



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






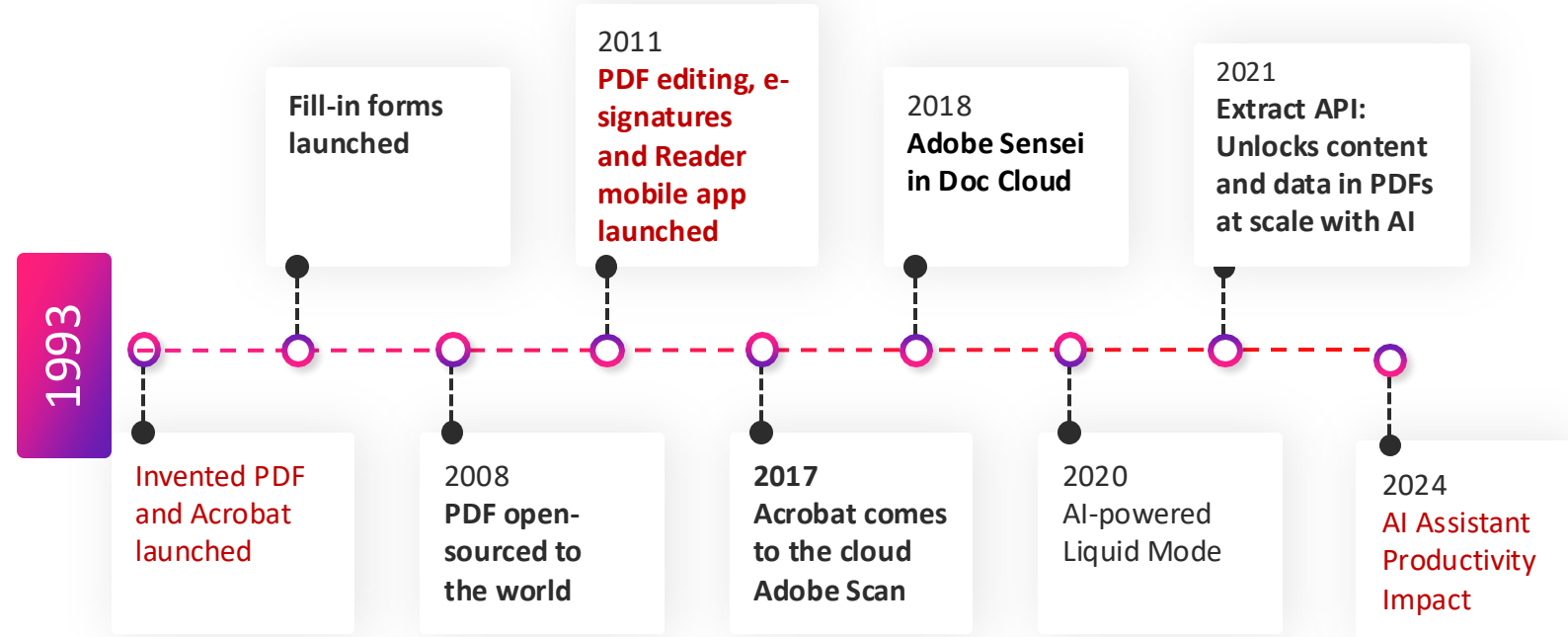
Deep understanding
of document structure



AI-powered document insights



Reimagined PDF



Today



Half a billion
monthly active users

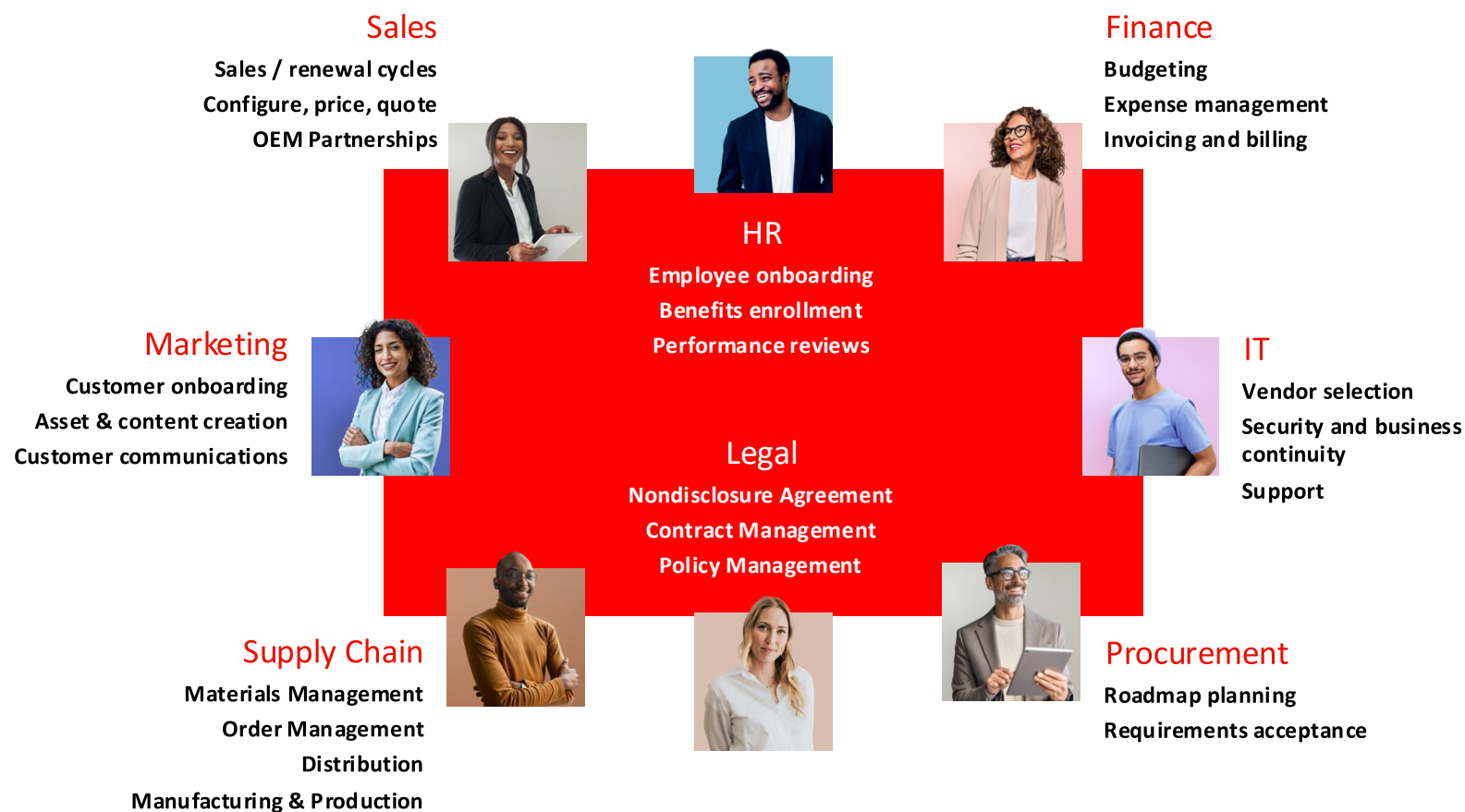


400B PDFs opened
in Acrobat last year



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:

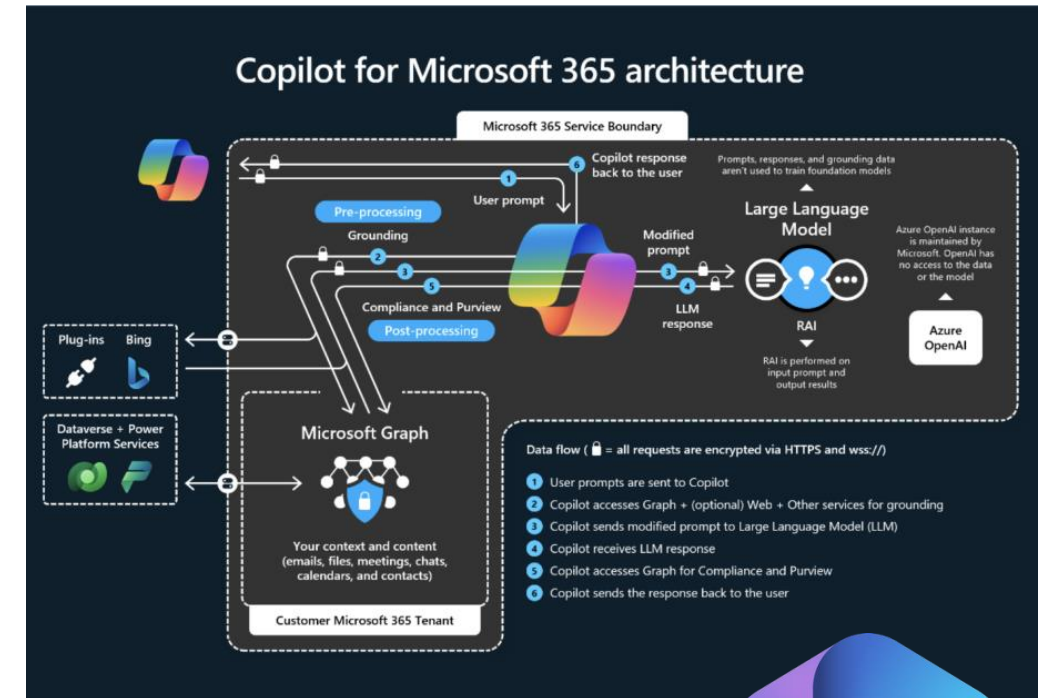
Creating a robust governance framework involves meticulous planning and continuous oversight, making it a complex and ongoing task.

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



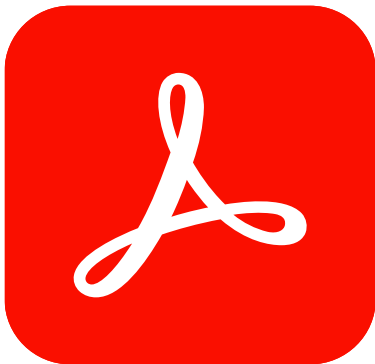
Adobe Acrobat

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.



Copilot



- 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



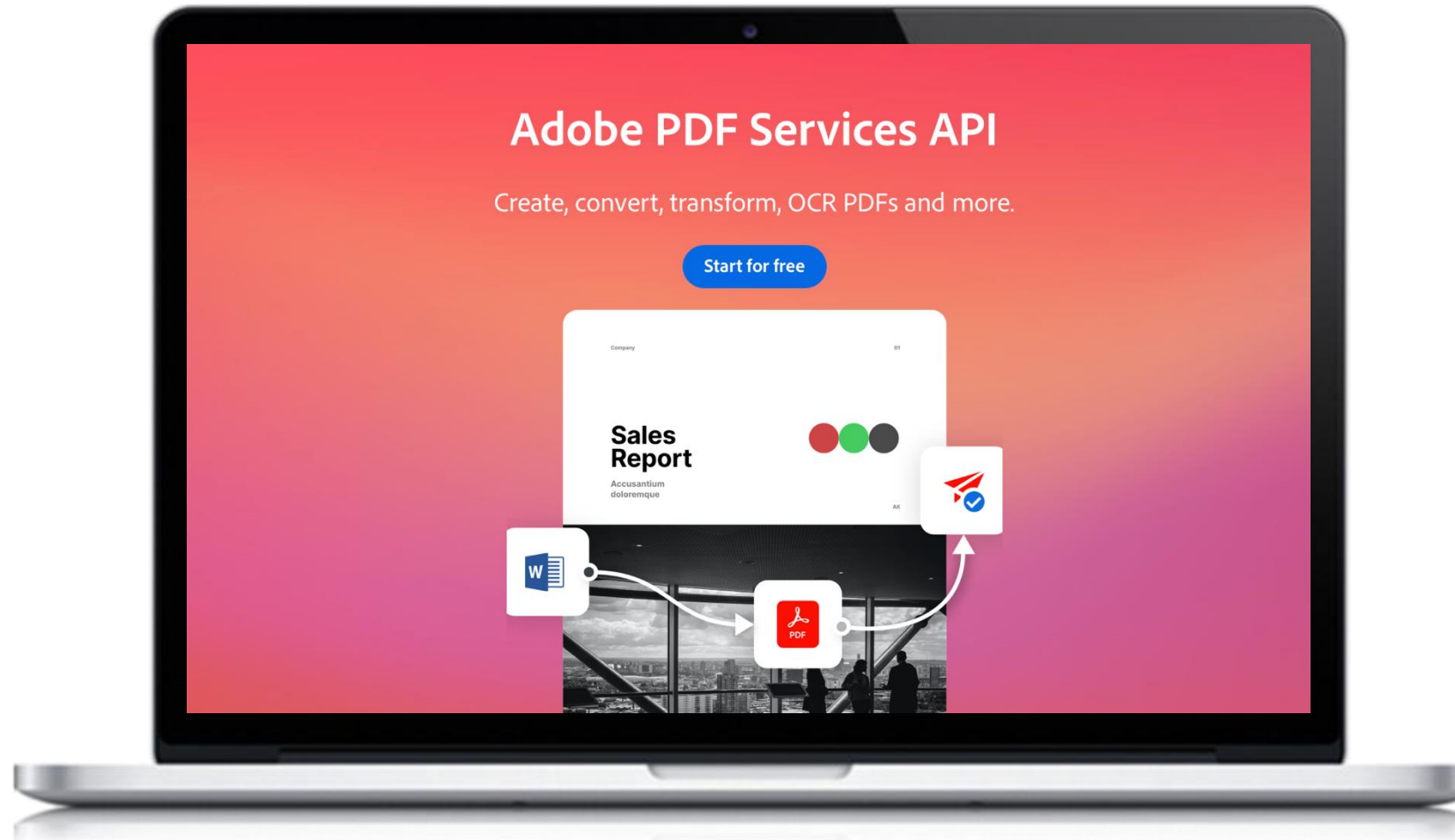
Create, convert, transform, OCR PDFs and more



