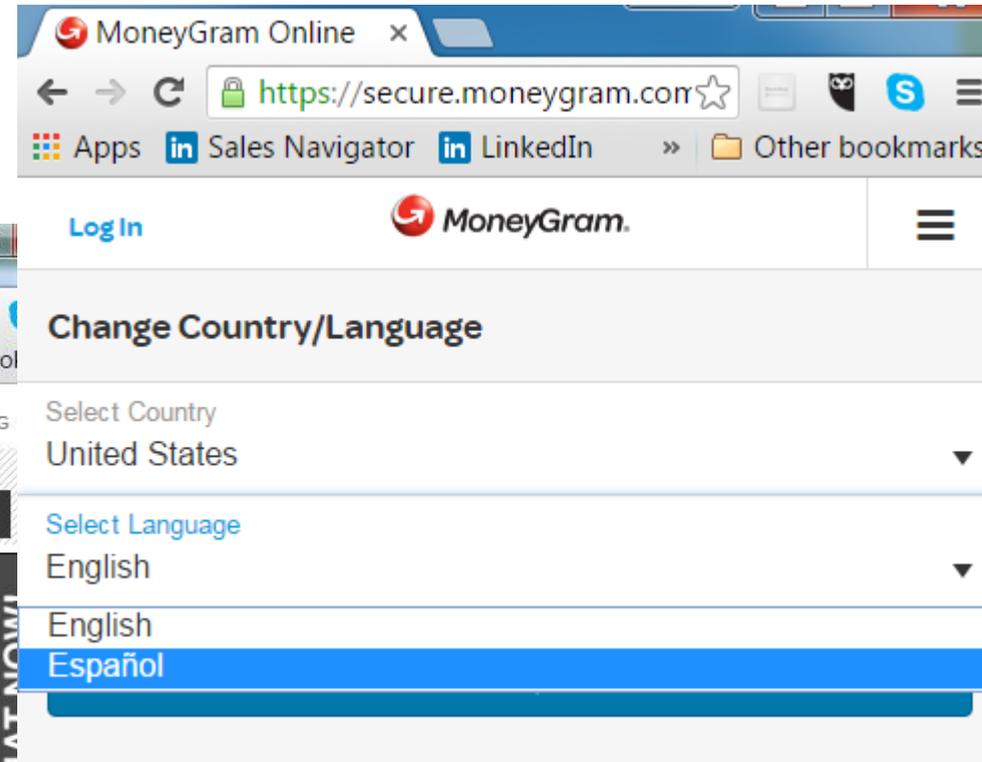
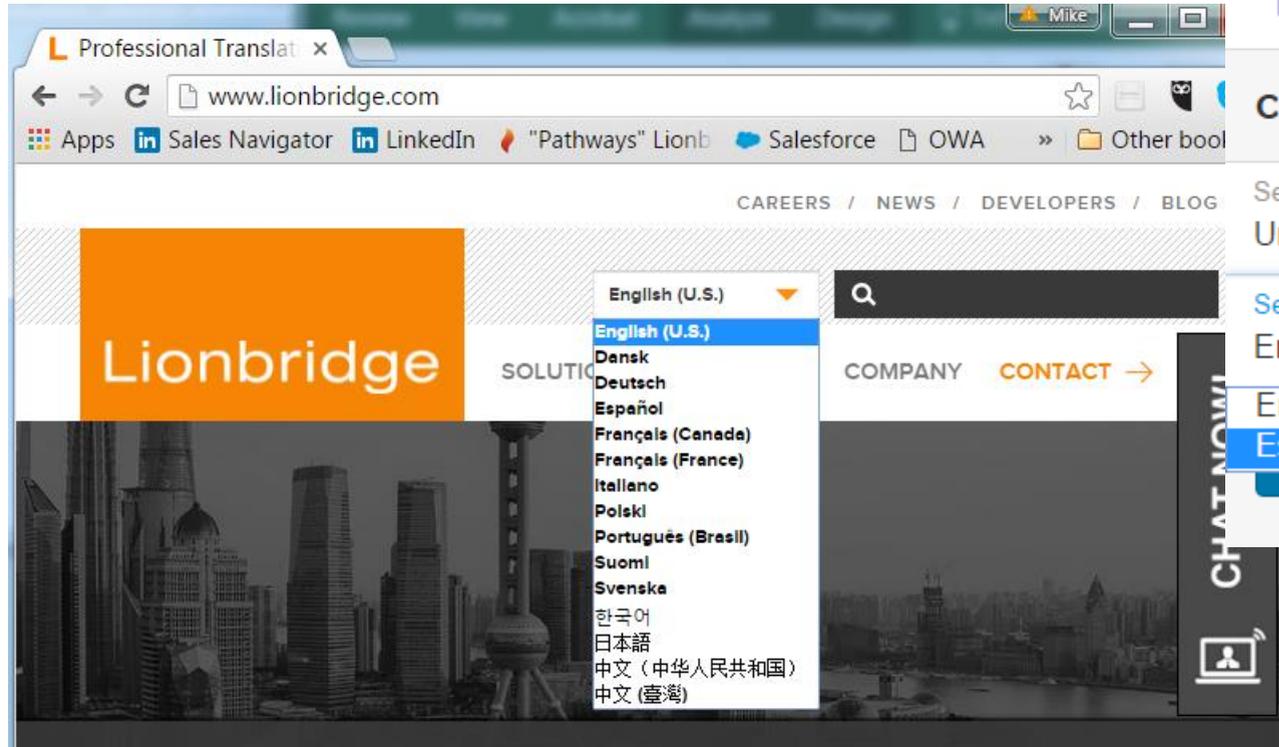
- Italian = IT, Italiano
- German = DE, Deutsche
- Allows for specificity of dialect when wanted but also allows for generic use of a language where/when appropriate.

