

LATEST WEB ACCESSIBILITY TRENDS AND IMPACTS

WORLD BLIND UNION ASIA-PACIFIC REGIONAL WEBINAR

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Greetings!



- Thank you for inviting me to join you at the launch of the WBUAP Regional Survey Report
- Wonderful to be able to connect across the distance, at this difficult time
- Hope you all are safe and well
- Great pleasure to be the virtual guest of my colleagues at HKBU
- ...an organization that's been working on the forefront of digital accessibility for years, not only in HK but in the Asia Pacific Region

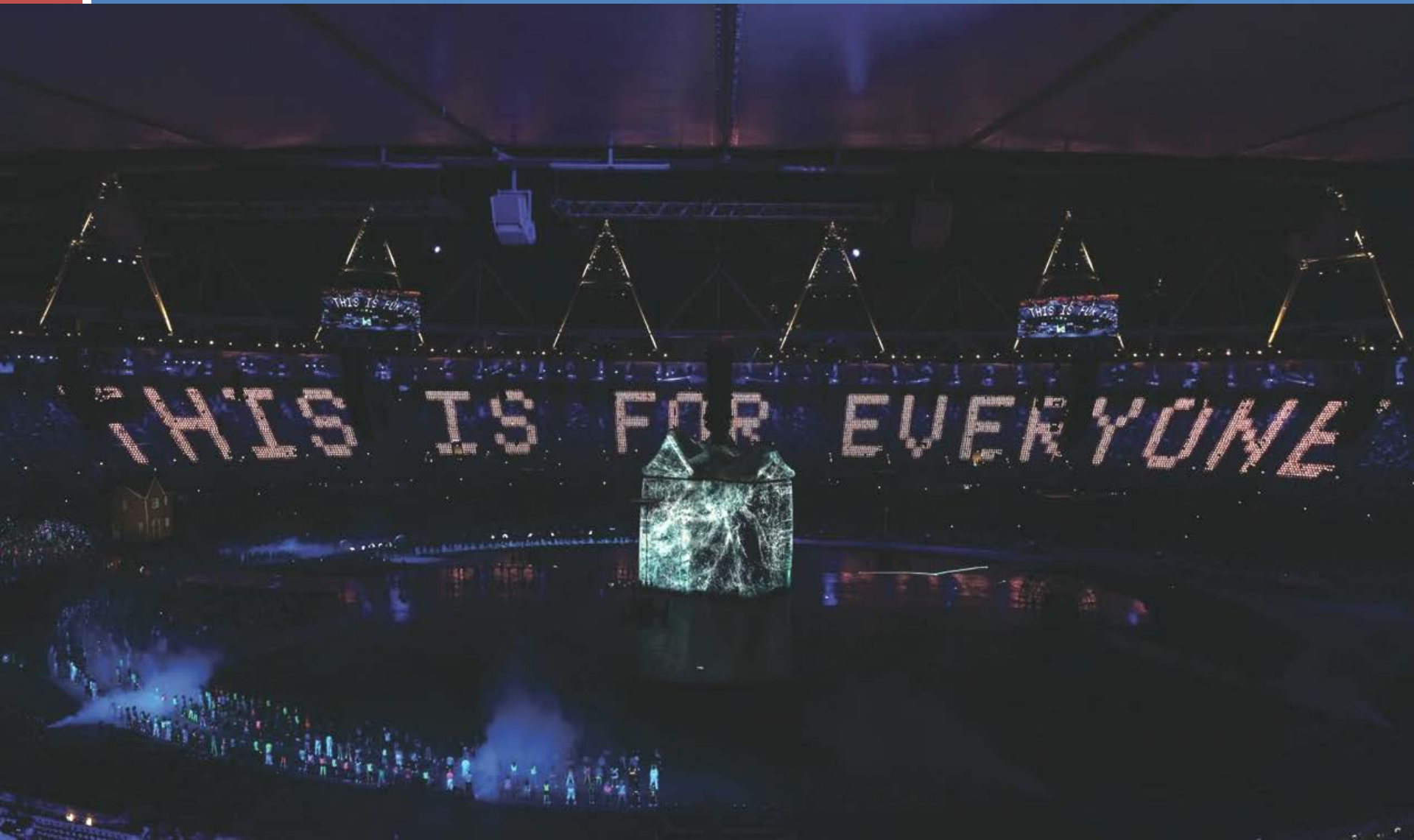
Congratulations on the Survey

- Data is essential if we want to change the web
- Survey asks important questions:
 - ❑ what policies are used for web accessibility
 - ❑ how aware are respondents of available resources
 - ❑ how well do websites perform on selected measures
- While the survey was based only on selected indicators
 - ❑ it nevertheless sheds light on important trends
 - ❑ it shows a high degree of standards harmonization, and awareness; low degree of implementation per sector

Data helps focus efforts

- Additional awareness campaigns would be useful...
 - ❑ what messages get through best?
 - ❑ what sector-by-sector partnering helps spread message?
- More educational resources may help
 - ❑ perhaps also translations?
- Continue promoting standards harmonization
 - ❑ among policy makers

“This is for everyone” – *Tim Berners-Lee*



- ✓ Develops standards for the Web
- ✓ Is an international, vendor-neutral community
 - ✓ Co-hosted in the US, Europe, Japan and China
- ✓ Develops hundreds of technical standards per year
- ✓ Open, consensus process, free standards
- ✓ Many different perspectives working together
 - ✓ industry, disability, research, education, government
- ✓ Includes Web Accessibility Initiative (WAI)





WORLD REPORT ON DISABILITY



World Health
Organization



THE WORLD BANK

One billion people
are living with a
