



## PDF Accessibility – Regulations, Risks and Strategies

Session Begins 1:00 pm CST  
 Periodic Audio Testing Occurring

## Useful Keyboard Shortcuts

- Full list - *Keyboard Shortcuts* from the *Help* menu on the Menu Bar.
- Chat: Move cursor to the Message text box
  - Windows: Ctrl+M
  - Mac: Command-M
- Speaker level Up:
  - Windows: Ctrl+Alt+Up Arrow
  - Mac: Command-Option-Up Arrow
- Speaker level Down:
  - Windows: Ctrl+Alt+Down Arrow
  - Mac: Command-Option-Down Arrow

## More keyboard shortcuts

- Open Closed-Captioning window

Windows: Ctrl+F8

Mac: Command-F8

- Close Closed-Captioning window

Windows: Alt+F4 or Ctrl+W

Mac: Command-W

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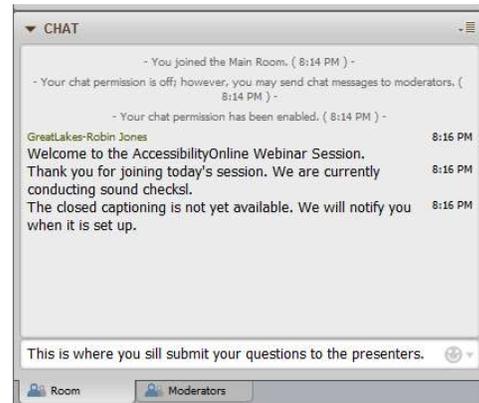
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    - Select “Visual Notifications” Uncheck anything you don’t want to receive and “apply”
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### *PDF Accessibility – Regulations, Risks and Strategies*

November 16, 2017

Paul Rayius, Accessibility Training Manager, CommonLook

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**Presenter**



**Paul Rayius**  
 Accessibility Training Manager  
 CommonLook  
 (202) 469-4487  
[prayius@commonlook.com](mailto:prayius@commonlook.com)



## Agenda

### PDF Accessibility: Regulations, Risks, and Strategies

1. What's Driving Digital Accessibility?
2. Regulations and Standards
3. Multi-Phase Plan for Document Accessibility
4. Tools to Use Along the Way
5. Tips for Document Accessibility Success

*Questions and Answers*



## Disability ... Part of The Human Condition

*"Disability is part of the human condition.  
Almost everyone will be temporarily or permanently  
impaired at some point in life." WHO*

Over 1 billion people<sup>(1)</sup> live with some form of disability

- ❖ That's 1 in 7 people, or 15% of the world's population
- ❖ 285 million people are visually impaired
- ❖ 360 million people suffer from hearing loss

1. Global Disability Action Plan 2014-2021 WHO - World Health Organization



## Equal Access for People With Disabilities

Made Possible by the Web, but Accessibility Barriers Exist



Vision

Low vision, blind, color blind etc.

- ❖ Screen readers
- ❖ Braille display



Hearing

Deaf, hearing impaired, noisy places

- ❖ Closed/open captions
- ❖ Transcripts



Mobility

Muscular dystrophy, arthritis, injury etc.

- ❖ Keyboard only
- ❖ Speech to text



Cognitive

Learning disability, dyslexia, ADHD etc.

- ❖ Digital content layout
- ❖ Information organization

Massive quantities of documents are added to websites each year. PDFs remain the most popular "final-form" electronic format. Documents authored using Microsoft Office are also pervasive.

The critical challenge is in ensuring that documents are accessible and usable by everyone.