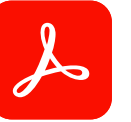
Modify PDFs and optimise output



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



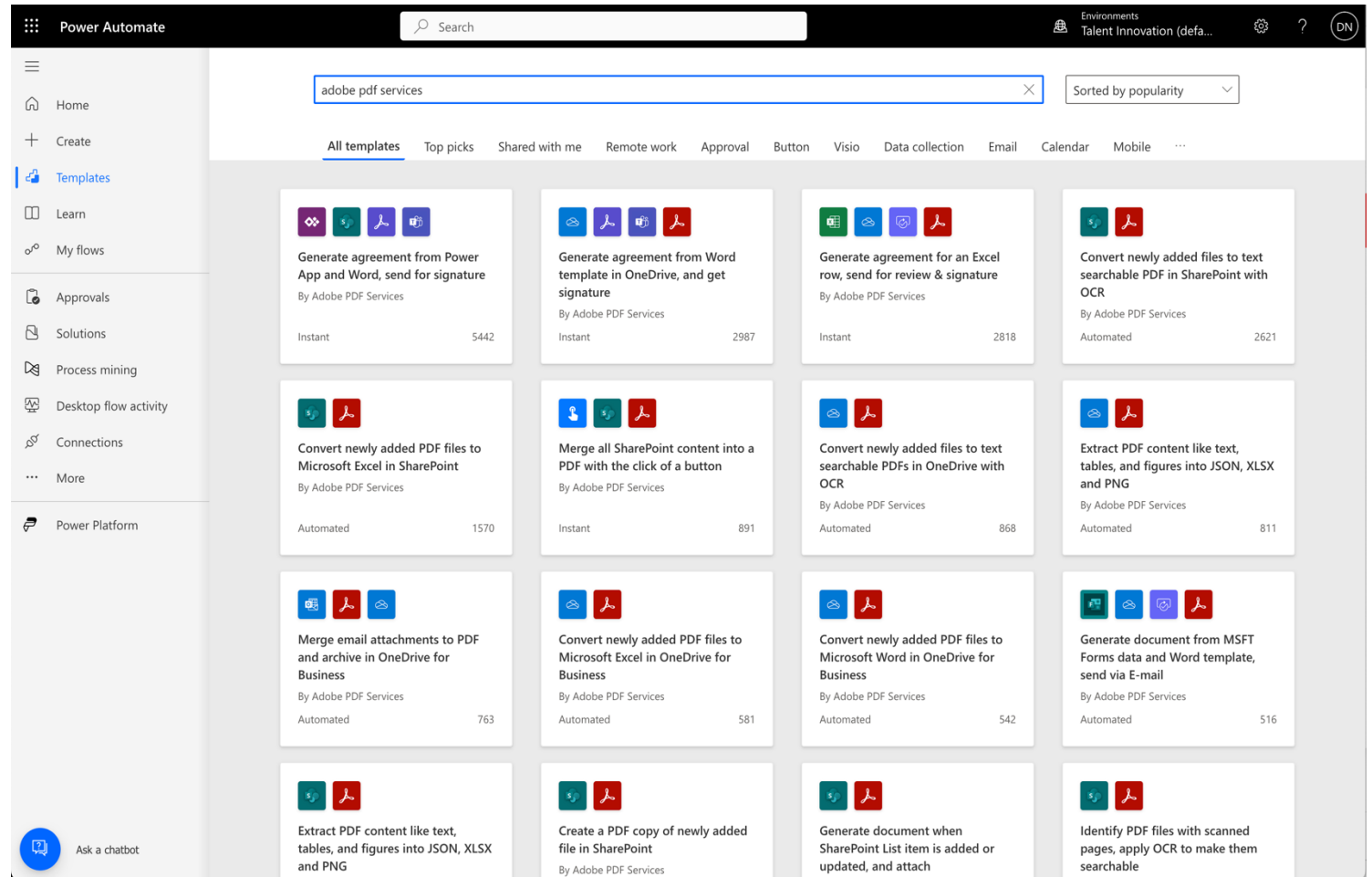
Realise cost savings and increased productivity by implementing cloud-based document workflows without any code



Connectors and Flow Templates ready to go



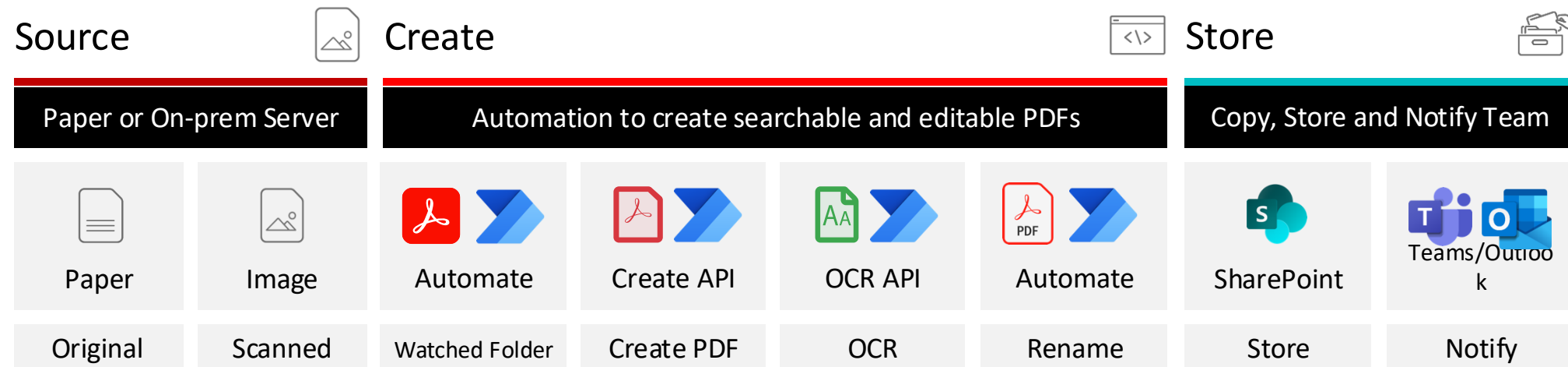
Adobe



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

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

Heading

Table

Paragraph

Heading

Reading Order

Document Cloud Security

Password Lockout Procedures

Organizations can enforce password policies for both Business IDs and Enterprise IDs with three (3) different password policies, shown here:

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)	✗

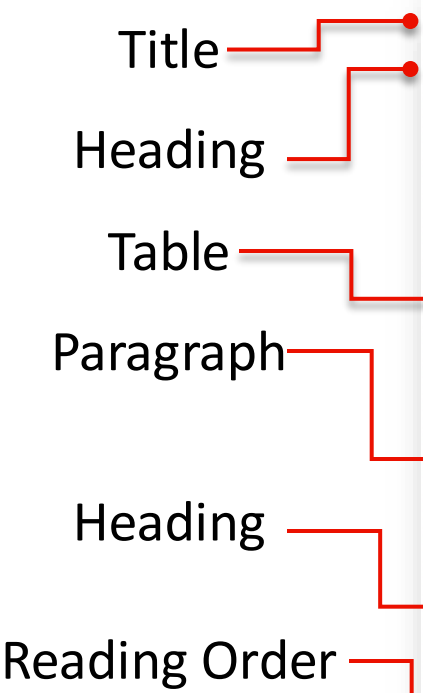
Creative Cloud for enterprise password policies


Both Business IDs and Enterprise IDs leverage the SHA-256 hash algorithm in combination with password salts and a large number of hash iterations. Adobe continually monitors accounts hosted on its infrastructure for unusual or anomalous account activity and evaluates this information to help quickly mitigate security threats. Conversely, Adobe does not manage user passwords for Federated ID accounts.

Account Management

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.



