



**Adobe**

# Generative AI and Automation solutions for both Marketing Communications and Document Processes

Matt Davis – Adobe Principal Solutions Consultant

# **AI Assistant in Acrobat.**

# Generative AI and Documents

Generative AI in Acrobat

 AI Assistant

**Adobe**

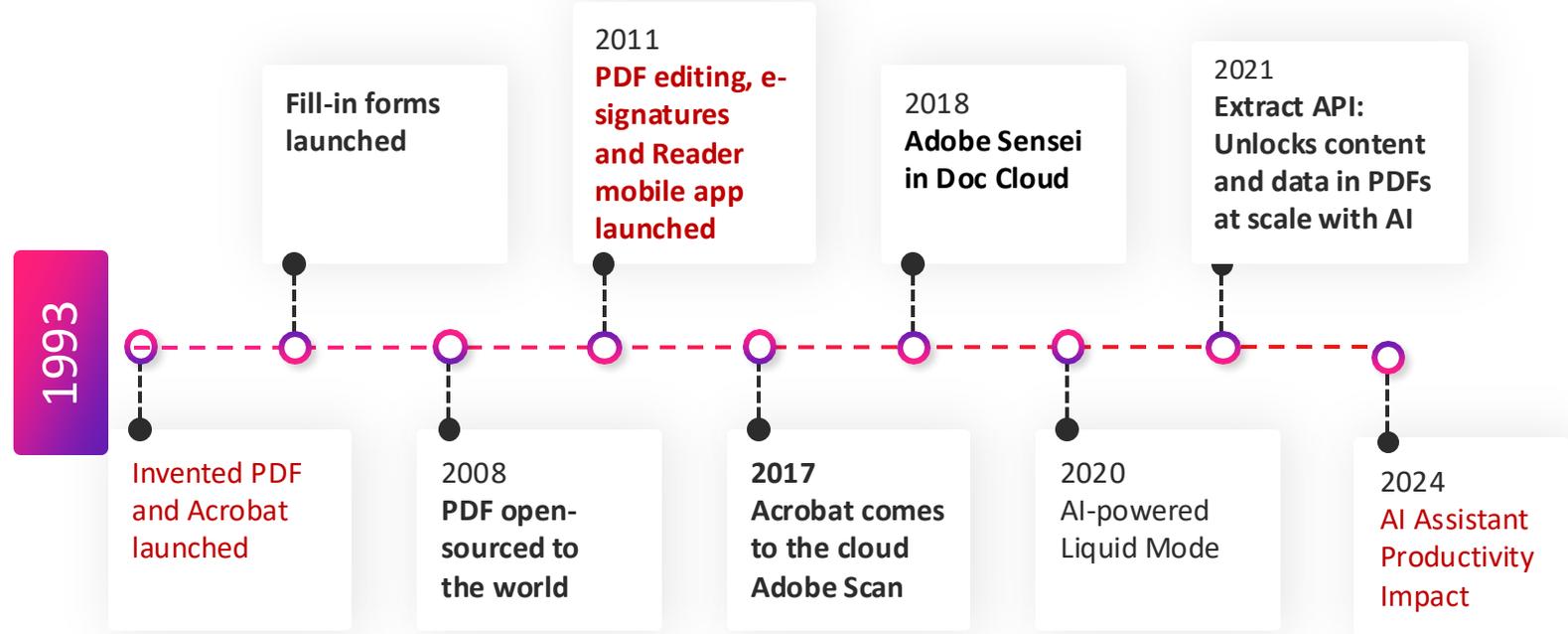
# Almost 32 Years - from rendering to understanding



 Deep understanding of document structure

 AI-powered document insights

 Reimagined PDF



## Today

		
Half a billion monthly active users	400B PDFs opened in Acrobat last year	16B PDFs edited in Acrobat last year

# Businesses run on digital documents



The **most critical business data** is in PDFs.



PDF is the **#1 file format** on corporate SharePoint storage.



**40%** of all documents received in Outlook are PDFs.



**3 Trillion** PDFs are in emails, cloud, and web.

# Preparing for Microsoft Copilot takes considerable time and resources

An artificial intelligence (AI)-powered tool that is primarily meant to support Microsoft 365 users

## Understand the architecture of Copilot for Microsoft 365:

This step demands significant time and technical expertise to ensure all components are compatible and properly integrated. It's far from straightforward.

## Get the basics and essentials covered:

Setting up the environment, managing licenses, and ensuring all foundational elements are in place are resource-intensive and prone to unexpected delays.

## Draft a governance framework for content management, security, and access:

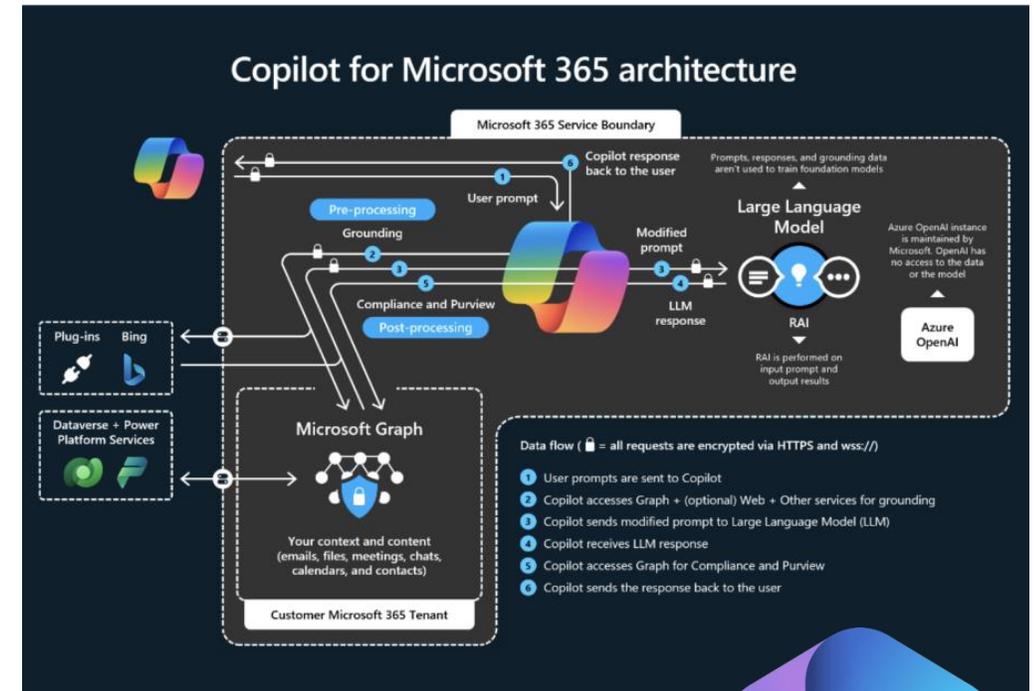
Creating a robust governance framework involves meticulous planning and continuous oversight, making it a complex and ongoing task.

## Use Microsoft Purview to secure and classify documents, emails, and Teams chats:

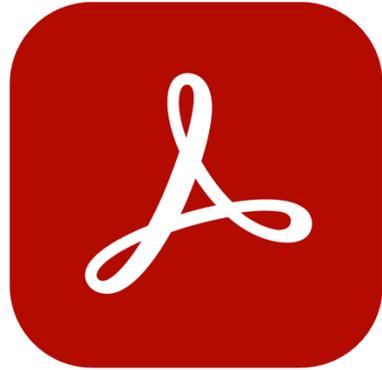
Implementing Microsoft Purview requires meticulous configuration and ongoing management to protect sensitive information effectively.

## Gear up end-user training for quick and secure adoption:

Developing comprehensive training programs, conducting sessions, and providing continuous support is essential but time-consuming.

