# Occibely

## Embedding Text Alternatives in Images Using Photo Metadata

CSUN ASSISTIVE TECHNOLOGY CONFERENCE
MARCH 15, 2022



## Agenda

- 1 INTRO TO PHOTO METADATA
- 2 IPTC ACCESSIBILITY PROPERTIES
- 3 OPPORTUNITIES AND CHALLENGES
- 4 BEST PRACTICES

- 5 HUMANS VS. MACHINES
- 6 PHOTO METADATA DEMO
- 7 HOW TO GET STARTED
- 8 THE NEXT DECADE

## Photo Metadata

#### WHAT IS IT?

EXIF - Camera settings

IPTC Core & Extension

XMP – IPTC, Dublin Core, VRA Core

#### WHO USES IT?

News agencies, photographers, publishers, museums, galleries, archives, libraries, collections, databases, and more



## How do you write and edit it?

#### IMPORT ASSETS TO IMAGE METADATA SOFTWARE

Import all auto-generated or pre-populated metadata and manually fill in the remaining information.

#### SOFTWARE PROGRAMS THAT SUPPORT IPTO

ExifTool: Command-line read/write/edit app

Adobe: Bridge, Lightroom, Photoshop

Metadata Tools: Photo Mechanic, ImageSnippets

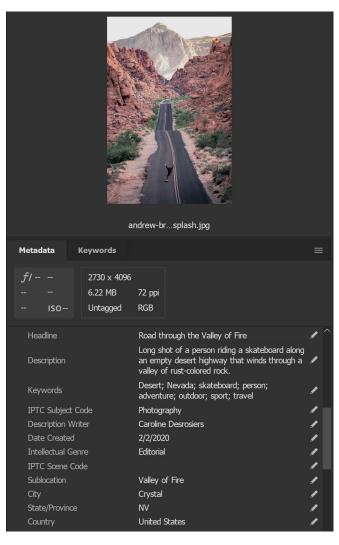
#### LIST OF PHOTO METADATA SOFTWARE PROVIDERS

<u>iptc.org/standards/photo-metadata/software-support</u>



## What does photo metadata look like?





**HEADLINE:** Road through the Valley of Fire

**DESCRIPTION:** Long shot of a person riding a skateboard along an empty desert highway that winds through a valley of rust-colored rock.