significant disability.

*World Health Organization
June 2011*

Digital accessibility crosses many functional areas



vision

hearing

motor

speech

cognitive

neurological

multiple disabilities

aging-related conditions

When you plan from the design stage, you can make almost anything accessible.

Accessibility can be one of the best innovation drivers for technology design.

Web Accessibility Initiative (WAI)



- A coordinated program of accessibility work integrated throughout W3C
- WAI develops
 1. accessibility reviews for all W3C standards
 2. **accessibility standards and guidelines**
 3. technical, educational and training resources
 4. resources to improve accessibility evaluation
 5. coordination with research
 6. promotion of standards harmonization

WAI guidelines are a foundation for information technology accessibility

- Web accessibility helps ensure equal access to information and communications
 - WCAG provides the foundation for **digital accessibility beyond the Web**, including **mobile accessibility, documents, publishing, automotive, web of things, virtual reality**

Benefits of Standards Harmonization

- Use a common set of accessibility standards internationally
 - ❑ Support sharing of technical and educational materials
 - ❑ Support shared development of authoring and evaluation tools and approaches
 - ❑ Support combined efforts to research, maintain, and evolve accessibility standards
- WAI Guidelines have been taken up into over 40 countries
 - ❑ Updated European Norm
 - ❑ US Section 508, ADA, Education, Transportation
 - ❑ Updated Chinese National Standard
 - ❑ Recommendations for implementing UN Convention on Rights of Persons with Disabilities

Translating WAI Standards and Resources

- All WAI Translations
 - ❑ 19 completed authorized translations of WCAG
- ...including several Asia-Pacific languages:
 - ❑ Chinese
 - ❑ Japanese
 - ❑ Korean
- Guidance for translating WAI resources
- Priorities for translating WAI resources