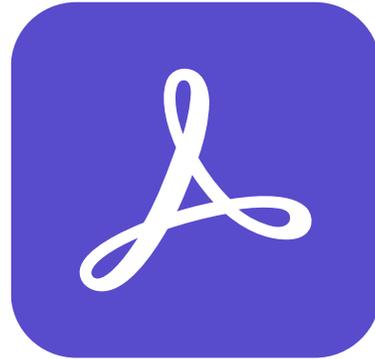


# Adobe Document Cloud – four core offerings



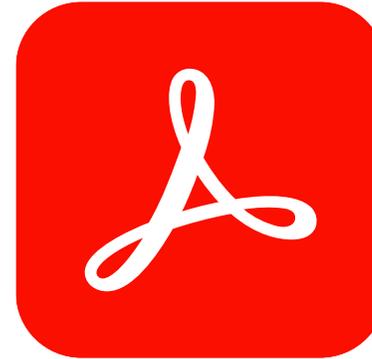
## Adobe Acrobat

PDF solution with e-signatures



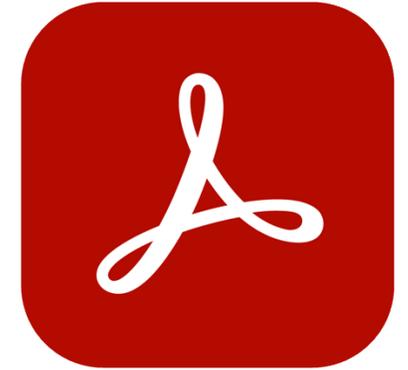
## Adobe Acrobat Sign

Sign Service for e-signatures



## Adobe Acrobat Services

PDF Services APIs\* & Acrobat Sign API



## Acrobat AI Assistant

Generative AI Service via API & Add-on

Subscription License

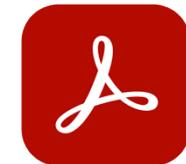
Acrobat Sign transactions

PDF Services transactions

Subscription Add-on



**Acrobat Premium for Enterprise – Acrobat Pro with Acrobat AI Assistant**



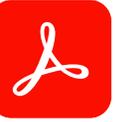
# Preparing for Copilot, Adobe can help.



- OCR API – automate scanned documents into searchable (indexed), editable and readable PDFs
- Accessibility API – automate tagging to make PDFs compliant to WCAG Accessibility Guidelines
- Auto Redact API – remove sensitive and personal data from PDFs so AI cannot find
- Purview – label PDFs with Acrobat Pro and Standard for Copilot
- Generative AI – use Adobe AI Assistant to summarise and chat whilst waiting for Copilot
- Electronic Seal API – automate the Electronic Sealing of PDFs at scale

Make your PDF documents ready for 2025

# PDF Services APIs



Reimagine digital signature and document experiences with APIs designed for developers



Create web document workflows



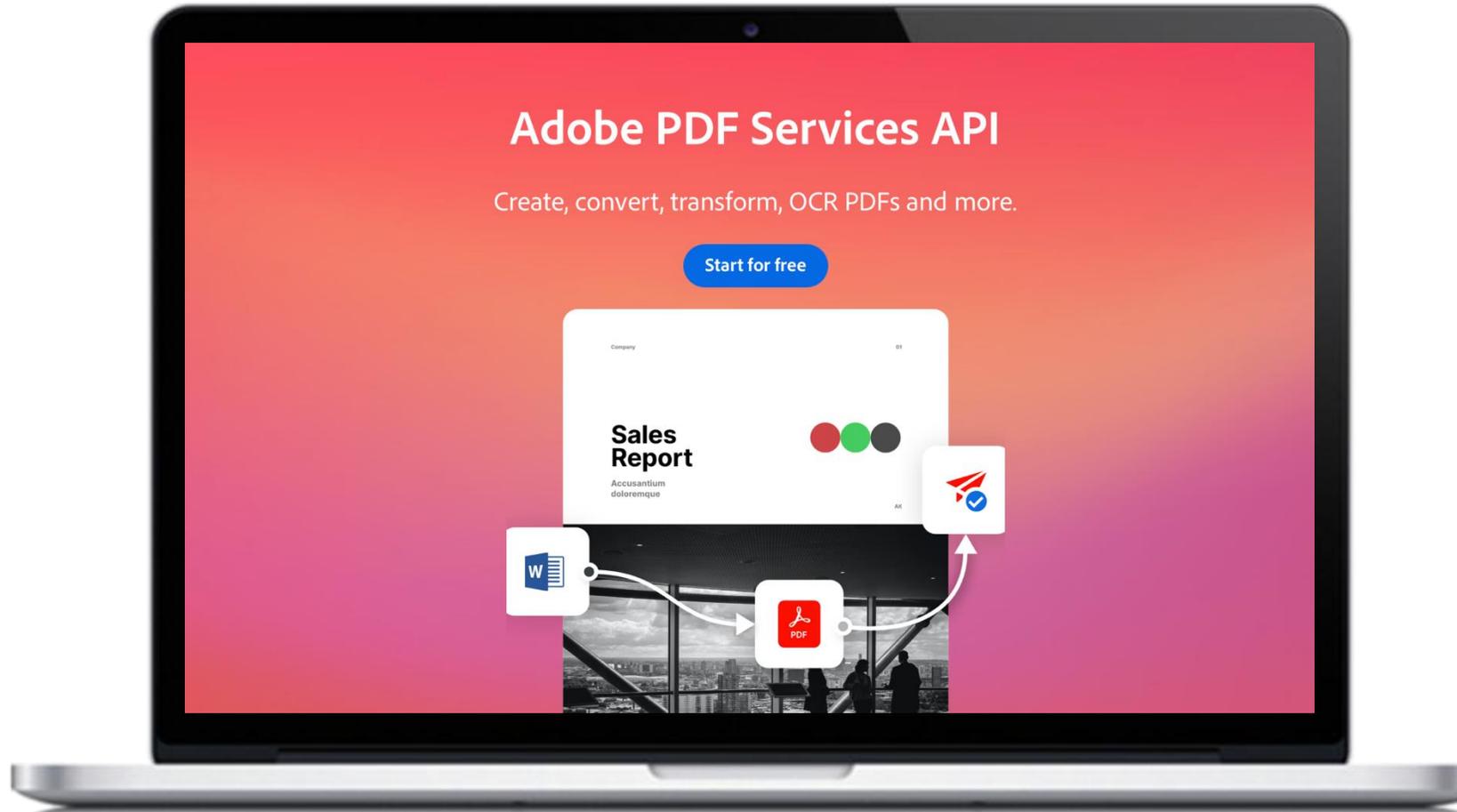
Create, convert, transform, OCR PDFs and more



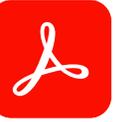
Modify PDFs and optimise output



Designed for Developers



# Adobe PDF Services APIs



Programmatically alter a document, such as reordering, inserting, and rotating pages, as well as compression

## Create



### Create

Create PDFs from a variety of formats, including static and dynamic HTML; Microsoft Word, PowerPoint, and Excel; as well as text, image, and Zip



### Split

Split a PDF document into multiple smaller documents by simply specifying either the number of files, pages per file, or page ranges



### Combine

Combine two or more documents into a single PDF



### Export

Convert existing PDFs to popular formats, such as Microsoft Word, Excel, and PowerPoint, as well as text and image

## Optimize



### OCR

Use built-in optical character recognition (OCR) to convert images to text and enable document searching



### Compress

Reduce the size of PDFs while determining the quality of images and graphics



### Protect

Protect a PDF file with password(s) for encrypting the PDF document and setting the restriction on certain features like printing, editing and copying in the PDF document



### Remove Password

Remove password security from a PDF document. This can only be accomplished using the owner password of the document which must be passed in the operation



### Linearize

Optimize PDFs for quick viewing on the web, especially for mobile clients

## Organize Pages



### Delete

Delete one or more pages from a document



### Reorder

Reorder the pages of an existing document



### Replace

Replace one or more pages with another page



### Insert

Insert one or more pages into an existing document



### Rotate

Rotate a page in an existing document

# Pre-built Templates accessed from Power Automate



Build customised document workflows with Low Code/No Code Flows fast



PDF Services connector brings the power of Adobe Document Services to all your connected Microsoft apps through Power Automate flows



Realise cost savings and increased productivity by implementing cloud-based document workflows without any code



Connectors and Flow Templates ready to go



Adobe

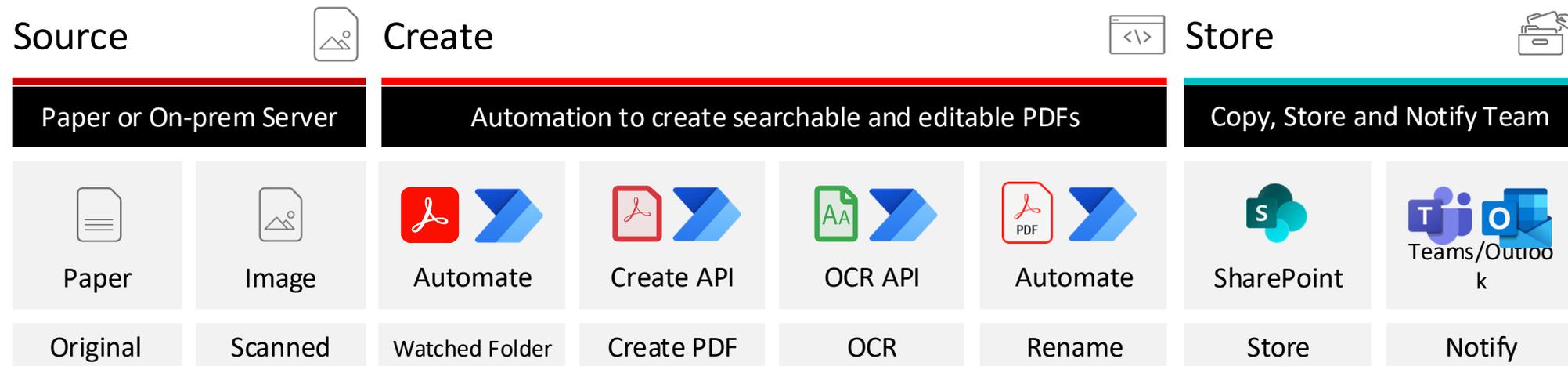
The screenshot displays the Power Automate interface with a search bar containing "adobe pdf services". The results are sorted by popularity and include the following templates:

Template Title	Frequency	Popularity
Generate agreement from Power App and Word, send for signature	Instant	5442
Generate agreement from Word template in OneDrive, and get signature	Instant	2987
Generate agreement for an Excel row, send for review & signature	Instant	2818
Convert newly added files to text searchable PDF in SharePoint with OCR	Automated	2621
Convert newly added PDF files to Microsoft Excel in SharePoint	Automated	1570
Merge all SharePoint content into a PDF with the click of a button	Instant	891
Convert newly added files to text searchable PDFs in OneDrive with OCR	Automated	868
Extract PDF content like text, tables, and figures into JSON, XLSX and PNG	Automated	811
Merge email attachments to PDF and archive in OneDrive for Business	Automated	763
Convert newly added PDF files to Microsoft Excel in OneDrive for Business	Automated	581
Convert newly added PDF files to Microsoft Word in OneDrive for Business	Automated	542
Generate document from MSFT Forms data and Word template, send via E-mail	Automated	516
Extract PDF content like text, tables, and figures into JSON, XLSX and PNG	Instant	-
Create a PDF copy of newly added file in SharePoint	Instant	-
Generate document when SharePoint List item is added or updated, and attach	Instant	-
Identify PDF files with scanned pages, apply OCR to make them searchable	Instant	-

# PDF Services API Use Case - Scan paper, OCR, save to SharePoint



**Problem:** I have paper documents or scans of paper documents that have a technical debt – not digital, no searchability (indexing), useability (edit and copy) and possibly not on SharePoint



**Solution:** Automation with PDF Services APIs and Power Automate

[Acrobat Services API Use Cases](#)

# Accessibility – Australian Policy: Digital Inclusion Standard



Prepare for accessibility



A PDF is considered accessible if meets certain technical criteria and can be used by people with disabilities



Apply accurate and detailed content tags



Improved accessibility tags checkers to understand accessibility standards



Save time making accessible PDFs



**Title** — Document Cloud Security

**Heading** — Password Lockout Procedures

**Table** — Password Requirements

Password Requirements:	Most Secure	More Secure	Easiest for Users
Minimum Number of Characters	✓ (8+)	✓ (8+)	✓ (8+)
Symbol & Number	✓ (1+ of both)	✓ (1+ of both)	✓ (1+ of both)
Lower & Upper Case Characters	✓	✓	✓
Cannot Match Previous Passwords	✓ (last 5)	✓ (last 5)	✓ (last 5)
Expiration	✓ (60 days)	✓ (90 days)	✗

**Paragraph** — Creative Cloud for enterprise password policies

**Heading** — Account Management

**Reading Order** — IT departments can create, manage, and delete Business ID, Enterprise ID, and Federated ID accounts through the Adobe Admin Console. Cloud storage for these accounts is allocated as individual storage, which means IT staff does not have direct access to any files in the user's Creative Cloud for enterprise storage. However, IT staff may assume ownership for the employee's account and revoke access or, with ESM, remove a user and transfer their assets to another user.

Removing a user either involves removing entitlements for that user or completely deleting the user account. Removing the entitlements of a user with existing shared services storage renders any data in cloud storage inaccessible to that user and prohibits them from using the desktop applications, but it does not delete the user or their cloud content. Completely deleting a user removes that user from the Admin Console and deletes their data. A deleted user's data is erased from disk 14 days after their account is deleted.



# PDF Services – PDF Accessibility Auto-Tag API



Improve PDF accessibility for all users. Get more powerful PDF tagging for accessibility within Acrobat



Accurate and detailed content tags



Improved accessibility tags added by processing the file in the cloud



Save time making accessible PDFs



User consent to use cloud-based ML service for auto-tagging



# Redaction

Redaction is permanently removing visible text and graphics from a document



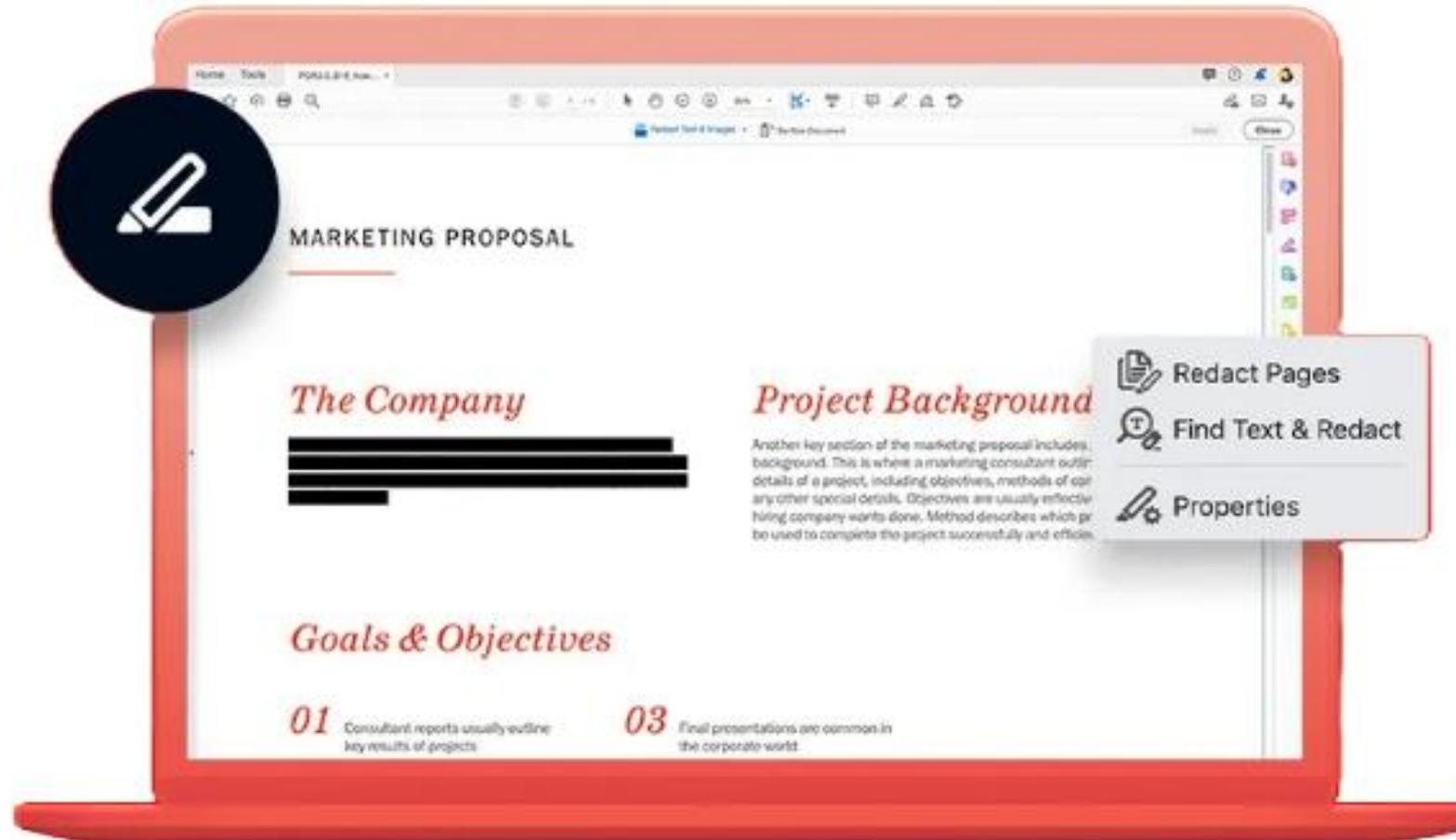
Advanced redaction and sanitisation tools to permanently delete text, graphic images, metadata and hidden information



Prevent sensitive information from being shared with unauthorised individuals



Know your data, protect your data



# Information Protection: Ensure compliance with Acrobat Pro's full featured redaction capabilities



**When it comes to complying with rules and regulations, Acrobat's redaction capabilities let users completely remove sensitive information**

**Use advanced redaction and sanitisation tools:**

- ✔ Permanently delete sensitive or confidential information
- ✔ Remove hidden information, such as metadata
- ✔ CMap Objects

*“Assurance that data remnants cannot be recovered from redacted PDF documents requires that the creation of PDF documents be restricted to Adobe Acrobat, Adobe Acrobat Distiller and Microsoft Word.”*



## Introduction

There have been numerous cases of security breaches resulting from a failure to effectively redact sensitive or private information from documents prior to release into the public domain. To assist in mitigating this security risk, Adobe Acrobat Pro DC 2017 provides redaction and sanitisation functionality that aims to completely remove undesirable information and other hidden information (e.g. metadata) from PDF documents.