## What is Driving Digital Accessibility?

Market Drivers

- ❖ Inaccessible content can mean 1-in-5 readers miss out
- ❖ Accessibility, while essential for disabled people, benefits everyone
- ❖ The law is also a major driver of accessibility



**Document Accessibility Drivers**

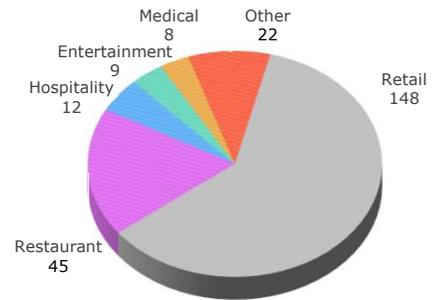
- Legal Risk**
  - ✓ Complaints
  - ✓ Litigation costs
  - ✓ Damages
- Competitive Advantage**
  - ✓ Meet growing demand
  - ✓ Differentiation
- Brand Value**
  - ✓ Ease of use and access
  - ✓ Progressive image
  - ✓ Reputation
- Customer Experience**
  - ✓ Meet needs of people with disabilities
  - ✓ Customer satisfaction



# What is Driving Digital Accessibility?

## Threat of Legal Action

- ❖ Organizations face tougher accessibility regulations and penalties for non-compliance
- ❖ 6601 ADA lawsuits filed in 2016<sup>(1)</sup>— 37% more than a year earlier
  - ❖ Rising potential costs from complaints, litigation costs, damages, injunctions
  - ❖ Precedents in multiple industries
- ❖ A recent ADA ruling: Winn-Dixie Stores (2017)
  - ❖ Now, any website considered a public accommodation can violate ADA if not fully accessible to WCAG 2.0 AA



Number of **lawsuits** claiming business websites aren't accessible to the blind, by industry, for 2015-2016<sup>(2)</sup>

(1) ADA Title III lawsuits, Seyfarth Shaw LLP  
 (2) To October, 2016, Seyfarth Shaw LLP



# Accessibility Regulations Demand Compliance



- ❖ Section 508
  - ❖ All electronic and ICT developed, procured, maintained, or used by the Federal Government is to be accessible to people with disabilities
  - ❖ Refresh harmonizes with WCAG 2.0 and extends to websites, electronic documents and software
- ❖ Americans with Disabilities Act (ADA Title II, III)
  - ❖ Applies to state/local gov't. (Title II)
  - ❖ Commercial and public entities with "places of public accommodation" (Title III)
  - ❖ Includes their websites and electronic content



# Accessibility Standards



- ❖ Section 508
  - ❖ Not only a law but also “How to”
  - ❖ Recently updated (“Refreshed”)
- ❖ W3C Web Content Accessibility Guidelines (WCAG) 2.0
  - ❖ International standard for web accessibility
  - ❖ Defines testable success criteria at 3 compliance levels
  - ❖ The “New” Section 508 (after the Refresh)
- ❖ PDF/UA
  - ❖ PDF specific standard for document accessibility



# WCAG

- ❖ Created by W3C / WCAG WG – for WEB content
- ❖ Guidelines – increased accessibility for all
- ❖ Technical Standard – not an intro!
- ❖ Four Principles (POUR)
- ❖ 12 Guidelines with testable success criteria (A to AAA levels)
- ❖ CAN be applied to PDF
- ❖ Referenced in both Title II and Title III



## PDF/UA

- ❖ ISO 14289
- ❖ Specific to PDF
- ❖ (Very high) technical standard
  - ❖ Mainly for developers/ authors
- ❖ Three sections:
  - ❖ PDF files
  - ❖ PDF reader software
  - ❖ How AT reads PDF



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## Differences Between WCAG and PDF/UA

- ❖ WCAG is for WEB
- ❖ WCAG is more broad in scope
- ❖ There are some instances where “a 1:1 mapping doesn’t exist”

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## Differences – Be More Specific...