**KEYWORDS:** Desert; Nevada; Skateboard;

Person; Adventure; Outdoor; Sport; Travel

**CREATOR:** Andrew Broderick

**LOCATION:** Crystal, NV

**DATE CREATED:** 2/2/2020





## How do you pass it?

#### **ESTABLISHING A WORKFLOW**

Create an input channel for all image assets

Add or update IPTC metadata properties

Export images & metadata to a DAM system

Share & distribute assets directly to output channels

Synergize DAM with CMS or PIM

### What are the benefits?

Allows transportation of info within an image file

Provides a system for tracking and organizing information

Supports digital workflows and operations

Improves online and offline search and discovery





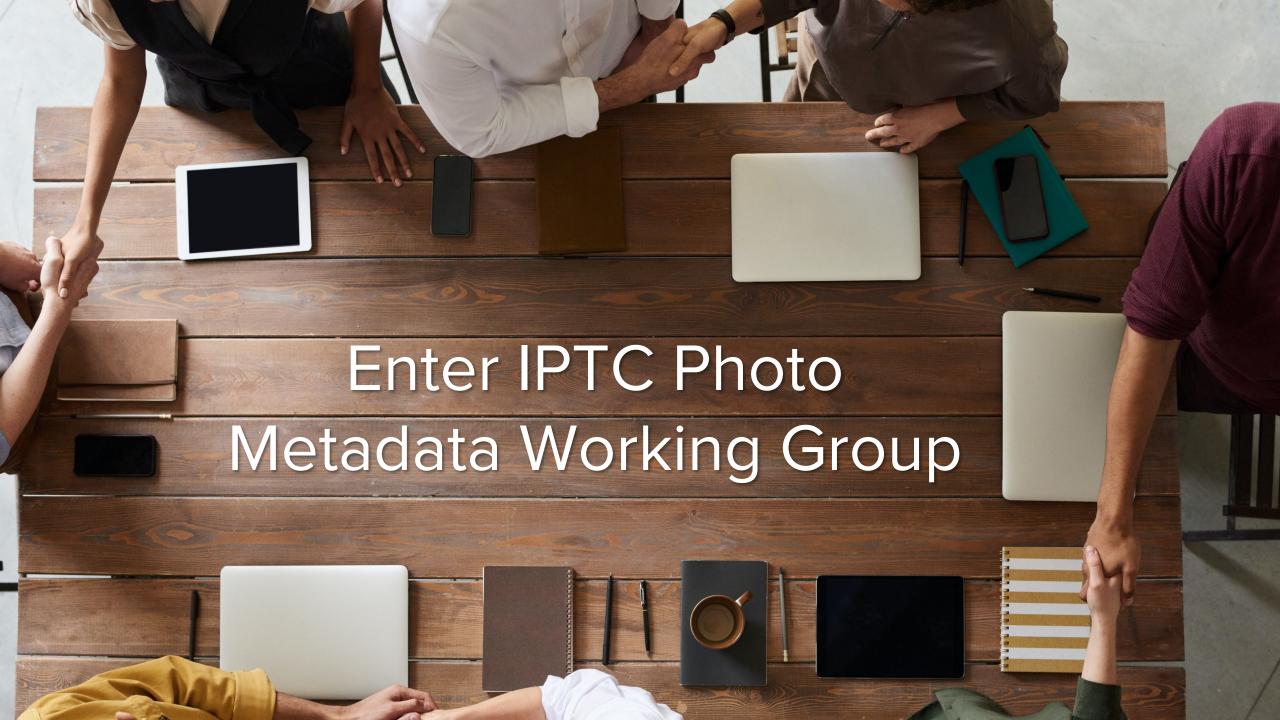
## What does photo metadata have to do with alt text?

Missing, inaccurate, incomplete, keyword-stuffing

Why are we still struggling to describe images?

Al solutions to the rescue?

A way forward to using humans for human work





#### **DIAGRAM Center Working Paper – April 2011**

#### Potential Use of Image Description Metadata for Accessibility

This working paper outlines the current barriers and opportunities for providing image description within publishing tools, technologies, and production processes. Ongoing discussion with standards groups, Adobe and other tool developers is exploring the feasibility of extending support for alt text and longdesc within image formats and authoring tools.

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## New Accessibility Properties

HOW WERE THE STANDARDS UPDATED?

Alt Text (Accessibility)

Extended Description (Accessibility)

Headline, Description/Caption, Title

Description Writer

### What comes next?

#### **CHALLENGES**

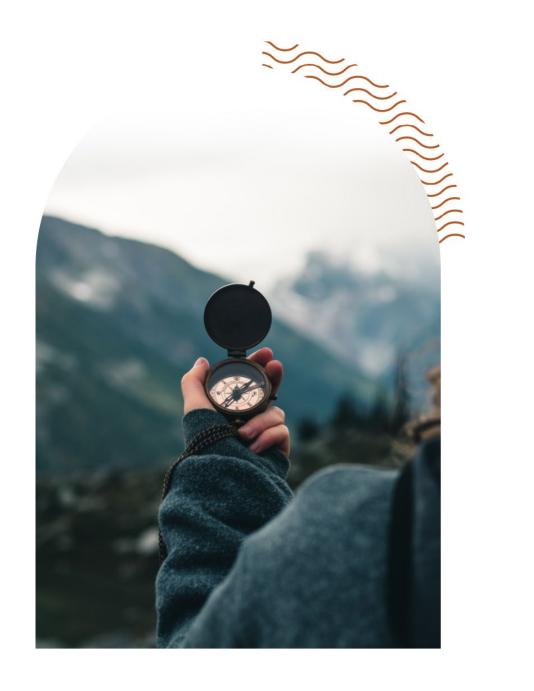
How to adapt alt text for different contexts

Need to add HTML markup to extended descriptions

#### **OPPORTUNITIES**

Reduce duplication of efforts

Shared responsibility for managing image accessibility



## WCAG Standards & Techniques

#### **TEXT ALTERNATIVES**

Non-text content, rendered through multiple methods, required for WCAG A, AA, AAA

