



web3
ALLIANCE



Garantire la provenienza dei contenuti: il progetto CAI

MATTEO ORIANI

Principal Cloud Consultant – Adobe West EMEA

40 Years of Innovation

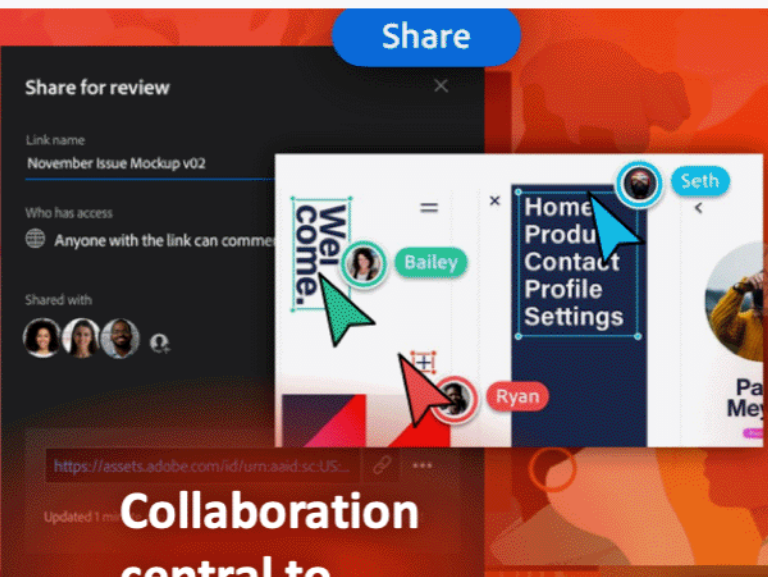


DIGITAL RESHAPING HOW WE CONNECT, INSPIRE & ENGAGE

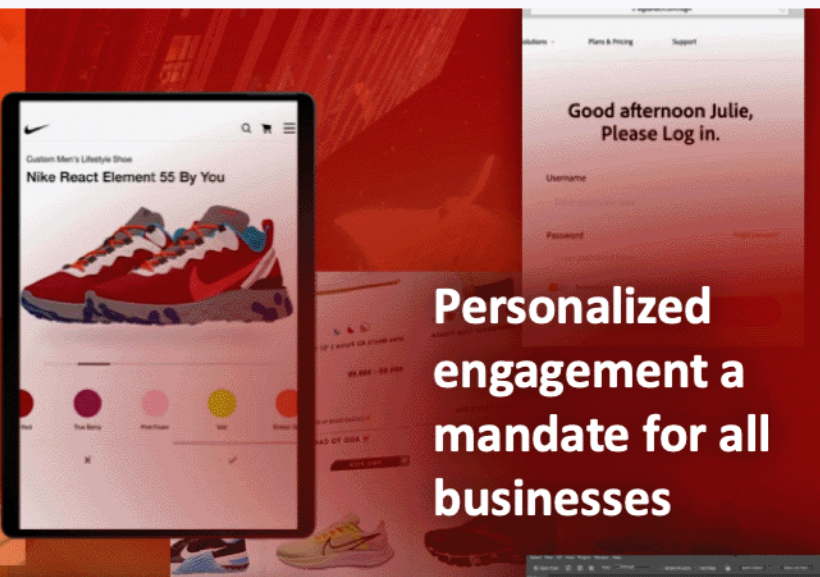
**Content &
application
consumption
exploding**



**Collaboration
central to
hybrid work**



**Personalized
engagement a
mandate for all
businesses**



**Creativity
redefining
productivity**



**AI & ML unleashing
new innovation**



ADOBE'S COMMITMENT

"AI is a revolutionary technology that has the potential to make an enormous impact on society. At Adobe, we are committed to ensuring that AI is developed responsibly, to serve our creators while respecting our customers."

