



AGENCY INNOVATION DAY - FEATURING THE ILLINOIS EPA

July 12, 2016



Welcome

Thank you for taking time from your busy schedules to join us today to learn how your agency can utilize “Workflow Automation” technologies to improve business efficiencies.

Today you will see two technology platforms that are available from the Department of Innovation and Technology that can help you modernize your existing business processes.

Major Technology Challenges in Illinois

42 years' of technical debt

Vulnerable Security Position

Out of balance Cost Structure

Illinois is ranked "C" as a Digital State

1974 - 2016



A = 8

B = 30

C = 12

These challenges have caused lost opportunities for our customers to benefit from the power of their government...

Ease of doing business in and with the State

Seamless engagement
Customer <> Government

Improve workforce productivity

Unleash value of data

Secure personal information

But we have a plan for overall digital transformation that will help make a 45-year journey in 4 years...

1

Improving the Business of IT

Operational Transformation

Organizational Transformation

2

Improving the Business of the State using IT

Customer Service Transformation

3

Make Illinois a Smart State

Smart City Solutions

Economic Growth

Regionalize Services

Cultural Transformation

From Current to Future State

FOCUSING ON AGENCY MISSIONS

Current IT Environment

One State

42 years of technical debt

2,800+ applications

Many potential vulnerabilities

36% of staff eligible to retire



C+ ranking as a digital state

1,700+ IT staff

60+ different IT organizations

Little coordination on spending

Many IT Organizations

Future IT Environment

One State

Right-sized applications

Enterprise IT Architecture

Modern and Efficient Infrastructure



Secure Data and Assets

Significant workload in the cloud

Process Driven IT Service Delivery

Illinois FIRST

Innovation at the Edge of the Network

One of our three “Illinois First” strategies is to improve the business of the State by using IT more effectively. Using IT to improve “Workflow Automation” is one of the Statewide strategic priorities. One of the approaches we are using to accomplish this strategy is to leverage existing technologies that we own today to speed up the delivery of new solutions.





MOBILE "FIRST" UPDATE



GOAL

MOBILE ENABLE ALL

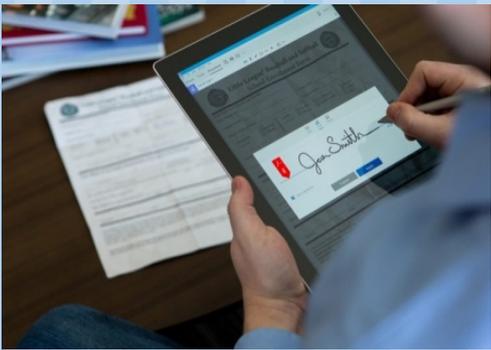
GOVERNMENT

INTERACTION POINTS

Focused on "SMART Citizen" enablement to collectively improve services and experiences of all residents, businesses, visitors and "everything" in, around and across the state.

MOBILE.FIRST

Enterprise Mobile Strategy enabling % of Citizen interactions to surpass 40% by 2017

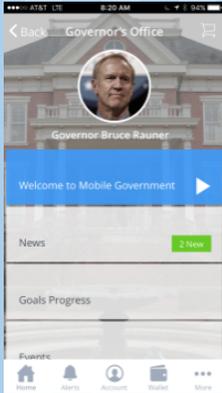
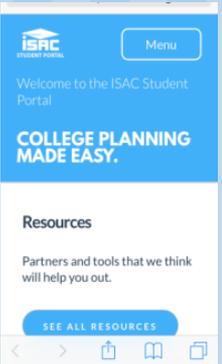


SECURED DIGITAL

Digital Signatures via Common Platform

CITIZEN ENGAGEMENT

Enterprise Catalog of Services, Digital Licensing and Permitting, Automatic Renewals, Student Portal for Universities



THE POWER OF MOBILE



INTERACTION

BUILD OFF OF
INCUBATION HUB
SUCCESSSES

MOVE ALL
INTERACTIONS TO
ANY DEVICE, ANY
TIME, ANY WHERE

PERSONALIZATION
OF GOVERNMENT
SERVICES

PLATFORM

MOVE TO MOBILE
RESPONSIVE
FRAMEWORK

ESTABLISH COMMON
IL DIGITAL IDENTITY

INTEGRATE
BLOCKCHAIN AND
WEARABLES

AGILE DELIVERY

OUTCOMES

SMART STATE

INNOVATION
LEADER

COMMON DIGITAL
IDENTITY

ECONOMIC
GROWTH

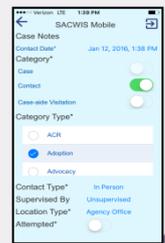
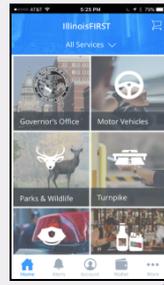
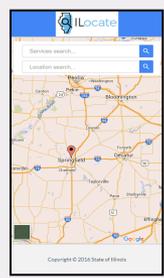
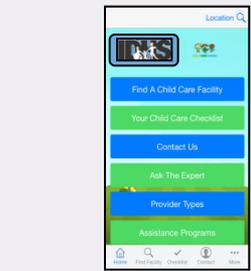
THE POWER OF MOBILE