WAI Resources available in Chinese

[W3C 可访问性标准概述](#) *W3C Accessibility Standards Overview*

[W3C 移动端无障碍](#) *Mobile Accessibility at W3C*

[Web无障碍简介](#) *Introduction to Web Accessibility*

[无障碍原则](#) *Accessibility Principles*

[网页无障碍和W3C标准的介绍视频](#) *Video Introduction to Web*

Accessibility and W3C Standards

[Web内容无障碍指南 \(WCAG\) 2.1](#) *Web Content Accessibility Guidelines*

(WCAG) 2.1

[Web内容无障碍指南 \(WCAG\) 2.0](#) *Web Content Accessibility Guidelines*

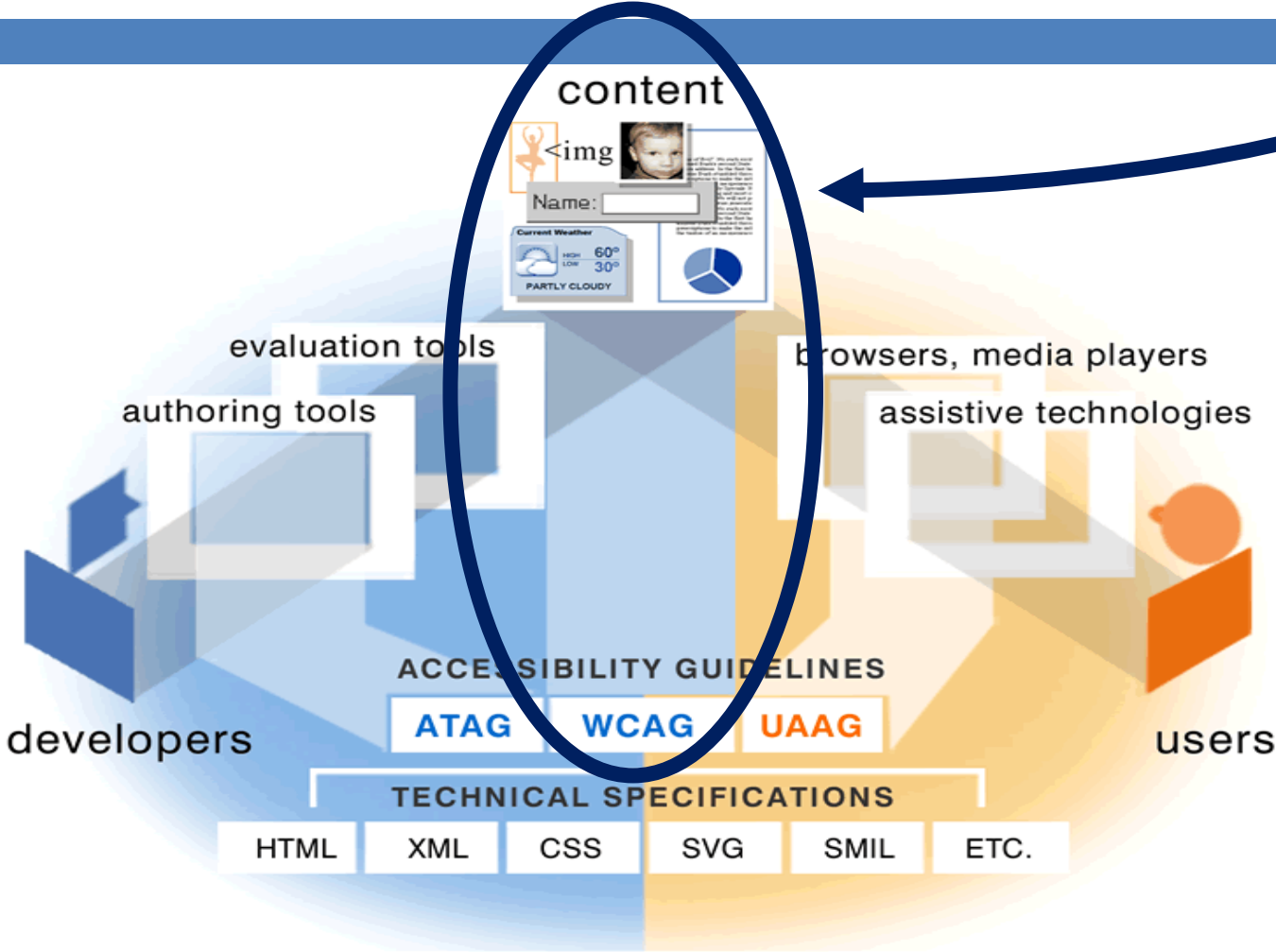
(WCAG) 2.0

[无障碍创作工具指南\(ATAG\) 2.0](#) *Authoring Tool Accessibility Guidelines*

(ATAG) 2.0

Please read, enjoy, and implement!