This publication provides guidance on the efficacy of redaction facilities within Adobe Acrobat Pro DC 2017 and is intended for information technology and information security professionals within organisations looking to redact sensitive or personal information from PDF documents before releasing them into the public domain or to other third parties.

## Scope of testing

The redaction functionality in Adobe Acrobat Pro 10 was previously tested in 2011 to determine if any redacted information could be recovered from PDF documents. The current round of testing aimed to examine the same functionality previously tested but in Adobe Acrobat Pro DC 2017.

For the purposes of this publication, the definition of successful redaction was the complete removal of redacted data from every location in a PDF document's file structure.

As part of testing, a number of test cases were considered that represented some of the different ways that information could be stored within a PDF document. This included:

- embedded text
- embedded image
- data from historical editing
- interactive form
- embedded text obscured by an embedded image
- embedded text in an encrypted PDF
- embedded metadata.

Unless otherwise stated, the following application versions were used:

- Adobe Acrobat Pro DC 2017 (2017.012.20093) which installs Adobe PDF Library 15 and Adobe Acrobat Distiller 17
- Microsoft Word 2010 (14.0.6023.1)

# PDF Services – PDF Auto Redact API (Beta)



Using Generative AI to find and identify personal and sensitive information inside a document



AI-powered redaction and sanitisation tools to identify all personally identifiable information, metadata and hidden information



Prevent sensitive information from being shared with unauthorised individuals



Know your data, protect your data

The screenshot displays the Adobe PDF Auto Redact API Demo interface. The main area shows a preview of a PDF document titled "This is a preview of the PDF." The document is a personnel record from the Australian Government Department of Defence. Key redacted areas include the name "FRANCES TYLER" and "Cecil Michael LUCAS". The sidebar on the left lists selection options for redaction, including "Person Name", "Susan King", "FRANCES TYLER", "Cecil Michael LUCAS", and "CECIL MICHAEL". The document text includes: "Australian Government Department of Defence", "Corporate Services & Infrastructure Group", "PERSONNEL RECORDS REFERENCE : AF0222454", "DVA REF: QLD / QSM25206 / 29 SEPTEMBER 2003", "ROYAL AUSTRALIAN NAVY/ROYAL AUSTRALIAN AIR FORCE RECORD OF SERVICE", "Squadron Leader (PLT) Cecil Michael LUCAS O222454 RAAF R'td", "DATE OF BIRTH: 18 JULY 1942", "DATE OF ENLISTMENT: 22 OCTOBER 1964", "DATE OF DISCHARGE: 12 SEPTEMBER 1980", "The member served in the following Ships/Units that may qualify for entitlement under the Veterans' Entitlements Act 1986:", "2 Squadron Vietnam 21/11/67 – 29/04/68", "REMARKS: NIL", "SUSAN KING Personnel Records – Canberra 30 SEPTEMBER 2003".

# Microsoft Purview Information Protection



This integration brings the same classification, labelling and protection to PDFs via Acrobat



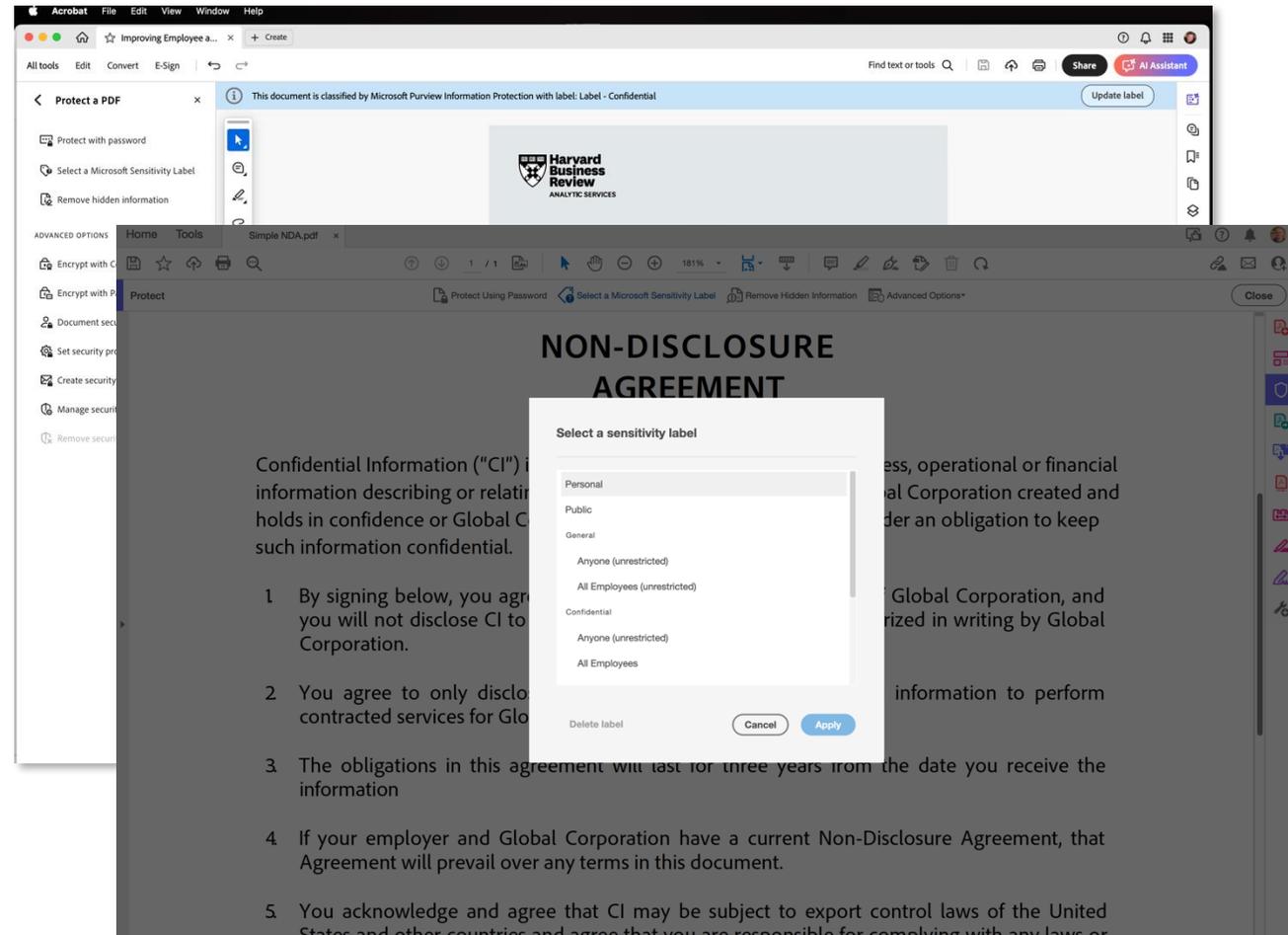
Data Protection: Integration with Microsoft Purview Information Protection - Copilot