**DON'T LOSE SIGHT OF THE
FUNDAMENTALS**

LEVERAGE ASSETS TO DRIVE
AND RESPOND TO CHANGE

Strategy Area	Where are we today	Where do we will be in 2019	Measurement of Success	FY17	FY18	FY19
Mobility	<ul style="list-style-type: none"> • Handful of mobile applications. • Most of Infrastructure / apps are mainframe and or client server based. • Web is not mobile enabled. 	<ul style="list-style-type: none"> • MobileFirst where all apps are interactions with business, citizens, students are via a point in time device that is highly commoditized and changes every year. • 80% of citizen and business interactions mobile enabled • Eg. device agnostic. Starts as smartphone, moves to wearable...then to noseable. 	<ul style="list-style-type: none"> • IllinoisFirst mobile app platform up and running, 85% of payment transactions driven by mobile. • All renewals, licensing, care delivery managed via mobile. Telecare, Televisitation solutions. • Common digital identity for all. • Common “one-stop” access to citizen information. 	<ul style="list-style-type: none"> • Launch 5 mobile apps per quarter. • Select common enterprise mobile platform. • Mobile enable all web and social media interactions. 	<ul style="list-style-type: none"> • Implement licensing and payments mobile platform. • Integrate with ERP. • Provide mobile platform as a service to other local and municipal governments across the state. • Integrate with IOT for Smart highways, Smart Commuting and Intelligent Communities 	<ul style="list-style-type: none"> • Move to available self service interactions for all constituents. • Tele_Now approach where interactions are readily available and leverages enterprise mobility Tele* platform.

MobileFIRST Strategy will increase interactions that are mobile enabled and improve tools for citizens, employees & businesses



Apps on the Horizon – Goal is one a month

Move from paper and web to mobile interaction

Migrate platform to mobile responsive

Migrate interaction experience to immediate!

Families,
Children,
Elderly and
Veterans

Public
Safety

Education

Transportatio
n

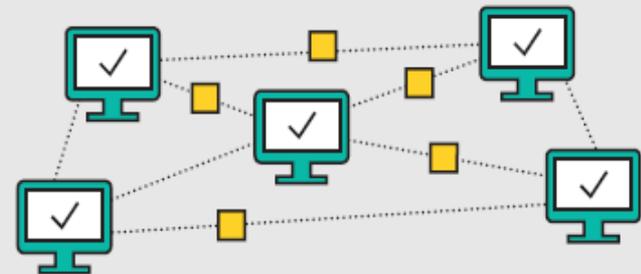
Natural
and
Cultural
Resources

Business
and
Workforce

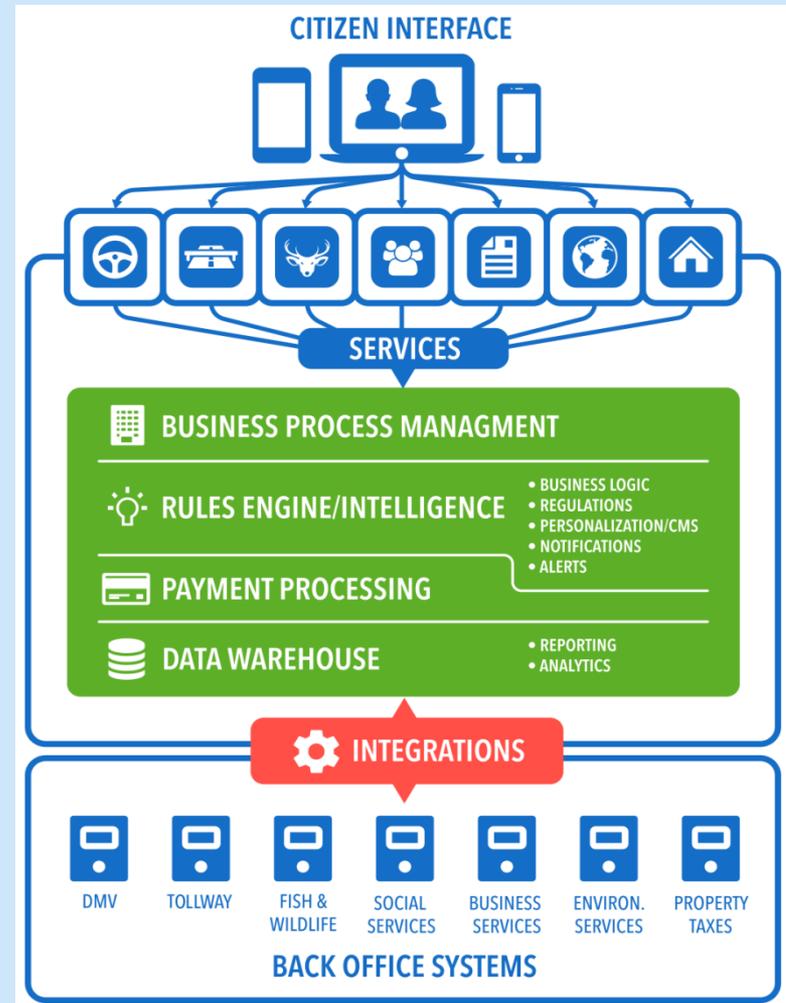
Govt and
Public
Employees



Safety,
Security
and
well
being



- **Citizen/Customer Interface.** Multiple interface options will be available, including web, mobile, wearables based upon a common digital identity
- **Business Process Management.** A BPM and rules Engine offers rapid launch with required customization of business rules, regulations, and personalization's
- **Payment Processing.** PCI Level 1 compliant payment processing. Accepts credit cards, debit cards, ACH, echecks, alternative currencies etc.
- **Data Warehouse and Analytics.** Enterprise data warehouse and analytics engine supports analytics and reporting to State agencies and end user customers
- **Integrations.** Integration / API layer supports highly



**HAVE THE COURAGE TO TAKE
THE FIRST FEW STEPS**

... MOBILE IS NOT THE FUTURE
IT IS THE NOW!