Accessible Web content



Web Content Accessibility Guidelines (WCAG)

➤ WCAG 2.0

- accessibility of Web content and applications
- content and applications must be **perceivable, operable, understandable, and robust**
- international standard, also ISO-endorsed
- adopted and referenced by many national governments

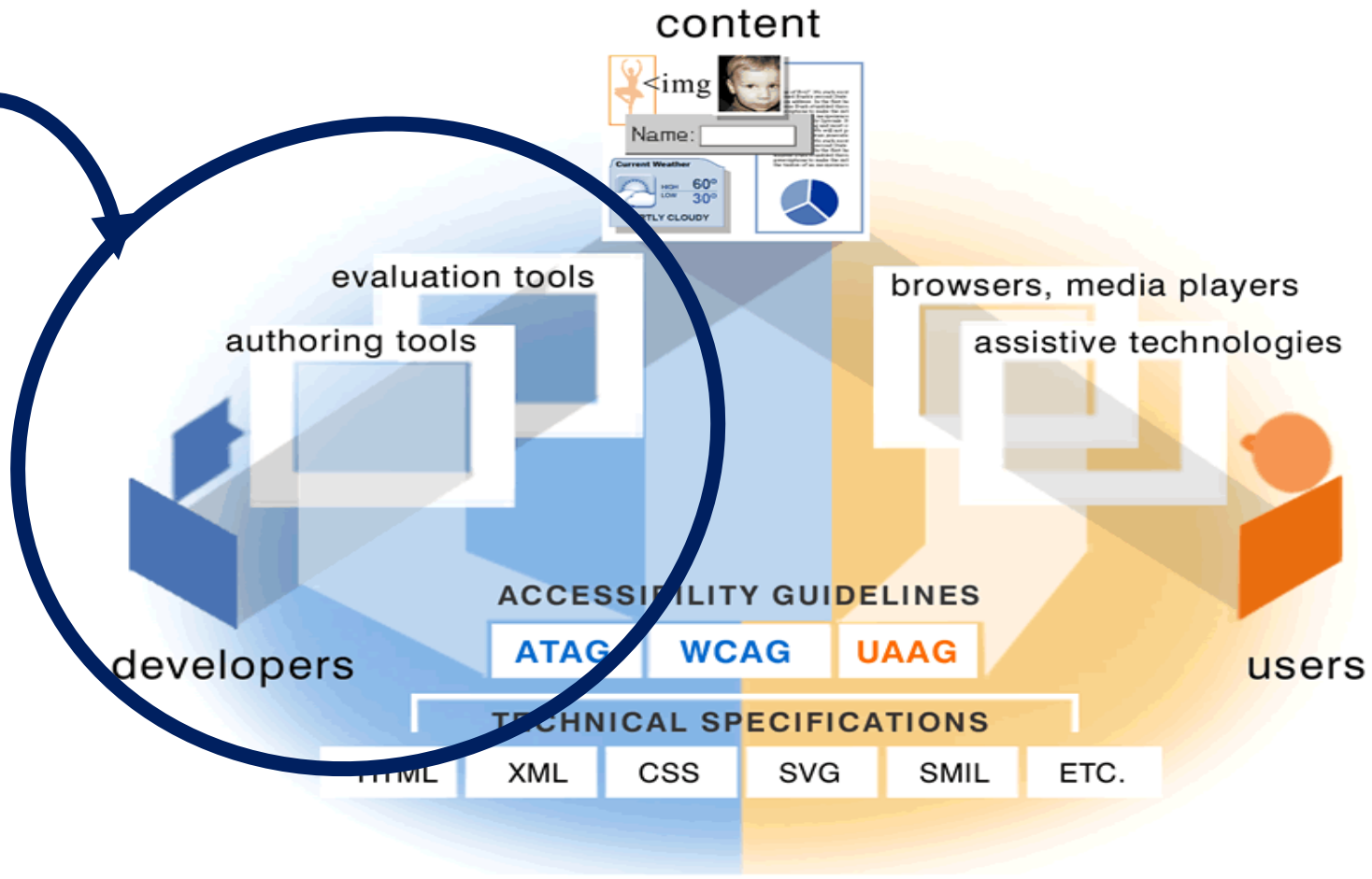
➤ WCAG 2.1

- expanded provisions for mobile, low vision, cognitive
- backwards compatible, but with evolution
- updated Techniques and Understanding

➤ Upcoming:

- WCAG 2.2 – expected 2Q 2021
- WCAG 3.0 – in development, several changes

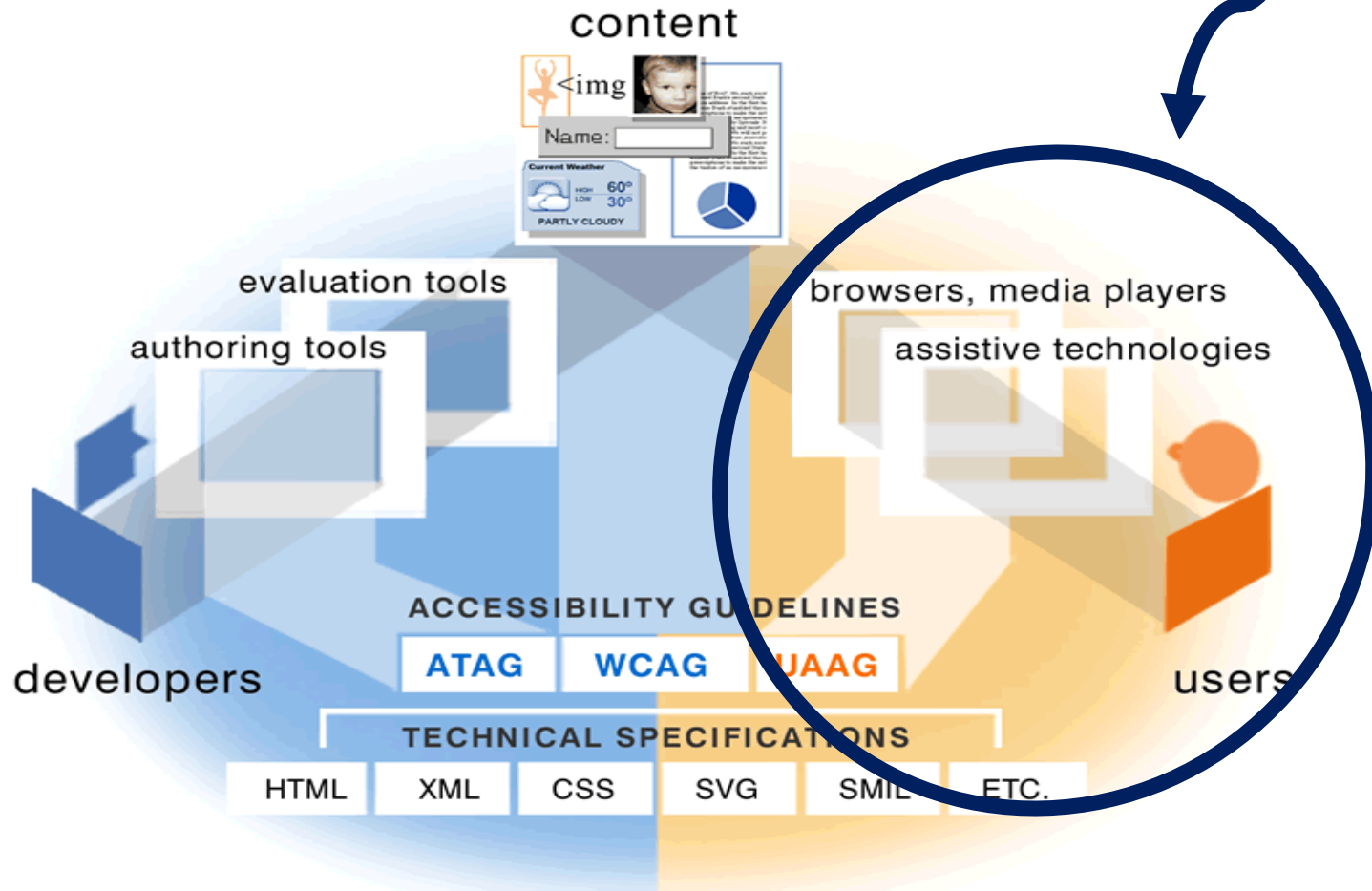
Producing accessible content



Authoring Tool Accessibility Guidelines

- **Authoring Tool Accessibility Guidelines (ATAG) 2.0**
 - for any kind of authoring tool – HTML editors, content management systems, social media
 - supports production of accessible content and applications
 - ensures accessibility of authoring tool interface
 - helps reduce cost of developing accessible content