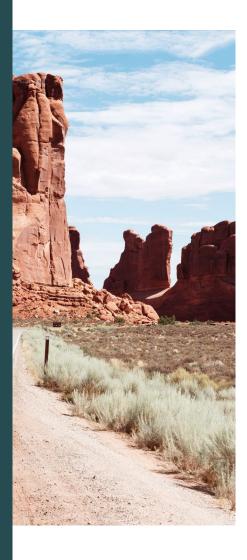
#### HTML ATTRIBUTES

<alt> attribute for <img> elements <figure> and <figcaption> <a href> link to description

#### **ARIA**

<figure> role and <aria-labeledby> <aria-describedby>





## Alt Text Tips

Think about the content, purpose, and meaning

Start with the primary focus

Describe all relevant details

Average 125 and keep it under 250

Can you visualize the same image?



## Extended Description Tips

#### **EXTENDED DESCRIPTION DEFINITION**

Continue information provided in alt text

Elaborate on content, purpose, and meaning

Do not repeate nearby text on page

#### **ALT TEXT**

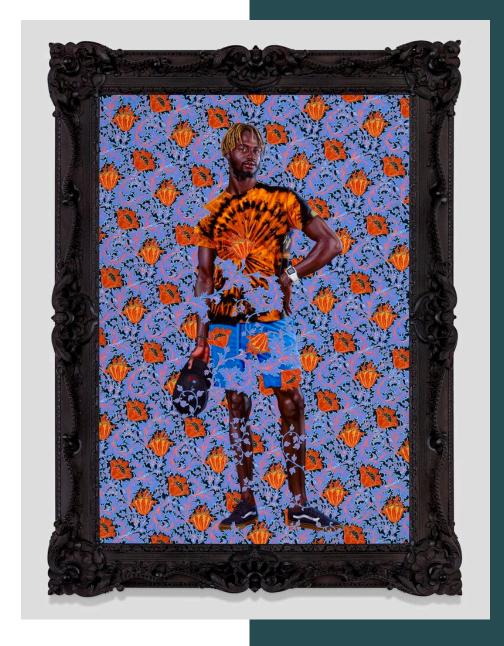
Wiley's photorealist style painting depicts a Black man wearing a black and orange tie dye t-shirt, blue shorts, black Vans with a white stripe, and a white smart watch.

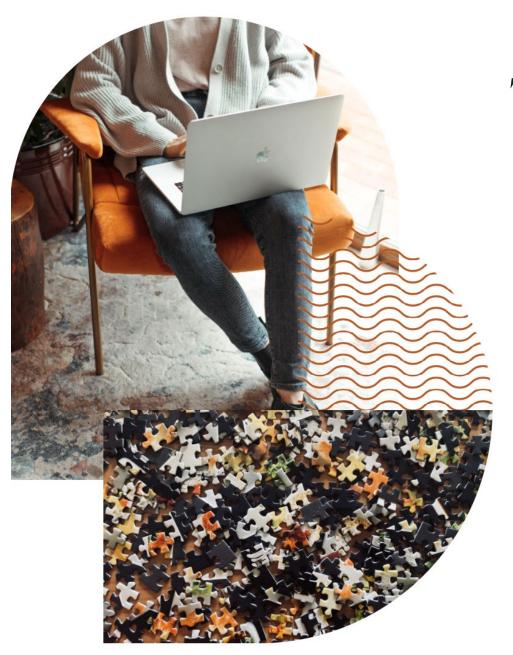


Extended Description on Next Slide

## **Extended Description**

The man stands in a relaxed position with left hand on hip, looking out in front of him with a neutral expression. His blond hair is in tight braids falling down to about ear level. He holds a black baseball cap with a red logo in his right hand. The background is purple, with a repeating pattern of individual orange flowers that match his t-shirt, weaved together with clusters of small blue leaves on a vine. The background overlaps his midsection with flowers flowing across his blue shorts. Tendrils crawl up the man's legs and arms, making it appear as though he is somehow part of the floral background.





## They say context is everything...

#### **HOW DOES IT IMPACT ALT TEXT?**

Industry - Technology, Fashion, Home Goods, Hospitality

Content Category - Education, eCommerce, Entertainment

Surrounding Text - Text that relates to / influences meaning

Groups of Images - Gallery, Collage, Sequence

Audience - Student, Customer, Language, Reading Level

## Humans vs. Machines



#### **INACCURATE**

Human: Climber adjusts ropes as they scale a bowed rock face against a quilt of clouds in the background.