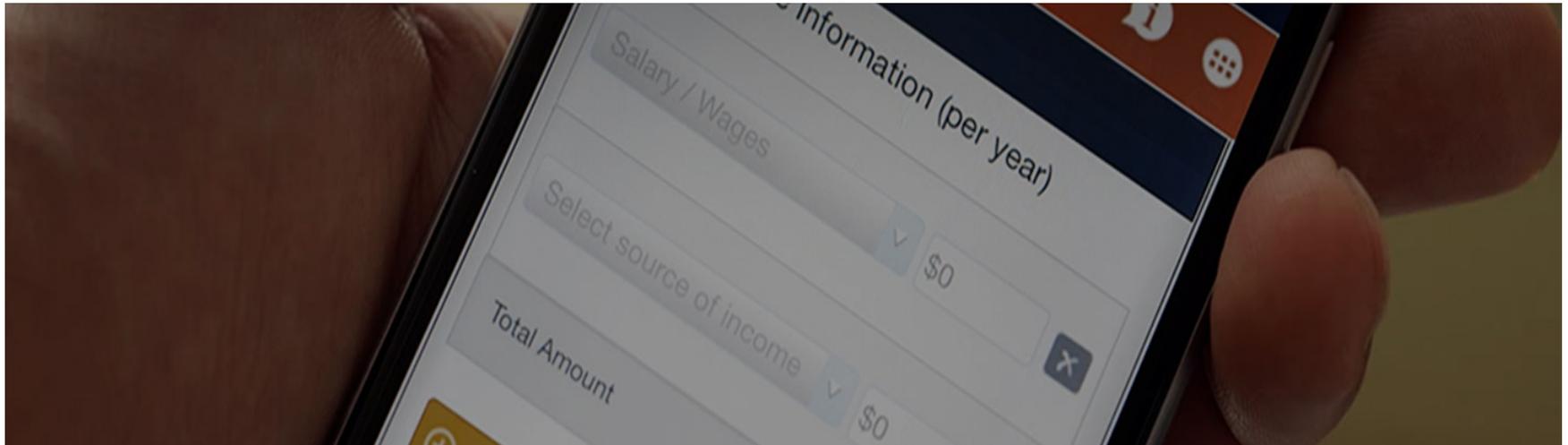
Understanding Adobe Experience Manager Forms

Rich Fetter
CIO – Illinois EPA
Department of Innovation and Technology

July 12, 2016

What is Adobe Experience Manager (AEM)?

AEM Forms is a technology platform that DoIT can leverage to assist agencies to improve user experiences by making complex form based interactions and associated workflows easy to use for web and mobile interactions.



Adobe Experience Manager Forms



Adobe Experience
Manager

Goal: Leverage the State’s current investment in Adobe Experience Manager (“AEM”) Forms to enable State agencies to utilize AEM Forms platform to modernize and automate complex workflows.

Contract Components and Value (\$1,247,400)

Contract Component	Capability	Value
AEM Forms	Enterprise Software License, Subscription and Maintenance	\$359,400
Adobe Lifecycle Manager	DHS License, Subscription and Maintenance	\$415,000
Reader Extensions	Software License that allows features such as signatures and saving documents to be extended to Acrobat Reader	\$383,000
Adobe Sign	License for use of electronic and digital transactions	\$90,000

Adobe Experience Manager (AEM) Forms

Description	Unit	Price
Annual AEM Software	Unlimited Access to AEM Platform	\$59,900
Annual AEM Infrastructure	Development / Quality Assurance / Production Infrastructure	\$16,200
AEM Application Development	Vendor or DoIT Staff	Price determined based upon application

Illinois EPA

Livestock Facility Inspections

Asbestos Removal Notifications

Vehicle Inspection and Maintenance Program Field Audits

Agency Forms Management

Illinois EPA Use Cases (Effort and Efficiency) & (Cost Savings)

Livestock Facility Forms

Annual Inspections
250 – 300

Annual Savings
\$54,000

Estimated ROI
60%

Payback Period
8 months

VIM Audit Forms

Annual Audits
40,000 – 50,000

Annual Savings
\$202,000

Estimated ROI
496%

Payback Period
3 month

Asbestos Removal Notifications

Annual Notifications
5,500-6,000

Annual Savings
\$77,000

Estimated ROI
129%

Payback Period
6 months



AEM Forms Demonstration

Optimize citizen self-service and reduce costs

Steve Walker
Adobe System Consultant

July 12, 2016

Simplify Complex Interactions with Adobe Experience Manager Forms



Find

- Provides search tool to make forms easy to find on web and mobile sites
- Automates forms publication from forms repository

Fill

- Detect and present forms optimized for user device
- Enable pre-filled fields, save as draft, attachments, electronic signing, Section 508/ADA compliance

Process

- Integrate forms and data with enterprise applications and databases
- Leverage investment in existing systems

Respond

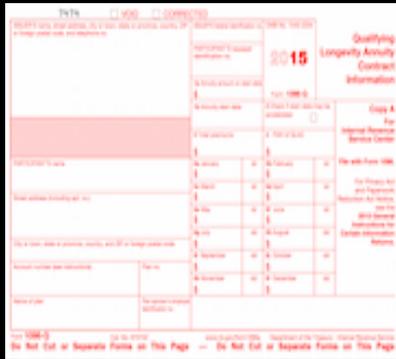
- Quickly create personalized and approved documents that users can access anywhere, anytime
- Deliver on-demand or batch documents to multiple channels

Measure

- Track, measure and analyze the user form fill experience
- Optimize forms to drive “conversion”

