



Accessibility at Scale

Sheri Byrne-Haber
Staff II, Accessibility Architect

Introduction



- Multi-disciplinary background
- 17 years in disability/accessibility space
- Medium 2020 UX Collective Author of the Year
- Founded McDonald's and VMware Accessibility programs
- Co-founded the Disability@VMware employee resource group
- Magnification and keyboard only user with a deaf daughter

Agenda

- Introduction
- Disability and accessibility basics
- What happens when you try to scale accessibility
- How to defeat enemies of accessibility at scale

Accessibility is about visible disabilities



Accessibility is about hidden disabilities



Who needs accessibility? You do (or will)

Permanent



Limb
Difference

Temporary



Shoulder
Injury

Situational



Holding
Something

People with disabilities use software via assistive technology



How does assistive technology work?



What accessibility standards apply to my org?

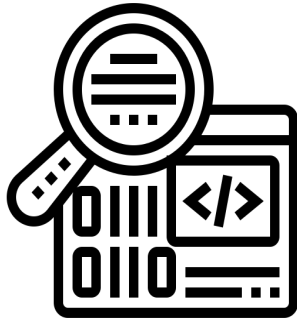
- World Wide Web Consortium (W3C)
 - 2.0 released 2009
 - 2.1 released June 2018
 - 2.2 coming June 2021
 - 3.0 coming 2023
- 3 Increasing levels of compliance
 - A, AA, AAA – where AAA is the strictest
 - Most regulations and courts have settled on AA
 - US Public Sector sales decided on 2.0 AA July 2018
 - Other countries, settlement agreements use 2.1 AA

Common accessibility guidelines

- Captions
- Color
- Magnification
- Language Settings
- Dyslexia-specific needs
- Alternatives to visuals that convey information
- Links
- Keyboard
- Status changes

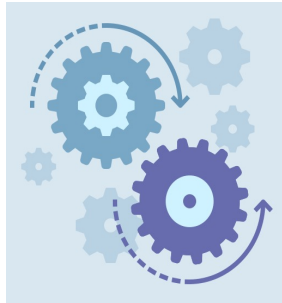
How is accessibility validated?

30 %



Code inspection

4-20 %



Machine learning review (data and patterns)

50-66 %



Human interaction with Assistive Technology

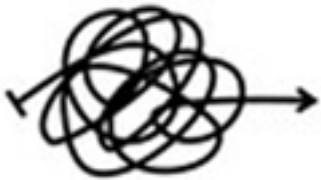
Accessibility complexity increases exponentially at scale