Al: A group of ants climbing a rock.



#### **INCOMPLETE**

Human: Woman lounges on an emerald green velvet chair with a book over her face.

Al: A person sitting in a chair.



#### **OFFENSIVE**

Human: Back of a person using a wheelchair snapping a photo of a man standing on a sidewalk.

Al: A person pushing a stroller with a person in it.

## Human-Focused Approach

#### WHY IT'S SO IMPORTANT

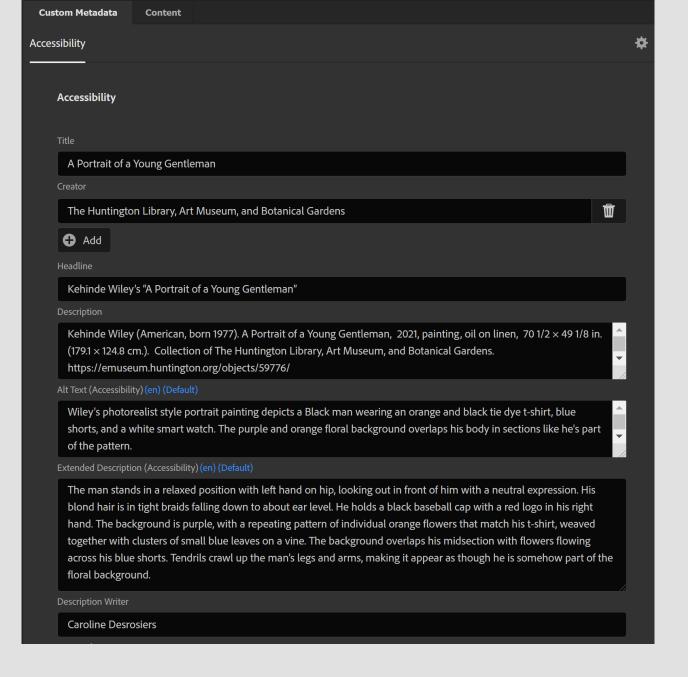
Incorporating inclusive language for gender, age, disability

Focus on improving the audio content experience

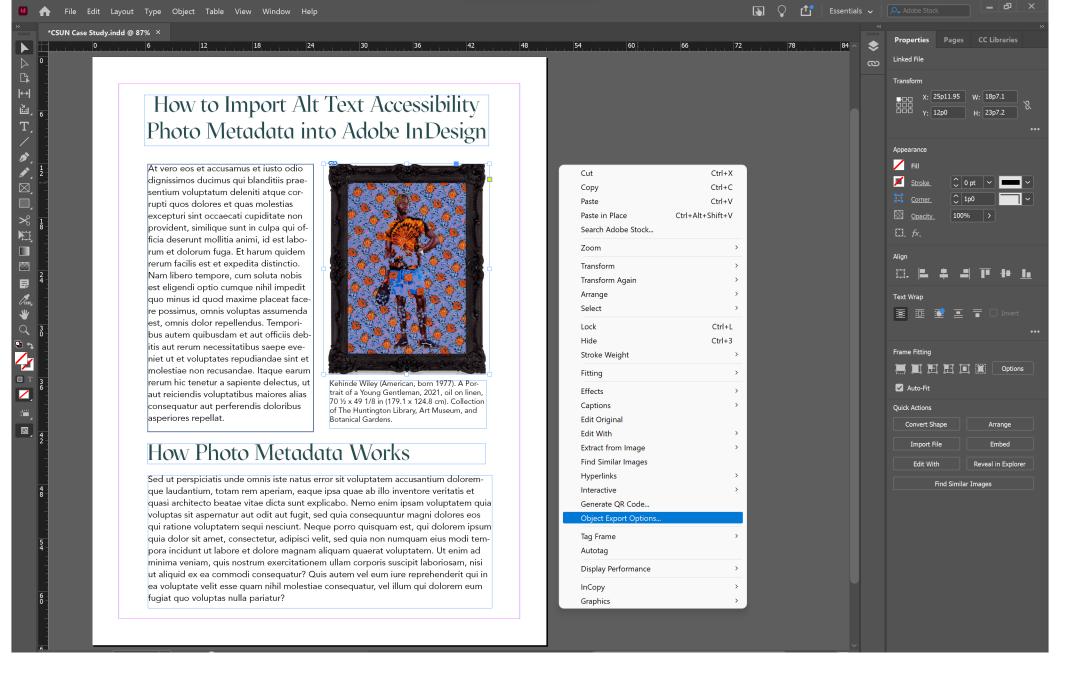
Opportunity to improve image SEO and visual search