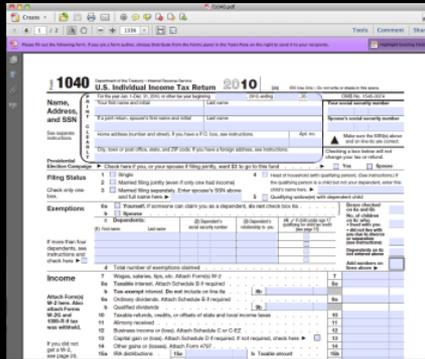
Adobe Engagement Spectrum

Static, Non-Fillable PDF



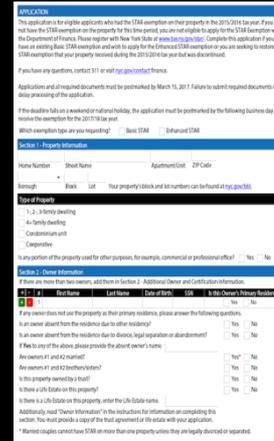
Print, Fill, Mail/Fax

Static, Fillable PDF



**Fill, Print, Mail/Fax,
Electronic Submission**

Dynamic, Fillable PDF and HTML



Electronic Submission

Adaptive / Responsive HTML



Electronic Communication

Demo



Asbestos Notification Automation Process

Ron Robeen

July 12, 2016

Field Operations Section Manager/Acting Asbestos Unit Manager

Bureau of Air

Illinois EPA

Background

Illinois EPA – Bureau of Air

- Illinois EPA is delegated by USEPA to enforce the National Emission Standards for Hazardous Air Pollutants for Asbestos (“Asbestos NESHAP”).

Demolition / Renovation - Asbestos Project Notifications

- Owner and operators subject to the Asbestos NESHAP are required to submit a Demolition/Renovation - Asbestos Project Notification Form 10 working days in advance of commencing a regulated asbestos demolition or renovation project.
- Original Notification forms are required by Illinois law to be submitted with a fee payment of \$150.
- The Asbestos Unit processes approximately 5,500 notifications (originals and revisions) annually.

Current Status

- Agency Staff has been working with the current Contractor since early 2016.
- Form is essentially “built” but several issues still need to be addressed to have a useable form.
- Internal testing partially completed.
- Database and other internal flow issues being addressed.
- Agency Division of Information Systems Staff are seeking approval of the form from USEPA, Cross Media Electronic Reporting Rule (“CROMERR”) Program personnel.
- Additional internal testing is still required.
- Additional “live” testing may be conducted..

Key Benefits of Automation

Increase in Regulatory Compliance

- Automated forms are often considered more user friendly, thus filing rates should improve.
- Also, business rules will “push” subject sources to submit notices that are more consistent with the rule.

Improved Staff Efficiency

- Increased regulatory compliance will decrease Agency outreach to sources to address issues including nonfiling or incomplete filing of notices.
- The number of notifications submitted through the automated process will be a one to one reduction in processing of paper notifications.
- This will greatly improve data and records management creating resource efficiencies.

Final Thoughts

- Benefits of electronic forms outweigh the issues.
- This process illustrates issues with process that warrant further review including the means to move from IT concept to finalization and implementation in a timely fashion, as well as how to ensure appropriate and necessary dialogue between IT and program staff.



Electronic Signatures with Adobe Sign

Steve Saman
Adobe System Consultant

July 12, 2016



Adobe Document Cloud

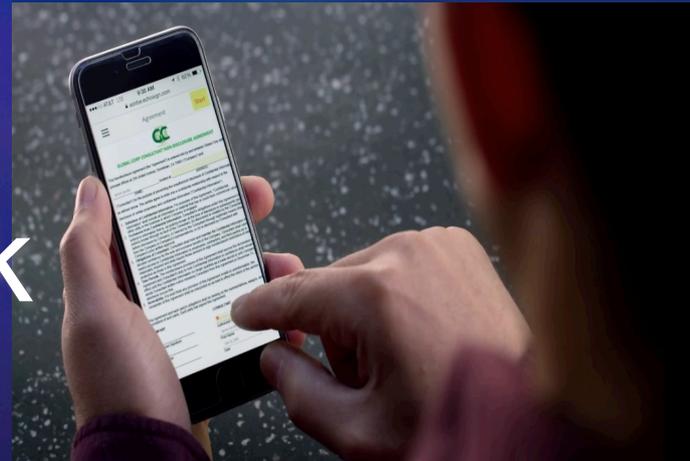
Steve Saman | Solution Consultant



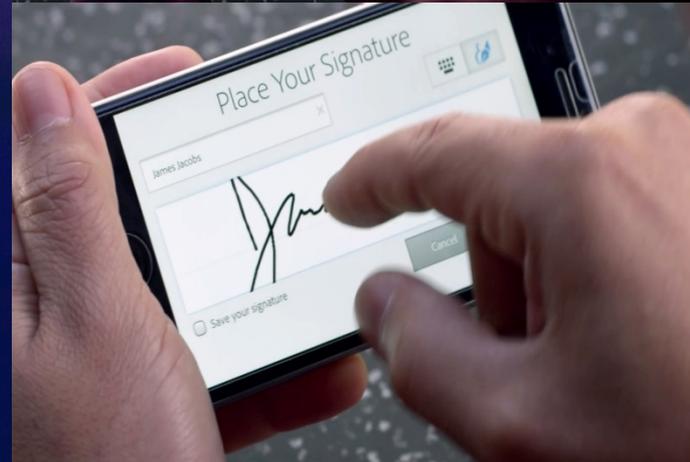
Paper to
Digital



Digital to
Done



paper•work



Is This Your Customer Experience?