- Can use 3 Digit code if more specificity is needed.

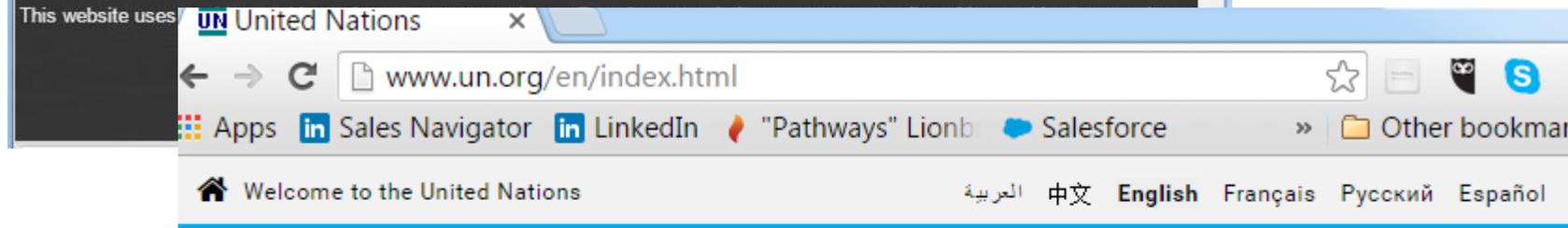
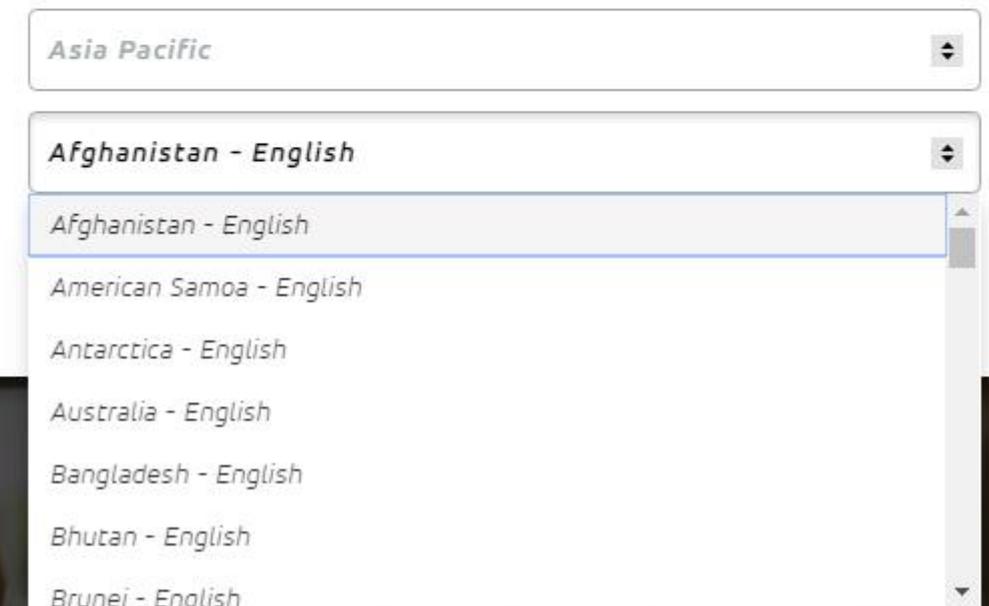
- Code list available at: [https://www.loc.gov/standards/iso639-2/php/code\\_list.php](https://www.loc.gov/standards/iso639-2/php/code_list.php)

- More info: [http://www.iso.org/iso/home/standards/language\\_codes.htm](http://www.iso.org/iso/home/standards/language_codes.htm)