- ❖ For “video-only” content:
  - ❖ WCAG - provide an alternative or audio track that provides “equivalent” info
  - ❖ PDF/UA – tag media with alternative description (how much info?) (Embedded video in PDF isn’t common)
  - ❖ XFA-PDF is allowed in WCAG (not PDF/UA)

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## Differences on the PDF/UA Side

- ❖ PDF specific
- ❖ Doesn’t address:
  - ❖ General accessibility principles
  - ❖ A/V content or video captions
  - ❖ Design, visual appearance, etc., except tagging

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## Differences on the PDF/UA Side (continued)

- ❖ JavaScript – needs to be accessible, but not a J.S. standard
- ❖ Requirements for consistent / reliable presentation – print, electronic, or AT
- ❖ Fonts must be embedded – Author intent / legible
- ❖ Article thread – reading order – not in WCAG
- ❖ Heading levels!



## Which to Choose?

According to the AIIM (Assoc. for Information and Image Management):

In situations “such as in PDF, it is generally appropriate to consult the accessibility standard (if any) developed specifically for that technology.”

*(That would be PDF/UA)*

- ❖ ADA / 508 “only” requires WCAG (at the minimum)
- ❖ PDF/UA could be more difficult, time consuming, confusing



## Multi-Phase Document Accessibility Plan

1	2	3	4	5
<b>Review &amp; Assess</b>	<b>Strategy &amp; Plan</b>	<b>Implement</b>	<b>Expand Program</b>	<b>Monitor &amp; Report</b>
<ul style="list-style-type: none"> <li>❖ Review corporate goals and business environment, requirements</li> <li>❖ Select standard(s) to test for compliance</li> <li>❖ Audit/test digital assets against standard(s) for compliance</li> <li>❖ Set priorities for document remediation</li> <li>❖ Develop document accessibility policy for future</li> </ul>	<ul style="list-style-type: none"> <li>❖ Leverage Phase 1 data</li> <li>❖ How document accessibility and compliance is attained</li> <li>❖ Prepare project plan – with prioritized assets for remediation</li> <li>❖ Decide internal, outsourced, or hybrid remediation approach</li> <li>❖ Commence communication and training of team</li> </ul>	<ul style="list-style-type: none"> <li>❖ Execute a pilot program</li> <li>❖ Integrate accessibility into design, development, and testing process</li> <li>❖ Prepare best practice document accessibility checklists and processes</li> </ul>	<ul style="list-style-type: none"> <li>❖ Scale up document accessibility program</li> <li>❖ Raise exposure and awareness through communications</li> <li>❖ Increase capacity through training</li> <li>❖ Document and provide accessibility guidance to other departments, business units, and Lines of Business</li> </ul>	<ul style="list-style-type: none"> <li>❖ Monitor for compliance with accessibility laws and regulations</li> <li>❖ Test and report on PDF holdings: # of PDFs and % in compliance</li> <li>❖ Reports will guide document creation and future remediation projects</li> </ul>

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## Document Accessibility Plan

### Key Steps

1	2	3	4	5
<b>Review &amp; Assess</b>	<b>Strategy &amp; Plan</b>	<b>Implement</b>	<b>Expand Program</b>	<b>Monitor &amp; Report</b>
<ul style="list-style-type: none"> <li>❖ Review corporate goals and business environment, requirements</li> <li>❖ Select standard(s) to test for compliance</li> <li>❖ Audit/test documents against standard(s)</li> <li>❖ Set priorities for document remediation</li> <li>❖ Develop document accessibility policy for future</li> </ul>	<ul style="list-style-type: none"> <li>❖ Leverage Phase 1 data</li> <li>❖ How document accessibility and compliance is attained</li> <li>❖ Prepare project plan – with prioritized assets for remediation</li> <li>❖ Decide internal, outsourced, or hybrid remediation approach</li> <li>❖ Commence communication and training of team</li> </ul>	<ul style="list-style-type: none"> <li>❖ Execute a pilot program to perform remediation on target documents</li> <li>❖ Integrate accessibility into design, development, and testing process</li> <li>❖ Prepare best practice document accessibility checklists and processes</li> </ul>	<ul style="list-style-type: none"> <li>❖ Scale up document accessibility program</li> <li>❖ Raise exposure and awareness through communications</li> <li>❖ Increase capacity through training</li> <li>❖ Document and provide accessibility guidance to other departments, business units, and Lines of Business</li> </ul>	<ul style="list-style-type: none"> <li>❖ Monitor for compliance with accessibility laws and regulations</li> <li>❖ Test and report on PDF holdings: # of PDFs and % in compliance</li> <li>❖ Reports will guide document creation and future remediation projects</li> </ul>