80%

of document
processes still rely
on paper

- Multiple Steps to Complete
- Manual and Paper-Based Steps
- Poor Experience for Customers
- Poor Data Integrity
- Legal and Compliance risk
- Not searchable
- Cost
- Productivity Drain
- Long Contract Cycles

1. Performance Not applicable.

2. Software

2.1 Software included

Line Number	Product Description
1	Adobe Professional II MLP Term License & MRS Multi Language
2	Creative Cloud Enterprise Demonstration 1 MLP SW Subscription Only Multi Language
3	Creative Cloud Enterprise Flash Professional 2 MLP SW Subscription Only Multi Language
4	Creative Cloud Enterprise Photoshop Extended 2 MLP SW Subscription Only Multi
5	Creative Cloud Enterprise Premiere Pro 1 MLP SW Subscription Only Multi Language Australia
6	Creative Cloud Enterprise 1 MLP SW Subscription Only Multi Language Australia

Notes

(a) The license pricing applicable to the above Software is per user

(b) In relation to the licenses provided under the following line items, Customer is only licensed for services offered under the Creative Cloud

License provided pursuant to Line Number:	License unit per product:
2	Adobe Document Cloud
3	Adobe Flash Professional

Paperwork Can Cause Risk



51%

Cite documents are misfiled or lost

55%

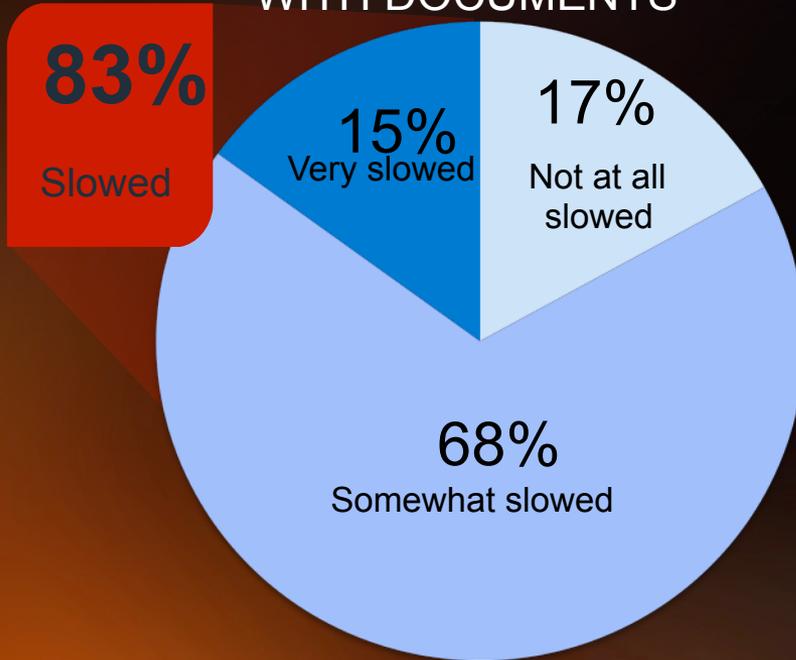
Don't know the status of their documents

\$350

Lost documents typically cost organizations \$350-700 each

Paperwork Affects Productivity

ABILITY TO BE PRODUCTIVE SLOWED
BY OUTDATED WAYS OF WORKING
WITH DOCUMENTS



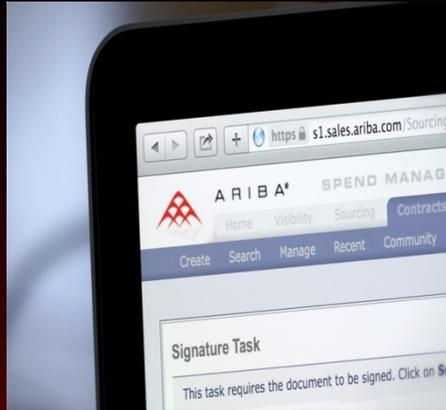
61%

Would change jobs even if the
only benefit was dramatically
less paperwork

Document Cloud and Digital Transformation



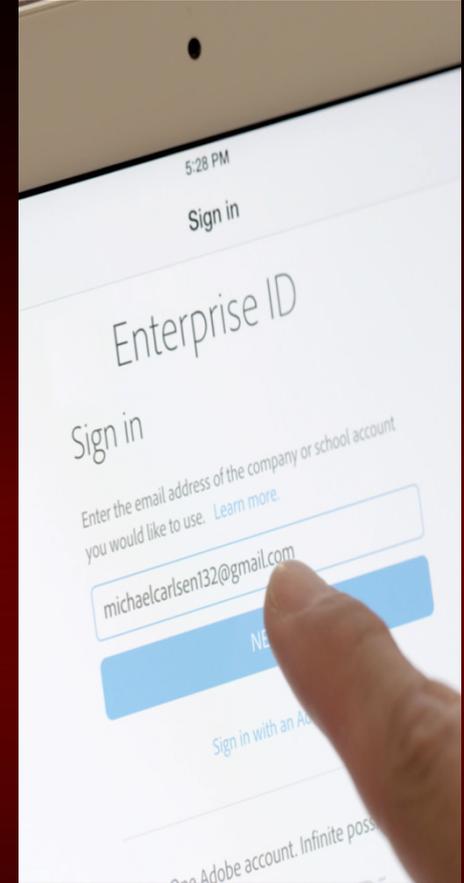
Easily Interact
with Content
Anytime on Any
Device