# Real World Examples



Please select a location



Search the UN

A-Z Site Index

Home About the UN What We Do Where We Work News and Media Observances

# Dialects, Dialects, Dialects

- Most Languages are **not Universal** when spoken in different regions.
  - English – US, UK, Australia, India
  - Spanish – Spain, Puerto Rico, Mexico, Argentina, or generic/universal
  - Chinese – Mandarin Vs Cantonese, Simplified Vs. Traditional
- **ASK** an expert:
  - Translation partner, in-country marketing, or sales
  - When depending on an expert opinion outside of your organization sanity check with your personnel when possible.
    - Linguists cannot know your brand as well as your personnel on the ground

# In-Country Review - Overview

- **Benefits:**

- Allows input of your personnel who:
  - Represent your brand on a daily basis
  - Understand the way your product is positioned and can advise on word choice better than someone outside of your organization
- In-country input makes your personnel feel more in tune with global marketing efforts and can lead to better success.

- **Potential Pitfalls:**

- Cost
- Timeline
  - Can be the longest portion of a translation process
  - Take personnel away from their core tasks
- Inconsistency

# In-Country Review – Best Practices

- **Technology**

- Use one of the tools available to automate the process

- **Personnel**

- Assign a SINGLE default reviewer for language/region
  - Assign back-ups for absence or spikes in volume
  - Default reviewer should also be the final authority on their language

- **Scope**

- Frame context of the review for best results
  - Checking the work of a trusted provider for:
    - Style, tone, word choice, that is inline with company vernacular
  - NOT asking to re-write or to check because there is any reason to doubt the objective quality
    - Defining this scope is essential in a successful; review process.
  - As the initial translations better align with reviewer preferences; review process can be lessened/removed.

# IFUs, User Guides, and other Patient Facing Content

# Layout Considerations

- **Overall Layout -**

- Multilingual or Monolingual?

- Multilingual is typically more cost effective and reduces SKUs
    - If Multilingual implement languages alphabetically based on ISO abbreviation
      - OK if you want to position your most common language (usually English) at Front

- LEAVE SPACE

- Remember that nasty text expansion topic we covered earlier? Keep 25-30% in mind.
      - Blank Space, room for font size reduction, margin increases, reduction of image sizes

# Layout Considerations Continued

- **Diagrams, tables, and Images**
  - Always use Layered images for easier translation
  - Provide source layered files, PDF is not translations “friendly”
    - InDesign and Adobe files: Never flatten images, provide live formats, not jpg, png, or images
    - MS Office Formats: Use text boxes for callouts and labels
  - Use culturally appropriate imagery. For instance use pictures of Soccer over Football or Baseball for most of the world.



# Informed Consent Forms and other Site Specific Material

- **Master and Site Specific ICF process**
  - Translate Master ICF
    - Create site specific ICF using track changes function
    - Provide Translator with site specific English ICF with track changes function turned on
      - Linguists can then implement tracked changes on the Site specific ICF avoiding re-translation and significantly reducing costs.
      - If changes are not tracked other processes can usually be used to avoid full re-translation
  - Process can also be applied to other site specific documentation

# Device Labeling and Interfaces

# Device Labels

- **Use SYMBOLS whenever possible**
  - Significantly reduces crowding and can help eliminate need for multilingual labeling.
    - Symbols can be fully defined in the user manual
      - Power: 
      - Up/Down
      - Enter: "OK" or
- Minimize on-device labeling where possible
  - Leave space to account for:
    - Text expansion
    - Country specific requirements



# Device Interface

- Space restrictions
  - Remember that nasty text expansion topic we covered earlier? Keep 25-30% in mind.
  - Most devices are designed to exactly accommodate English string lengths making localization even harder.
    - Blank Space, room for font size reduction, margin increases, reduction of image sizes.
      - Avoid awkward abbreviations that can confuse patients and providers



# Device Interface (Continued)

- Character considerations:

- String Length

- Most devices have a maximum string length

- Know it and tell it to your translators

- Translations can be tailored to accommodate the restriction.

- This must be done on the front end. Much harder to complete this operation after translation is complete

- Try to leave room on English strings

- Compatibility

- Single Vs Double Byte Characters 한자

- Accents and Special Characters

- Know your compatibility

- **ñ. À Æ Ê Õ**

- Don't be fooled like a major pet retailer...