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## Phase 1: Review and Assess

### Audit and Test Documents Against Standard(s) for Compliance

- ❖ Set goals -> choose standard -> test.
- ❖ Do it yourself OR Use a service?
  - ❖ Outsource it if:
    - ❖ PDF locations are unknown,
    - ❖ There are too many documents to do yourself, and/or
    - ❖ Time, expertise, knowledge of software/ standards is lacking.
  - ❖ Tools for Do It Yourself:
    - ❖ Adobe Acrobat,
    - ❖ PAC-2, and/or
    - ❖ CommonLook PDF Validator GlobalAccess.



## Adobe Acrobat (as a Checker)

- ❖ Pros:
  - ❖ Included in Acrobat Pro
  - ❖ Generates a report
- ❖ Cons:
  - ❖ Doesn't certify standards compliance
  - ❖ Can give "false positives/ negatives"



## PAC-2

### ❖ Pros:

- ❖ Free
- ❖ Tests against PDF/UA
- ❖ View tagging, role mapping
- ❖ Screen reader preview!

### ❖ Cons:

- ❖ Additional download (need IT / permission?)
- ❖ Doesn't show artifacts
- ❖ Can't save report
- ❖ Not much explanation of failures or warnings
- ❖ No functionality to fix issues



## CommonLook Validator

### ❖ Pros:

- ❖ Free
- ❖ Tests with multiple standards
- ❖ Custom Configure Checkpoints
- ❖ Generates a report
- ❖ Edit verification status
- ❖ Easily view tagged / untagged content, tag properties, metadata, and more

### ❖ Cons:

- ❖ Additional download (need IT / permission?)
- ❖ Limited functionality to fix issues



## Phase 2: Strategy & Plan

Determine Remediation Approach: In-house or Outsourced

Internal Project	Outsourced Remediation
<ul style="list-style-type: none"> <li>❖ Advantages                             <ul style="list-style-type: none"> <li>❖ Software* enables productivity &amp; effectiveness</li> <li>❖ Builds internal capacity &amp; awareness</li> <li>❖ Long term approach to maintain compliance</li> <li>❖ Combines with outsourcing as required</li> </ul> </li> <li>❖ Disadvantages                             <ul style="list-style-type: none"> <li>❖ Staff time and effort</li> <li>❖ Limited staff knowledge and experience</li> <li>❖ Learning curve for existing staff &amp; new hires</li> </ul> </li> </ul> <div style="border: 1px solid orange; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>* Industry software options</b></p> <ul style="list-style-type: none"> <li>❖ Adobe Acrobat Professional</li> <li>❖ CommonLook PDF GlobalAccess</li> </ul> </div>	<ul style="list-style-type: none"> <li>❖ Advantages                             <ul style="list-style-type: none"> <li>❖ Easier to implement, scale &amp; support</li> <li>❖ Increased speed &amp; agility</li> <li>❖ Cost-effectiveness (with certain vendors)</li> <li>❖ Vendor guarantee can reduce risk</li> </ul> </li> <li>❖ Disadvantages                             <ul style="list-style-type: none"> <li>❖ Higher costs in some project scenarios</li> <li>❖ Time required to contract with vendor</li> <li>❖ Wide range of vendor service accuracy &amp; quality levels</li> </ul> </li> </ul>

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## Adobe Acrobat (as a Remediation Tool)

