Web Accessibility - Bridging the Gap Between IT & HR

ESSENTIAL ACCESSIBILITY

1.3 Billion People
With Disabilities Globally

Over **60 Million** People
With Disabilities Make it the
Largest Minority Group in Us

19.3% of Americans Self-
identify as Having a Disability

Friends And Family Represent Another
105 Million Consumers Who Have an
Emotional Connection to Disability

People With Disabilities Control
$2 Trillion in Income Globally

"I might be young but I speak for an aging population."

-Stef

ESSENTIAL ACCESSIBILITY.

"Disability for me is not a word, because I see him do a lot of stuff that normally we don't do."

-Juan Sr., father of Juan Jr.

ESSENTIAL ACCESSIBILITY.

What is Web Accessibility?

Web accessibility means that websites, tools, and technologies are designed and developed so that people with disabilities can use them.

Learning the Lingo

- **W3C** – World Wide Web Consortium
- **WCAG** – Web Content Accessibility Guidelines
- **AODA** – Accessibility for Ontarians with Disabilities Act
- **Section 508** – US Federal government web accessibility requirement
- **EN 301 549** – Europe web accessibility requirements
- **ADA** – Americans with Disability Act (Has different Titles)
- **Section 504** – Civil Rights Law (Rehabilitation Act)
- **HTML** – Hypertext Markup Language
- **HTML5** – The latest version of HTML
- **CSS** – Cascading Style Sheets
- **ARIA** – Accessible Rich Internet Applications
- **VPAT** – Voluntary Product Accessibility Template
- **HOH** – Hard of Hearing
- **A11y** – Accessibility (11 letters between A and Y)
- **AT** – Assistive Technology
- **UD** – Universal Design

Everyone Benefits from Accessibility

How many times have you used voice recognition or text to speech on your phone?

Have you ever zoomed in on a webpage to increase the text to a readable size?

Have you ever used word prediction when typing or texting?

Have you ever noticed your cell phone automatically adjust the brightness of your screen for different environments?

Benefits of Accessibility

Maximize	Maximize reach, revenues, and ultimately profits
Retain	Retain your current investment in resources
Tap	Tap into new pool of knowledge workers – those with disabilities
Increase	Increase productivity for all
Generate	Generate a positive media response
Use	Use as a competitive differentiator
Increase	Increase customer loyalty
Support	Support corporate social responsibility
Attract	Attract not only those people with disabilities, but their families, friends, co-workers, health care professionals

Accessibility ROI

ROI of 2.4:1

BUSINESS CASE

Return on Goodwill:
Return on Investment for Accessibility
Tom Brinck, Randolph G. Bias, Deborah J. Mayhew