 **WAI-A**
WCAG 2.2

9

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



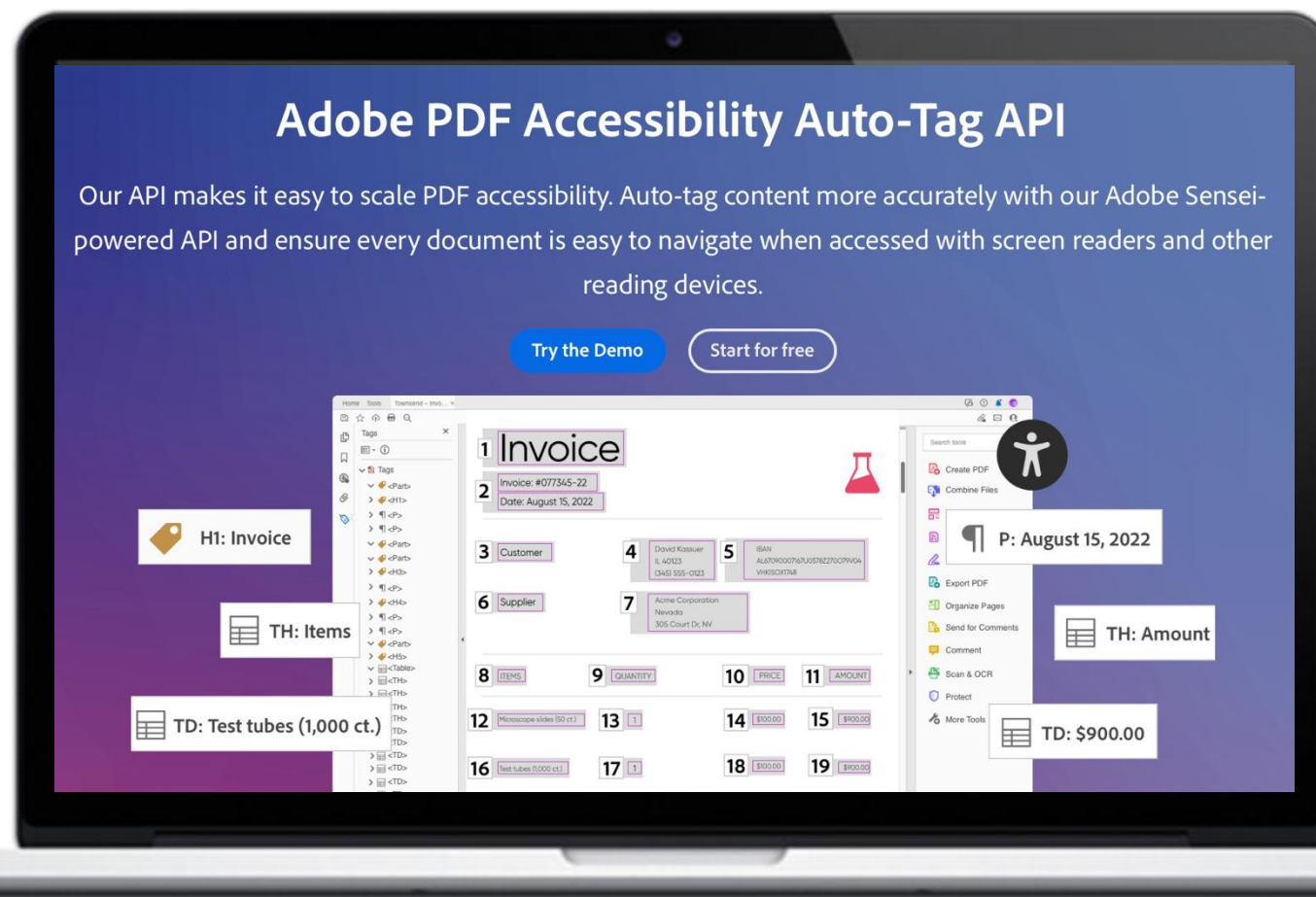
Improved accessibility tags added by processing the file in the cloud



Save time making accessible PDFs



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



Redaction

 Redact a PDF



Redaction is permanently removing visible text and graphics from a document



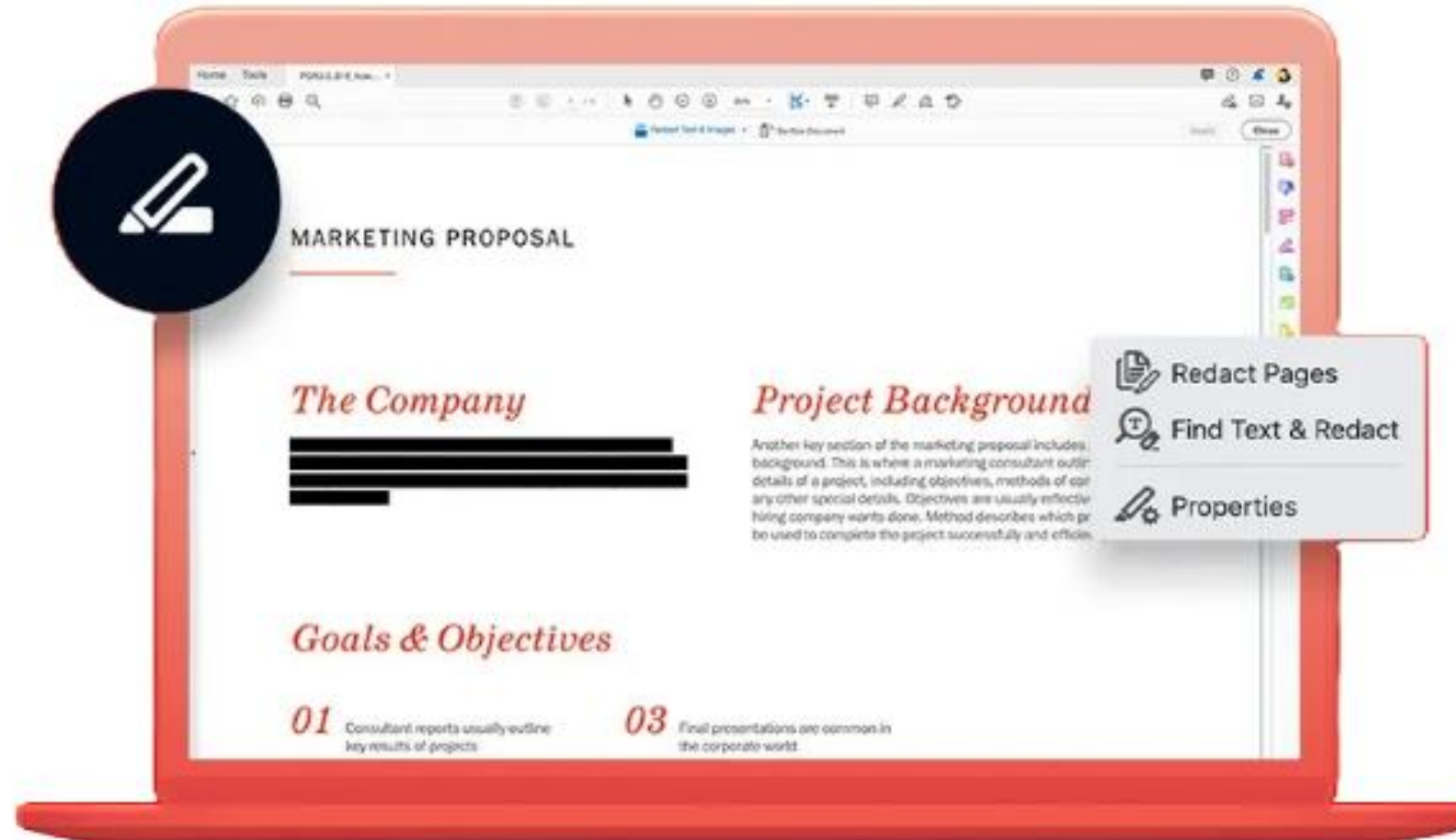
Advanced redaction and sanitisation tools to permanently delete text, graphic images, metadata and hidden information



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

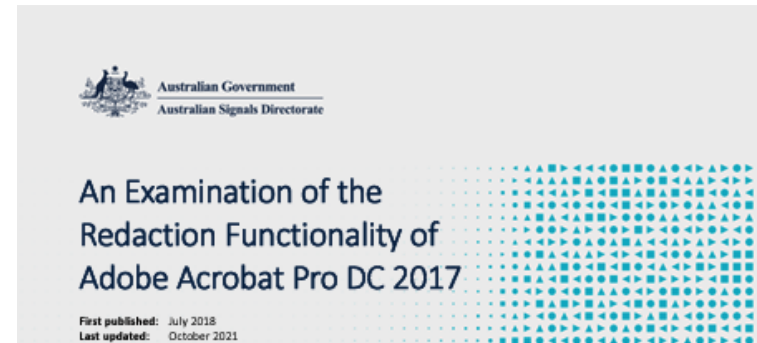


When it comes to complying with rules and regulations, Acrobat's redaction capabilities let users completely remove sensitive information

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)

 Redact a PDF



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

Adobe

Adobe PDF Auto Redact API Demo

Upload a PDF > Select text to redact > Preview and save output

Page 8

- Person Name
 - Susan King
 - Page 8
 - FRANCES TYLER
 - Page 8
 - Page 13 - 1
 - Page 13 - 2
 - Cecil Michael LUCAS
 - Page 8
 - Page 26
 - Page 29 - 1
 - Page 29 - 2
 - CECIL MICHAEL
 - Page 3
 - Page 8
 - Page 9
 - Page 10
 - Page 11
 - Page 13
 - Page 19
 - Page 21
 - Page 26
 - Page 29 - 1
 - Page 29 - 2

This is a preview of the PDF.