Browsers, media players, mobile devices



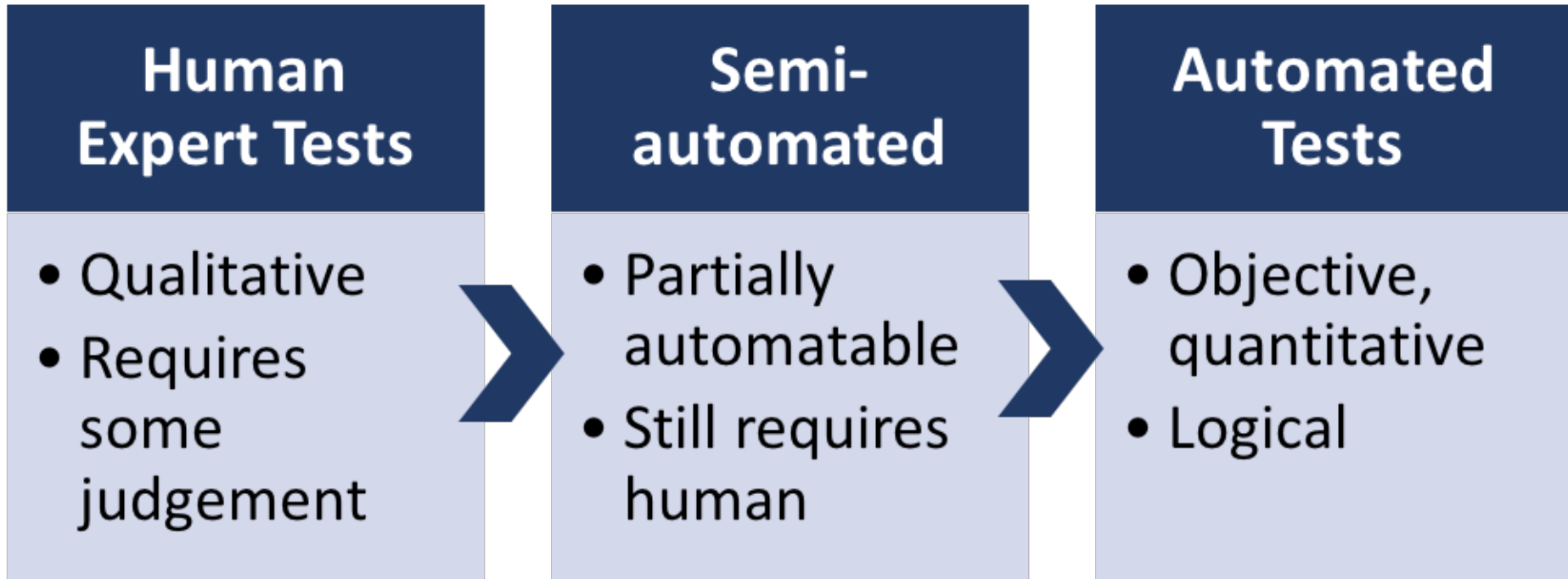
User Agent Accessibility Guidelines (UAAG) 2.0

- Perceivable
- Operable
- Understandable
- Programmatic access
- Specifications and conventions

Accessible Rich Internet Applications (ARIA)

- ✓ Provides expanded capabilities for accessibility
 - of dynamic, interactive web content and applications
- ✓ ARIA 1.1 completed in 2017
- ✓ ARIA 1.2 under development
- ✓ Accessibility API mappings
 - ✓ improved support for graphics