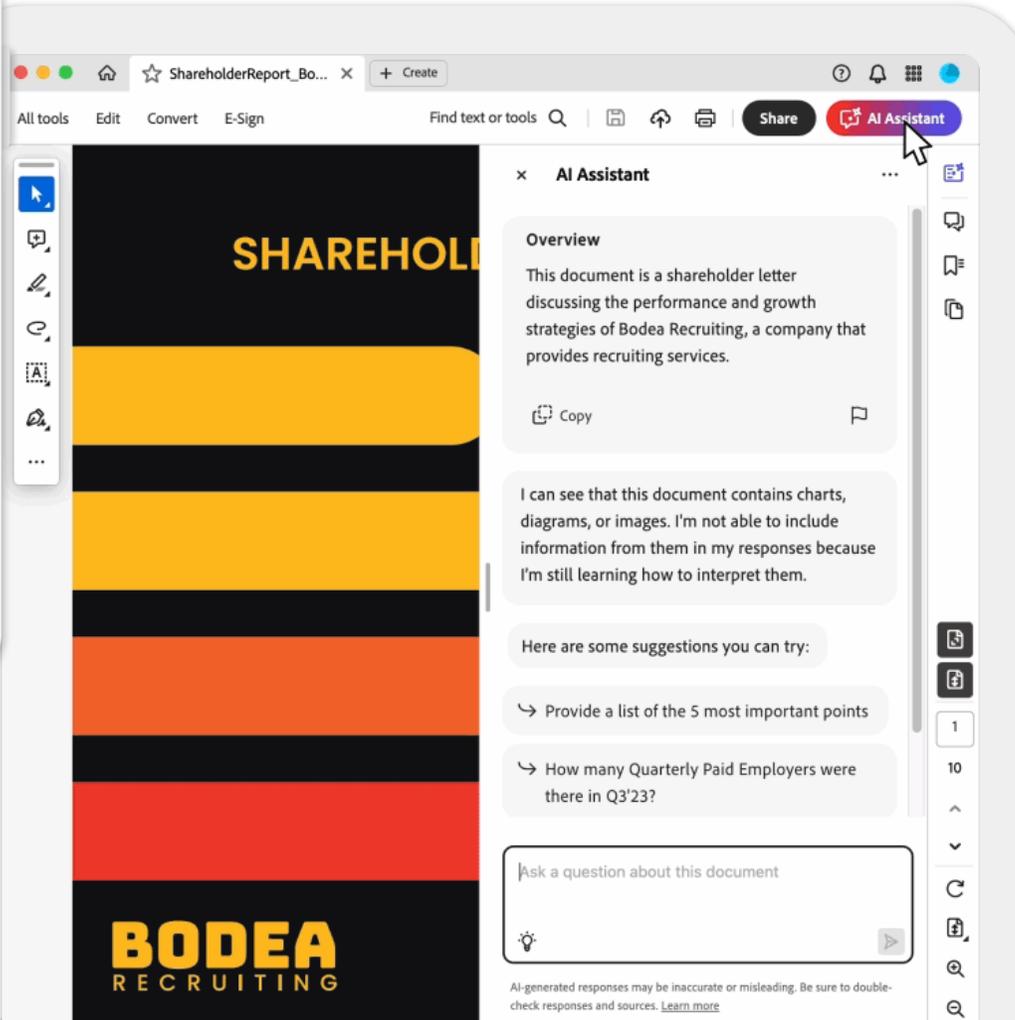
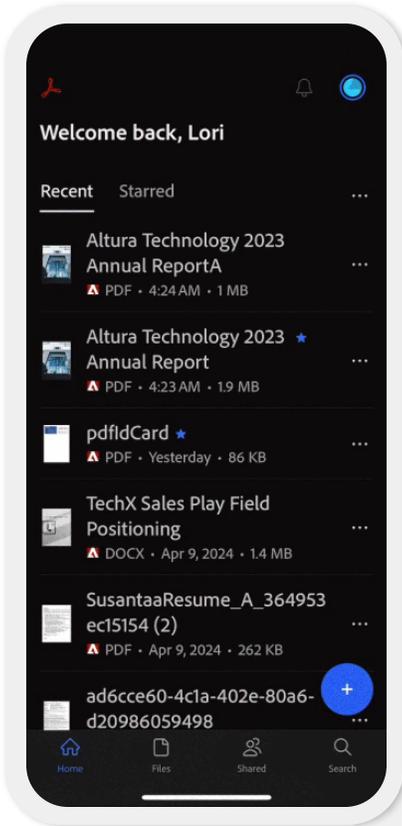
Apply and edit Information Protection sensitivity labels and policies to your PDFs



Know your data, protect your data, and prevent data loss



# Work smarter with your documents



 AI Assistant

# Your data remains yours

**Get started today with Acrobat AI Assistant**

**Acrobat Add-on installs into Free Reader, Std & Pro**

**Acrobat AI Assistant currently leverages the Microsoft Azure OpenAI Service**

**Data is transient and purged twice a day**



Customer data is not used to train large language models.



AI Assistant is only looking at the document(s) that you tell it to. Your people are in control.



Your people can only use AI Assistant on documents they already have access to.



Responses are attributed to your source document(s).



Enterprise controls to manage who has AI access in the company.



Responsible implementation: adheres to Adobe AI Ethics principles.

# Turn documents into action for legal and compliance professionals

## Evaluate risks from proposals



Quickly review new partner proposals and documents for compliance

## Review Master Agreements



Attorneys can quickly generate client alerts from their more extensive research on dense legal concepts

## Review Compliance policies



Quickly bring together and validate insights for due diligence

## Address growing regulation & compliance demands



Quickly generate and share compliance checklists from the latest rules and regulations

## M&A Due Diligence



Accelerate review of new partner proposals and documents for compliance **NEW**

## Propose Supplier Negotiation strategy



Extract insights and generate targeted content to help pitch a new business

# Adobe Acrobat AI Assistant Value



Interact with your document for quick answers and one-click summaries to create impactful content



Engage with your documents



Sum it up quickly, in context



Craft into emails, pressos, and more



Voice prompts in the mobile app



# PDF Services – PDF Electronic Seal API



Authenticate documents easily at scale by verifying their identity and integrity with a digital certificate

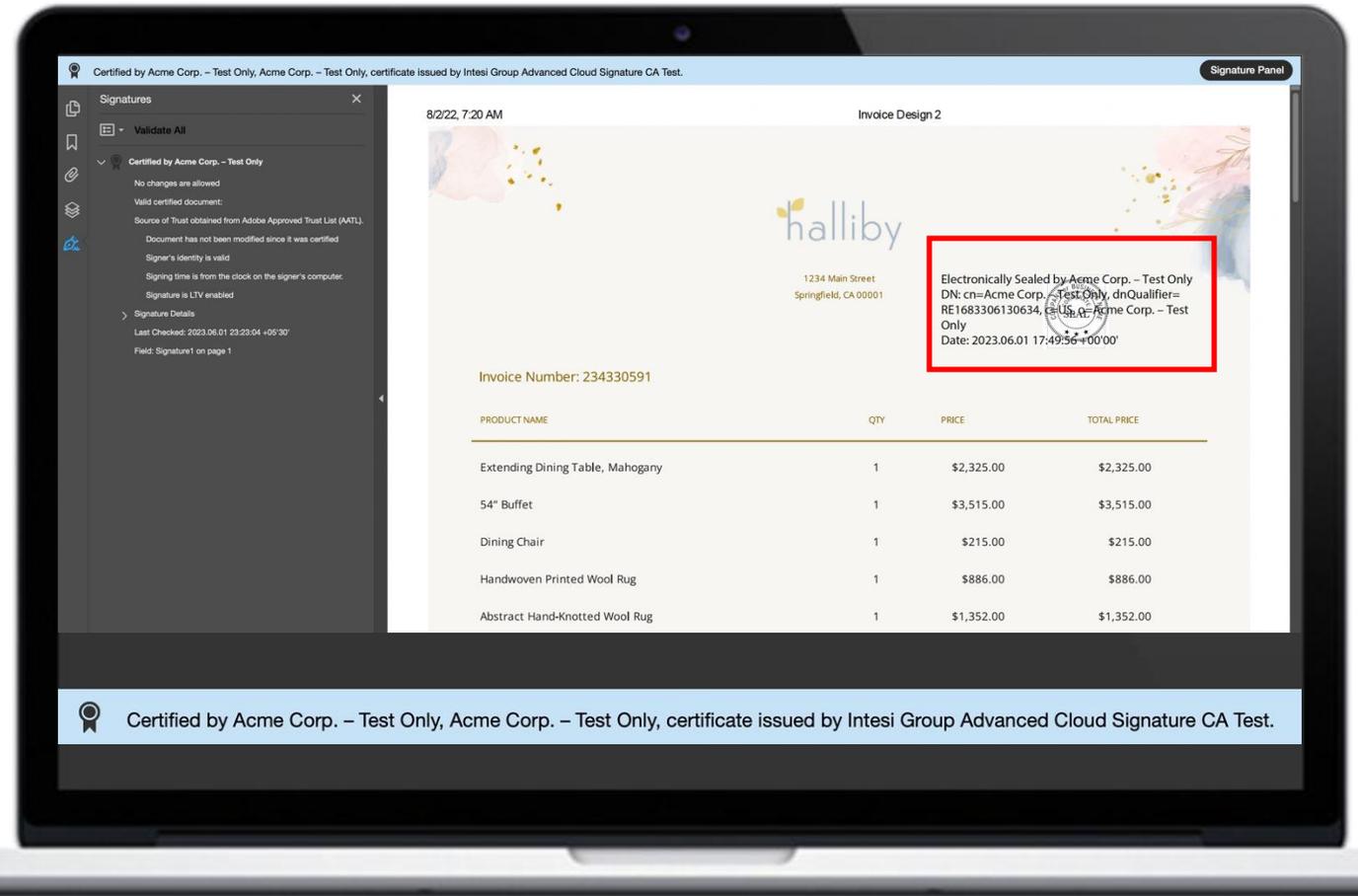


Applies an electronic seal (e-seal) to a PDF document using a digital certificate to verify the identity and integrity of a document



