Multilingual Web Accessibility

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Setting Expectations

The COVID-19 pandemic has drastically impacted the world.

Please be patient and kind.

This session:

→   Has a generic design.
→   Is not prepared for a11y.
→   Still has substance!

Setting Expectations

→ Multilingual (**ML**) & Accessibility (**a11y**) are big, complex topics.

→ Combining the two increases complexity.

→ We are going to cover big concepts.

→ Assume some collective accessibility knowledge.

→ Please ask questions!

Assumptions

1. Follow best practices and standards

2. Skilled team members will perform work

3. Specialists for each organization and technology architect the most viable solution *for the org's needs.*

Disclaimer: *this session is for information only and does not represent any legal advice.*

Session Goals

Gain understanding.

We will surface:

- → Concepts
- → Considerations
- → Challenges

Reaching our goals

1. Mutual considerations of ML and a11y
2. Overview of multilingual implementations
3. Highlight language-specific accessibility needs
4. Challenges of compliance
5. Impact to processes & workflow

Mutual Considerations

[Some] Mutual considerations of ML & a11y

1. Legal
2. Design
3. Development
4. Comprehension
5. Testing
6. Workflow

Legal

- → Accessibility compliance
  - → Government agencies, higher education, industry
  - → Many international laws; most use WCAG 2.0 as a standard
- → Multilingual requirements
  - → Industry vertical + Government + Population
  - → Health care + Gov't contract + Spanish Population in CA
  - → Countries with multiple official languages (Canada)

Design

→ Layout (structure, negative space, reflow, zoom)

→ Fonts (selection, size, colors)

→ Media (text images, video, audio, infographics)

→ Navigation (menus, blocks, headings)

Development

→ Semantic HTML is good for everyone!

→ Use specialized markup to surface text strings

→ Require additional technology configurations, libraries, and possible integrations

→ Require additional training and skills

→ Require specific testing tools, including manual tests

→ Require full-coverage/best-practices adherence

Comprehension

→ Plain language content (in all languages)

→ Content reading level

→ Content structure (headings, paragraph, sentences)

→ Content structure (tabular data)

→ Text-based alternatives (diagrams, charts)

→ Language delivery (visual, auditory, haptic)

Testing

→ Specific tools

→ Manual testing

→ Very user-specific testing (e.g., Low-sight Brazilian Portuguese)

→ Test coverage

→ Testing process
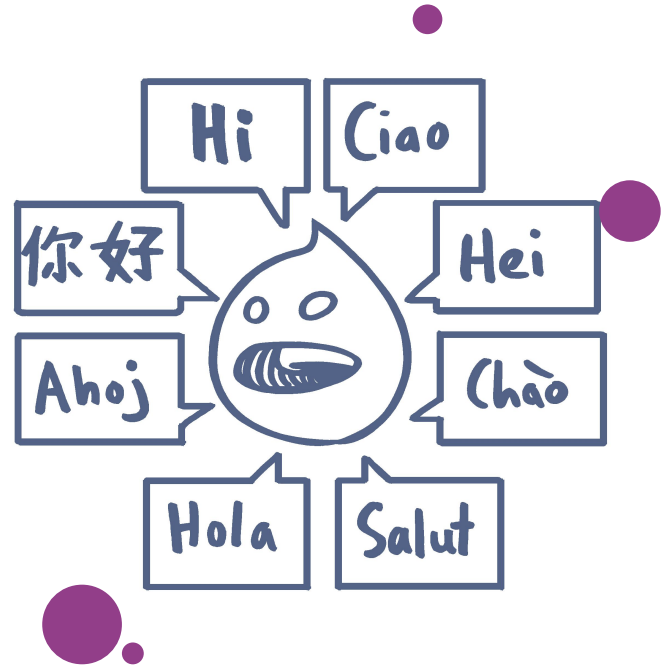
→ Validation & proof of compliance

Workflow

→ Glossaries, taxonomies, & structural content

→ Initial content creation

→ Content review & validation

→ Content publication

→ End-to-end time to market

Multilingual Web Overview

Multilingual Topics

→ Multilingual design

→ Multilingual page rendering

→ Multilingual development

→ Multilingual content process

Multilingual design considerations

→ Right-to-left layouts

→ Long words & symbols in all content elements

→ Using text in images (non SVG)

→ Supporting text (labels, menus, etc.)