Australian Government
Department of Defence

Corporate Services & Infrastructure Group
Personnel Records – Canberra
Personnel record page 7
CANBERRA ACT 2000
p/n 02-0305-5967
Susan King

PERSONNEL RECORDS REFERENCE : AF0222454

DVA REF: QLD / QSM25206 / 29 SEPTEMBER 2003

(ATTENTION: FRANCES TYLER)

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

Any queries regarding this Statement of Service please contact this office.

REMARKS: NIL

SUSAN KING
Personnel Records – Canberra
30 SEPTEMBER 2003

8 46

Back Redact

Note: this record used in the demo is publicly accessible on Nation Archive of Australia. © 2024 Adobe. All Rights Reserved. Adobe Confidential.

Microsoft Purview Information Protection



Protect a PDF



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



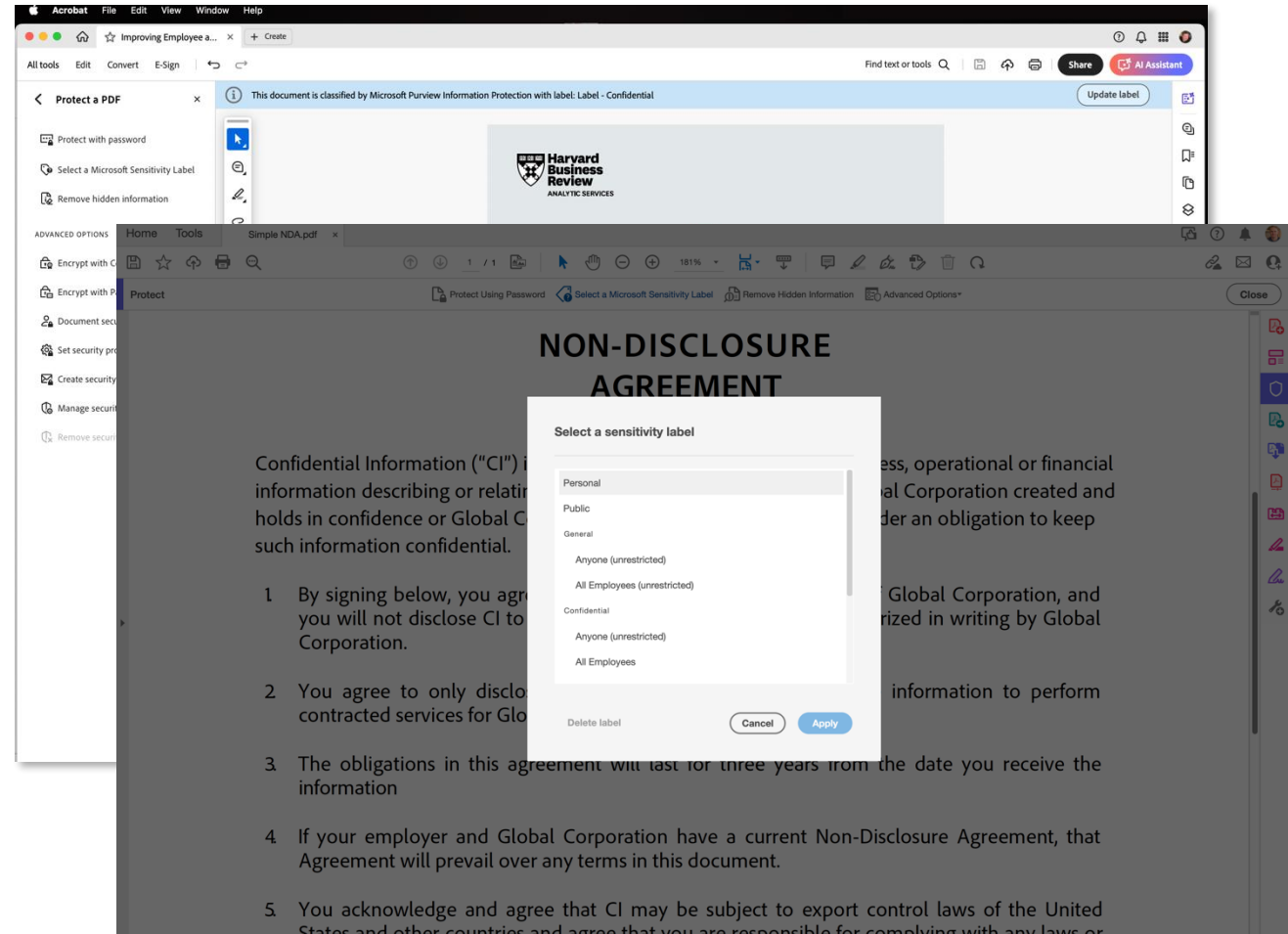
Data Protection: Integration with Microsoft Purview Information Protection - Copilot



