



DIGITAL FORMS MATURITY MODEL.

THE JOURNEY TO EXPERIENCE-DRIVEN COMMUNICATION
STARTS WITH A SINGLE FORM.

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Adobe can help.

Assess and plan your journey.

Financial services organizations, government agencies, and all regulated businesses rely on forms to onboard new clients, serve existing clients, and accomplish critical processes. Forms are a critical part of the customer experience. The *digital* customer experience is the number one way companies plan to differentiate themselves over the next five years.¹ As a result, improving forms is a key part of digital transformation initiatives for regulated industries.

But it's not just about the forms themselves. Once submitted, forms require acknowledgement, receipts, status updates, information packets, account statements, or other communications. Behind every form is also a complex business process, often requiring handoffs to different business units and access to other applications and data repositories. Many organizations still have ad hoc or separate departmental solutions for forms, documents, and processing. The usability and efficiency of your forms and associated communications and business processes directly impact:

- **Client satisfaction:** Clients increasingly demand self-service interactions. They don't want to spend time in your office or on the phone, filling out paper forms and waiting for paper or slow digital replies.
- **Conversion:** Customers abandon enrollment if it's difficult or inconvenient to fill out forms whenever and however they want.
- **Operational efficiency:** Filled-out forms kick off a flurry of activity, involving multiple steps, people, and business systems.
- **Cost:** Printing, mailing, manual steps, different departmental solutions for different communications, and ad hoc tracking are costly, error-prone, and require lots of personnel.
- **Compliance:** Forms need proper access control, tracking, and storage to comply with regulations.
- **Business agility:** Changes in technology, regulations, or business models may impact hundreds or thousands of forms.

With so many moving parts, picking a starting place and a destination for your digital forms transformation—and integrating it into a unified customer experience—can be daunting. For over a decade, Adobe has been helping governments, financial organizations, and other regulated industries modernize and optimize their forms, documents, and workflows. Leveraging this experience, Adobe offers a digital forms maturity model to help you see how forms can fit into broader digital transformation efforts that are under way in your organization.

“When digital transformation is done right, it’s like a caterpillar turning into a butterfly, but when it’s done wrong, all you have is a really fast caterpillar.”

GEORGE WESTERMAN

Principal Research Scientist with the MIT Sloan Initiative on the Digital Economy

The business case for form and document transformation.

For governments.

Traditionally, government service interactions have required a lot of time and resources to process and complete. Citizens would travel to a government office for service or call a service number, fill out forms, and wait for a paper response, perhaps with follow-up telephone calls. Now, governments are embracing digital technologies to improve operational efficiency and the citizen experience.

Government agencies and example use cases leading the way in digital forms transformation include:

- Health and human services (applications for Medicaid, social benefits)
- Taxation (tax returns)
- State, county, and municipal services (licenses and permits)

For example, property tax payments at the San Francisco Office of the Treasurer and Tax Collector used to be elaborate and complex, requiring citizens to submit paper forms and payments at the city's intake center. Today, the property tax payment process is fully digitized through a self-service portal that is integrated with back-end systems and generates digital documents of record. Citizens now receive faster access to information about their tax obligations and have more expedient access to payment processing. Using the new system, the Office was able to process \$241 million of payments in 12 days—8 times the normal processing volume for the agency.²

2. "How the San Francisco Office of the Treasurer and Tax Collector collected \$241M in property tax revenue in twelve days with no lines," Adobe Blog, January 18, 2018.

3. "Digital Efficiency Report," UK Government, November 2012.

4. "Citizen Satisfaction with Digital Government Services Doubles in Two Years, Accenture Report Shows," Accenture, February 2017.

5. "Smarter eGovernment: The Economics of Online Services in Utah, fall 2012," Center for Public Policy & Administration, The University of Utah.