The certificate is issued to the organisation's legal entity by a Certification Authority (CA) or a Trust Service Provider (TSP)

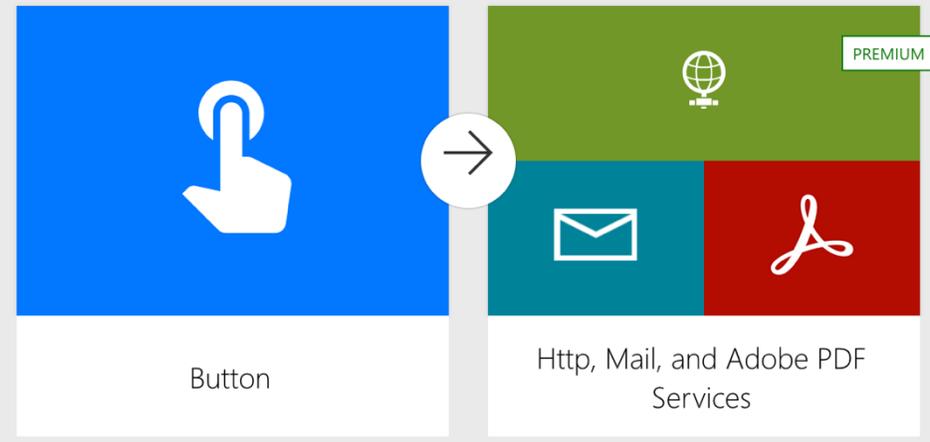
Contains information about: Organisation sealing the document, Certificate applied, TSP provider, Timestamp and Validity period



- Home
- Create
- Templates
- Learn
- My flows
- Approvals
- Solutions
- Process mining
- Desktop flow activity
- Connections
- More

Power Platform

# Electronically Seal a PDF document



Apply an Electronic Seal to a PDF document and share it as an email attachment.

This flow will connect to:

	Mail	Mail	✓ ...
	Adobe PDF Services	Adobe PDF Services	✓ ...

Continue

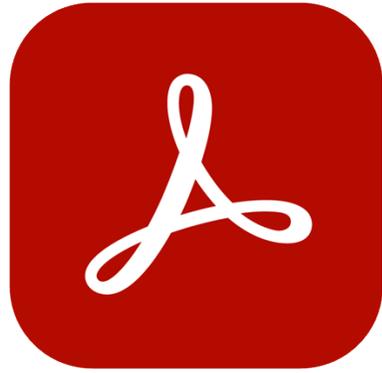
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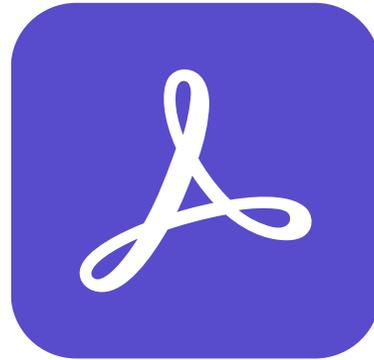
Make your PDF documents ready for 2025

# Adobe Document Cloud – four offerings



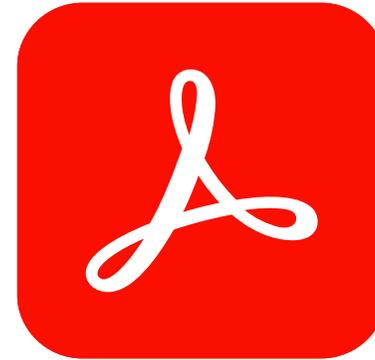
## Adobe Acrobat

PDF solution with e-signatures



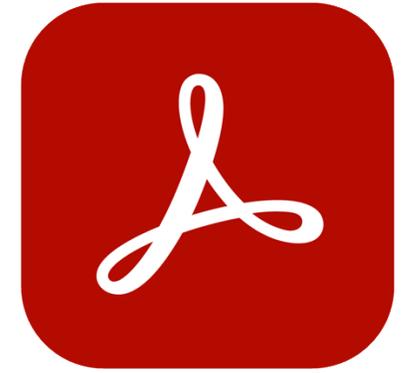
## Adobe Acrobat Sign

Sign Service for e-signatures



## Adobe Acrobat Services

PDF Services APIs\* & Acrobat Sign API



## Acrobat AI Assistant

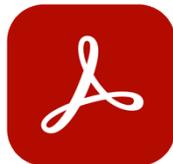
Generative AI Service via API & Add-on

Subscription License

Acrobat Sign transactions

PDF Services transactions

Subscription Plugin



## Acrobat Premium for Enterprise – Acrobat Pro with Acrobat AI Assistant



-  Home
-  Gallery
-  Files
-  About
-  Help



# Adobe Firefly

-  Featured
-  Image
-  Video
-  Audio
-  Vector





# Firefly is designed to be safe for business

## Responsible training

We trained our Firefly generative AI models on licensed and public domain content

## Security and privacy

We won't train our foundational Firefly generative AI models on your enterprise content

## Content transparency

Content Credentials and provenance details are automatically attached to Firefly-generated assets



## Diverse representation

Training designed to be representative of regional markets and built to avoid harmful bias across gender, age, and skin tone

## Accountability

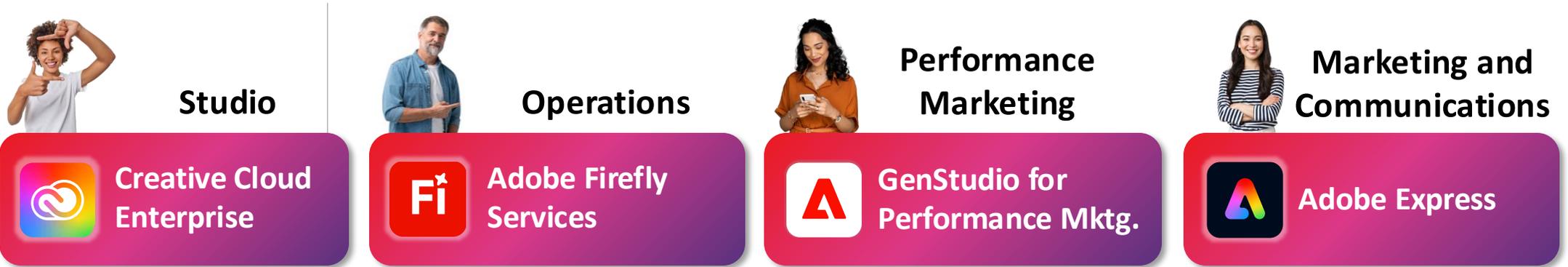
AI Impact Assessments and Adobe's AI Ethics Board provide ongoing reviews and refinement of Firefly data, approach and output