Market Increase of 8%

EXTEND MARKET REACH

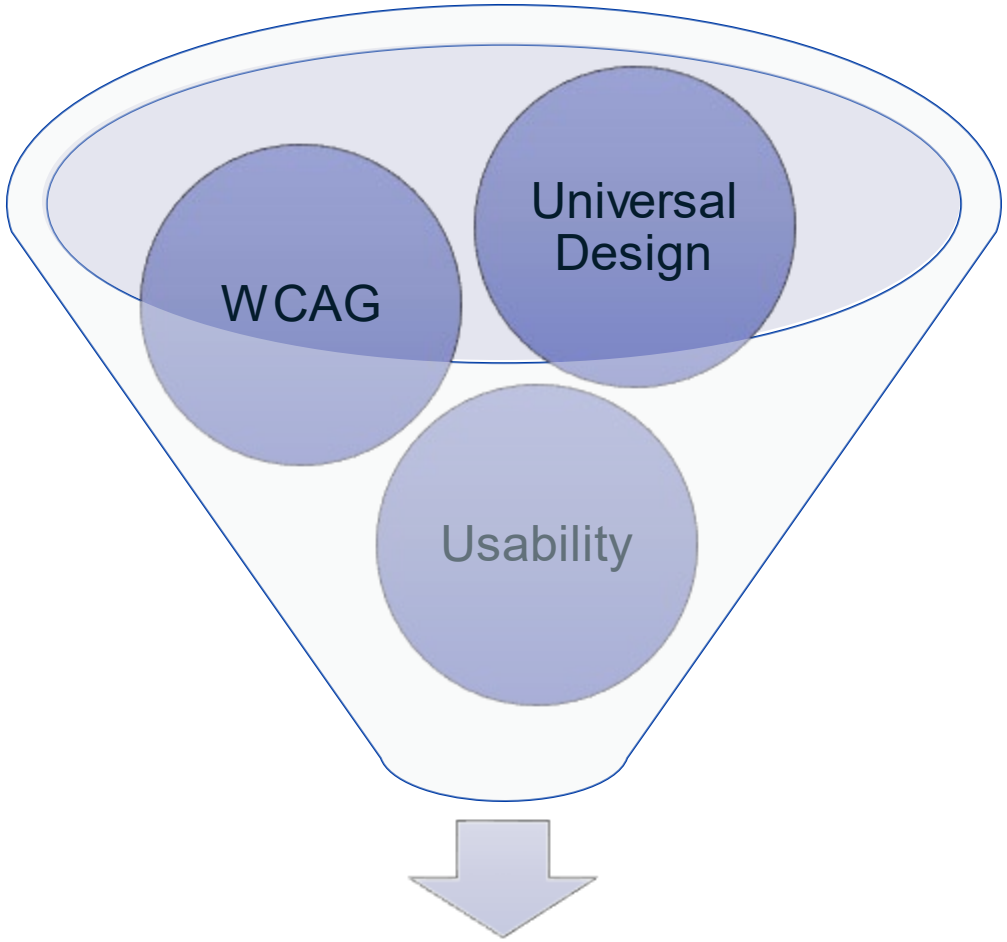
Increased Natural Search Traffic by 7%

SEO

Accessibility ROI

- Some business assumptions:
  - The site gets 10,000 visits a month
  - Of those 10,000 visits, 1,000 people (10%) put an item in the shopping cart
  - Of those 1,000, 333 (33%) start the checkout process
- Of those 333 people who start checkout, 100 of them complete checkout (a 70% "abandonment rate"*)
- The site brings in $10,000 in revenue a month (average of $100 per checkout)
- We know that 19% of people declare that they deal with a disability. Of our 10,000 visits, therefore, 1,900 people probably have a disability that affects the way that they use the site.

WCAG along is not Enough!

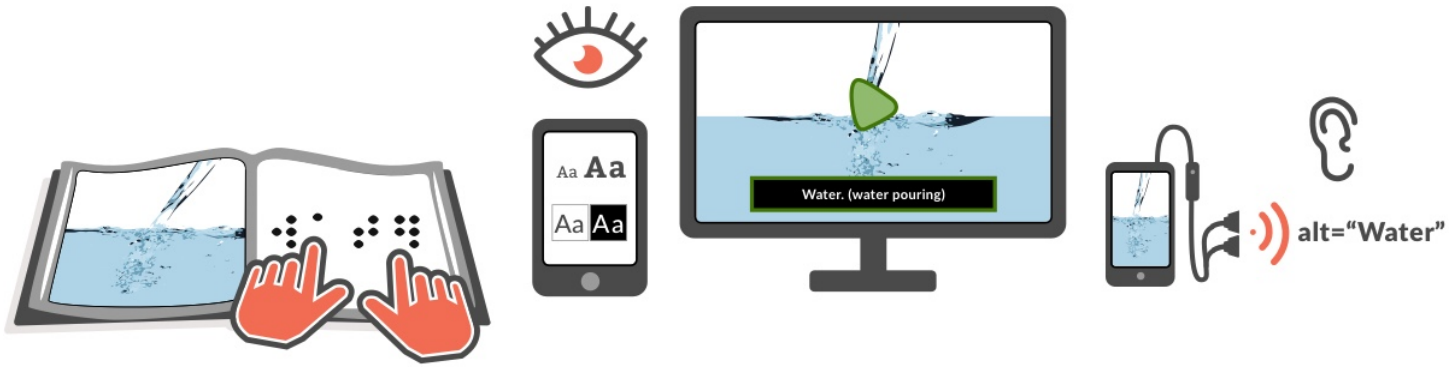


EQUAL ACCESS

Perceivable

To make sure learners can see and hear your content, you will learn how to:

- Add alternative text to images and other visuals
- Close caption videos or provide transcripts
- Provide sufficient color contrast between text and its background
- Make sure content does not rely on color alone



Operable

To make sure learners can interact with your content with a variety of tools, you will learn how to:

- Provide a clear structure with properly marked up headings
- Create descriptive links that make sense out of context
- Provide sufficient time for interaction and response
- Avoid content that can trigger seizures

Understandable

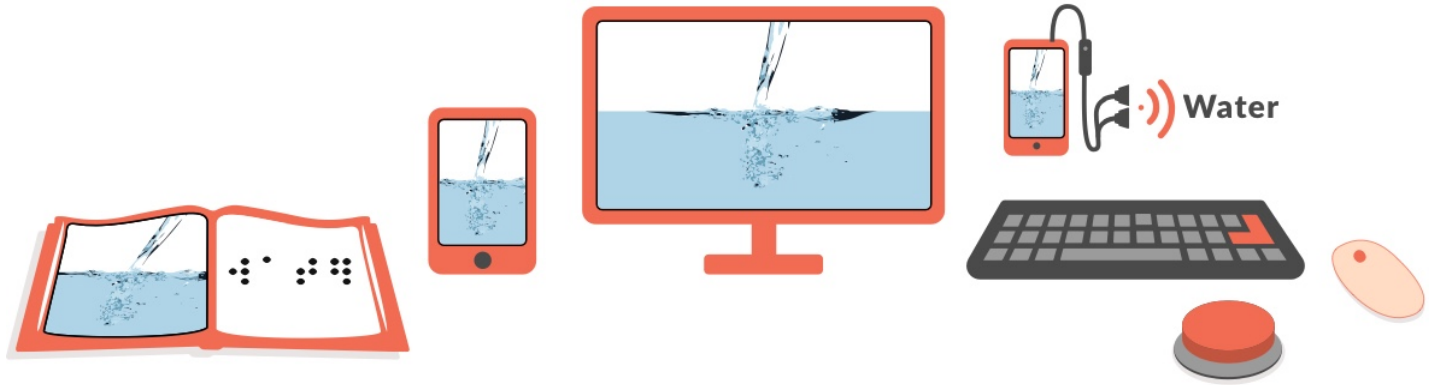
To make sure learners can understand your content and enjoy a predictable experience, you will learn how to:

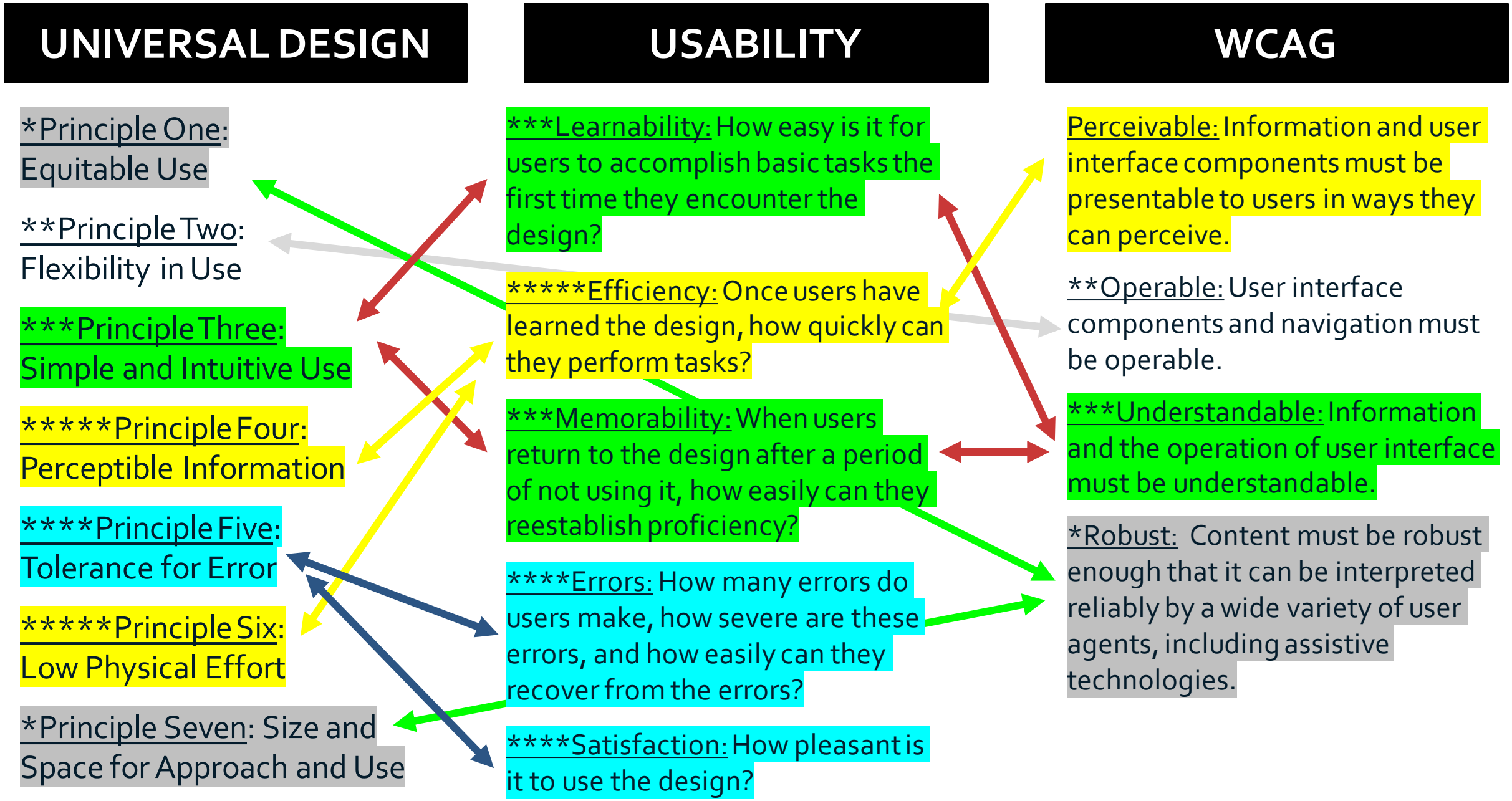
- Clarify expectations through clear directions and models
- Follow conventions to ensure a predictable and consistent experience
- Use plain language
- Indicate the language of your content

Robust

To ensure your content works well with current and future technologies, you will learn how to:

- Add metadata to make content easier to find and use
- Perform an accessibility check
- Perform basic assistive technology testing




UNIVERSAL DESIGN
USABILITY
WCAG
*Principle One: Equitable Use
**Principle Two: Flexibility in Use
***Principle Three: Simple and Intuitive Use
*****Principle Four: Perceptible Information
****Principle Five: Tolerance for Error
*****Principle Six: Low Physical Effort
*Principle Seven: Size and Space for Approach and Use
***Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?
*****Efficiency: Once users have learned the design, how quickly can they perform tasks?
***Memorability: When users return to the design after a period of not using it, how easily can they reestablish proficiency?
****Errors: How many errors do users make, how severe are these errors, and how easily can they recover from the errors?
****Satisfaction: How pleasant is it to use the design?
Perceivable: Information and user interface components must be presentable to users in ways they can perceive.
**Operable: User interface components and navigation must be operable.
***Understandable: Information and the operation of user interface must be understandable.
*Robust: Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

