

Make The News Accessible

Reporting on and designing for people with
disabilities

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Make The News Accessible



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Every person. Empowered. In every context.

Disability

~~=~~

Personal
health
condition

Disability

=

Mismatched
human
interactions



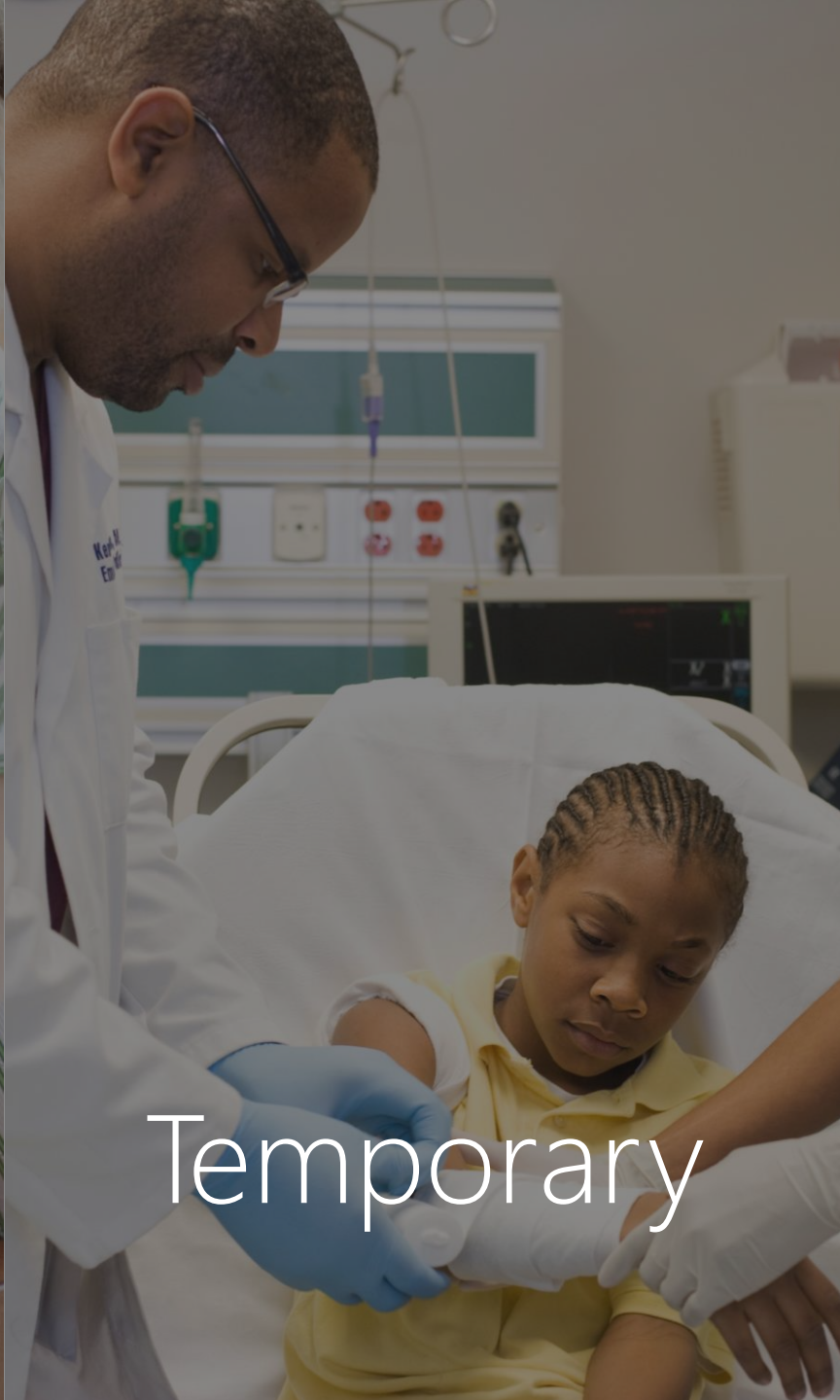


Permanent





Permanent



Temporary

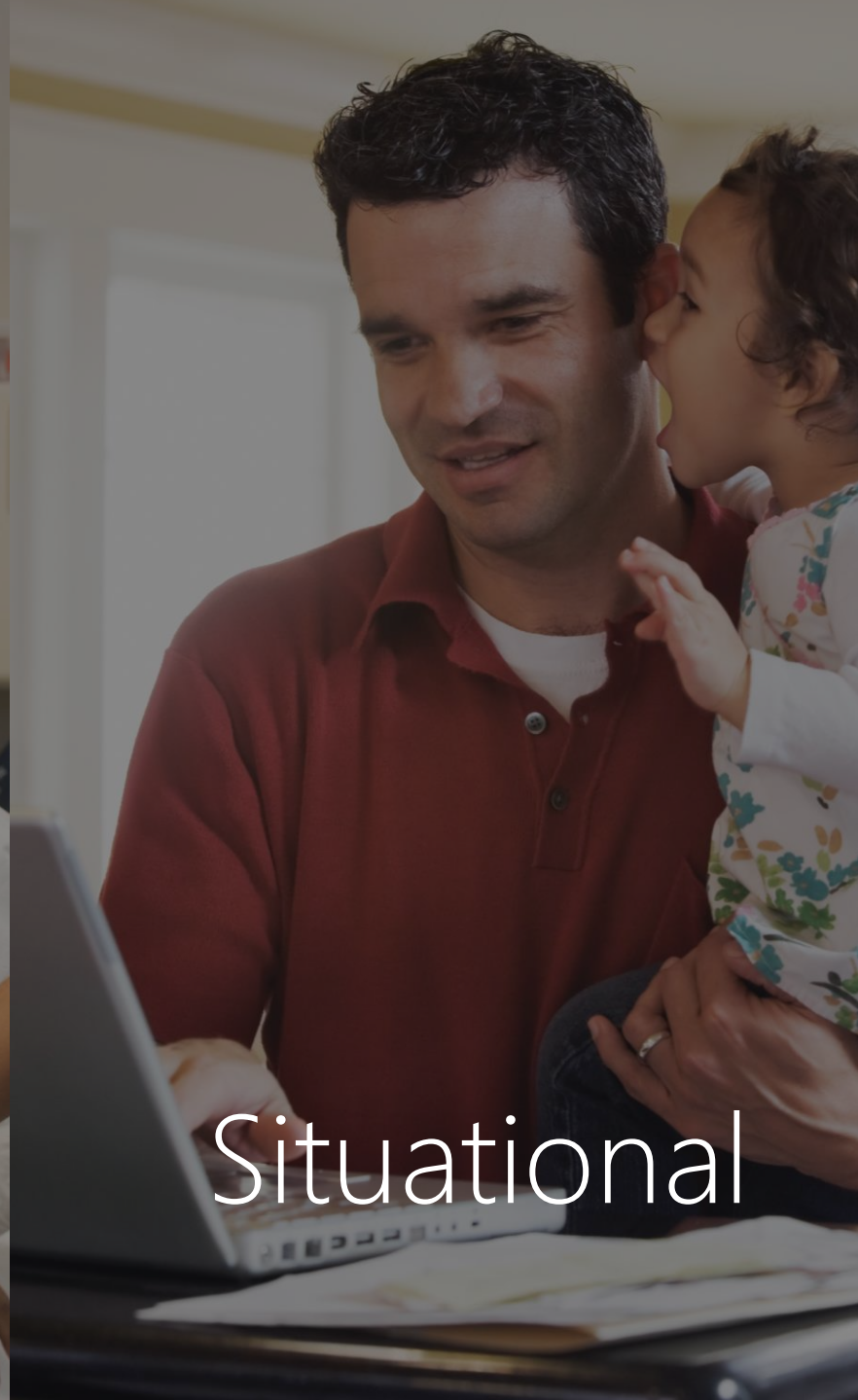