## Sustainability

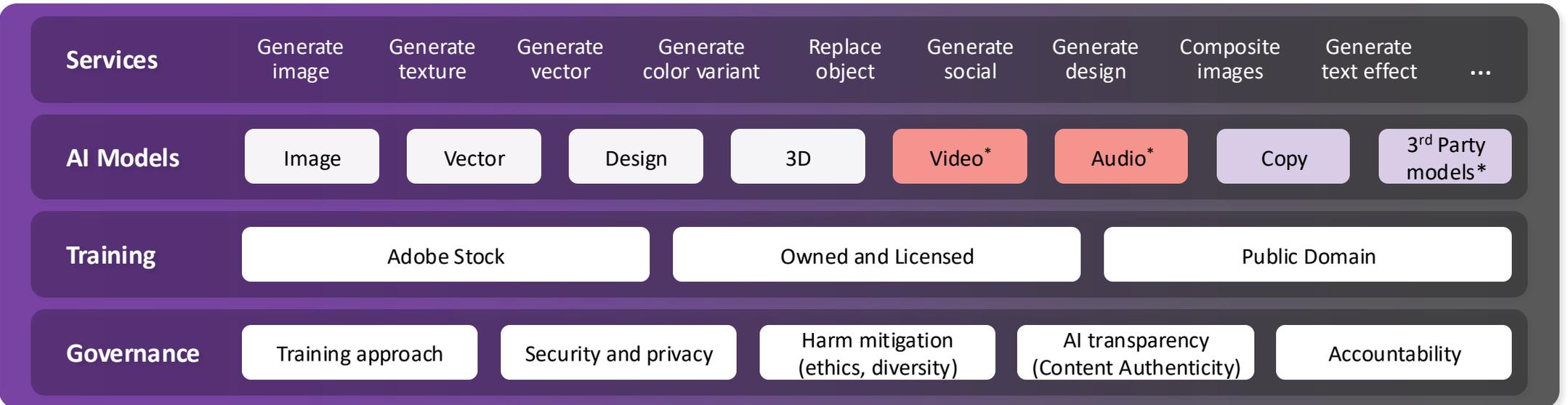
Prioritise energy efficiency and emissions reduction to minimise the footprint



# Adobe creative solutions for the modern enterprise



## Firefly Generative AI Platform



\* Coming soon / under exploration    Access 3<sup>rd</sup> Party large language models (LLMs)



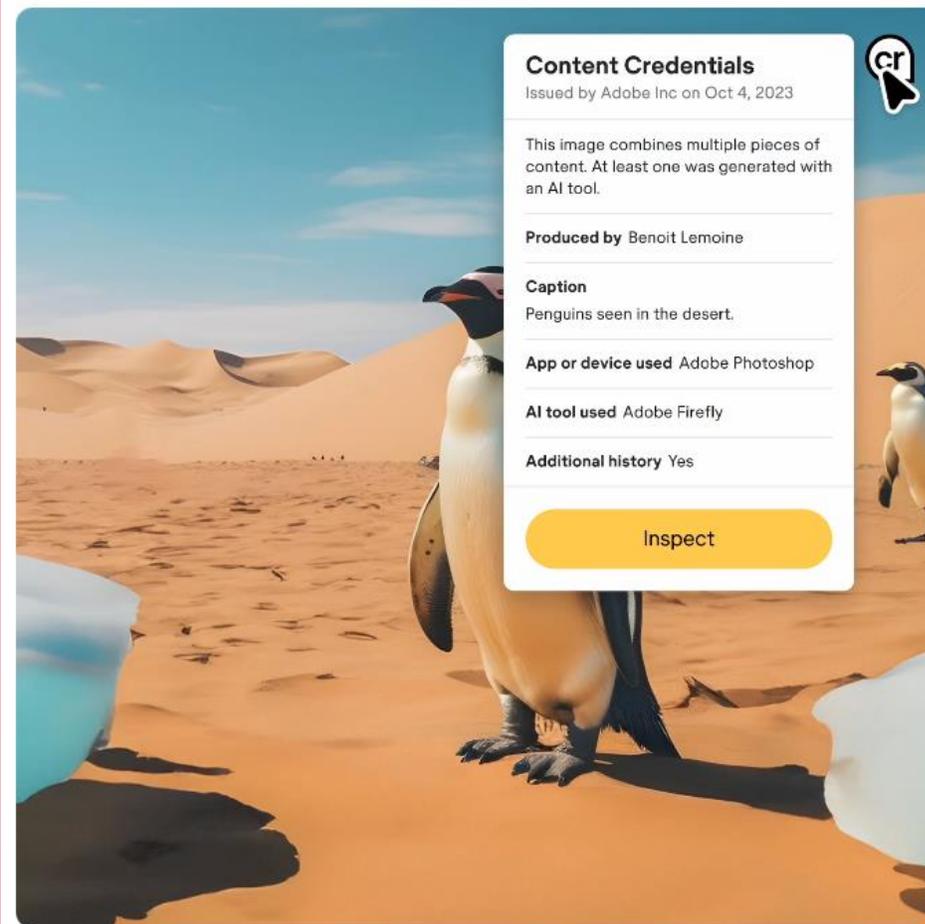
# Content Authenticity Initiative

- **Content Credentials:** an established global standard for digital provenance;
- Initiative was launched with the New York Times and Twitter, and enjoys broad adoption by OpenAI, Meta, Google, Nikon, Sony, BBC and many others
- Adobe open-source tools fueling a compatible ecosystem of transparency and attribution for images, video, audio
- More than 4,000+ members, including:



## Wait, where did this image come from?

Deepfakes. Voice cloning. Synthetic media. It's hard to tell what's accurate and authentic these days.





# Accidental Copyright Infringement

Accidental infringement occurs when generated content unintentionally violates intellectual property rights

## The risks

- Users may unknowingly violate copyright laws by creating content that closely resembles protected works

## What they need

- **Commercial Safety:** Models or platforms should be able to safely generate content without the risk of reproducing protected content
- **Indemnity:** Models creators should be confident in their ability to create safe content and protect their users

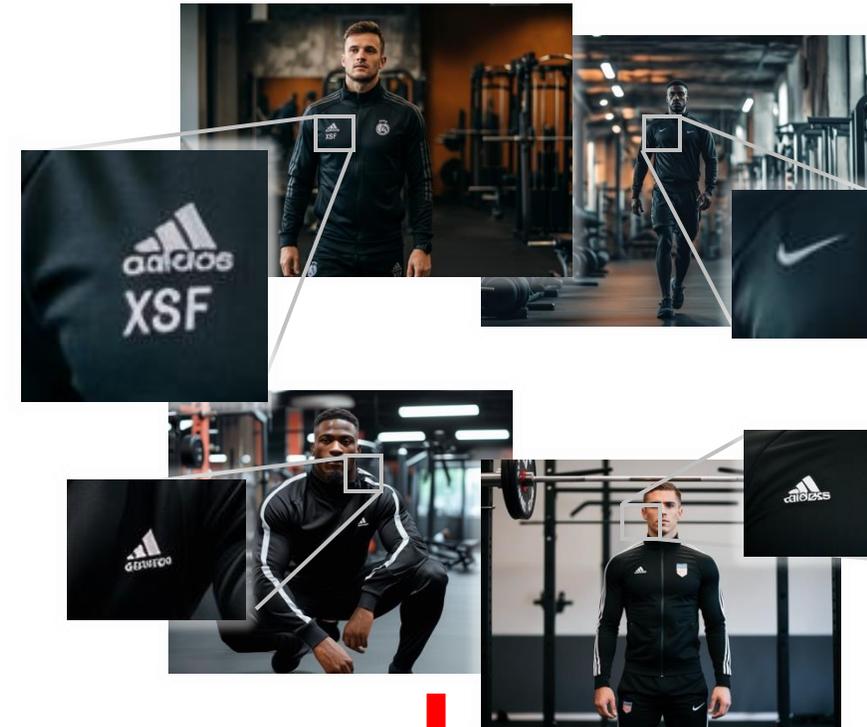
## What are they using today?

- **Unsafe models** that require careful human revision to avoid potential legal and financial impacts

 **Adobe Firefly**



**Commercially Safe  
Output**



**Accidental  
Infringement<sup>1</sup>**

**Prompt:** a photo of an elite athlete in an all black track suit at the gym

# Adobe's AI ethics on Firefly



## Accountability

We are committed to taking ownership for the impacts of our work by having processes and resources dedicated to respond to internal and external concerns.



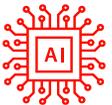
## Responsibility

We will be responsible during every phase of designing, deploying and maintaining our AI systems through thoughtful evaluation and careful due diligence.



## Transparency

We will be open about, and explain, our use of AI to our customers so, they have a clear understanding of our AI systems and their application.



### AI Ethics Review Board

Ensure human oversight and evaluate features to mitigate against potential biases



### Content Authenticity Initiative

Setting tech standards for content provenance, enabling creators to add a layer of provable authenticity



### Testing and Feedback

Rigorous, continuous testing and improvement based on feedback

Generate scale  
through Automation

**Adobe**



Brands today must quickly scale high-quality content for every customer interaction



# Personalised marketing requires content at a massive scale



× **8**  
Products

× **15**  
Marketing Channels

× **35**  
Languages

× **30**  
Variants

× **32**  
Refresh / year

Total assets **504000**

# Content demands create challenges across multiple teams

## Marketing



Running fewer campaigns than desired results in missed growth opportunities

## Operations (Creative/Marketing)



Costly to scale content production

## Creative



Burdened by repetitive tasks, limiting time for high-value creative work

Faster time to market

Expansion to new geos

More precise targeting

“What if we could produce 10X the content without 10X the investment?”