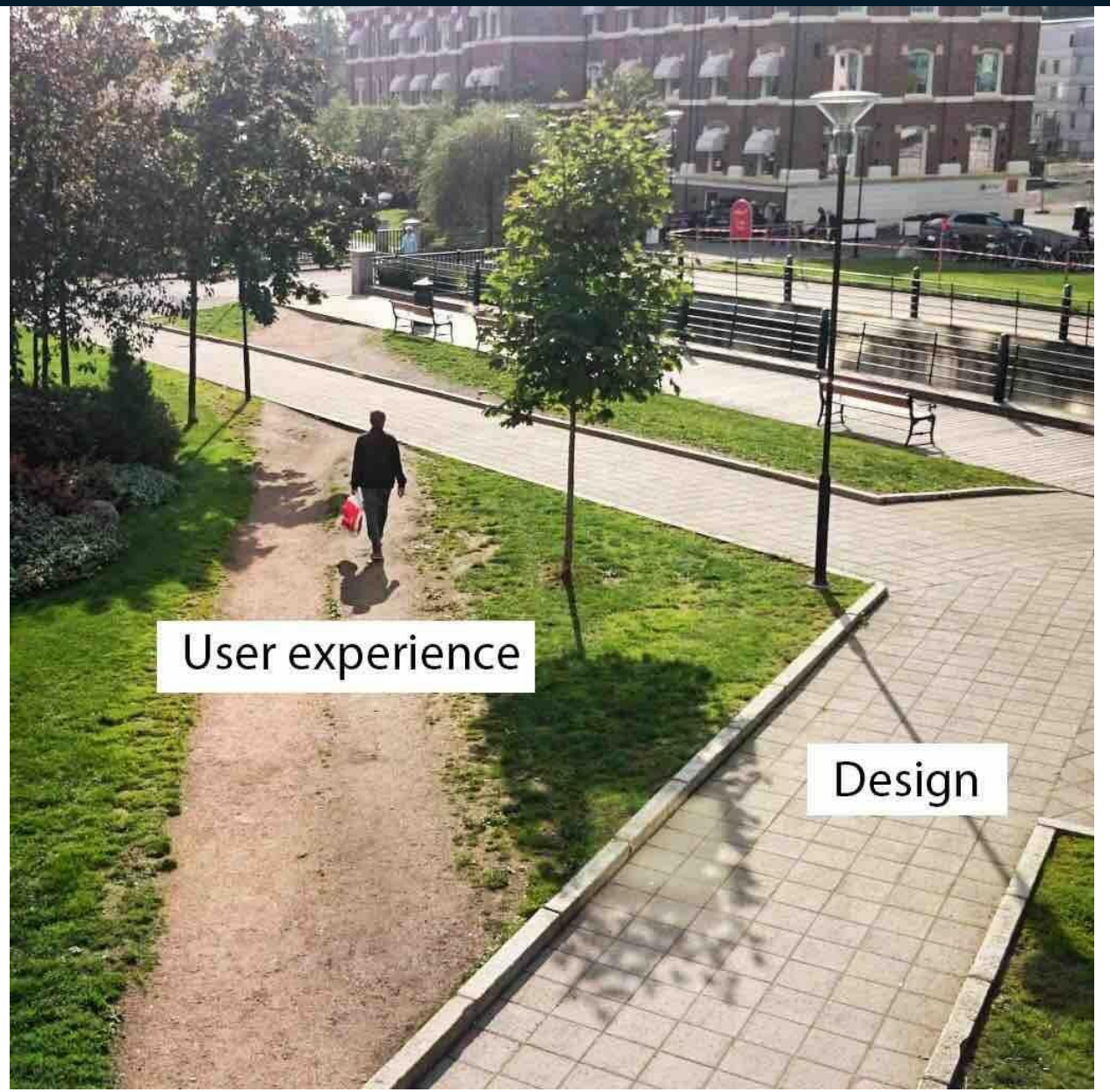
Work Smarter not Harder

CLEARING A PATH
FOR PEOPLE WITH SPECIAL NEEDS
CLEARS THE PATH FOR EVERYONE!