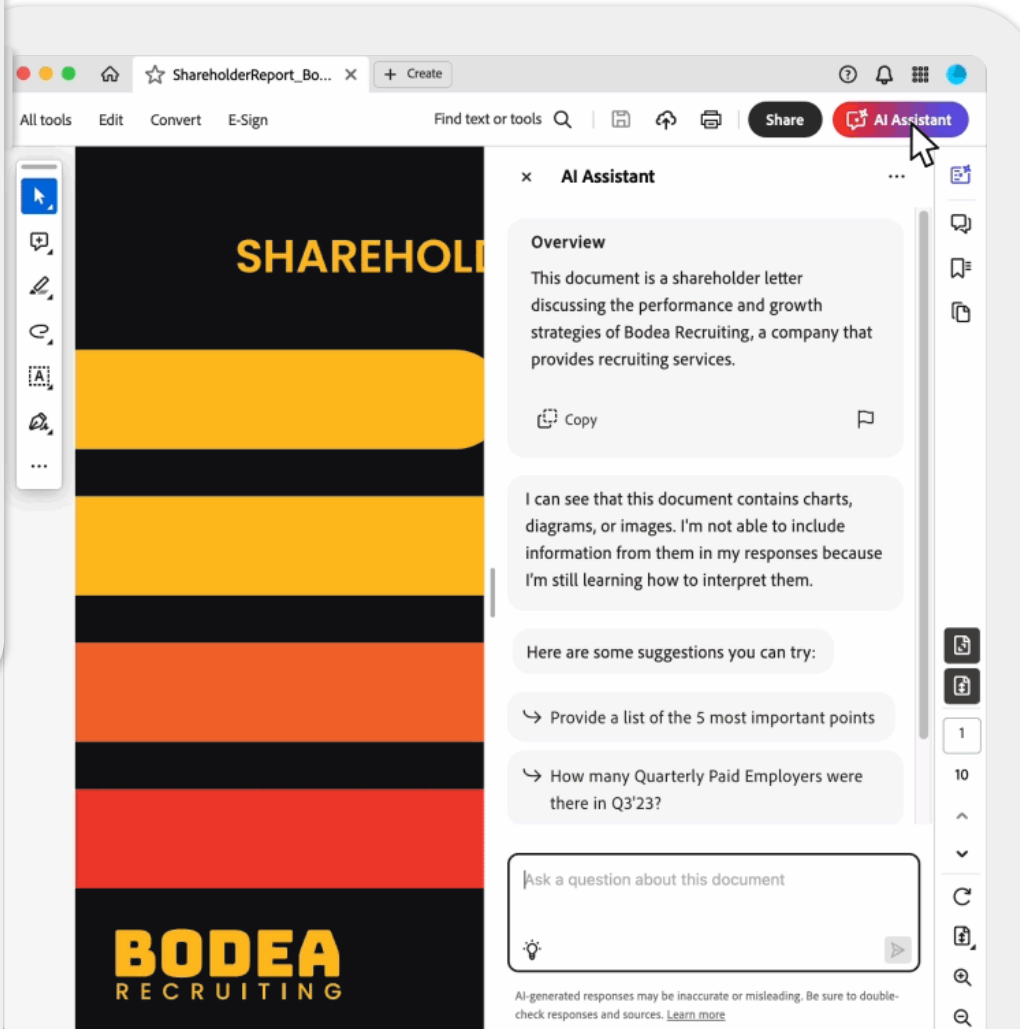
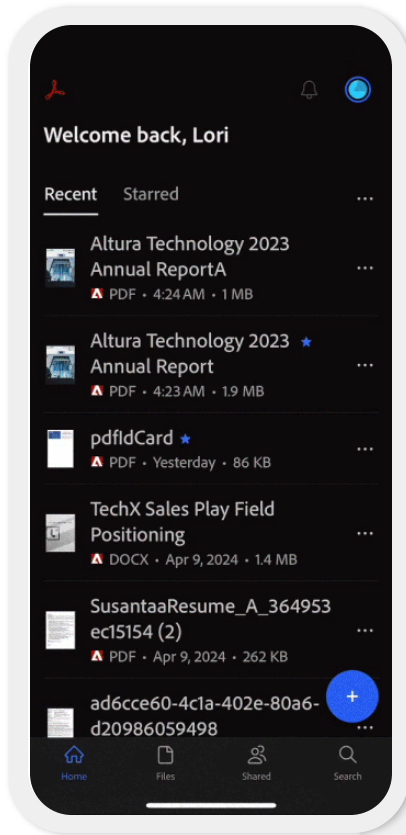
Apply and edit Information Protection sensitivity labels and policies to your PDFs



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



Work smarter with your documents





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



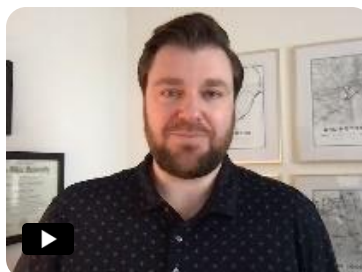
Quickly bring together and validate insights for due diligence

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

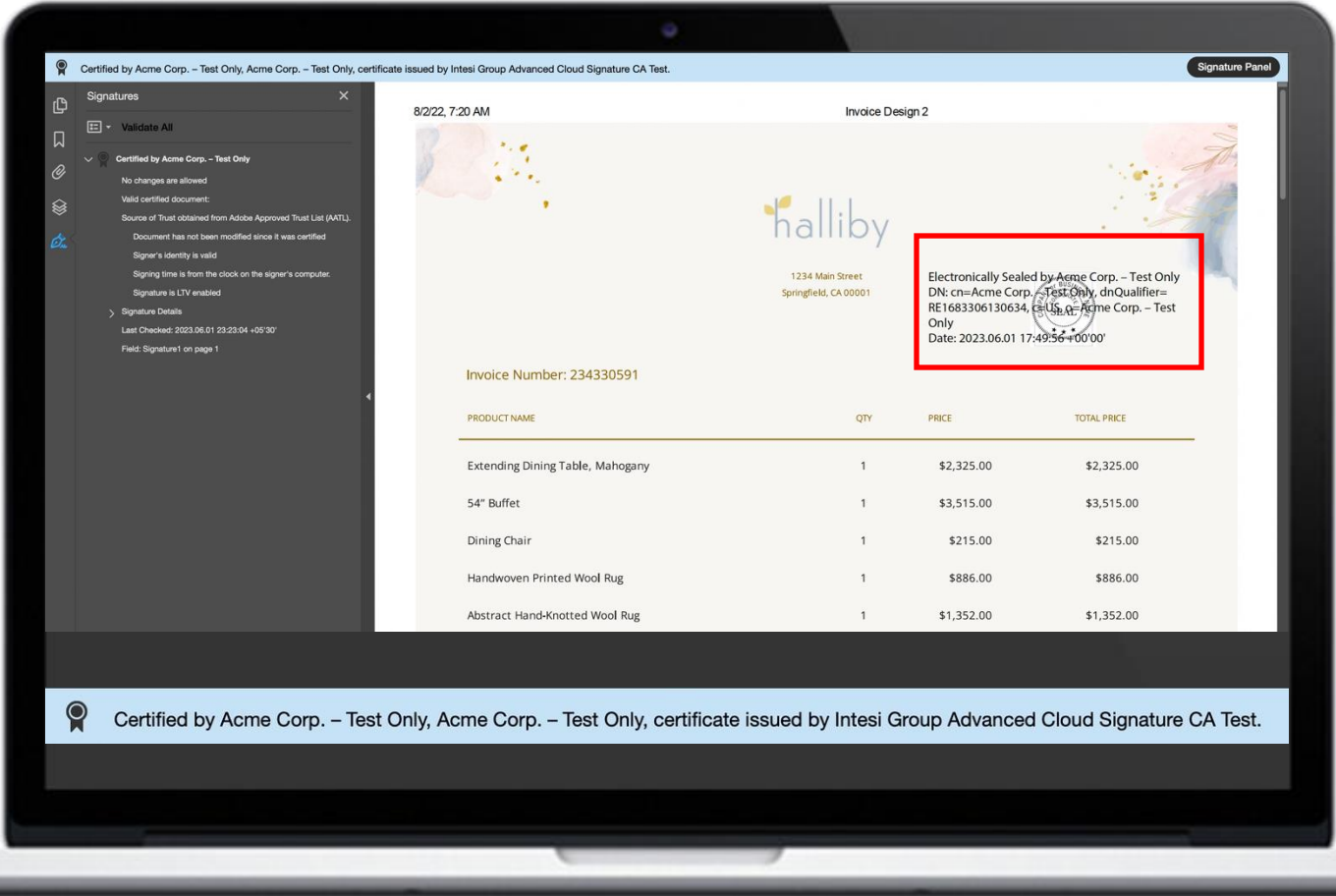


Applies an electronic seal (e-seal) to a PDF document using a digital certificate to verify the identity and integrity of a document



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

Button

Http, Mail, and Adobe PDF Services

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

Preparing for Copilot, Adobe can help.