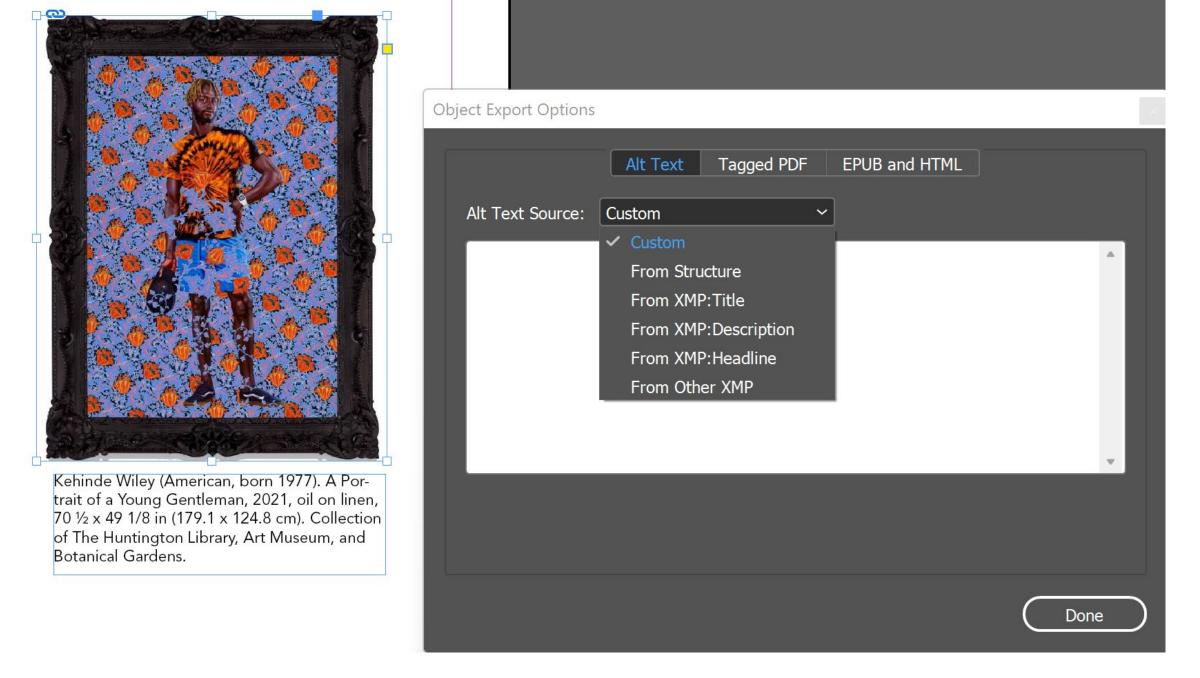




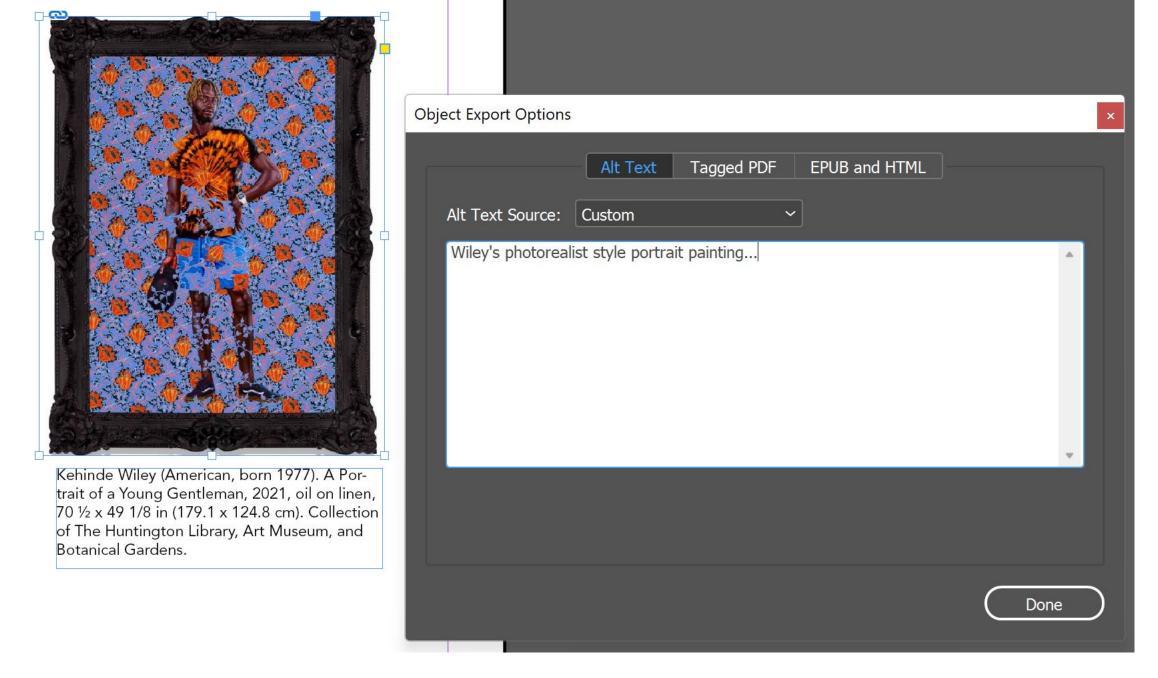
Adobe Bridge > Custom Metadata Panel Plugin > accessibility\_view.json



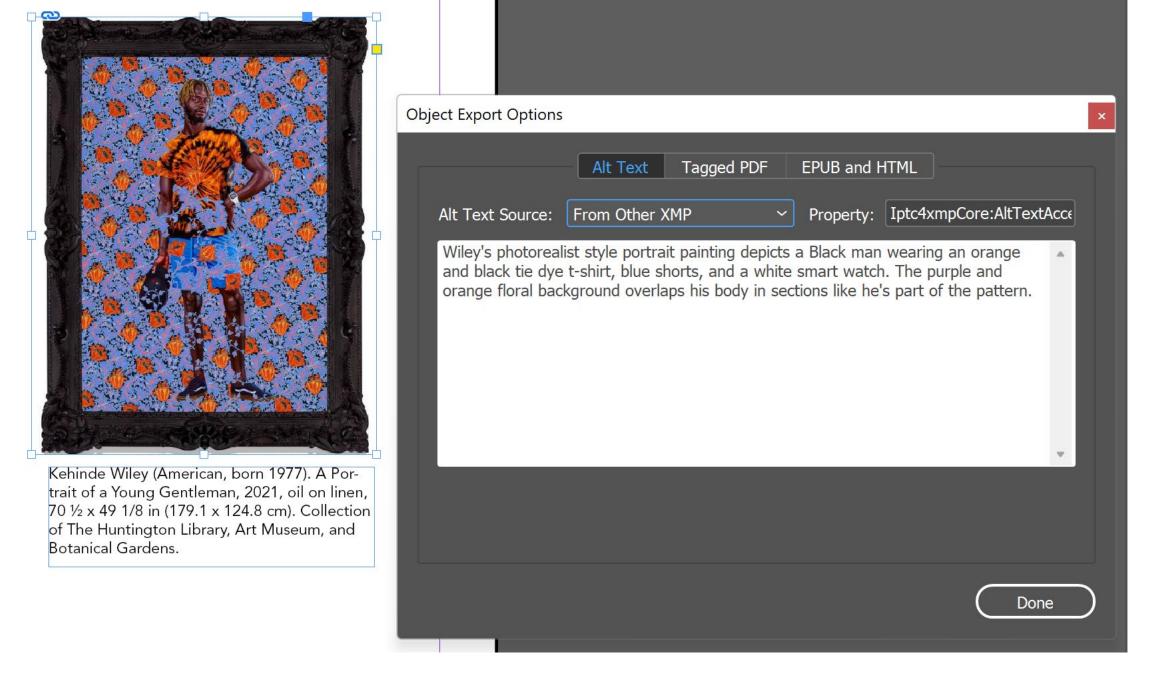
Adobe InDesign > Select Image > Right Click > Object Export Options