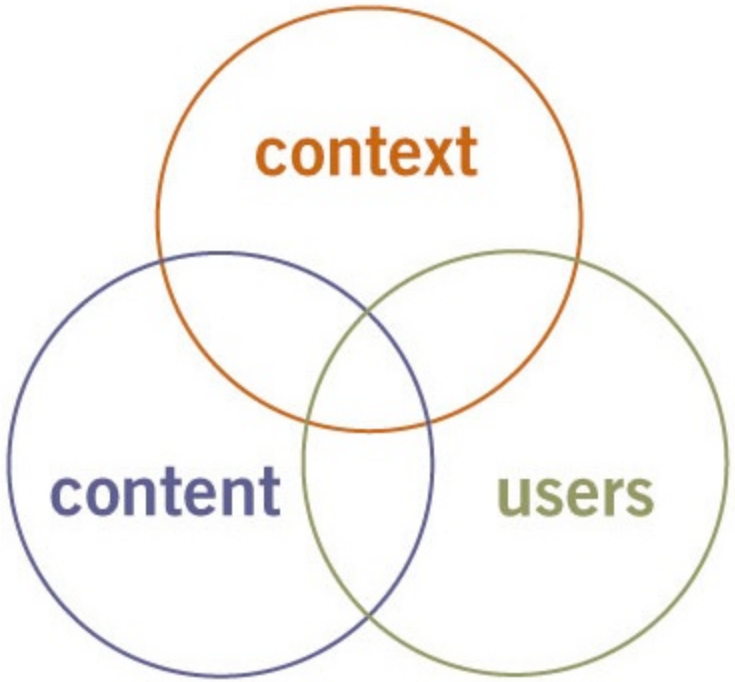

Consider the affects of Perspective
Is this a *bridge* or is this a *fence*?

Perspective *is* Everything!

It doesn't always turn out how we thought.



Balance the Basic User Experience



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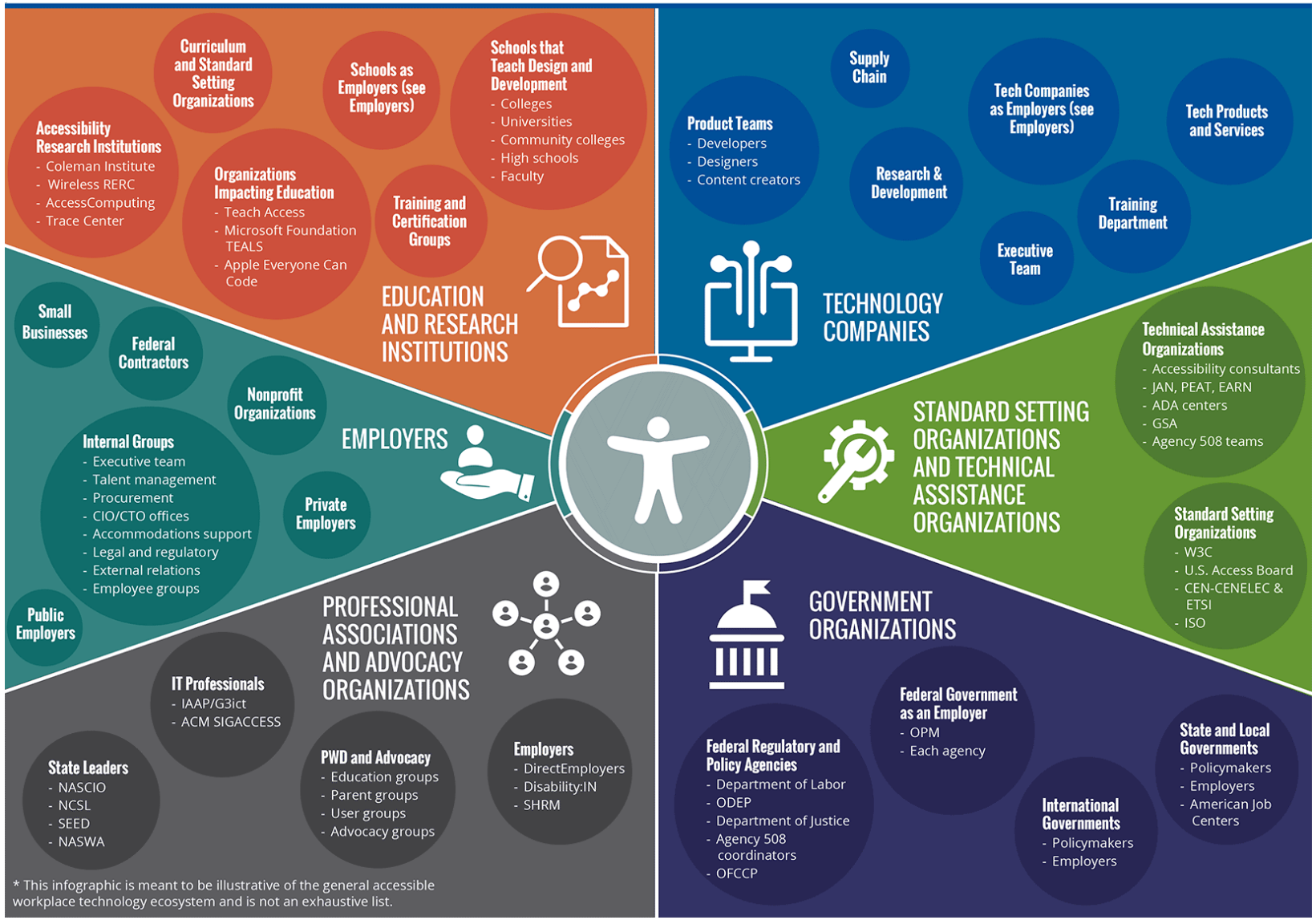
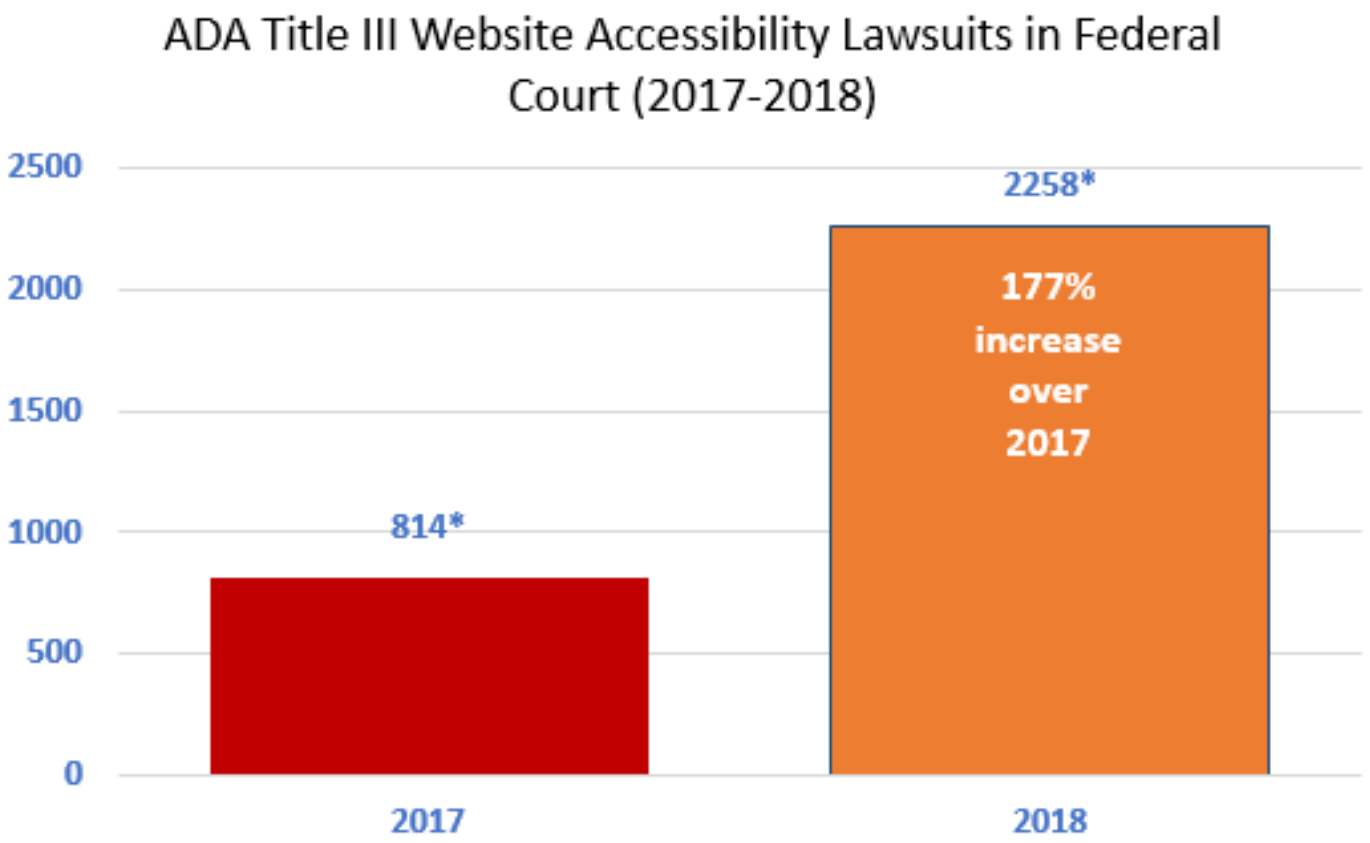
Roles and Responsibilities Breakdown