Achieve Efficiencies by
Integrating Document
Workflows with Business
Systems



Maintain Confidence
that Documents are
Protected and the
Process is Secure



Citizen Engagement

Self service portals increase satisfaction and lower your costs

HR Efficiency

Digitize your entire Employee lifecycle

Workforce Productivity

Empower the mobile, modern workforce

Procurement Agility

Engage your Vendors & Contractors

Document Cloud Solutions Enhance Customer Experience

Workforce Productivity

- NDAs
- IP licensing
- Change requests
- Order fulfillment
- Legal documents

Empowering a Mobile, Modern Workforce

Workforce Productivity – Drafting an NDA

Legal

Account Manager

Business Development

Partner

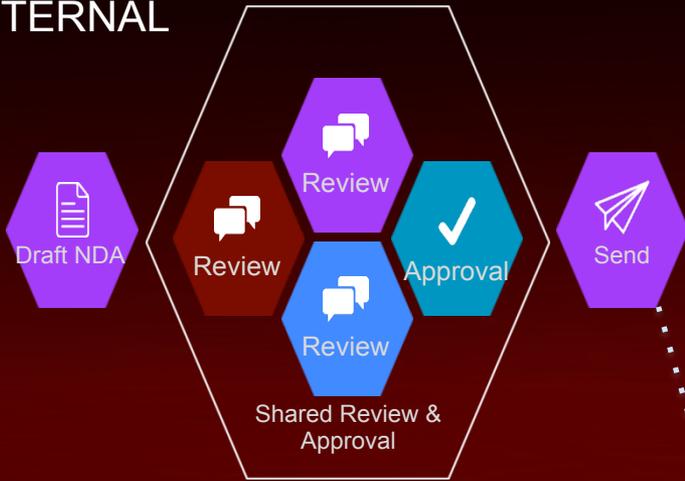


Workforce Productivity with Adobe Document Cloud

Tools Used

Acrobat DC Document Cloud Services eSign Services System of Record

INTERNAL



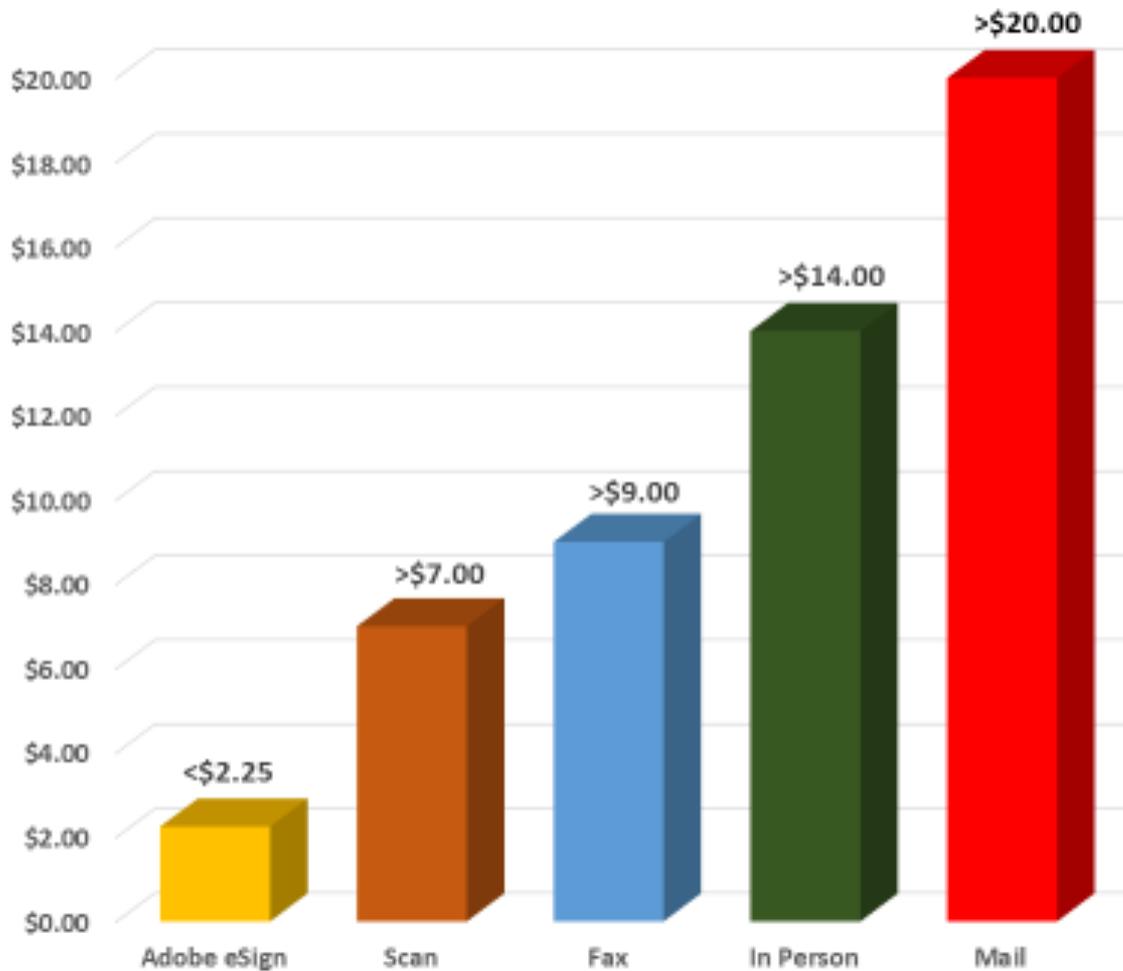
Automatically stored in ERP System

EXTERNAL



6 TOTAL STEPS	0 MANUAL STEPS
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Cost per Approval-Based Transactional based on Workflow



Five (S-s) advantages of Adobe eSign:

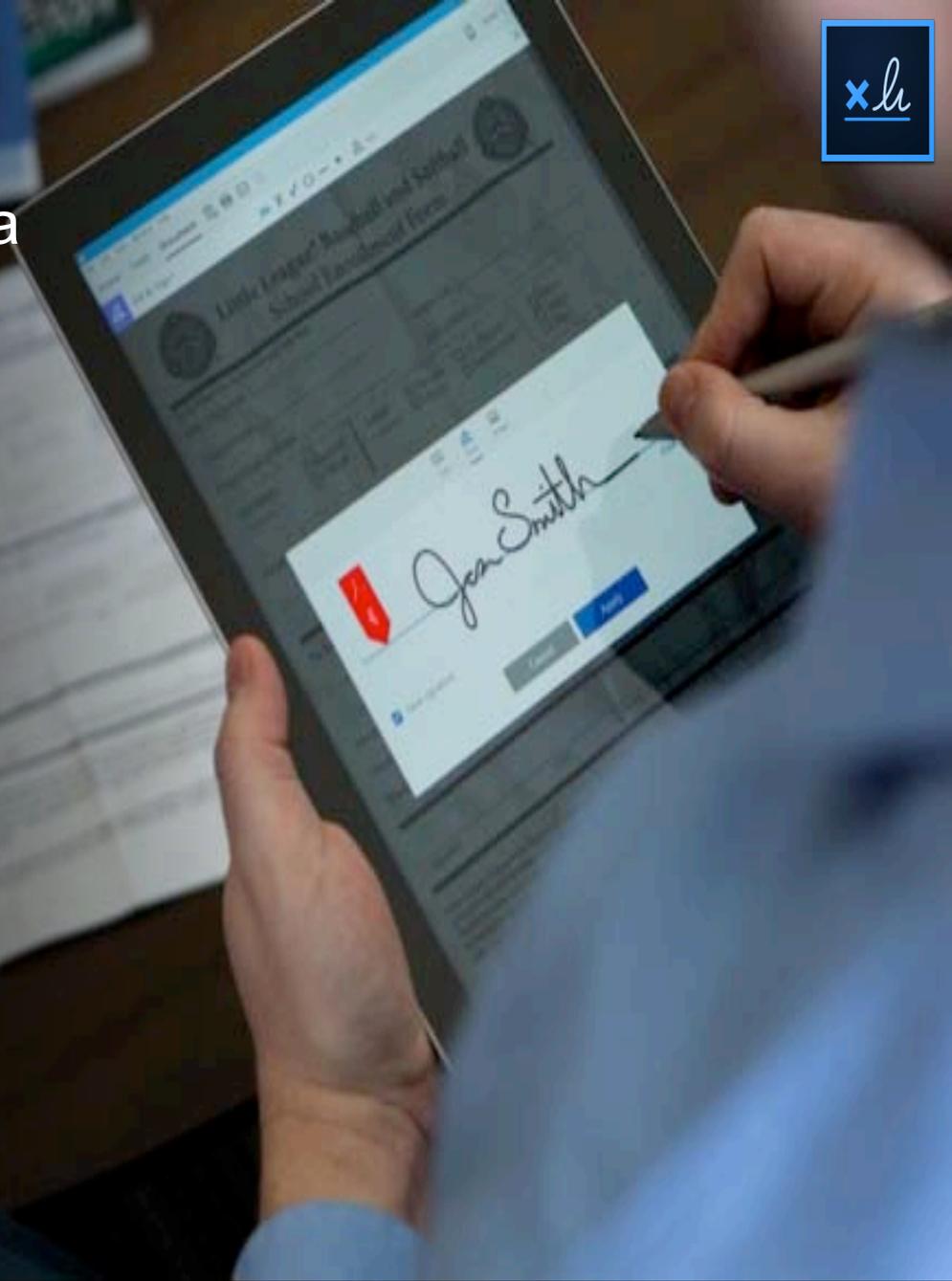
- **Savings**
Low fixed cost per transaction
- **Status**
Sender has complete visibility to where document is in real-time
- **Speed**
An approval-based workflow can be completed in minutes vs days
- **Security**
Data is transported in SOC2 compliant environment w 256AES encryption while in transit and stored (+ HIPAA, PCI, ISO)
- **Simplicity**
Adobe eSign is about as easy as sending an email



Adobe Sign

Make 100% digital workflows a reality with trusted, legal electronic signatures

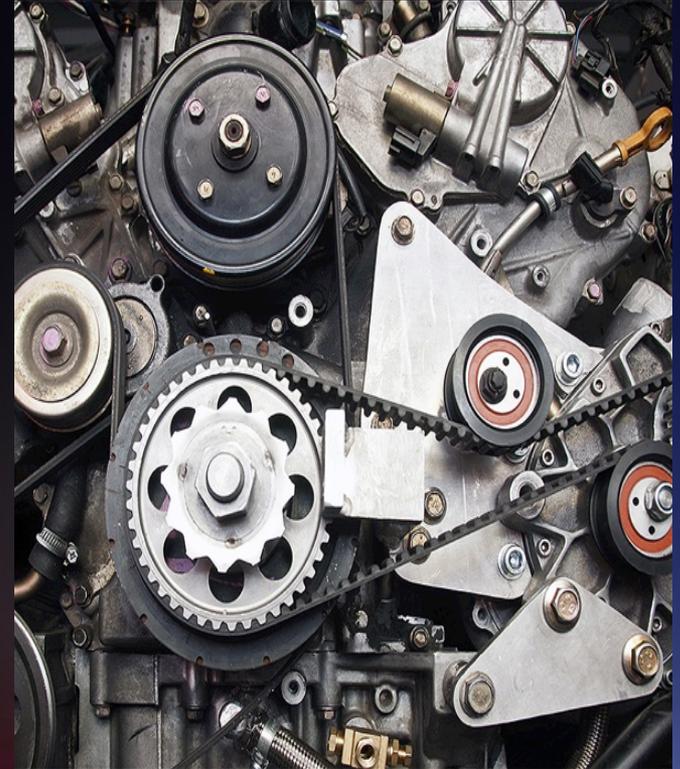
- Get signatures in minutes, not days
- Work anywhere, on any device
- Add to your systems and processes
- Ensure security and compliance