- ❖ Pros:
  - ❖ Included in Acrobat Pro
  - ❖ Generates a report
  - ❖ Able to fix PDF in Acrobat
- ❖ Cons:
  - ❖ Doesn't certify standards compliance
  - ❖ Can give "false positives/ negatives"
  - ❖ Help documentation for minimum WCAG not PDF/UA
  - ❖ Some error documentation is incomplete/ incorrect
  - ❖ Hard, inefficient, error prone
  - ❖ No "Undo"

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## CommonLook PDF (as a Remediation Tool)

- ❖ Pros:
  - ❖ Tests against multiple standards
  - ❖ Custom Configure Checkpoints
  - ❖ Generates a report
  - ❖ Easily view tagged / untagged content, tag properties, metadata, role mapping, and more
  - ❖ Includes powerful tools to increase speed and accuracy in remediation and testing
  - ❖ Unlimited Undo!
- ❖ Cons:
  - ❖ Not free
  - ❖ Additional download (need IT / permission?)



## Phase 3: Implementation

Integrate accessibility into Document Development and Testing Process

- ❖ Invest in education for designers, developers, authors: accessibility concepts, standards, creating documents
- ❖ Internal processes guide content creation and dissemination
- ❖ Document accessibility is applied at multiple stages
  - ❖ **Creation** stage: using accessibility tools and features
    - ❖ Use integrated accessibility tools, if appl. to verify and correct
    - ❖ Select tools for authoring software (e.g. InDesign, Word, ...etc)
  - ❖ **Review** process: prior to disseminating content (e.g., to web)
  - ❖ **Finalizing** end product: at last review - PDF to be posted
- ❖ Higher costs incurred if accessibility is added late in development cycle (e.g., post-authoring stage)

- Document Accessibility Basics**
- ✓ Reading order & formatting
  - ✓ Using color, italics, symbols
  - ✓ Impact of contrast
  - ✓ Headings & styles, alternate text for images, data tables

- Accessibility Tools**
- ✓ Microsoft Word & PowerPoint built in accessibility checkers
  - ✓ Programs & plugins (e.g., MadeToTag for InDesign, CommonLook Office for Word and PowerPoint)



## Phase 4: Expand the Program

Audit and Test Documents Against Standard(s) for Compliance

- ❖ Reminders for this phase:
  - ❖ Scale up document accessibility program
  - ❖ Raise exposure and awareness through communications
  - ❖ Increase capacity through training
  - ❖ Document and provide accessibility guidance to other departments, business units, and Lines of Business



