

The image shows a laptop screen with a construction proposal document. The document title is "PROPOSAL" in large orange letters. Below the title, there is a paragraph of text: "This letter is to propose our bid to construct y in Los Angeles, California, this coming Octob \$800,000. See below for our construction bi details and the breakdown of this budget." Below this is a "PRICING" table:

Description	%
Labor	30
Materials	60
Engineer's Fee	10
Total	

At the bottom of the document, there is a red Adobe Sign logo and a button that says "Click here to sign" with a signature line below it.

Overlaid on the top left of the laptop is a black circle with a white house icon and a signature. A white sidebar menu is on the left with three items: "Request e-signatures" (with a house icon), "Send in bulk" (with a document icon), and "Web forms" (with a document icon).

A white pop-up window titled "Get document signed" is on the right. It contains a "Recipient" field with a dropdown arrow and the email "alex.diaz@townsend.com". Below it is a "Message" field with the text "Invoice" and "Please sign this document. Thanks!".

# Boost your bottom line with document automation.

Smart digital document strategies from Adobe and Microsoft.

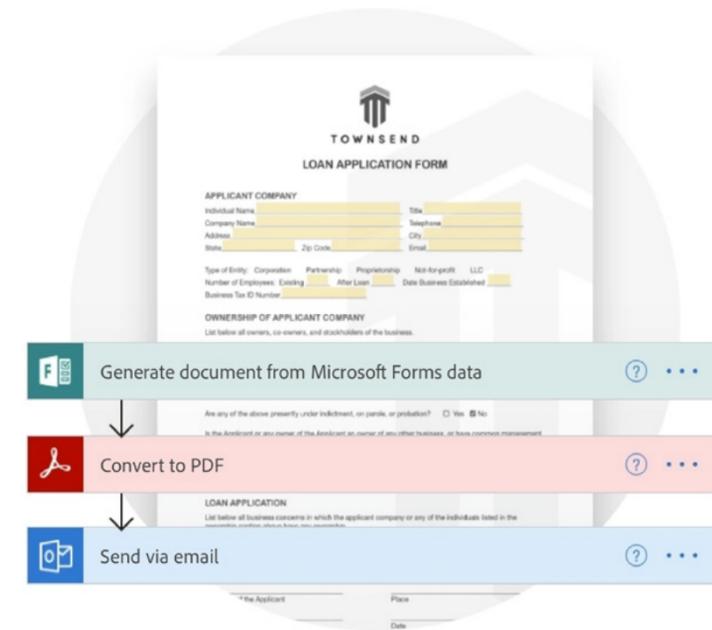
Rapid digital transformation in recent years has permanently altered expectations for how businesses operate, with customers and employees alike demanding more intuitive, secure digital document experiences. The result has been historic investment in support of everything from e-signature solutions to digital document collaboration and security.

Threatening this progress, however, is a fresh wave of economic uncertainty putting new pressure on IT and business leaders to justify investment in their organizations' digital maturation. At the same time, endless regulatory changes, limited bandwidth to evaluate constantly evolving solutions, and overhauls that interrupt day-to-day operations can make further attempts at investment feel like a losing battle.

Yet pulling back spending altogether puts businesses at risk of falling behind the competition. A 2023 Pfeiffer Report study, sponsored by Adobe, estimated cumulative productivity gains with Acrobat can deliver thousands of dollars of ROI per user each year. When outdated document processes create inefficiency and enterprise risk, failing to invest comes at a steep cost.

### Supercharge your document workflows with Adobe connectors in Microsoft Power Automate and the Power Apps environment.

- Send a selected file in Microsoft SharePoint for signature, and automatically store signed documents.
- Enable sending by authorized users on behalf of others.
- Dynamically route documents for signature based on data and Microsoft Entra ID profiles.



Fortunately, emerging automation technology has made it easier than ever to convert tedious, error-prone manual processes into highly efficient and secure digital workflows for businesses of all sizes. Driving this sea change are cloud-based APIs (application programming interfaces). These powerful software interfaces connect applications that typically require costly IT development services or third-party integration applications. Cloud-based APIs also integrate easily with existing technology, enabling low-code, visual-led solutions that are readily available and require no maintenance.