→ Use of SVGs

Multilingual page rendering: Native

Languages are rendered directly from code (or CMS).

Examples:

→ Drupal core language, Adobe AEM native support

→ Hard-coded HTML (or HTML output)

→ Often integrated with a 3rd Party TMS to provide the multilingual translations (Lingotek)

Multilingual page rendering: Proxy

Translations are added with a JavaScript overlay and served from a Translation Management Service.

Examples:

→ Google Translate widget (on-site), Chrome plugin

→ Paid SaaS: Transifex, Smartling GDN, SDL Proxy

→ Some proxies require additional development to support decoupled sites (React/Vue).

About the Google Translate widget

The website plugin is no longer supported!

→ Quality of machine translations reduced by overuse.

→ User level: use Google Chrome translate plugin.

ccount   Ask Us   Get a Library Card   G Select Language ▼

We no longer provide new access to Google Translate's Website Translator. This change does not affect existing use of the Website Translator.

We encourage users looking to translate webpages to use browsers that support translation natively.

Multilingual development considerations

→ Mindful when embedding text strings in code.

→ Surface text for content editor modifications.

→ Define explicit language on the page and sections.

→ Forms (native and third-party integrations).

→ All of the "hidden" and less-obvious content:

→ Page metadata, OpenGraph, and Social Media integrations

→ HREFlang, URLs

Multilingual content workflow

→ Source content must be "final for translation".

→ Human/professional translation costs money.

→ Machine translation impacts content comprehension.

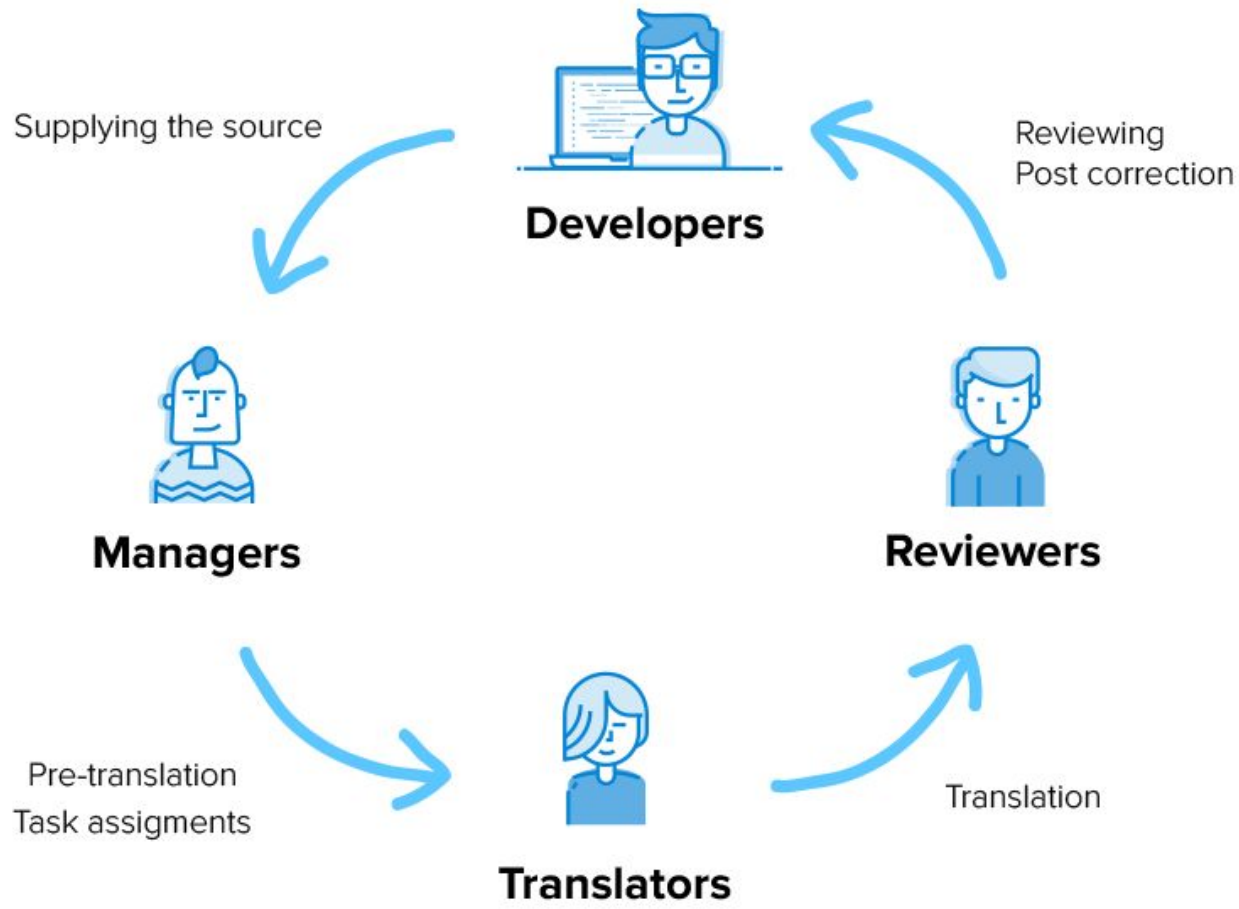→ Translations commonly take place in a TMS system and may have limited context.