Get something accessible

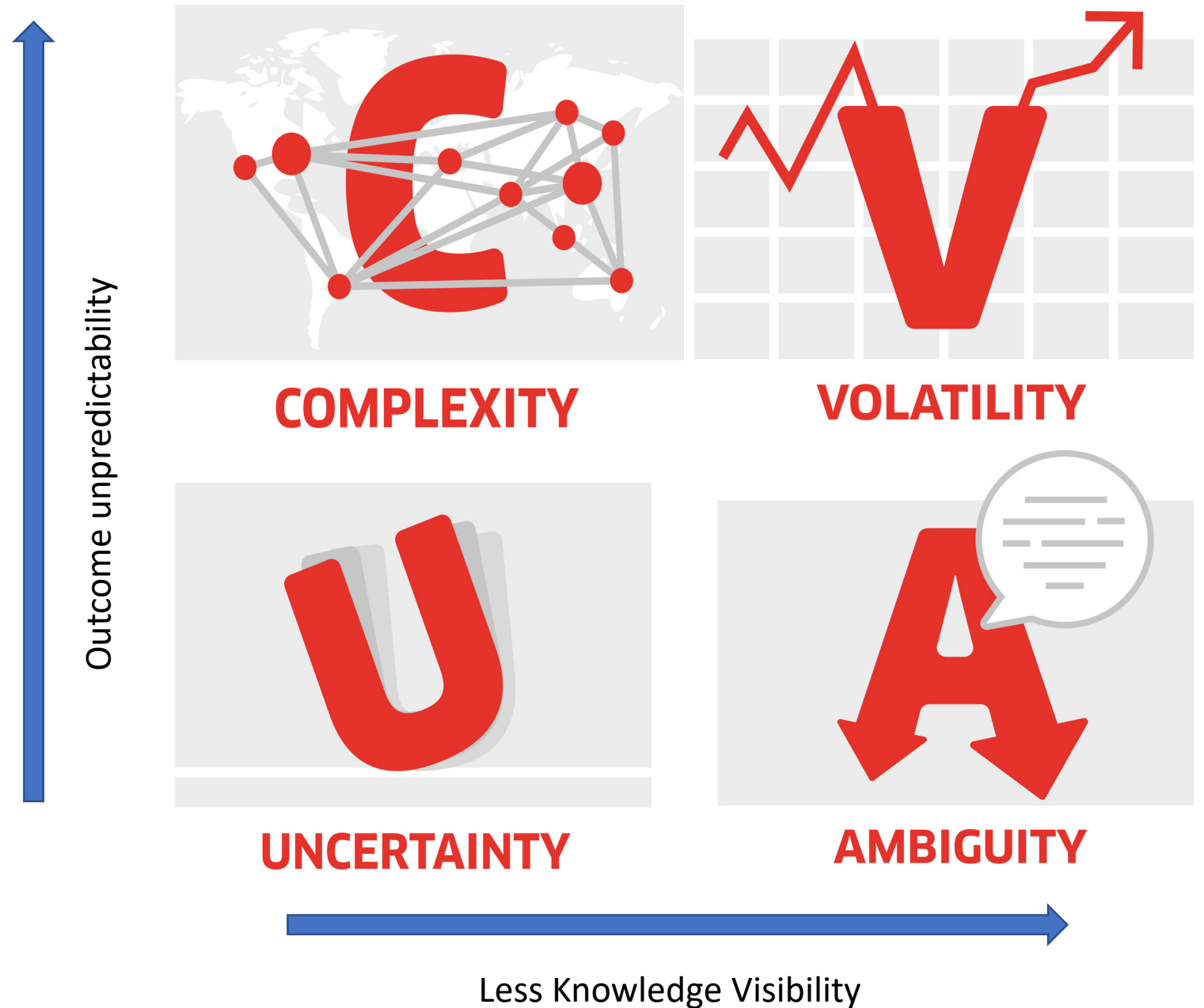


Keep something accessible



Keep something cloud-based accessible

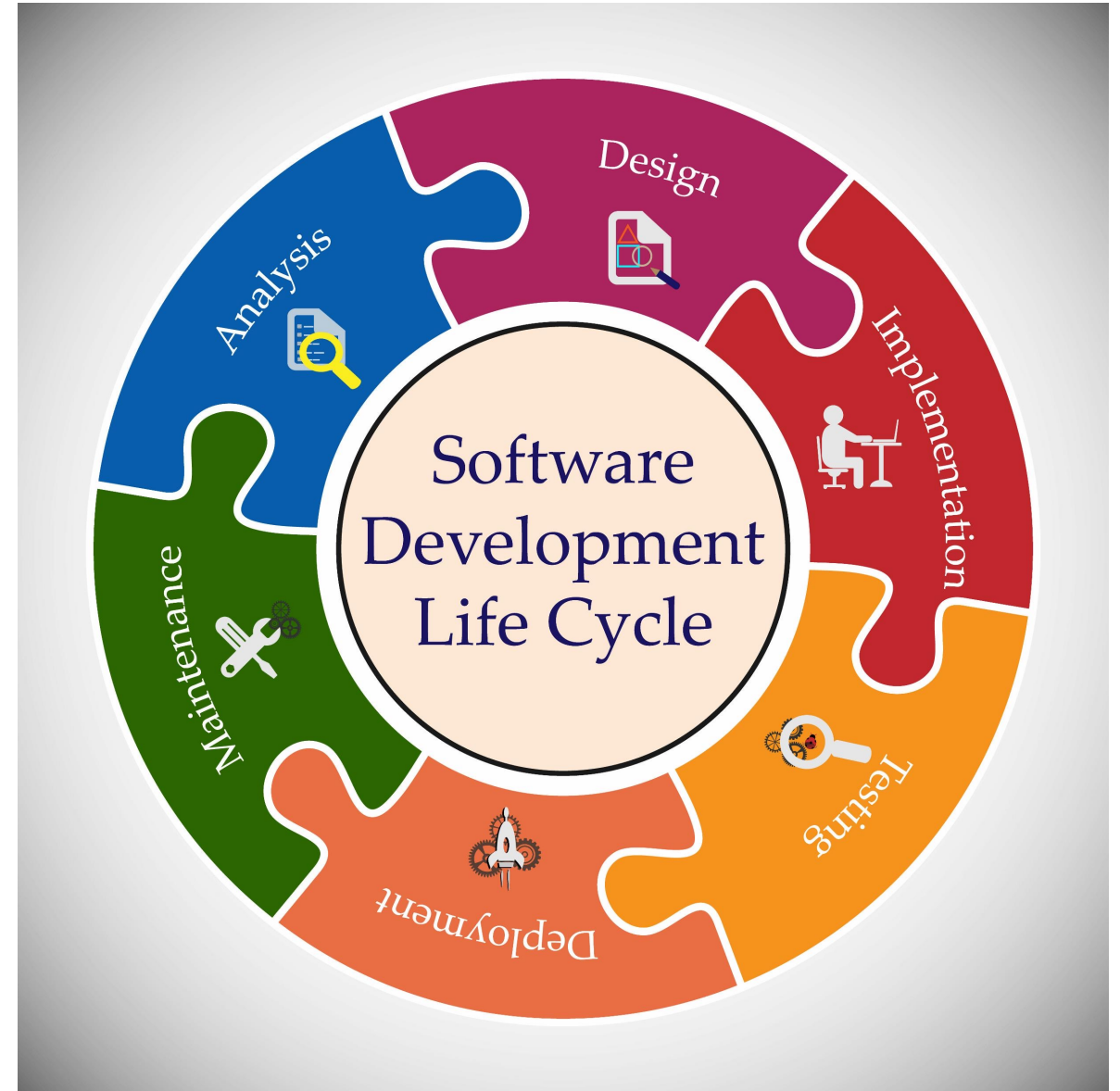
Accessibility
at Scale can
put you in
“VUCA
World”