Dana Rao

Executive Vice President, General Counsel and Corporate Secretary

<https://www.adobe.com/about-adobe/aiethics.html>



Content provenance



2022 Code of Practice on Disinformation



PARTNERSHIP ON AI

Practices for Synthetic Media



Adobe's Commitment to AI Ethics

At Adobe, our purpose is to serve the creator and respect the consumer, and our heritage is built on providing trustworthy and innovative solutions to our customers. As our technology becomes more sophisticated, our products and features have the potential to impact our customers in profound and exciting ways. However, we believe we have a role that goes beyond creating the world's best technology. We are committed to ensuring that our technology and the use of our technology benefits society. At Adobe, as we innovate and harness the power of AI in our tools, we are dedicated to addressing the harms posed by biased data in the training of our AI. AI Ethics is one of the core pillars of our commitment to Digital Citizenship, a pledge from Adobe to address the consequences of innovation as part of our role in society.

How AI is used in Adobe's products

We believe AI will enhance human creativity and drive value from the complex global digital ecosystem. For the Creative Cloud, we are focused on making it easier for everyone to tell their story with simpler and more intuitive tools. As part of our Digital Experience offerings, Adobe's enterprise customers use our AI to deliver relevant and meaningful insights and personalized digital experiences to their end customers. And with Document Cloud, AI-enabled features help understand the structure of PDFs to assist the user in viewing, searching, and editing documents on any platform.

However, we recognize the potential challenges inherent in this powerful technology. AI systems are based on data, and that data can be biased. AI systems trained on biased data can unintentionally discriminate or disparage, or otherwise cause our customers to feel less valued. Therefore, we are committed to maintaining a principled and ethically sound approach to ensure our work stays aligned with our intended outcomes and consistent with our values. And we are actively participating in government discussions around the world to shape AI Ethics regulation for the good of the consumer and effectiveness in the industry.

AI Ethics Principles

At Adobe, we believe responsible AI development is based on the following three principles:

- **Responsibility:** We will approach designing and maintaining our AI technology with thoughtful evaluation and careful consideration of the impact and consequences of its deployment. We will ensure that we design for inclusiveness and assess the impact of potentially unfair, discriminatory, or inaccurate results, which might perpetuate harmful biases and stereotypes. We understand that special care must be taken to address bias if a product or service will have a significant impact on an individual's life, such as with employment, housing, credit, and health.
- **Accountability:** We take ownership over the outcomes of our AI-assisted tools. We will have processes and resources dedicated to reviewing and responding to concerns about our AI and taking corrective action as appropriate. Accountability also entails testing for and anticipating potential harms, taking preemptive steps to mitigate such harms, and maintaining systems to respond to unanticipated harmful outcomes.



Content Authenticity Initiative

The Content Authenticity Initiative is a group working together to fight misinformation and add a layer of verifiable trust to all types of digital content

CONTENT AUTHENTICITY INITIATIVE

MEMBERS



...more than 1000 members

CONTENT AUTHENTICITY INITIATIVE



The Content Authenticity Initiative is a group working together to fight misinformation and add a layer of verifiable trust to all types of digital content

Founded in late 2019 by **Adobe** in collaboration with the **New York Times** and **Twitter**

Content journey steps

- *Creation*
- *Editing*
- *Publishing & Sharing*
- *Viewing*

“State of the art” technologies at the core, Decentralized Identifiers (Blockchain), XMP, digital signature compliance with eIDAS



Project Origin
Protecting Trusted Media

Project Origin, founded in 2019 by **BBC, CBC Radio Canada, Microsoft** and the **New York Times**

Misinformation has become topical.

As news and information leaders, we have an obligation to put in place defensive measures to protect the information systems the public relies on.

The Origin team has been working to define an end-to-end **process** for the publishing, distribution and presentation of provenance enhanced media.



Coalition for Content Provenance and Authenticity

Coalition for Content Provenance and Authenticity (**C2PA**) is a **Joint Development Foundation** project that brings together the efforts of the **Content Authenticity Initiative (CAI)** and **Project Origin**.