→

Multilingual Team

Image source: https://www.globalizationpartners.com/2013/04/08/website-translation-reviewing-source-files-and-cms-workflows/
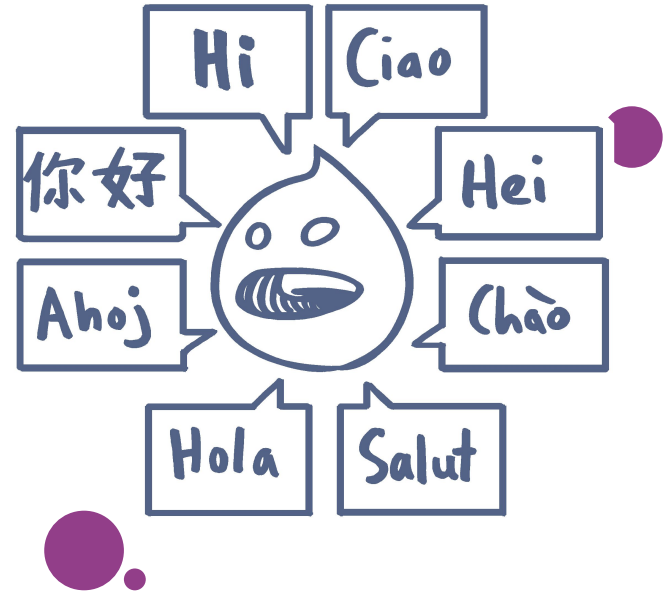
Supplying the source

Developers

Reviewing
Post correction

Managers

Reviewers

Pre-translation
Task assigments

Translation

Translators

Accessibility Language Considerations

Accessibility language considerations

→ ML Accessibility coverage

→ Accessible Technology

→ WCAG Success Criteria

Multilingual Accessibility Coverage

→ Identify your needs (legal & business)

→ Identify your tools, team, and process

→ Balance the process within your org constraints.

→ Challenges:

  → Many testing steps & seemingly exponential test cases.

  → **Editorial Content is a huge source of compliance issues!**

Multilingual Accessible Technology

→ Native Operating System languages

→ Text-to-speech: Synthesizers, Screen readers

→ What about Braille?

→ Challenges:

    → AT requires semantic HTML to function correctly

    → Language coverage differs across technology

WCAG: Multilingual Design

→ Reflow, resize, text spacing, font, text size

→ Text based buttons (size & functionality)

→ Clear representation (language switchers (flag/code)

→ Images of text

→ Challenges

  → Requires a11y design testing across languages

  → Media approach should be considered

WCAG: Identify language in Code

→ Language of page <html lang="en">

→ Language of parts mon ordinateur parle français

→ Challenges:

  → Website & CMS configuration required

  → In-page content: editor tools, training, and TMS process

# WCAG: Success Criteria w/ translatable text

→ Non-text alternatives

→ Errors, labels, messages

→ Audio descriptions, closed captions

→ Sign-language

→ Challenges:

  → CMS/display - rendering translated versions

  → Workflow - surface, translate, test, and publish language variants

Challenges with Compliance

Compliance? Choice vs. Requirement

→ Choice:

  → Increase market reach

  → The Greater Good

→ Requirement:

  → Scope: Municipal, State, and Federal

  → Receive funding

  → High population is non-English speaking

  → Essential services
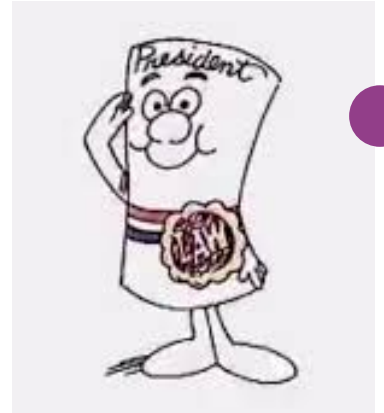
Proof of compliance

- → Availability of tools
    - → Non-English reading level
- → False-negatives
    - → Spell checking
- → Manual testing
    - → Trusted tester (DHS)
- → Proof over time quality scores
    - → Quantification of compliance
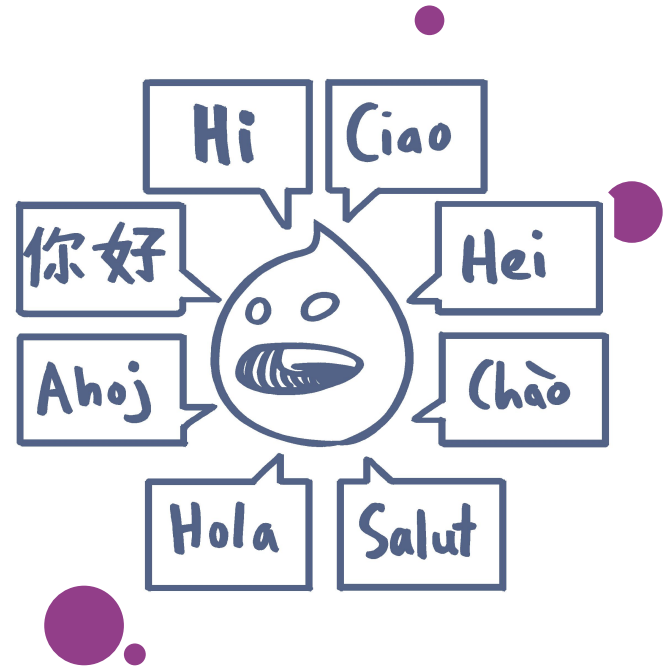
Cost of compliance

→ Translated content a11y tests

  → How much is automatic?

  → How much is manual?

  → How often?

→ Multiple compliance req's

  → a11y + Language Access Laws

Workflow Impact

Common workflows

→ Source content workflow A11y test here? Just content or the whole tech?

→ Translation content workflow Train? Good source = good translation?

→ Localization content workflow Train? Test? Locale specific content.

→ Content specific success criteria Train? Test? Alt text, colloquialisms, etc.

→ Specialized content workflows Digital Assets (DAM), Processes, APIs

→ Content publication lifecycle (all languages) Proof of public access. When does it go "live"? How to manage changes?

Workflow considerations

→ When do you add a11y to the ML content workflows?

→ When do you add ML to the a11y workflows?

→ Who do you train?

→ Who is testing?

→ When do you test?

→ What are you testing?
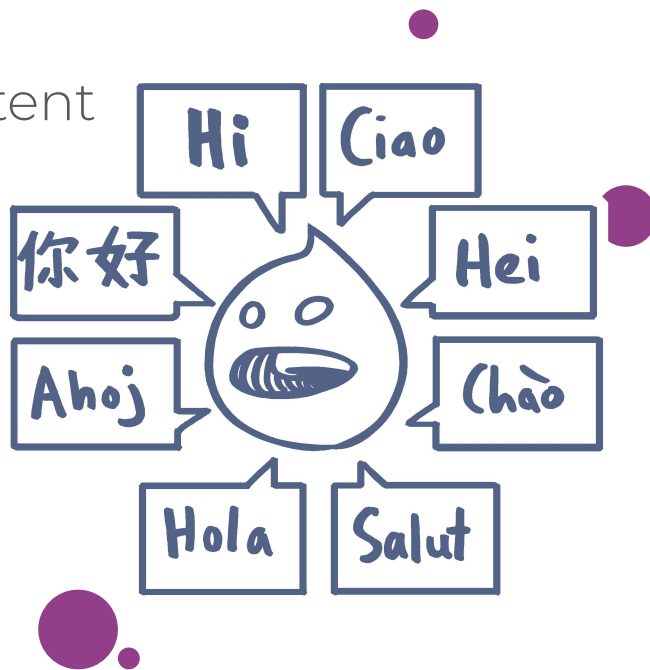
External considerations

→ Translations happen outside the CMS and returned to the website.