Use the Dev
Ops infinite
loop to
reduce
volatility



Established
software
principles
reduce
accessibility
uncertainty



Accessibility
style guides
reduce
ambiguity

Accessibility Brand Guidelines

 **COMPANY**
P. +000 123 456 789
E. info@websiteurl.com
W. www.websiteurl.com
A. 00 Street Name, Location
Country Name Here 12345

COMPANY LOGOTYPE

01. Full Logo | 02. Logo Symbol | 03. Logo Type



COLOR VARIATIONS



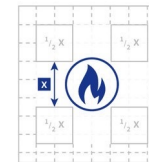
White Background | Black Background | Gray Background | Red Background

LOGO CLEARSPACE

DEFINITION

COMPUTATION

MINIMUM SIZE



COLOR USED

Blue	BLACK	WHITE
CMYK : 12 34 56 789	CMYK : 12 34 56 789	CMYK : 12 34 56 789
Pantone : 56 78 90	Pantone : 56 78 90	Pantone : 56 78 90
HEX : 45% 25% 70%	HEX : 45% 25% 70%	HEX : 45% 25% 70%
RGB : 364%7	RGB : 364%7	RGB : 364%7
Web : #0000005	Web : #0000005	Web : #0000005

TYPOGRAPHY

Font Download Link Goes Here

Ab MONTERRAT
ABCDEFGHIJKLMNO
abcdefghijklmno

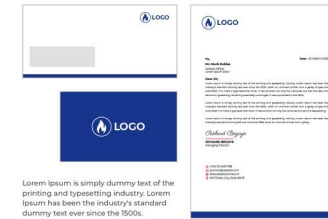
ICONOGRAPHY

Icon Download Link Goes Here



STATIONERY

Envelop | Business Card | Letterhead



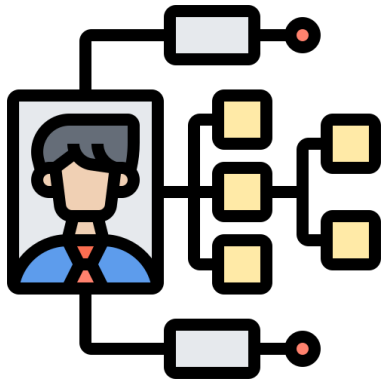
Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s.