- Directors – Build accessibility into financial decisions, team building and risk assessment
- Managers – Encourage training around accessibility and ensure accessibility is continued throughout the lifecycle process
- Human Resources – Include accessibility knowledge in job descriptions
- Procurement – Ask 3rd party vendors about the accessibility of their products
- Sales – Learn to talk openly about accessibility of the company
- Product Owners – Build in User Stories for accessibility testing
- Design – Incorporate accessibility into wireframes
- Content – Incorporate accessibility into writing for the web (documents, web, emails, etc.)
- Developers – Develop with accessibility in mind
- Quality Assurance – The new Accessibility Tester

ACCESSIBLE WORKPLACE TECHNOLOGY ECOSYSTEM



Did you Know?


ADA Title III Website Accessibility Lawsuits in Federal Court (2017-2018)
2500
2000
1500
1000
500
0
814*
2258*
177% increase over 2017
2017
2018

Main Pain Points (most common ones)

- Applicant Tracking Systems
- Learning Management System
- Accommodations Systems
- HR information systems
- Internal Portals
- Promotions (Marketing and Communications)

3 Main Questions Employers Should Consider:

1

Is it required for applicants to apply online to be considered for employment?

2

Is your website accessible to individuals with disabilities, especially those applicants with visual and mobility disabilities?

3

Do you offer an effective accommodation process for individuals to request accommodation where they are unable to use the on-line application process?

Communicating Accessibility

- Job Seekers and New Hires
  - Discuss commitment to equal access and promotion of accessibility in the workplace.
- Existing Employees
  - Building out an Accessibility Committee to ensure transparency of policies and process for all roles and responsibilities around accessibility.
- Communicating with the General Public
  - Show a corporate plan around diversity, inclusion to ensure individuals with disabilities know your efforts. Provide an Accessibility Statement around the company planning of accessibility.