Permanent



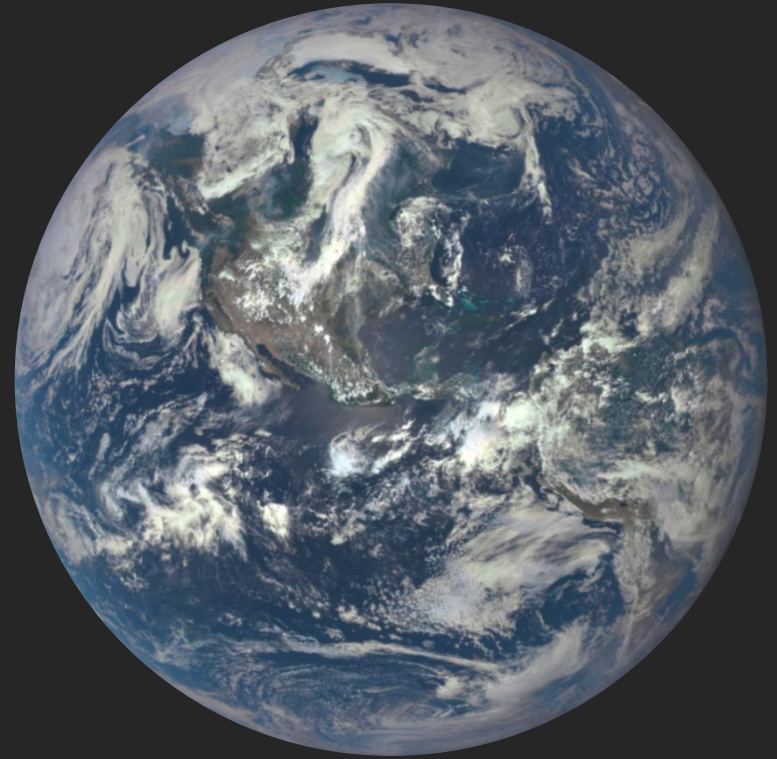
Exclusion

Temporary



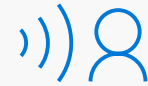
Situational

Over 1 billion people
with disabilities.



In it for the long game

From accessibility to inclusion

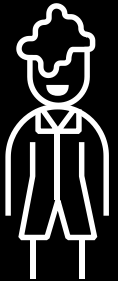
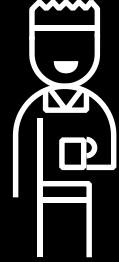
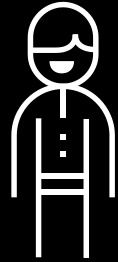
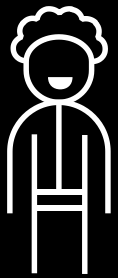
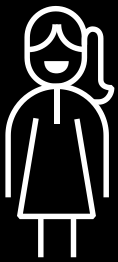