The C2PA binds the efforts of these two groups and focuses exclusively on the development of open, **Global Technical Standards** to channel the content provenance efforts of the CAI and Project Origin

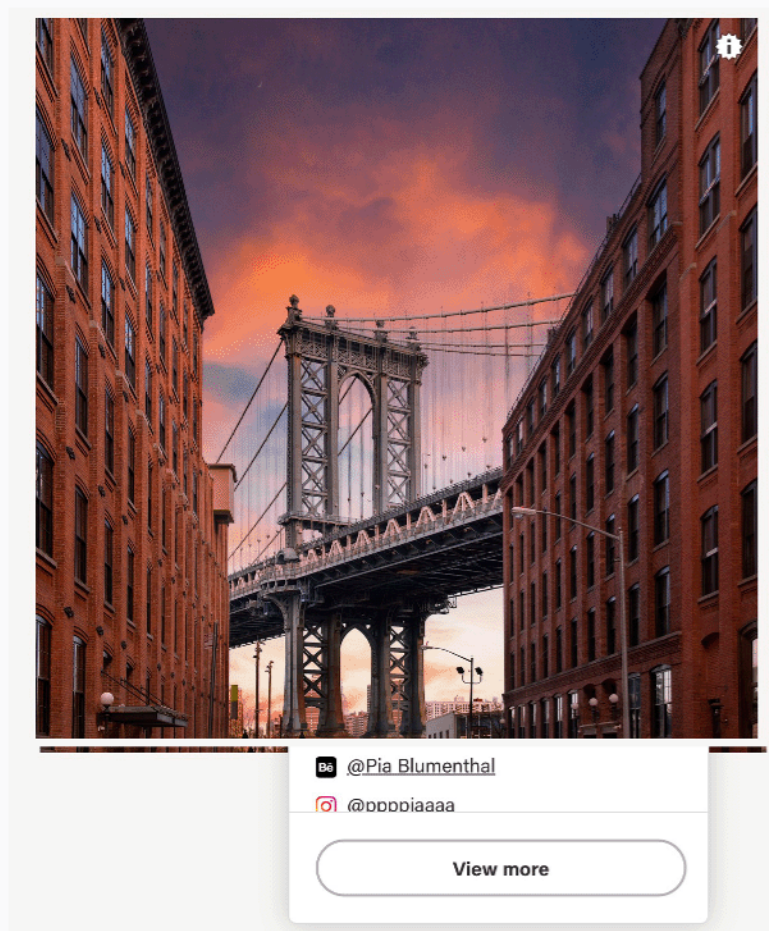
C2PA v1.3 released in 2023



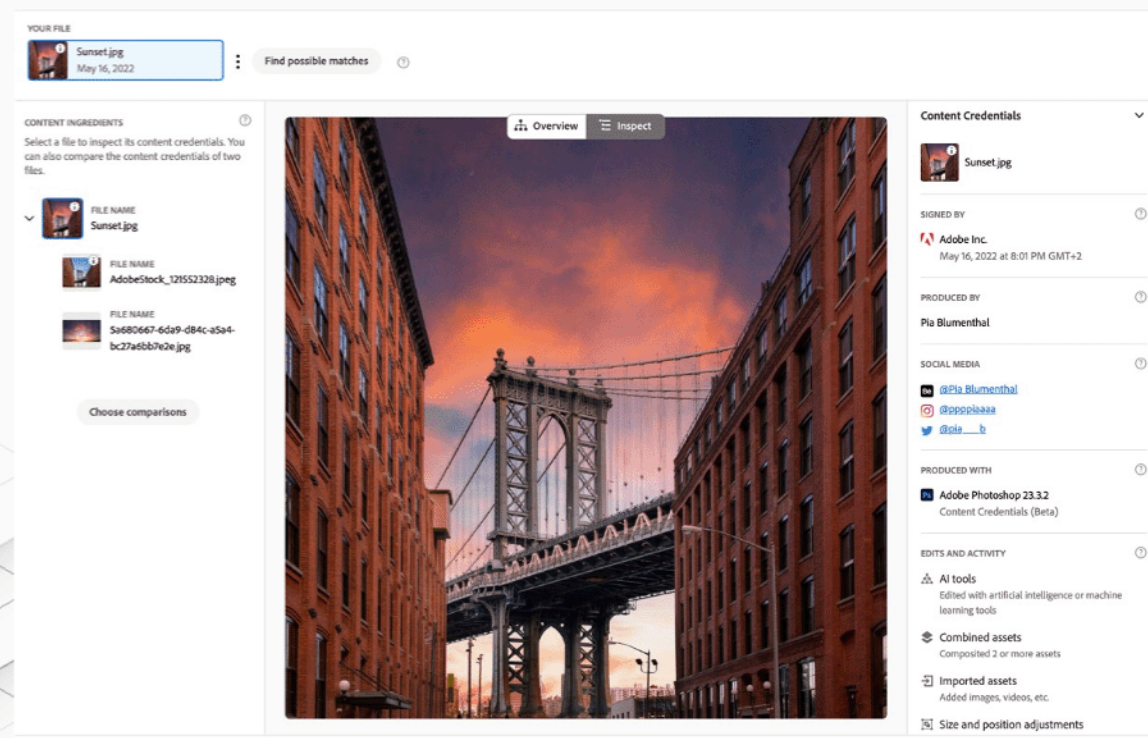