## Phase 5: Monitor & Report

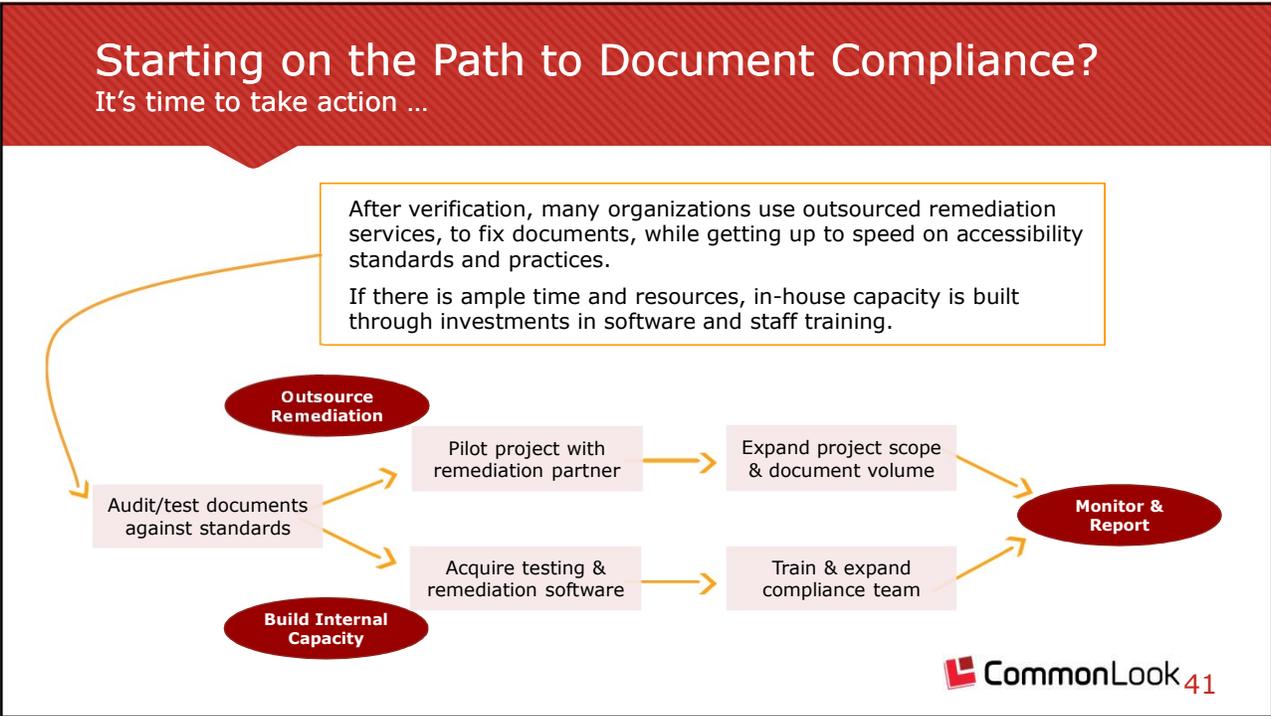
Assess and Monitor for Compliance with Accessibility Laws



Domain Compliance Report from CommonLook Clarity

- ❖ Goal: assess compliance status; monitor progress
  - ❖ Confirm PDFs are remedied, new PDFs are accessible
  - ❖ Assist in cases of litigation
- ❖ Goal: prioritize documents; manage remediation project
  - ❖ Track and test new documents, to organize compliance efforts
  - ❖ Create reports to guide document creation
- ❖ Tools and services available for monitoring and generating reports to be shared with the team
  - ❖ Many companies test and monitor web HTML content
  - ❖ CommonLook Clarity is designed specifically for PDF monitoring and reporting





- ## Tips for Document Accessibility Success
- ### Organizational Considerations
1. Create a cross-functional team, with a mandate to act proactively
  2. Gain executive support early in the program
  3. Build relationships among key stakeholders including legal, regulatory, compliance, IT, communications and others
  4. Invest in staff, software tools, and training to build internal capacity
  5. Choose an outsourcing partner for remediation services, to handle overflow workload, and complex projects
  6. Embed accessibility practices as corporate values, through communications and training
- 
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## Tips for Document Accessibility Success

Prepared for today. Ready for the Future.



1. Maintain a document inventory according to priority, importance to customers, relevance to compliance standards etc...
2. Select a partner with proven remediation process and practices, and the ability to guarantee results
3. Tackle low hanging fruit: fix document issues with highest impact on customers, and other stakeholders
4. With a large remediation project, try to show quick wins
5. Design with accessibility in mind – cuts the time and cost involved required for future remediation
6. To stay compliant, do accessibility checks at key milestones

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## Questions?

**You May Type and Submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area**

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**Thanks for Listening!**

*For More information*

*Visit our website: [www.commonlook.com](http://www.commonlook.com)*

*Or contact us:*

**Andy Baum**  
 Account Executive  
[abaum@commonlook.com](mailto:abaum@commonlook.com)  
 Office: (847) 448-1443  
 Cell: (773) 931-9474

**Paul Rayius**  
 Training Manager  
[prayius@commonlook.com](mailto:prayius@commonlook.com)  
 Tel. (202) 469-4487

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