Copilot



- 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

Adobe Document Cloud – four offerings



Adobe Acrobat

PDF solution with e-signatures



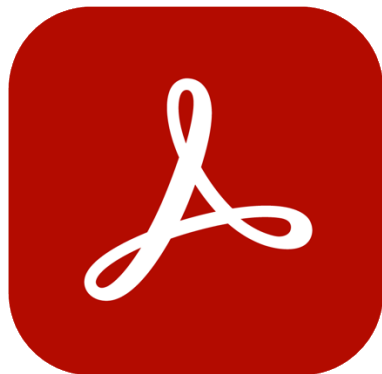
Adobe Acrobat Sign

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





Adobe Firefly



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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

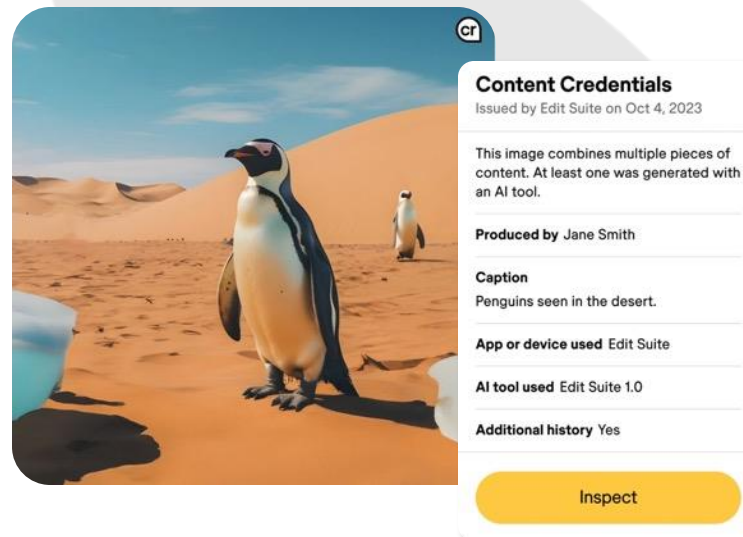
Training designed to be representative of regional markets and built to avoid harmful bias across gender, age, and skin tone

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





**Studio**


**Operations**


**Performance Marketing**

**Marketing and Communications**

 **Creative Cloud Enterprise**

 **Adobe Firefly Services**

 **GenStudio for Performance Mktg.**

 **Adobe Express**

Custom Models

Brand styles

Campaign styles

Product generation

Character generation

Firefly
Generative AI
Platform

Services	Generate image	Generate texture	Generate vector	Generate color variant	Replace object	Generate social	Generate design	Composite images	Generate text effect	...
AI Models	Image	Vector	Design	3D	Video*	Audio*	Copy	3rd Party models*		
Training	Adobe Stock		Owned and Licensed			Public Domain				
Governance	Training approach		Security and privacy		Harm mitigation (ethics, diversity)		AI transparency (Content Authenticity)		Accountability	



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:



The Washington Post

CBC Radio-Canada

The New York Times



GANNETT

gettyimages



Qualcomm

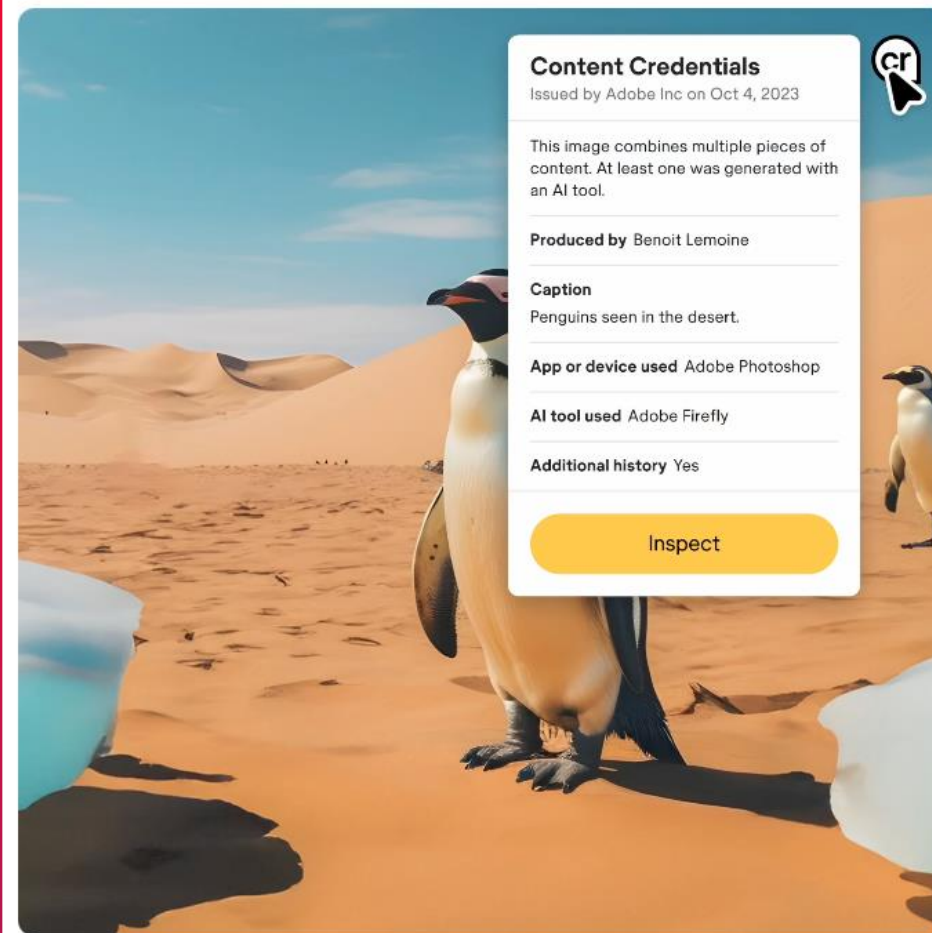


VII



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

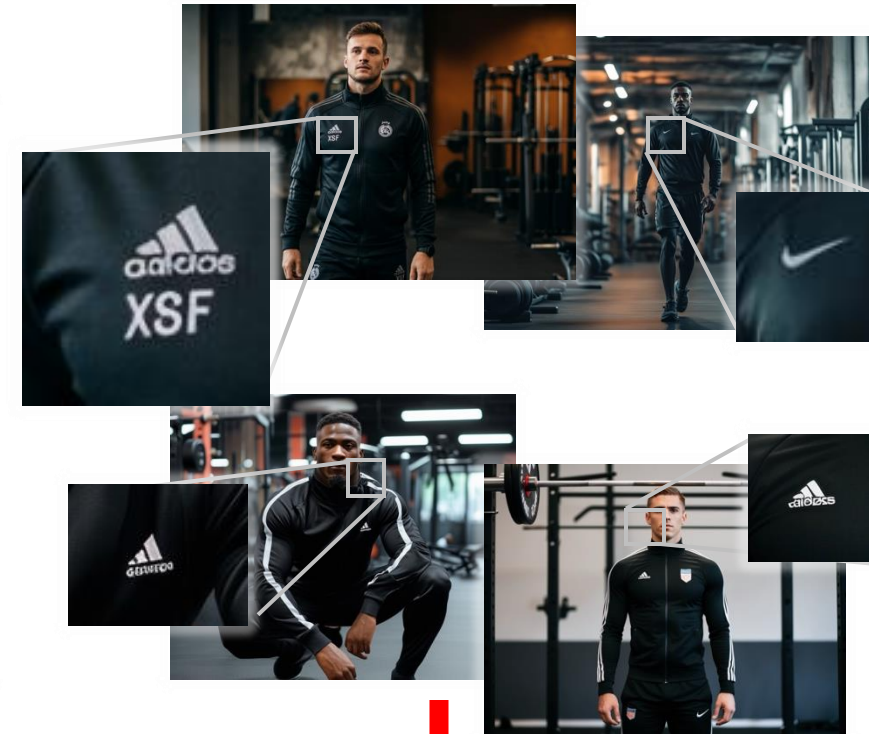
- **Commercial Safety:** Models or platforms should be able to safely generate content without the risk of reproducing protected content
- **Indemnity:** Models creators should be confident in their ability to create safe content and protect their users

What are they using today?

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



**Commercially Safe
Output**



**Accidental
Infringement¹**

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

Adobe's AI ethics on Firefly



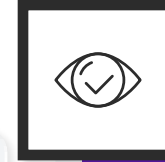
Accountability

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.