This eBook details how Adobe Services APIs and Microsoft productivity app integrations allow organizations to introduce greater security, standardization, and automation to their document processes—often with low or no code required. Digitize and customize your document workflows across manual, automated, and hybrid processes, all while using familiar tools that your organization has likely already invested in.

# An end-to-end solution that's easy to implement.

There's no way around it: The digital document workflow challenges facing today's organizations are complex, demanding holistic, integrated solutions that go beyond simply patching holes. Adobe Document Cloud enables organizations to add speed, security, and scalability at every point in a digital document's lifecycle.

Acrobat Services are a critical component of this larger ecosystem, functioning like LEGO building blocks that are easy to scale and integrate with existing tech stacks. By connecting apps and automating redundant tasks, APIs unlock the full potential of any organization's most valuable resources—its people—allowing them to focus on the kind of high-impact strategic work no machine can replicate.

**“** Humans don't like being bots. They don't like doing the same thing a million different times. We're smarter than that, and people's talent is more valuable than that.”

Ben Vanderberg, Adobe Principal Platform Evangelist

API-enabled automations offer unprecedented scalability. “We're an elastic cloud service,” explains Ben Vanderberg, Adobe principal platform evangelist.

Besides saving time, API-powered automated workflows are crucial to reducing human-caused errors and introducing new levels of standardization to help ensure compliance with governmental regulations. This includes the ability to standardize document security across an entire organization for critical workflows, be it adding password protection or preventing unauthorized users from printing or editing a PDF file.

As companies grow, so does their number of data silos. APIs break down these information barriers, enabling users to pull data from different locations to quickly generate new documents using customizable templates. Of particular importance: All of the APIs required to perform these are low-code, meaning team leaders can engage a much deeper talent pool when it comes to developing and deploying them.

# How APIs and integrations automate document processes.

The Adobe Acrobat Services portfolio includes over 15 APIs that allow for a number of productivity boosts, including:

- Generating documents from Power App forms and Microsoft Word templates, and sending for signature
- Converting PDF files to Microsoft Excel in SharePoint
- Extracting PDF content into JSON, XLSX, and PNG
- Automatically tagging a PDF for greater accessibility
- Applying security controls to restrict viewing and editing

The use cases on the following pages illustrate how Adobe and Microsoft can help increase efficiency through customized document processes.

## Putting the power of AI to use to give you more time for what matters.

With services powered by Adobe Sensei AI, organizations can accelerate form-based processes, reduce errors, and give staff more time for strategic tasks.

- Automate form field recognition based on document analysis
- Auto-clean scanned documents
- Automatically extract content from native and scanned PDFs
- Improve accessibility at scale with automatic tagging

## Use case 1: Document generation.

The task of creating new invoices, contracts, and other forms can present a particularly pernicious bottleneck for teams in any department. Adobe Document Generation API allows you to pull data from diverse sources and plug it into customizable templates, supporting not only faster but more reliable, error-free document workflows—right out of the gate.

One team already harnessing the API's [time-saving potential](#) is the legal department within Adobe. Together with the Acrobat Sign API, the lawyers have used Adobe Document Generation API to handle 75% more sales contracts through self-service workflows, speeding up the time it takes to execute these contracts by 273%.

“Acrobat Services allow us to automate what we were doing 20 years ago,” says E.A. Rockett, senior director of the Office of the General Counsel at Adobe. “We’re getting back to the first principles of enterprise documents—that is, the way lawyers interacted with sales reps 20 years ago, giving them optionality for different scenarios.”

After document creation, perhaps the most time-consuming task attorneys engage in is document review. Fortunately, APIs can help simplify this process, too, by identifying key patterns to further compress the lifecycle of a deal.