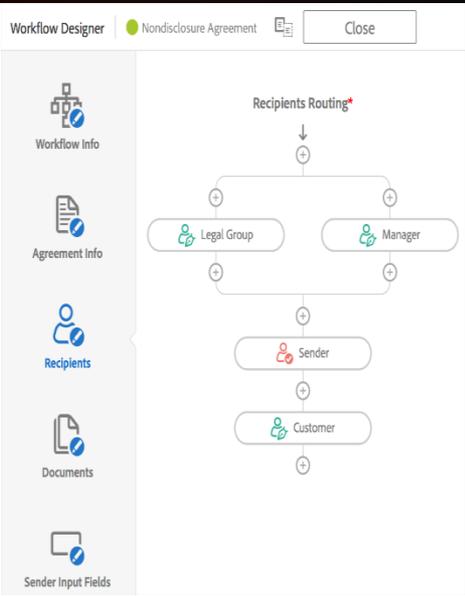
Adobe Sign

Enterprise-grade capabilities:

- Fast form design and deployment
- Superior workflow design & control
- Easiest signing experience, anywhere
- Top-rated turnkey integrations, plus complete APIs
- Flexible signer authentication options, supporting the highest levels of legal compliance
- Powerful administrative & reporting controls
- World-class security, privacy, & compliance
- Proven availability & uptime performance



Superior Workflow Control with Visual Design Tools



The screenshot shows a 'Nondisclosure agreement' form. It includes fields for 'Date' (12/22/2015), 'Geography' (dropdown), 'Country' (dropdown), 'Language Preference' (dropdown), and 'Your Name' (text input). There is a 'Company' section with a 'Company name' field. The 'Signer Info' section includes 'Signer 1 Name' and 'Signer 1 Email' (both text inputs). A 'Submit' button is at the bottom right.

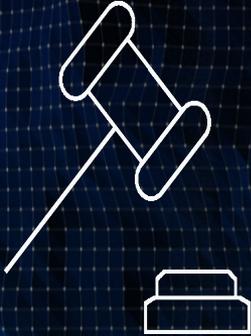
The screenshot shows a Salesforce interface for a 'Nondisclosure Agreement'. It features a 'Document Cloud Actions' section with 'Draft', 'In Progress', and 'Completed' tabs. Below this is a 'Recipients' table with columns for 'Type', 'Recipient', and 'Email / Fax'. The table lists three recipients: 'Legal' (legal@globalcorp.com), 'Contact' (Sara Tran, saratran@company.com), and 'User' (Robin Lowkey, robinlowkey110@globalcorp.com). There are also checkboxes for 'Add Recipient', 'I also need to sign this document', and 'Host signing for the first signer'. The 'Agreement Detail' section shows 'Agreement Name' as 'NDA - Home Risk Owners' and a 'Message' field.

Drag and drop to create custom workflow templates

Build self-serve web apps with Advanced Workflows

Easily configure workflow templates in Salesforce

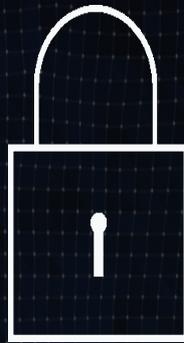
E-signatures You Can Trust



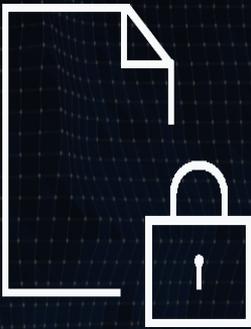
Legally Binding



Compliant



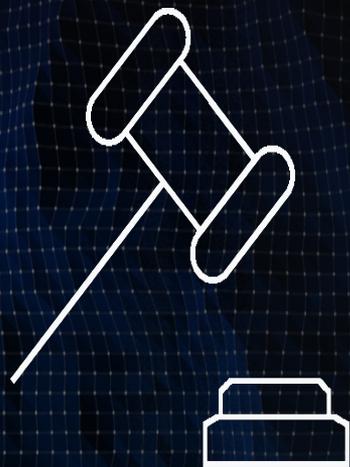
Secure



Auditable



Adobe Sign



Legally
Binding

- E-signatures serve the same function as ink signatures
- Valid and enforceable in more than 50 countries
- Data provides clear, easily producible evidence of each party's signature
- Multiple authentication methods can be used to guarantee the identity of signers
- Complete support for digital signatures

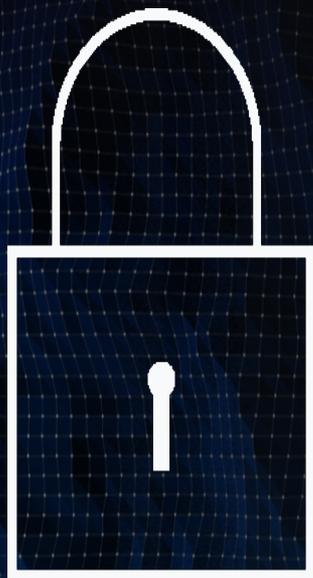
Adobe Sign



Compliance



Adobe Sign



Security

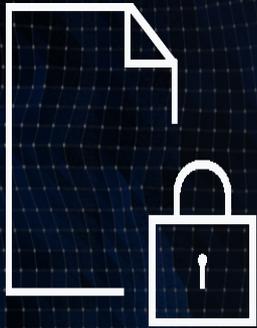
Application service security

- Capability-based security to control resource access
- Single factor and multifactor identity authentication
- AES 256-bit encryption for data at rest
- HTTPS TLS v1.0 (or higher) to help protect data in transit
- Documents certified using digital signature
- Adobe Secure Product Lifecycle (SPLC)

Data center security

- Geographically dispersed data centers
- Near real-time replication to disaster recovery data center
- Intrusion detection, response, and monitoring
- Environmental hazards detection and humidity control
- Third party testing and assessments

Adobe Sign



Auditable

- Visibility into the status of documents
- Actions tracked, logging when documents are opened, signed, and returned
- All parties receive a certified PDF of the executed contract at the end of the process with a tamper-evident seal
- Audit Record provides key details of the transaction, including who signed, when they signed, and the IP address they signed from
- Signed documents along with Audit Trails are securely stored in the cloud for use if needed