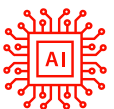
Responsibility

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

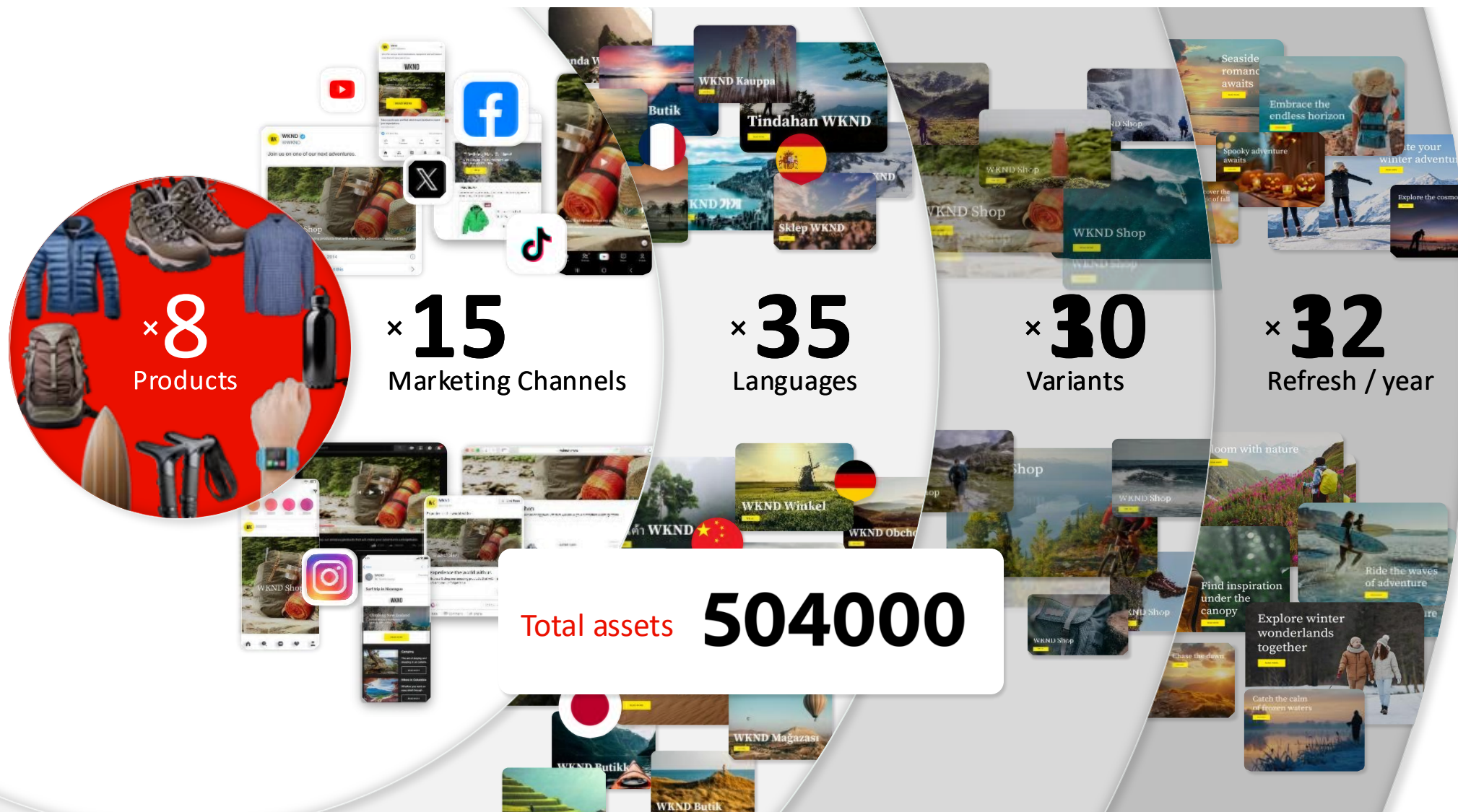
Adobe



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



Personalised marketing requires content at a massive scale



Content demands create challenges across multiple teams

Marketing



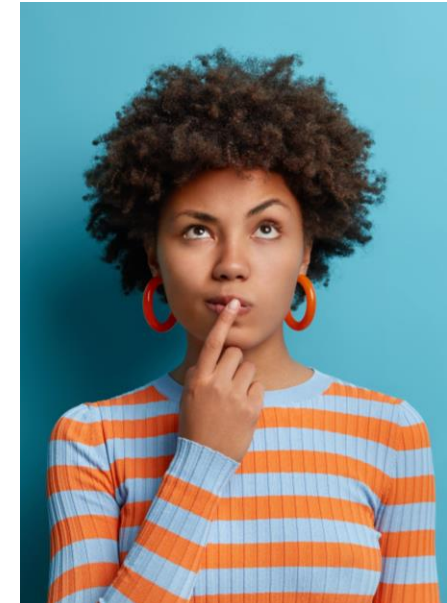
Running fewer campaigns
than desired results in
missed growth opportunities

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?”

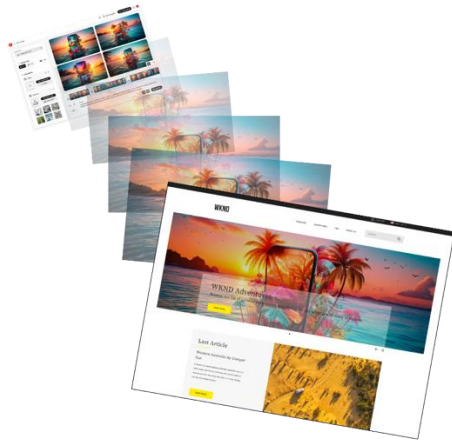
Increased engagement

Higher conversion

Improved customer retention

Adobe Firefly Services

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



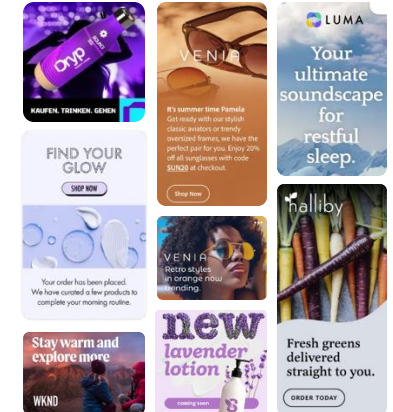
Produce content that is safe for business



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 *

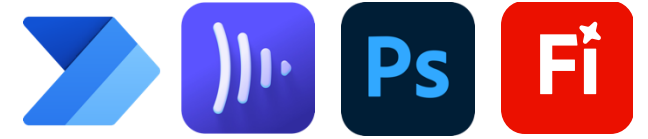
Edit

-  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



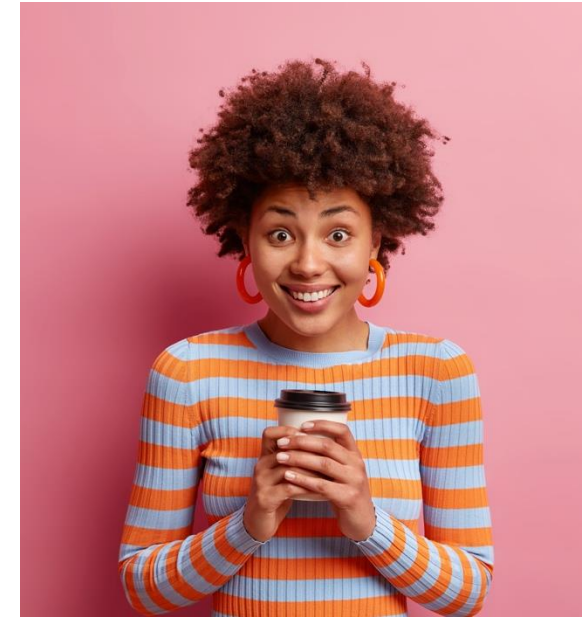
Exploiting growth opportunities with personalised experiences and more targeted campaigns

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