1990

2000

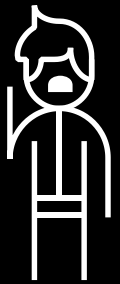
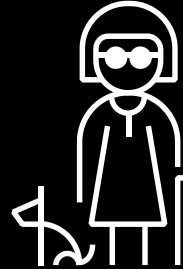
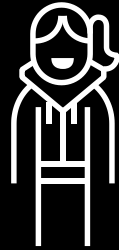
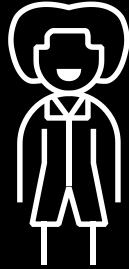
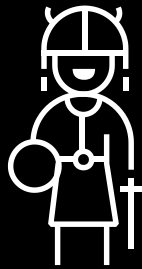
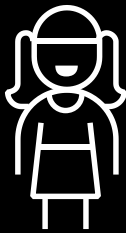
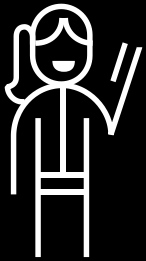
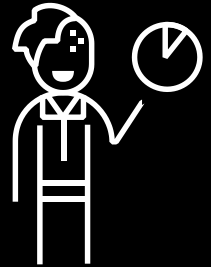
2010

2020



Inclusive

A Microsoft Design ToolKit





Let's face it

We build content experiences based on what we know.