CONTENT AUTHENTICITY INITIATIVE

OPEN SOURCE JAVASCRIPT SDK - VERIFY TOOL

CAI Trusted Content



CAI Verify web page

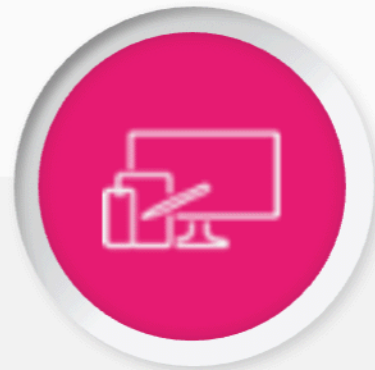
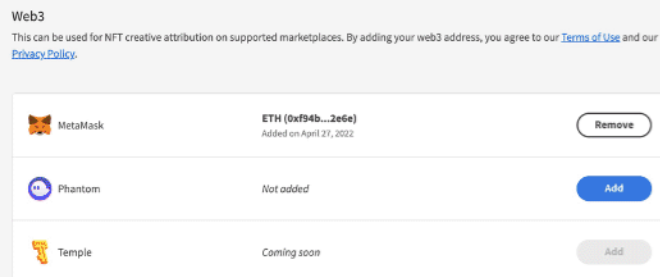


CONTENT AUTHENTICITY INITIATIVE

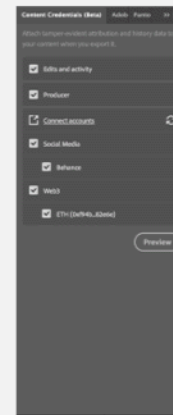
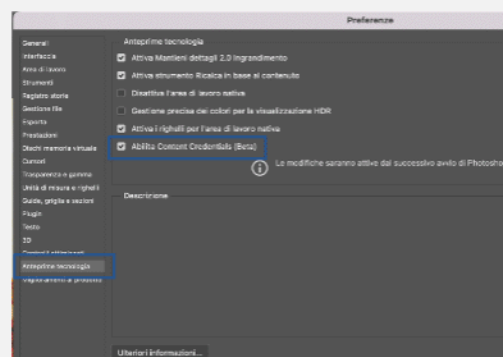
ADOBE TOOLS