Communication Goes Both Ways!

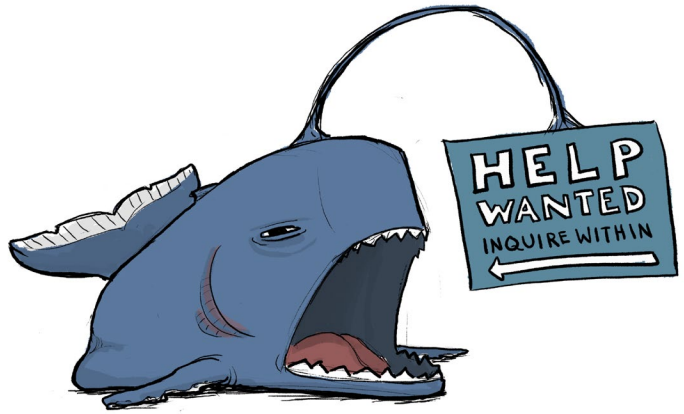
- Listen to your employees
  - Do IT need more training around accessibility?
  - Do they need additional resources to help test and remediate?
- Prioritize accessibility
  - Accessibility falls into various areas of the business structure.

The Importance of Professional Development

AccessU	Accessing Higher Ground	CSUN Assistive Technology Conference	M-Enabling Conference
TeachAccess	Disability:IN	Knowbility	IAAP

Hiring an Accessibility Specialist

- Look for someone familiar with testing various environments (web, mobile, etc.)
- Someone familiar with the most up to date standards (WCAG 2.1)
- Someone that will use automated, manual and functional testing.
- Someone that will help you prioritize areas of testing.
- Someone who will partner and walk through the Life Cycle process
- Someone that can provide useful reports, checklists and training resources to help continue the education and development of accessibility.



Accessibility vs Accommodation

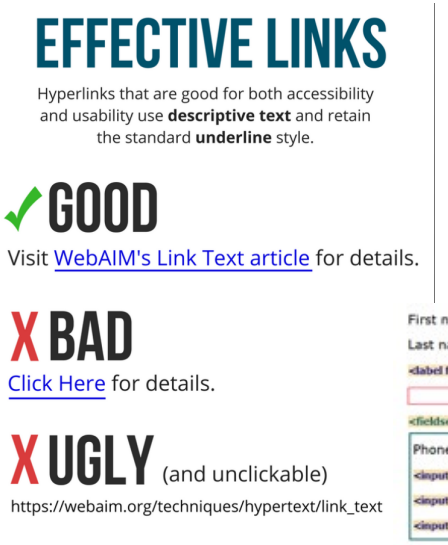
Assistive Technology

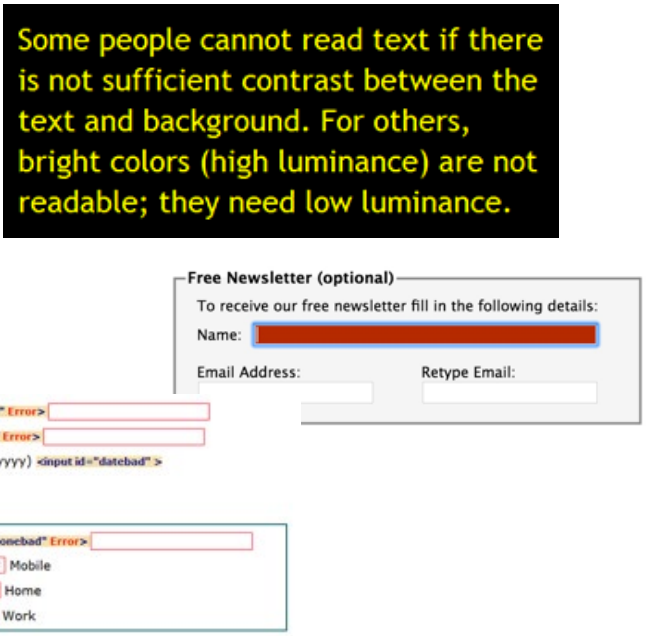
Assistive technologies are designed to help people with disabilities navigate the digital world. Examples include:

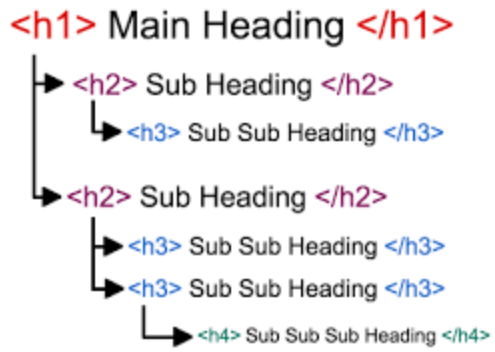
- Screen reading software such as JAWS, NVDA, Browsealoud or Readspeaker
- Screen magnifiers such as ZoomText
- Speech recognition software such as Dragon, Siri, Alexa, etc.
- Keyboard and mouse replacement tools such as Tobii Dynavox
- Touch replacement software for mobile phones

7 Common Accessibility Barriers

1. Images missing text alternatives (alt-text)
2. Proper use of tables
3. Insufficient color contrast ratio
4. Accurate Headings
5. Descriptive Links
6. Forms without proper labels or logical reading order
7. Absence of keyboard support or visual focus







Focus on the Barrier – NOT the disability

A barrier to accessibility is anything that limits or prevents a person from being able to receive information, services and goods, and access space or activities. Barriers may prevent access to housing, transportation, community participation, employment or education.