But here's the problem: If we use our own abilities as a baseline, we make things that are easy for some people to use, but difficult for everyone else.

Accessible design starts with seeing human diversity as a resource for better designs.

There's no such thing as 'normal'

If we use our own abilities and biases as a starting point, we end up with products designed for a limited subset of people – people like us.

Designing for inclusivity not only opens up our products and experiences to more people with a wider range of abilities. It also reflects how people really are.



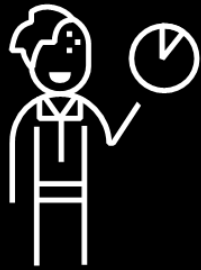
Inclusive and accessible

Inclusive design: A method

A design methodology that enables and draws on the full range of human diversity.

Accessibility: An attribute

The qualities that make an experience open to all.



Inclusive design principles

Recognize exclusion

It happens when we solve problems using our own biases

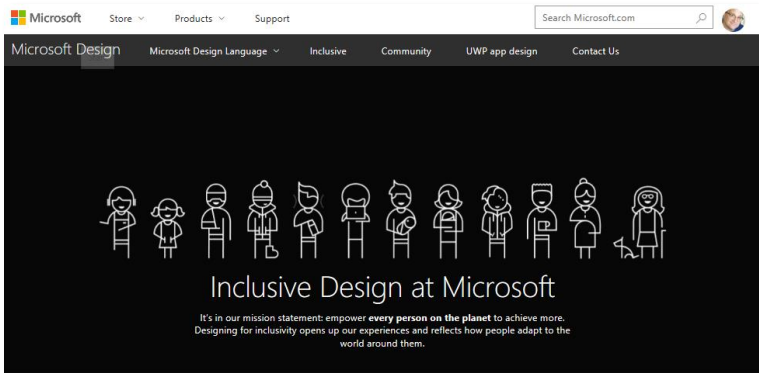
Learn from diversity

Human beings are the real experts in adapting

Solve for one, extend to many

Focus on what's universally important to all humans





Our inclusive design principles

Recognize exclusion

Exclusion happens when we solve problems using our own biases. As Microsoft designers, we seek out those exclusions, and use them as opportunities to create new ideas and inclusive designs.

Learn from diversity

Human beings are the real experts in adapting to diversity. Inclusive design puts people in the center from the very start of the process, and those fresh, diverse perspectives are the key to true insight.

Solve for one, extend to many

Everyone has abilities, and limits to those abilities. Designing for people with permanent disabilities actually results in designs that benefit people universally. Constraints are a beautiful thing.

Inclusive: A Microsoft design toolkit

The toolkit is a comprehensive resource for any inclusive session you want to lead. Practice new skills, develop new concepts, or create a prototype – the toolkit is made to be retrofitted to your design team's goals. Download everything here, and start exploring!

Manual

The manual is a comprehensive introduction to the world of inclusive design. Learn the basics and shift your design thinking toward universal solutions.

[DOWNLOAD MANUAL \(PDF\) >](#)



Activities

The activity cards and support cards are designed to be integrated into your design process. Jump-start creative thinking and stress-test concepts through an inclusive lens.