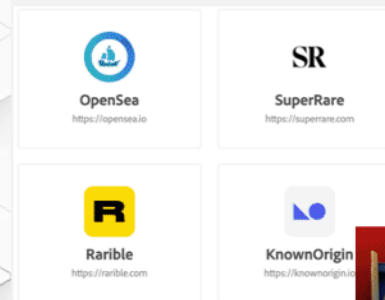
Web3 Crypto address
&
Adobe ID



Adobe CC apps configuration



Adobe Stock - Bēhance
Website Custom Integration
CAI Open-source tools



CONTENT AUTHENTICITY INITIATIVE

ADOBE TOOLS



Raccolte di risorse selezionate

Esplora le più incredibili e variegata collezioni delle nostre risorse stock ad alta risoluzione ed esenti da royalty



Foto Stock
Stupende e ricercate immagini stock esenti da royalty

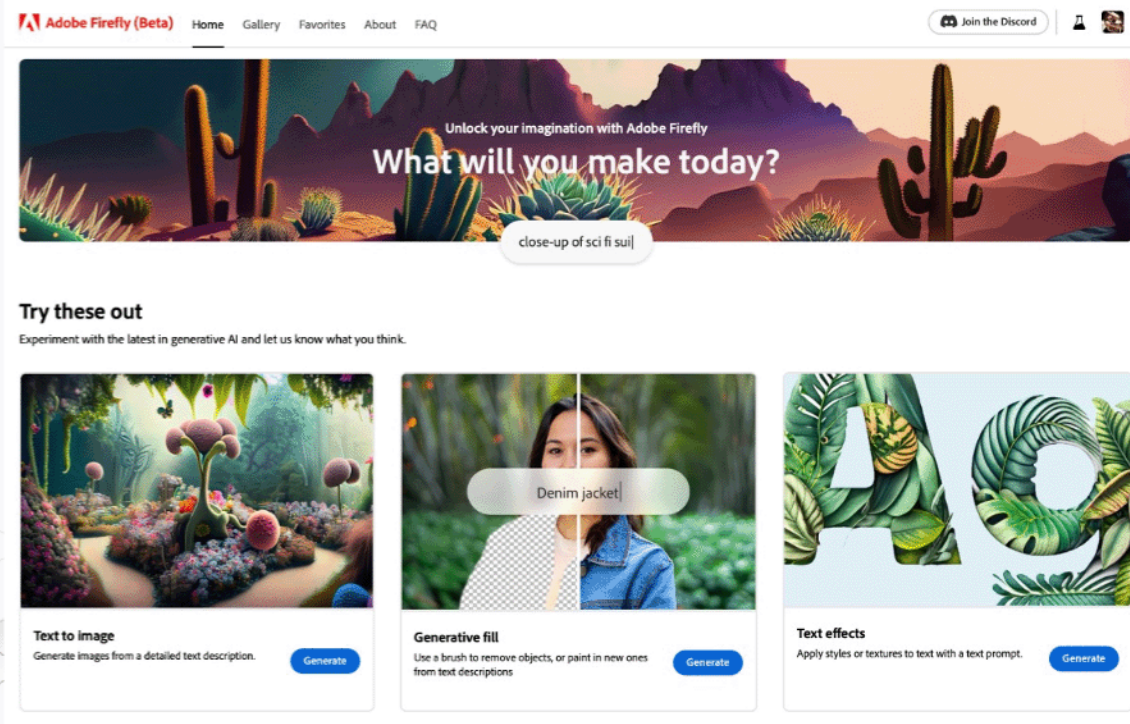


Immagini stock premium
Foto Stock ad alto impatto ed esenti da royalty per una narrazione potente



Filmato video Stock
Splendide clip video in 4K e HD per qualsiasi progetto animato

Adobe Stock & Bēhance



Adobe Firefly (GenAI commercial safe)


CONTENT AUTHENTICITY INITIATIVE

USE CASES – PIXELSTREAM

C2PAToolCAI c2patool/0.3.8 c2pa-rs/0.15.0
id: KoToqiolB9J8QtBXk18j

Input Images


The source image is your new image that you would like to be encoded. The parent image is the image that you modified to create the source image. Any previous c2pa manifests on the parent image will be included in the source image encoding.