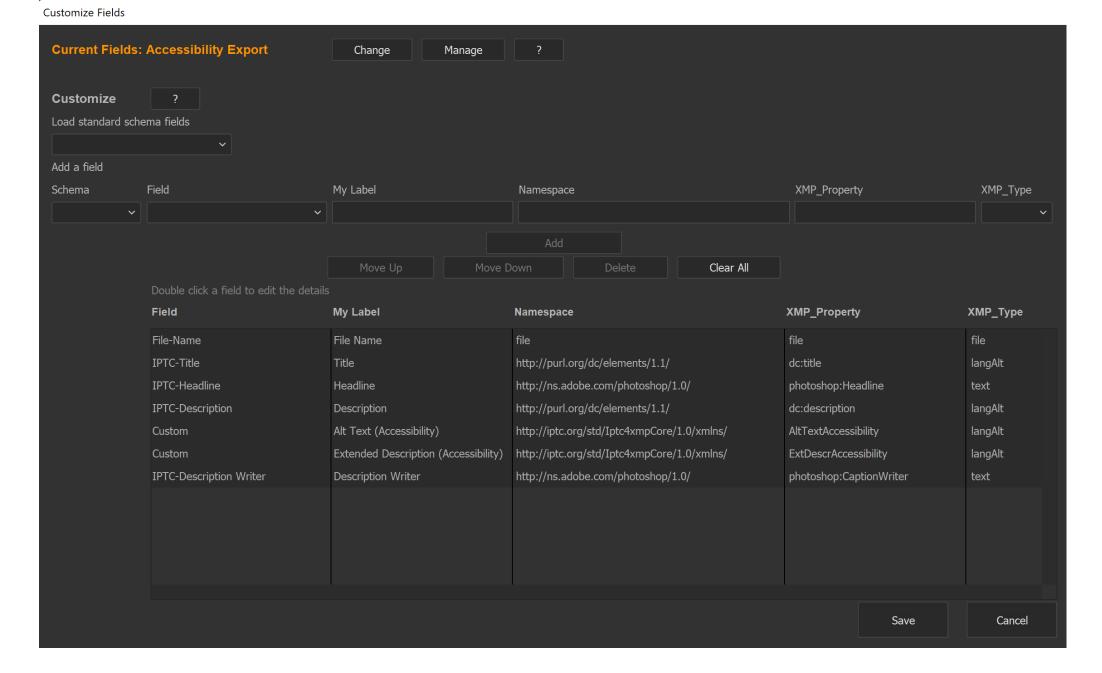
Object Export Options > Alt Text Source > Make a Selection



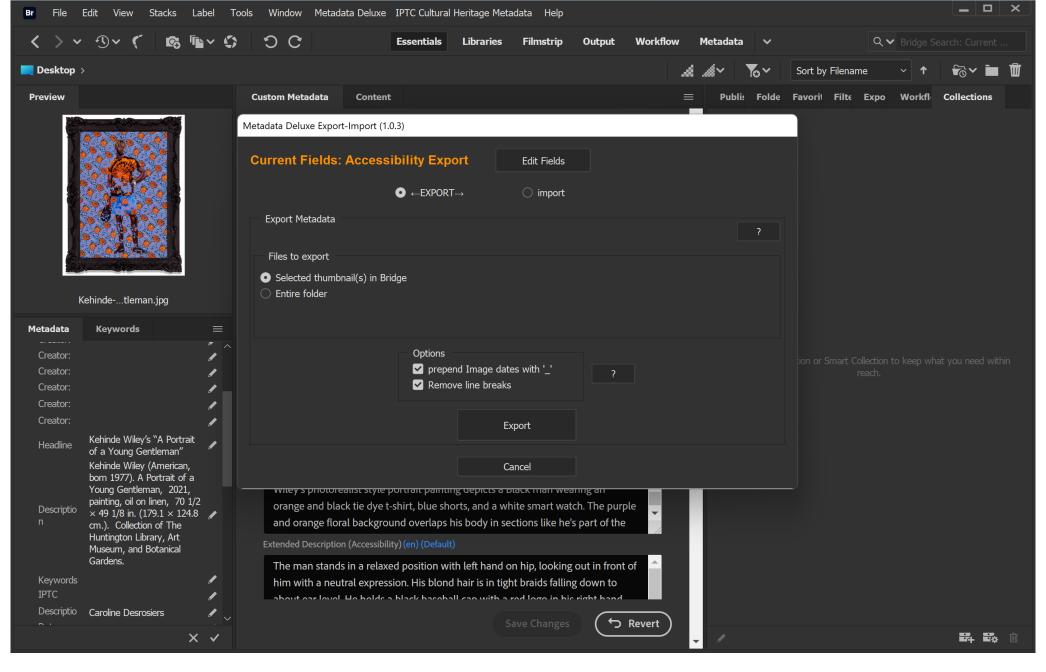
Object Export Options > Alt Text > Custom > Manual Entry