Accessibility at
scale requires
integration at all
levels of the
organization

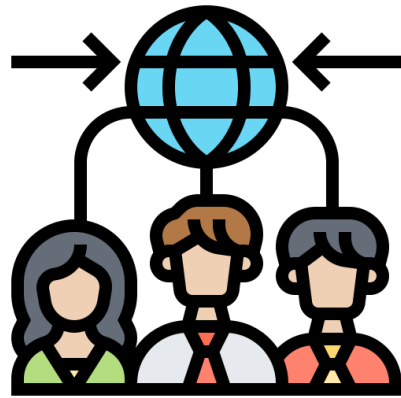


Accessibility must be part of every product conversation, MVP and definition of done





Executive Support



Centralized Resources



Champions program



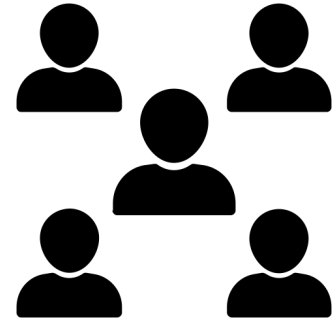
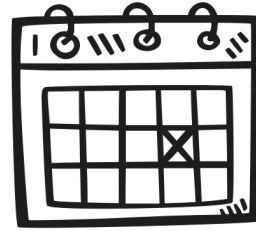
Accessibility Goals/OKRs

What adds accessibility into conversations?

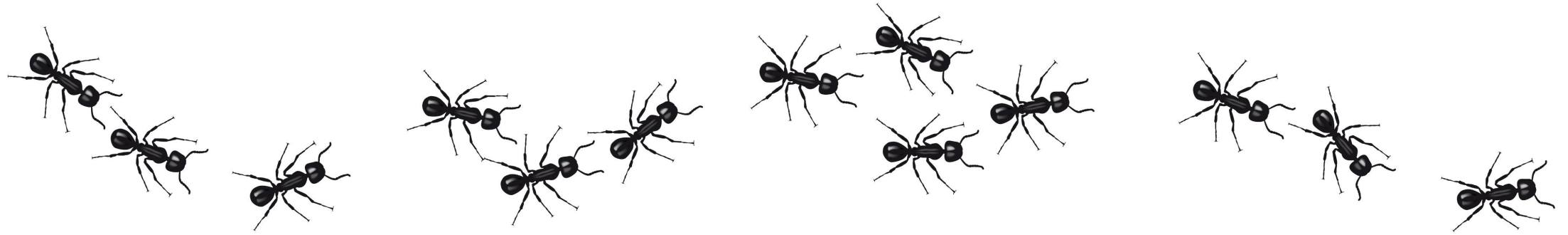
What adds
accessibility into
conversations?



- 1) Hire more employees with disabilities
- 2) Listen to our lived experience
- 3) Include disability into all JEDI discussions