Advances in Efficiency and Reliability of Testing



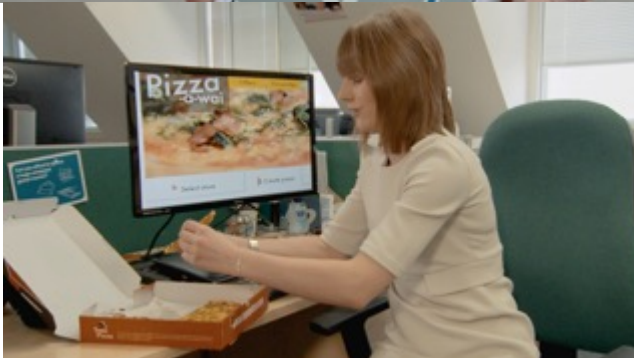
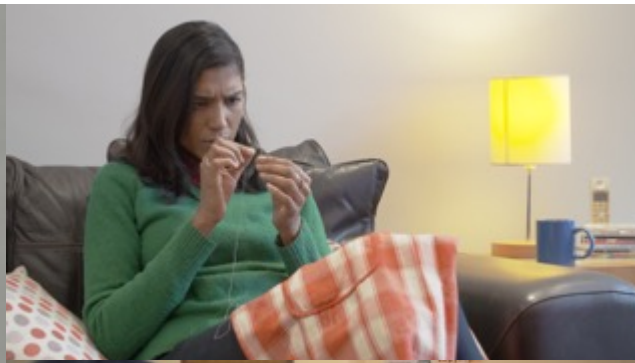
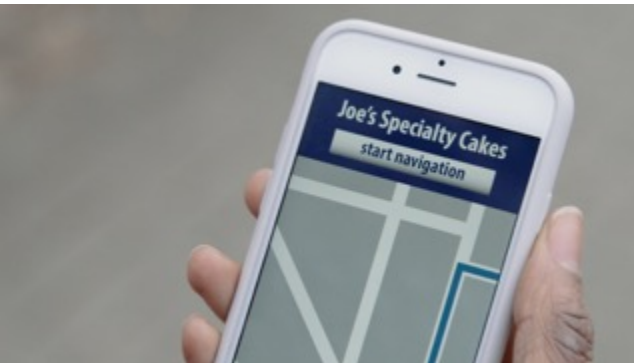
Advances in Efficiency and Reliability of Testing

- ✓ Website developers, designers, managers want to know: "Are we accessible yet?"
 - ✓ Can we get more reliable answers faster? Challenges:
 - ✓ Need standardized interpretations of test rules
- ✓ Need to increase the automation of tests
 - ✓ Need large repository of sample test data
 - ✓ Accessibility Conformance Testing Rules and Formats
- ✓ Machine learning
 - ✓ Help identify patterns
 - ✓ Help identify images
 - ✓ More reliably interpret meaning in surrounding context

Ecosystem of Accessibility Resources

- Many types of educational resources, and resources supporting implementation
 - Conceptual introductions: [WAI Perspectives Videos](#)
 - How to Meet WCAG 2: Quick Reference
 - Web Accessibility Introductory Course MOOC
 - [How People with Disabilities Use the Web](#)
 - [Designing and Developing for Web accessibility](#)
 - [Business Case for Digital Accessibility](#)
 - TEDxMIT: [Creating an Accessible Digital Future](#)

WAI Perspectives Videos



MOOC: Introduction to Web Accessibility

- Online course with authoritative web accessibility curriculum
- Availability for free, and/or paid certificate
- Based on a free curriculum developed by WAI
- <https://www.edx.org/course/web-accessibility-introduction>



What's Different During Covid?

- Increased importance of remote, or “hybrid,” interactions
- Many accessibility barriers with remote video-conferencing
 - screen reader interoperability
 - access to streaming captions and interpreters
 - ability to “pin” views with key accessibility information
 - understandability of video-conference controls
- Also accessibility of online learning, telehealth, finances, etc
- Many aspects of Web Content Accessibility Guidelines are relevant for ensuring accessibility of remote meetings

Many Ways to Participate in WAI !

- Review draft guidelines, specifications, educational resources
- Send comments to improve draft documents
- Help translate WAI documents
- Participate in WAI Working Groups, Task Forces, Interest Group, Community Groups
- Join W3C and WAI

Promoting Digital Accessibility

- Ensure clear policies for web accessibility
- Harmonize with international standards
- Promote awareness and education for digital accessibility
- Ensure that authoring tools and evaluation tools support accessibility
- Leverage artificial intelligence to make accessibility more efficient
- Monitor implementation and improve policies
- Promote accessibility as an innovation driver



Thank You!

More information: www.w3.org/WAI