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E.A. Rockett, Adobe Senior Director of the Office of the General Counsel

“When we reviewed over a thousand contracts, we noticed the same clause was scrutinized repeatedly during legal review,” says Rockett. “We determined if we could provide a checkbox to the sales team that automatically removed that phrase when specific conditions were met, we could eliminate thousands of tickets and thousands of hours of workload for our attorneys.”

With Adobe PDF Services and Microsoft Power Automate, documents can be generated from familiar productivity tools, including Microsoft Word and Excel, as well as Microsoft Forms data.

## Use case 2: E-signatures.

E-signatures power business in today's digital-first world. This is as true for an HR department onboarding fresh talent as it is for a finance team seeking budget approval. Not all e-signature experiences are created equal, however. With the Acrobat Sign API, teams can seamlessly integrate e-signature capabilities into mobile apps, websites, and other platforms for maximum customization. For example, documents can be sent for signature from within productivity applications such as Microsoft Teams.



For the staffing technology firm Avionté, ensuring frictionless digital experiences isn't just good for business—it is their business. With over 1,000 customers and 25,000 users, the company knew they needed an e-signature solution that was not just scalable, but easy to use, secure, and compliant.

Today, Acrobat Sign API is embedded throughout their technology platform. Customers use it to obtain documentation from their employees and other stakeholders. At every step of the way, the API generates a clear audit trail that leaves no question of authenticity.

As anyone who has ever worked in HR knows, however, obtaining the right signatures at the right time is only half the battle. To truly improve document workflow efficiency, users must be able to track a form's progress at a glance. With Acrobat Sign API, all the data collected from the e-signature process feeds directly back into the Avionté system, granting recruiters real-time visibility into every one of their contracts.

The impact in terms of hours saved has been “staggering” for Avionté customers, says Scott Poeschl, the company's vice president of partnerships—so much so that many have been able to increase the volume of business they conduct.

“And that's the key for Avionté,” says Poeschl. “When our customers win, we all win.”

### Use case 3: Data extraction.

Mining PDFs for information is an often slow and messy process, with tables and page breaks enough to confound many of the tools designed to help with the process. Adobe Extract API harnesses state-of-the-art AI and ML to sail over these visual hurdles and quickly turn any PDF document into usable JSON or XLSX data. The extracted data from documents such as signed agreements, tests, and reports can be leveraged to transform them into new file types.

This tool proved critical for AI Singapore after a multinational financial services client hired the firm to help it extract text from disparate reports and brochures, all in PDF form. The team had tried to solve the dilemma on their own using other PDF extractor tools, but the results were always useless gibberish.

With pressure mounting, they gave Adobe Extract API a try.

“Our results were amazing,” says Siavash Sakhavi, assistant head of the team tasked with finding a solution. In the end, the team went from behind schedule to completing the project in almost half the time planned using Adobe Extract API.



**APPLICATION**  
for employment

**NAME**  
First name  Last name

**EMAIL**  **PHONE NUMBER**

**EARLIEST POSSIBLE START DATE**

**UPLOAD RESUME**

The illustration features a red border around a light yellow background. On the left, there are icons for a house, a globe, a pencil, a ruler, and a compass. At the bottom, there is a blue and white graphic resembling a stylized wave or a piece of paper.

## Use case 4: Digital content publishing and review process.

Easy collaboration on PDFs is a must in today's hybrid workplace, and Adobe PDF Embed API is making it happen. Teams ranging from creative to sales use the tool to share PDFs in the highest quality rendering possible and solicit feedback directly within the document. Following publication, the approved PDF then becomes a source of valuable data, thanks to the API's ability to track key analytics such as time spent on a page and searches.



“It would have taken us twice as long to develop the Share for Review feature without Adobe PDF Embed API.”

Jeremy Mitchell, Adobe Senior Software Engineer

Adobe PDF Embed API's collaborative nature made it especially appealing to engineers at Adobe who were determining how to create a better review process within the popular InDesign application. In particular, they needed to solve the problem of how to turn even the most complex layouts into common formats reviewers could comment on, regardless of whether or not they had access to the InDesign app. Their solution, Share for Review, revolved around Adobe PDF Embed API, which they used to render high-quality PDFs in any web experience, along with annotation tools for commenting.