Source Image

Upload a file or drag & drop
JPG or PNG up to 10MB

(required)



Parent Image

Upload a file or drag & drop
JPG or PNG up to 10MB

(optional)

Manifest Actions Assertion

This generates C2PA Version 1.1 actions

Color Adjustments

Changes to tone, saturation, etc.

☐

Converted

The format of the asset was changed.

☐

Created

The asset was first created, usually the asset's origin.

☐

Cropped

Areas of the asset's "editorial" content were cropped out.

☐

Drawing

Changes using drawing tools including brushes or eraser.

☐

Edited

Generalized actions that would be considered "editorial transformations" of the content.

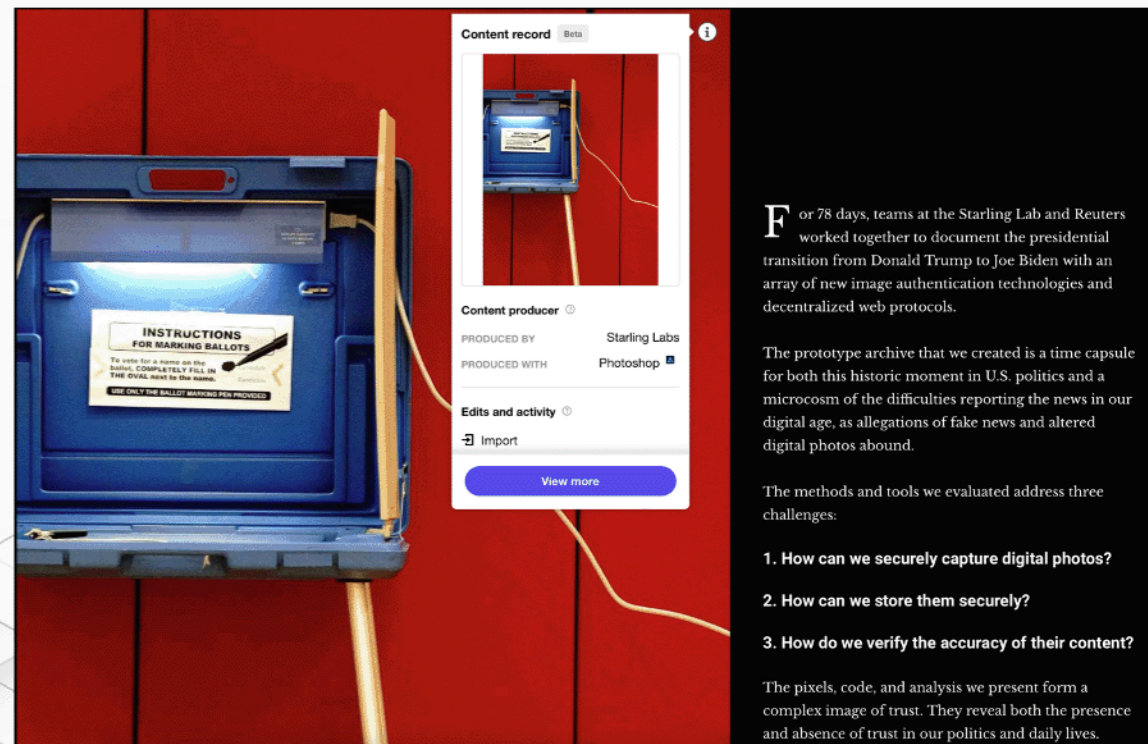
☐

Generate C2PA Encoded Image

<https://c2patool.pixelstream.com>

CONTENT AUTHENTICITY INITIATIVE

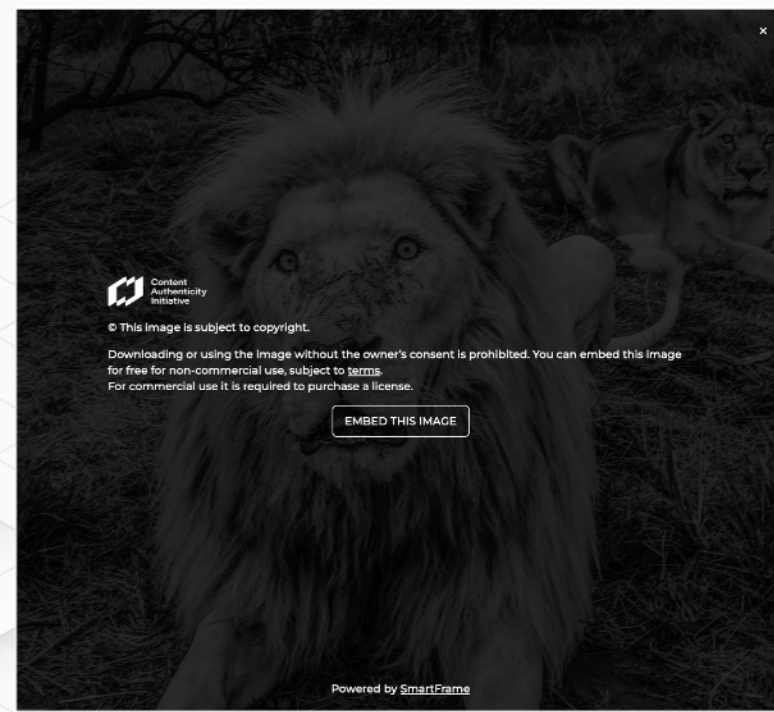
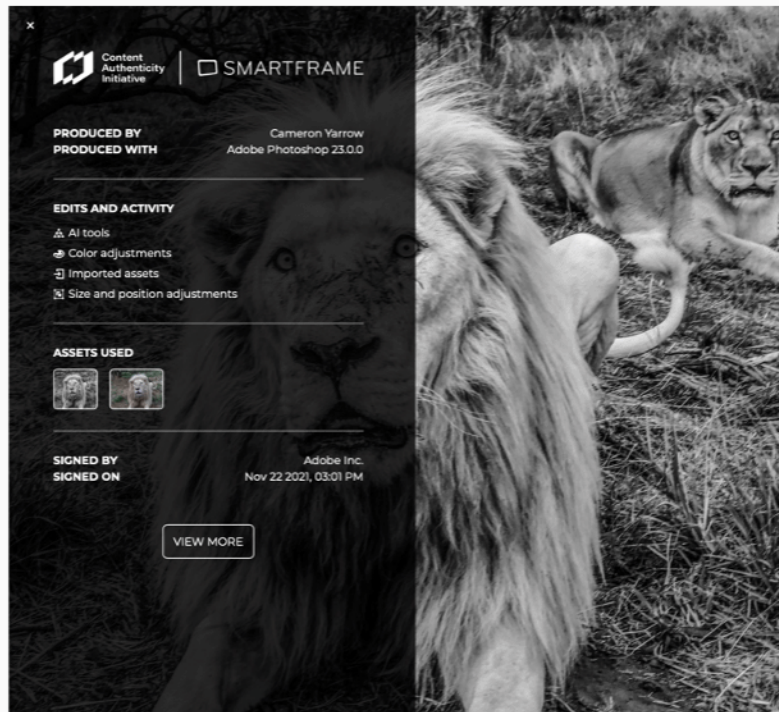
USE CASES – 78 DAYS PROJECT





CONTENT AUTHENTICITY INITIATIVE

USE CASES – SMARTFRAME





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GRAZIE