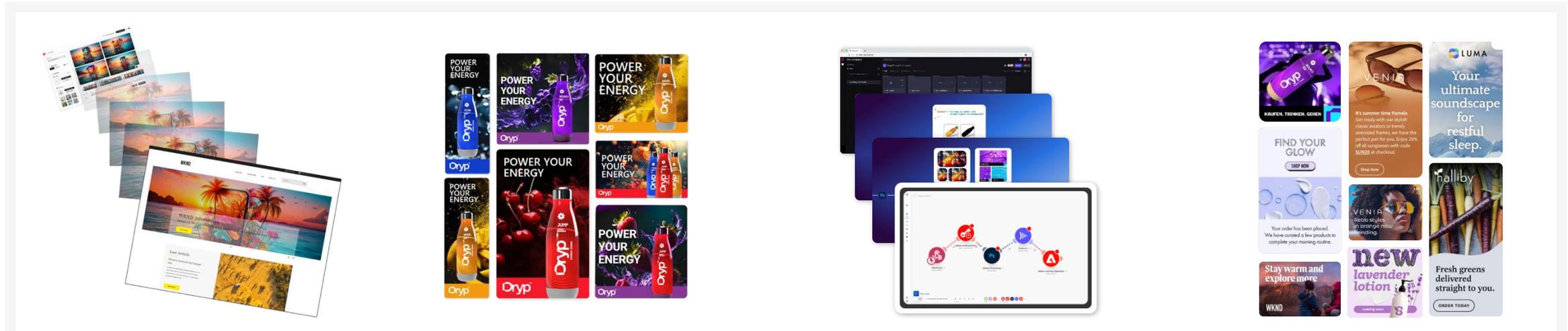
Increased engagement

Higher conversion

Improved customer retention

# Adobe Firefly Services

Scale high quality, on-brand content across media types with 25+ GenAI and Creative APIs



**Produce content that is safe for business**

**Eliminate repetitive asset production tasks**

**Streamline production workflows from creation to assembly**

**Maintain high quality and control**



Text to Image • Generative Fill • Generative Expand • Remove Background • Object Composite • Reframe Video • Translate and Lip Sync • And more...



# APIs to automate end-to-end content production workflows

## Generate

- Generate Image
- Generative Fill
- Generative Expand
- Generate Similar
- Object Composites
- Custom Model \*
- Create Mask
- Content Tagging
- Dubbing & Lip Sync \*
- 3D + 2D Generative Render \*
- Render 3D Scene / Model \*

## Edit

- Smart Crop
- Depth Blur
- Auto Straighten
- Auto Tone
- Apply Lightroom Presets
- Apply Lightroom Edits
- Add XMP to Image
- Remove Background
- Custom Scripting \*
- Create 3D Scene \*

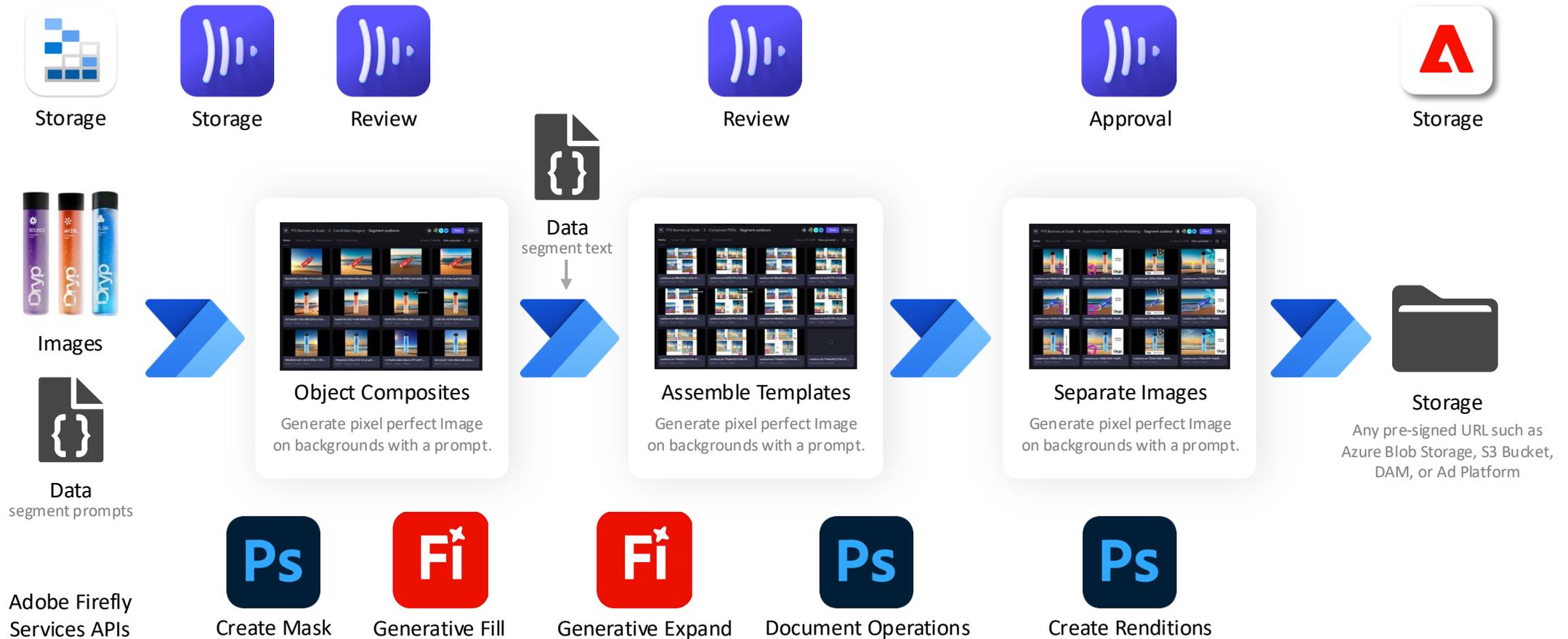
## Assemble

- Photoshop Actions
- Replace Smart Object
- Create PSD
- Apply Photoshop Edits
- Edit Text Layers
- Create Artboards
- Export Rendition
- Export Rendition \*
- Data Merge \*

# Use Cases: Banners @ Scale



Generate personalised banners at scale for different campaigns



# Teams are firing on all cylinders with Firefly Services



## Marketing



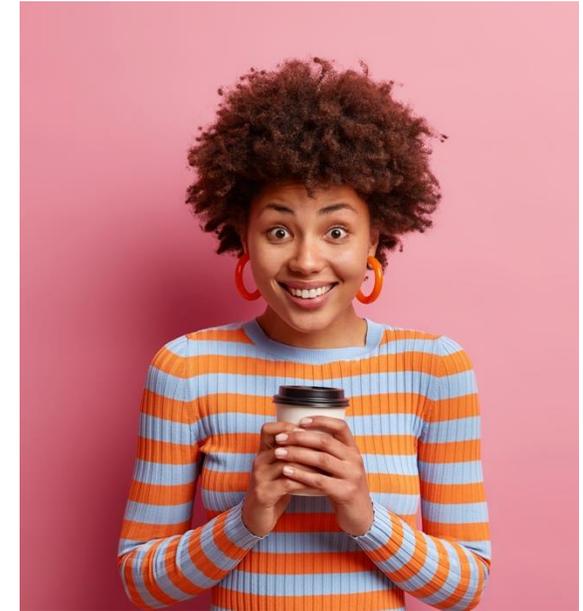
Exploiting growth opportunities with personalised experiences and more targeted campaigns

## Operations (Creative/Marketing)



Streamlining workflows to accelerate content production, and lowering cost per asset

## Creative



Focusing energy on creativity, innovation, brand building and storytelling

# Customers see tangible value with Firefly Services



200K

Assets generated in  
under two weeks



95%

Time savings to  
process images



Leading office supply  
retailer

10X

Faster content  
creation

**OLIVER**

63%

Reduction in  
production costs

**Adobe**

# Data#3 next steps slide

- Thank you, Matt for your insightful and relevant presentation
- Exciting times and looking forward to working with Adobe and the Data#3 customers
- As a takeaway from this presentation, please come and discuss with us and the Adobe team at the booth

I'll leave you with these thoughts:

- How ready are you and your organisation for 2025?
- Contact Data#3 and we will work with you on how to assess and move you along the curve
- Come and have a discussion with the Data#3 and Adobe team at the booth

**Adobe**