Disabled employees need to feel like they are included and belong



Treat accessibility defects the same
as other product defects

Bugs are bugs

Enemies of accessibility at scale

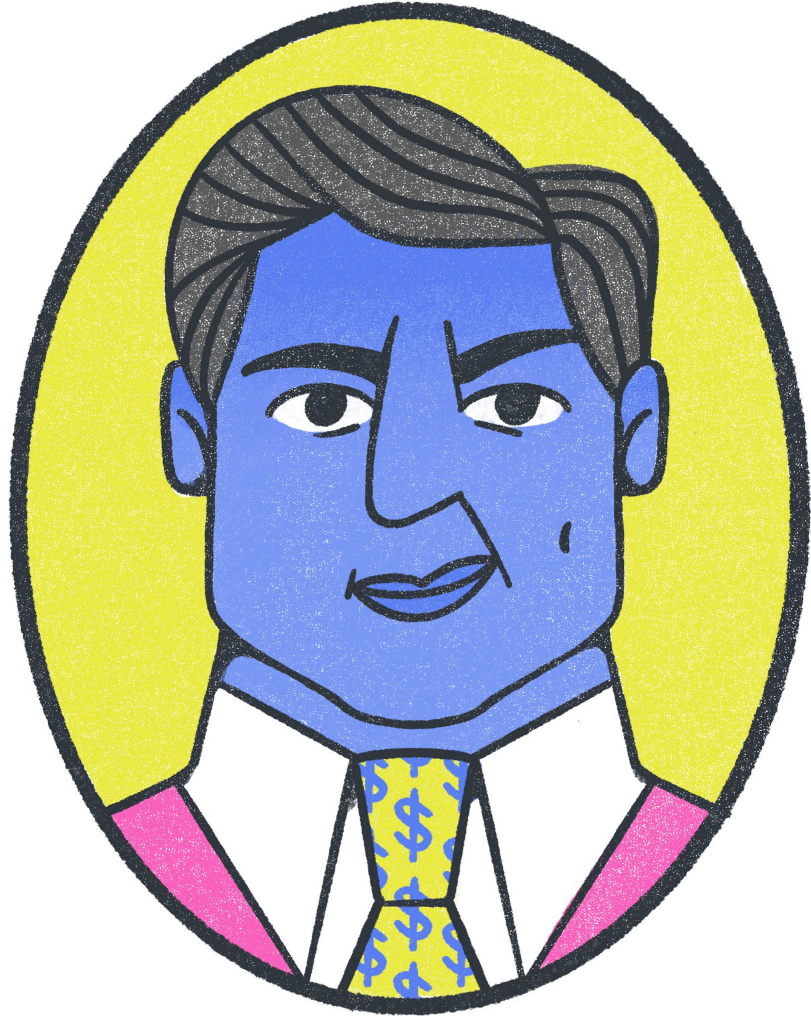
The Change Haters



Solution: Find out what motivates them and appeal to that

Enemies of accessibility at scale

The Business Case Demanders



Solution:

- a) start with the civil rights argument. If that doesn't work
- b) give them a business case

Enemies of accessibility at scale

The Feature Lovers



Solution: Give them a financial incentive by creating OKRs that include accessibility

Enemies of accessibility at scale

The Trivializers



Solution: Quantify the numbers

- a) Do user research with people with disabilities
- b) Make sure your surveys are accessible

Enemies of accessibility at scale

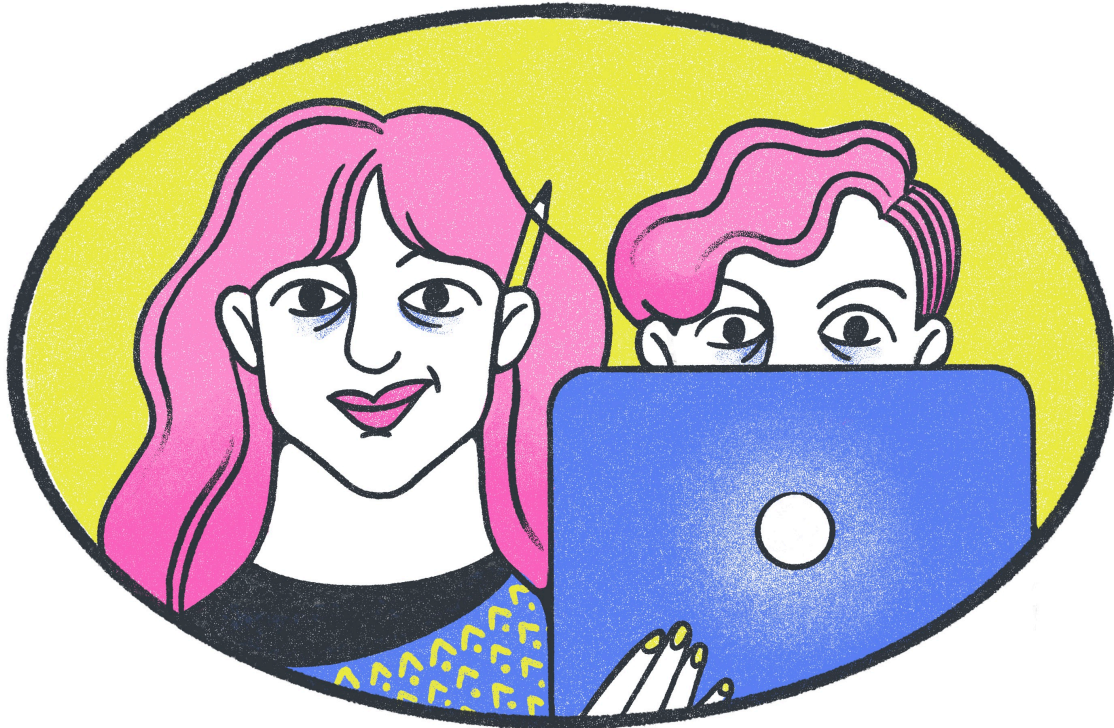
The Excluders



Solution: Explain this is a logical fallacy

Enemies of accessibility at scale

The Box Tickers



Solution:

- a) Don't use overlays or checklists.
- b) Build accessibility organically into your organization

TL; DR

Accessibility at scale requires:

- Executive support.
- The willingness to modify product development processes.
- Internal accessibility resources combined with participation from every department in the organization.
- Processes that are repeatable and when possible, automatable.

Thank you!

If you enjoyed this talk please consider:

- 1) Subscribing to my [Medium](#) blog
- 2) Connecting with me on [LinkedIn](#)
- 3) Reading my free book “[Giving a Damn about Accessibility](#)”

- Sheri Byrne-Haber