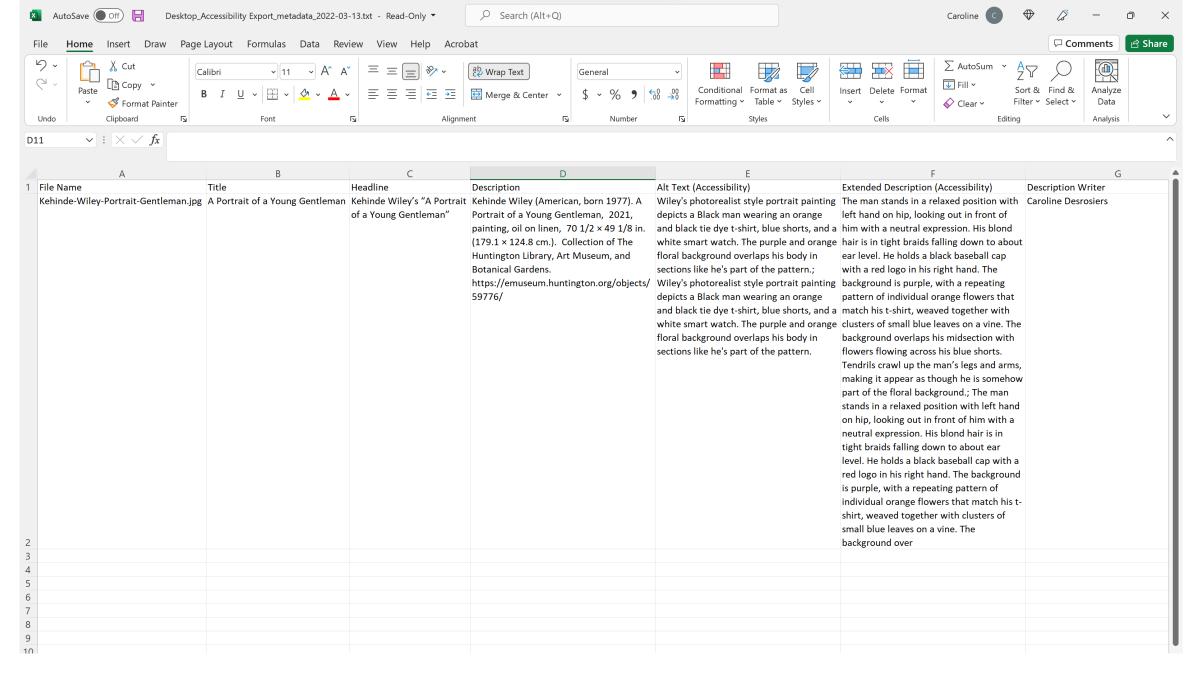
Object Export Options > Alt Text > From Other XMP > Iptc4xmpCore:AltTextAccessibility



Metadata Deluxe Export Import > Customize Fields > Add XMP AltTextAccessibility and ExtDescrAccessibility



Metadata Deluxe Export Import Plugin > Export Options



Open TXT file in Excel



## o get started?

Shift the mindset to truly "own" your images

Map out how metadata will move through your systems

Request support from technology providers

Establish image standards and requirements

Follow IPTC for updates on the new accessibility fields



## The Next Decade

#### WHAT'S NEXT FOR METADATA?

Born-accessible content workflow solutions

Further development of standards and best practices

Human-scaled photo metadata workflows across systems

Extended description solutions for complex images

Prioritization of DEIA initiatives



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