“It would have taken us twice as long to develop the Share for Review feature without Adobe PDF Embed API,” says Jeremy Mitchell, a senior software engineer on the project. End users, meanwhile, enjoy a review process that is three times faster when all is said and done.

## Use case 5: Archiving and retrieval.

As more and more document workflows go digital, teams need the assurance that whatever they choose to store is both securely locked away *and* retrievable by the right parties. The latter goes beyond simply being able to open a document. Rather, it includes the ability to quickly search a PDF for specific information and easily call up detailed metadata.

Adobe PDF Services API was created to solve both sets of challenges, offering wide-ranging features aimed at increasing document security and usability. Among them are the options to add and remove passwords, convert PDFs to a variety of popular formats, and use built-in optical character recognition (OCR). Integrations with Microsoft SharePoint and OneDrive enable organizations to spend less time on archiving tasks and more time on strategic priorities.

Take, for instance, a common scenario: A global company with mountains of legal contracts must update a specific clause in order to ensure those documents remain compliant. To do this, the staff must first locate all the relevant forms, then unlock the text, and finally find and replace the relevant content.

Using Adobe PDF Services API, they create a storage system on a shared drive, convert any non-PDF files into PDFs, and finally run OCR on all the forms in order to render them searchable. With the relevant documents identified, the staff can convert them en masse into Word documents, find and replace the critical content, and export them back into PDF form.

## Easily integrate Acrobat Sign into leading productivity applications.

- Flexible APIs provide turnkey integrations which can be installed in minutes with no coding required for easy ramp-up
- Prepare and send documents for e-signature directly from existing systems and applications
- Receive real-time status updates and retrieve stored copies of signed agreements from within integrated applications
- Out-of-the-box integrations include Microsoft 365, SharePoint, OneDrive, Power Automate, Salesforce, ServiceNow, and Workday



# Enable powerful, automated document workflows with APIs.

At a time when businesses need to balance their digital transformation roadmaps with economic uncertainty, technology is opening up easier and better ways to automate and integrate document workflows across organizations. Cloud-based APIs are a straightforward way to automate document workflows and connect all the different cloud platforms in an organization's ecosystem—and because they're so easy to implement, teams can experience gains quickly with limited retraining required.



Integrations with Microsoft Power Automate, UiPath, and Workfront further enable low-code or no-code solutions with their ecosystem of applications and connectors. Because these low-code platforms are visual-led—with drag-and-drop interfaces rather than technical coding environments—automated workflows can be created without prolonged developer cycles.

Together with individual productivity applications like Acrobat Pro, Acrobat Sign, and Adobe Scan, these APIs and integrations are part of Adobe Document Cloud for Enterprise, which provides comprehensive solutions to enhance existing application workflows by bringing tools and capabilities to sales teams where they live and work. Put them to work to generate, share, collaborate on, and unlock the value of your team's digital documents.

Because in the end, a winning document strategy is a winning business strategy.

# Adobe and Microsoft can help.

From the PDF creator and industry leader you can trust, Adobe offers a comprehensive set of APIs to reimagine and improve your document workflows at every stage of the process, from creation to reviews, approvals, signatures, archiving, and analysis. With Adobe Acrobat Services, and the deep integration with Microsoft productivity tools, your teams will be poised to quickly and effectively support your organization's every goal in this new, digital-first world.

[Learn more >](#)

## Sources:

["Acrobat Services API Use Cases,"](#) Adobe Developer.

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E.A. Rockett, senior director of the Office of the General Counsel, personal interview, Adobe, November 2022.

["How Avionté Uses Adobe Acrobat Sign Embed to Make E-Signing Frictionless,"](#) YouTube video, 2:28, posted by Adobe Document Cloud, December 8, 2022.

["Self-service contracts for business users,"](#) Adobe customer success story for Agreement Experience.

["The ROI of Adobe Acrobat and PDF Document Management,"](#) Pfeiffer Consulting, 2023.



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