[DOWNLOAD ACTIVITIES \(PDF\) >](#)

Inclusive design resources

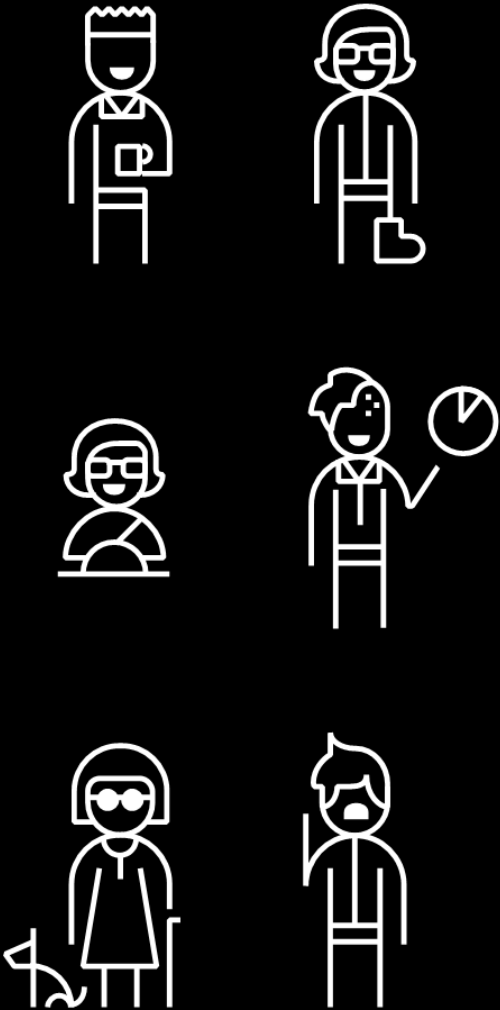
- Design principles
- Toolkit for designing for inclusion
- Videos on inclusive design in action

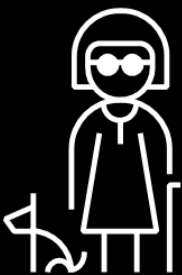
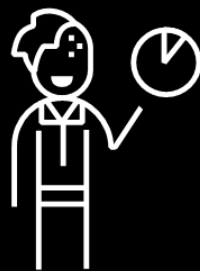
microsoft.com/design/inclusive

inclusivethefilm.com

Inclusion is more than just great design

Lessons from Microsoft's inclusive hiring initiative





"There's an incredible pool of skilled and talented people who also happen to have autism."



Thinking differently

Many people on the autism spectrum have cognitive attributes that combined are different than the "allistic".

Creative, counterintuitive approach

Trustworthy and reliable

High integrity

Little or no prejudice

Committed workers

Strong focus

Attention to detail

Unblocking hiring

Microsoft learned that its grueling interviews unintentionally excluded some people who process information in unique ways.

Seeking a job at Microsoft typically involves meeting with multiple managers in back-to-back interviews that can take a full day, a process that can be very stressful.

Interviews replaced by multiple-day hands on academy that focuses on workability, team projects and skills assessment.

Hired candidates receive as much or little support as they want, including workshops with their new team, training for manager, community mentor.

This represents one of the ways we are evolving our approach to increasing the diversity of Microsoft's workforce.



Inclusion in newsrooms = new ideas in journalism

Different styles of reporting
Deep focus in editing
Fresh ideas for products
Internal resource for, you said it, inclusion

October is National Disability Employment Awareness Month





**Inclusive Hiring
Virtual Career Fair
for People with Disabilities**

October 19 | 1-3PM (PDT)

Sponsored by Microsoft

Online Recruiting Event: October 19th | 1-3pm PDT
Virtual Event open to people with disabilities across the United States

AT&T
Boeing
Expedia
Fidelity Investments
JPMC
LinkedIn
Merck
Microsoft
Nordstrom
PwC
Starbucks
T-Mobile
Voya

<https://aka.ms/virtualfair>

Every person. Empowered. In every context.

Accessibility as an everyday strategy

Heather Billings, 18F, GSA

My journey

[insert images of map with Sim Daltonism applied]

Challenging some assumptions

Being accessible means it works on a screenreader
...but it's so much more than that.