→ Professional translators change without control.

→ How do the 3rd party integrated systems support ML + a11y? Integrating requires consistency and more testing.
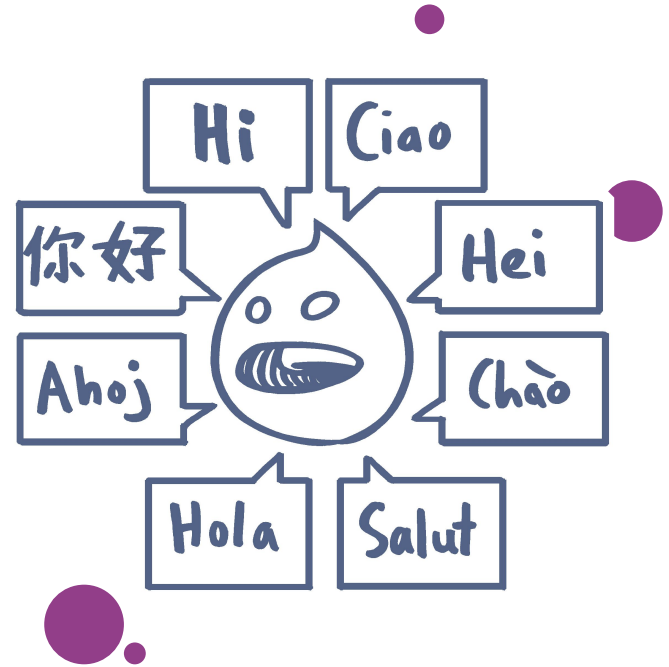
Perform Audits

→ **Personally:** enterprise tech, process, and multilingual audits for 25+ years, a11y audits for 4 years

→ **Multilingual:** preparation for translation, efficient translation process

→ **A11y:** tie comprehensive testing into the overall process, use audits as a starting point or confirm baseline
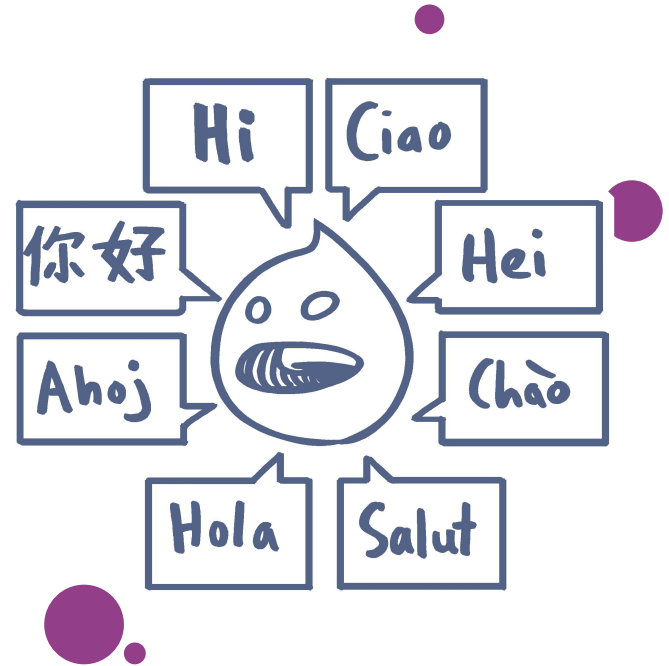
Accessible Multilingual Team

Accessibility
Governance
Team

Accessibility
Testers

Accessibility
Testing Tools

Image source: https://www.globalizationpartners.com/2013/04/08/website-translation-reviewing-source-files-and-cms-workflows/

Questions?

Thank you!
Merci!
Gracias!