Barrier Examples:

- Attitudinal (Attitudes can be the biggest barrier.)
- Informational and Communication
- Technological
- Business (Policy, process, and procedures)
- Physical and architectural

Common barriers for this group include: Blind, Low Vision or Color Blind

- visual content that has no text alternative or degrade when magnified
- functional elements that cannot be controlled with a keyboard
- overly complex or excessive amounts of content
- inability to navigate within a page of content
- content that is not structured
- inconsistent navigation
- time limits (insufficient time to complete tasks)
- unexpected actions (e.g., redirect when an element receives focus)
- Low Contrast (or use of color alone)
- multimedia without audio description

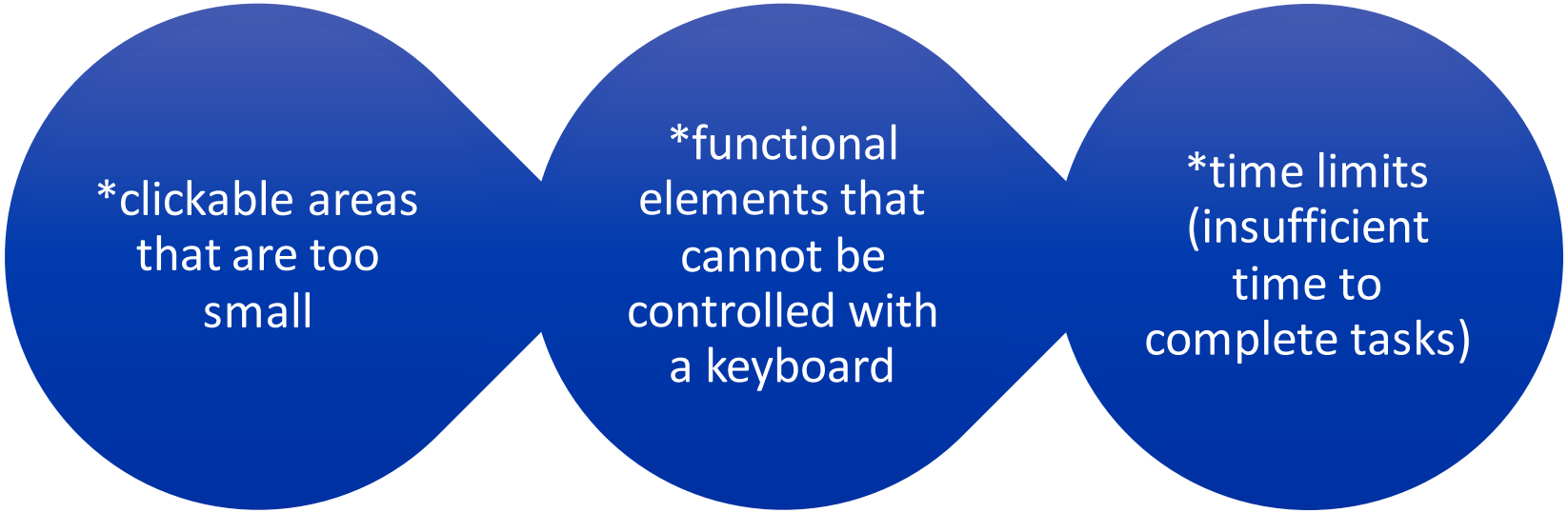
Common barriers for this group include: Deaf and HOH

AUDIO WITHOUT A TRANSCRIPT

MULTIMEDIA WITHOUT CAPTIONS OR TRANSCRIPT

LACK OF ASL INTERPRETATION (FOR ASL/DEAF COMMUNITY)

Common barriers for this group include: Mobility Related



Any item marked with an asterisk(*) is also a barrier to a different disability

Cognitive and Learning

Common barriers for this group include:

- *use of overly complex/advanced language
- *inconsistent navigation
- *overly complex or excessive amounts of content
- *time limits (insufficient time to complete tasks)
- *unstructured content (no visible headings, sections, topics, etc.)
- *unexpected actions (e.g., redirect when an element receives focus)

More specific disability-related issues include:

- reading: text justification (inconsistent spacing between words)
- *reading: images of text (not readable with a text reader)
- *visual: visual content with no text description
- math: images of math equations (not readable with a math reader)

- Any item marked with an asterisk(*) is also a barrier to a different disability

Checking for Accessibility

- TechCheck – a tool to help employers assess their technology accessibility practices
- Talent Works – an online resource that helps employers and human resources (HR) professionals make their eRecruiting technologies accessible to all job seekers
- Buy-IT! – a guide for purchasing accessible technology
- Webaim Wave - easy online tool to check for Web Accessibility
- Aslint – easy developer tool to check for Web Accessibility

Questions & Answers

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IAAP International Association of Accessibility Professionals

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