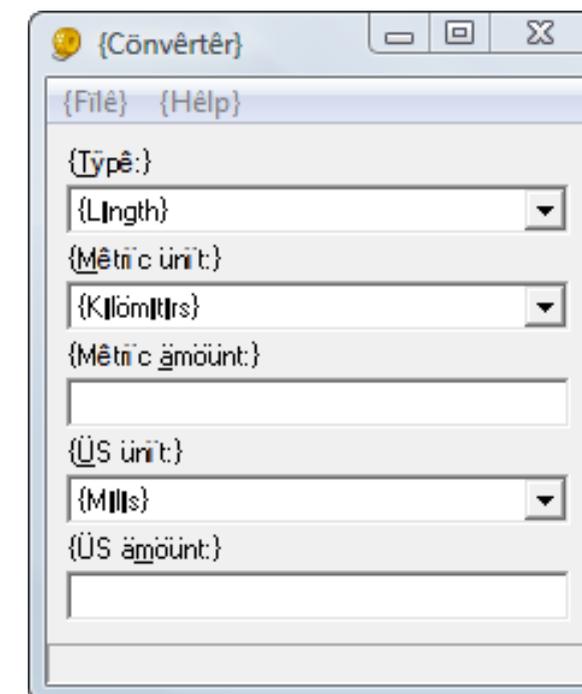
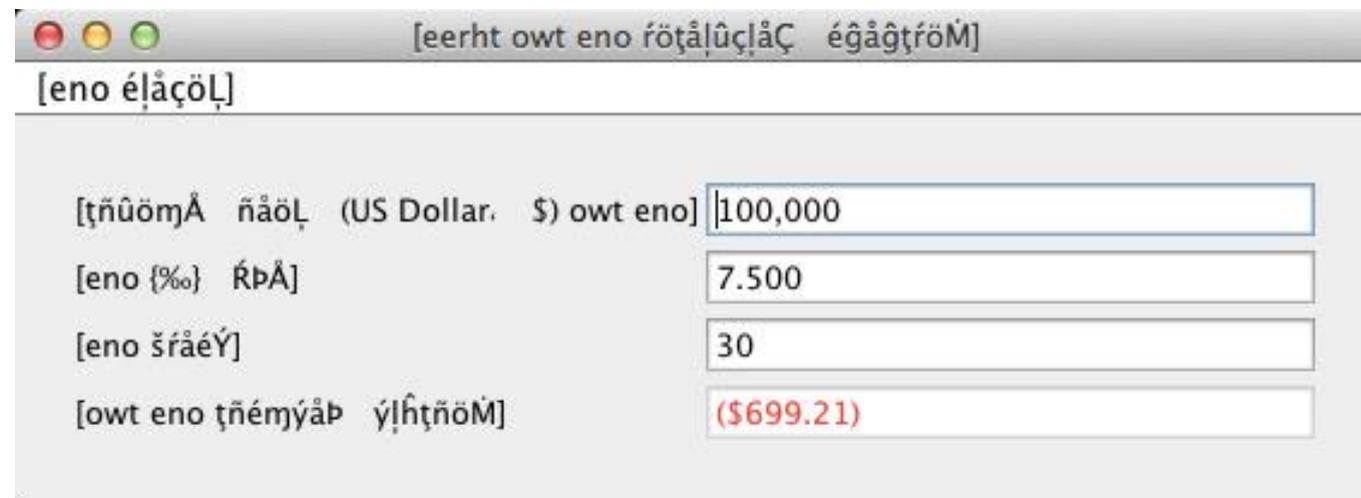
# Software/User Interface

# Software - Pre-Localization considerations:

- Character and String Lengths – See Device Interface slides
- Design considerations
  - Use Dynamic button, menu, and dropdown sizes
    - Hard coded sizes will force code changes to accommodate some expanded text
    - Images
      - Do not include text on images/graphics
      - Use generic images that are not culturally specific
  - **PSEUDOLOCALIZATION!**
    - Don't skip this step!

# Pseudolocalization

- Software testing method used for testing internationalization aspects of software.
- Instead of translating the text of the software into a foreign language, the textual elements of an application are replaced with an altered version of the original language.
- Learn about localization issues before they are encountered during the translation process.



# Software – Post Localization

- In-country Review
  - Will it be completed? If so follow recommendations on slides 18-19
  - Always review translated strings in non-compiled format
    - Review should precede any testing operations
- Software Testing
  - Functional and Linguistic
    - Essential to limit liability and ensure proper function
    - Testing can be done out of country
      - Software testing specialists utilized
    - Both functional and linguistic bugs targeted and mitigated
      - Regression rounds completed to ensure bugs are eliminated and software is fully functional.

# Bringing it Home

# Translation cannot be an afterthought

- Translation is all encompassing
  - Virtually every element of a document/product affected
  - Translations are a complex and time consuming process, creating content that is localization friendly will pay dividends to **both cost and** timelines for translation
- Documentation, Software, and Labeling all have specific considerations.
- Review processes are very valuable but must have defined workflows.
- Always think about the end users (and not just English speaking customer when authoring
- And finally...

# 10 Commandments of Translation

- Use Active Voice, concise sentence structure
- No slang or colloquialisms
- Standardize Measurements, Dates, and Numbers
- Use ISO Abbreviations
- Consistency
- Target specific demographics wherever possible
- Leave Space and Use Layers
- Manage In-Country Reviews
- Use Symbols where possible
- TEST your software!

# Q&A

THANK YOU

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