Challenging assumptions

Examples of other users to consider when assessing accessibility:

- Users with fine motor control impairments
 - Problem areas: Small touch targets, timed experiences
- Users with cognitive or learning disabilities
 - Problem areas: Font choices, autoplay audio, distracting colors or moving images that cannot be stopped
- Users with hearing impairments
 - Problem areas: Lack of audio transcription
- Users with visual impairments other than blindness
 - Problem areas: Contrast for text, enlarging text breaks things

Accessibility is an approach

It is a technical implementation

It is a content strategy

It is a design strategy

It is a business priority

Accessibility is a technical implementation

- WCAG 2.0
- ARIA
- Semantic HTML/CSS/JS
- Testing (with tools and manually)

WCAG WTFBBQ

WCAG: Web Content Accessibility Guidelines

We're on version 2.0, released in 2008

Developed by the W3C -- you may know their previous hit standards, like CSS and XML

WCAG WTFBBQ

“WCAG 2.0 success criteria are written as **testable statements** that are **not technology-specific.**”

— (WCAG 2.0 recommendation, (emphasis mine))

WCAG consists of the following:

- Four principles: perceivable, operable, understandable, and robust
- Guidelines derived from those principles
- Success criteria to determine if the guidelines have been met
- Examples demonstrating a few of the techniques that satisfy the above for a given scenario.

Examples of WCAG guidelines

Guideline 1.1 Text Alternatives

Sensory: If non-text content is primarily intended to create a [specific sensory experience](#), then text alternatives at least provide descriptive identification of the non-text content.

Guideline 1.3 Adaptable

1.3.2 Meaningful Sequence: When the sequence in which content is presented affects its meaning, a [correct reading sequence](#) can be [programmatically determined](#). (Level A)

Guideline 1.4 Distinguishable

1.4.2 Audio Control: If any audio on a Web page plays automatically for more than 3 seconds, either a [mechanism](#) is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)

But really...

RTFWCAG

ARIA

Also created by the W3C

“Accessible Rich Internet Applications”

- Roles describe structure
- Attributes describe state, properties, and relationships

ARIA roles

Overrides an HTML element's native role (or interaction a screen reader would normally determine possible)

Landmark roles define sections of a page

ARIA attributes

Describe the state and relationship of a given element

- Whether a box is checked or not
- Which form label corresponds to which form input
- Whether something is currently "visible" or not

HTML considerations

Semantic HTML is a must

Use HTML5 elements like nav, header, aside

Use header elements (h1, h2, h3, etc) in order of importance, NOT based on style or size!

Make sure elements like forms and tables use the right markup
tabindex

CSS considerations

Be cautious about psuedoselectors

Apply styles conditional to ARIA rules

JavaScript considerations

Dynamic content can be tricky to do right

Make sure elements created have the proper ARIA roles/attributes

Define live regions on pages (areas of the page that are likely to be dynamically updated) and give them the proper tabindex

Accessibility is a content strategy

Is your writing concise and clear?

Are you only surfacing the information that's necessary?

Are your links descriptive?

Are there multiple ways to tell this story?

Accessibility is a design strategy

Font weights + sizes

Color contrast

Text over images

Transparencies

Predictable layouts

A practical example

<Insert images of CALC's error table>

Test your work

Manual testing with a keyboard

Learn to use your operating system's built-in screen reader

Use color contrast checkers and HTML tools to check your design and code

Accessibility is a business priority

Most media outlets don't prioritize user control of their experiences.

- Popups that hijack the reading experience
- Autoplay audio and video without accessible controls
- Ads that autorefresh

Resources

WebAIM

Google Udacity course

WCAG 2.0 official site:

<https://www.w3.org/TR/WCAG20/>

A WCAG checklist (one of many unofficial ones):

<https://www.wuhcag.com/wcag-checklist/>

Paciello Group blog:

<https://developer.paciellogroup.com/blog/>