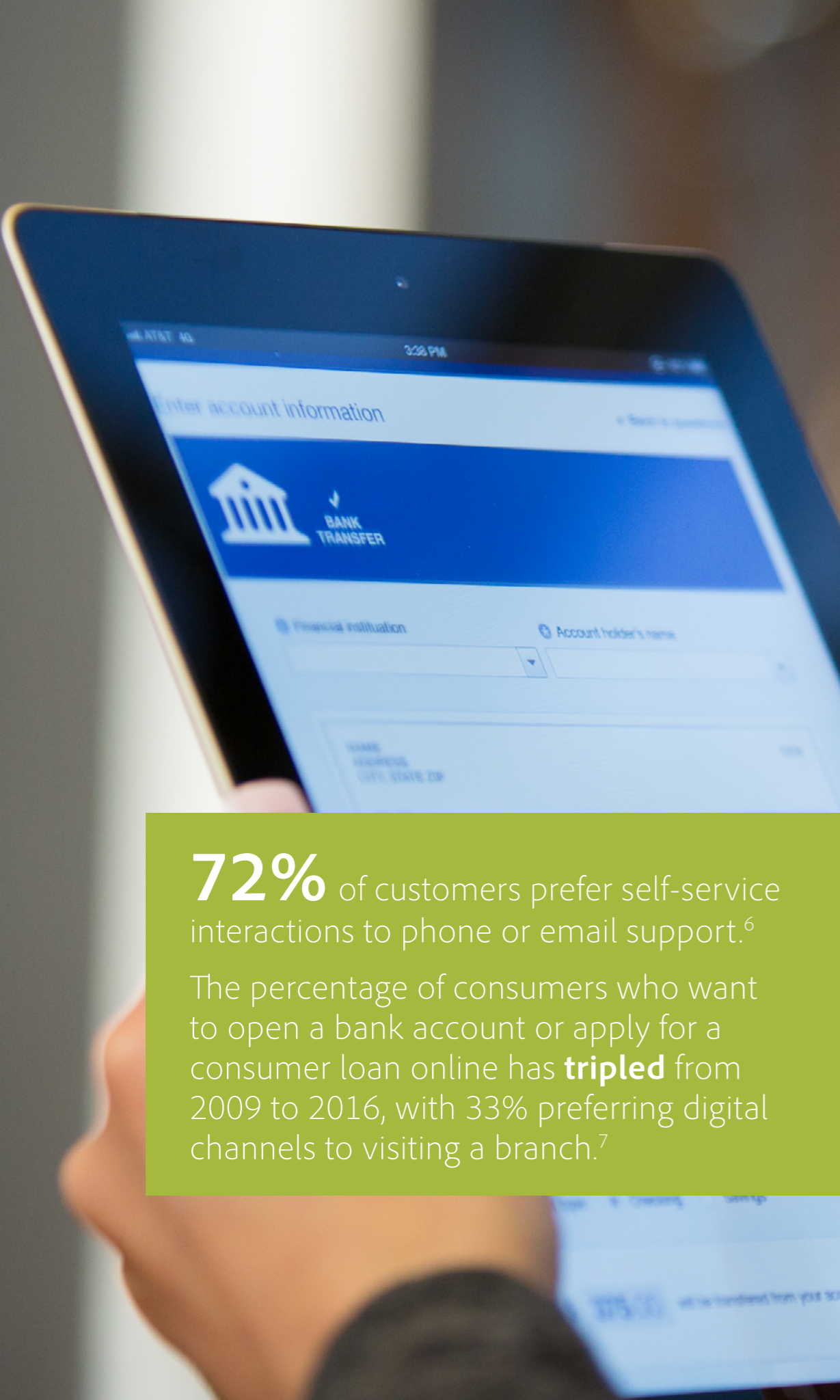
The UK Digital Efficiency report³ estimated that bringing transactional services online could save the UK government \$2.4 to \$2.5 billion* a year in four key areas:

1. Reduced staff time for processing digital transactions compared to the alternatives
2. Estates and accommodation
3. Postage, packaging, and materials
4. IT system support

*Based on conversion rate of 1 GBP to 1.40 USD.

More than **8 in 10** citizens expect the same or higher quality of digital services from government as they do from commercial organizations.⁴

By moving nine services online, the state of Utah avoided up to **US\$45.9 million** in costs over five years, with an average cost per online transaction of **US\$3.91** compared to **US\$17.11** for an offline transaction.⁵



72% of customers prefer self-service interactions to phone or email support.⁶

The percentage of consumers who want to open a bank account or apply for a consumer loan online has **tripled** from 2009 to 2016, with 33% preferring digital channels to visiting a branch.⁷

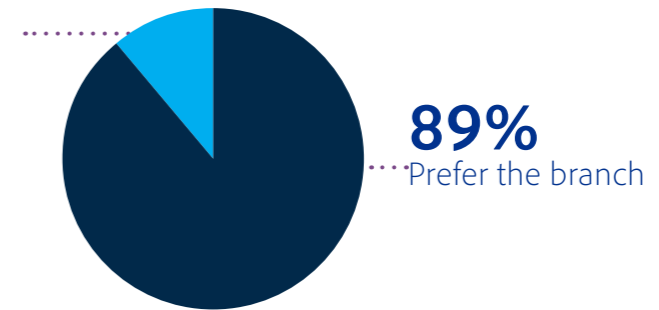
For regulated businesses.

Financial and healthcare organizations lead digital forms transformation in regulated industries. Enrollment, onboarding, and retention involve many complicated forms and documents that clients tend to abandon for more costly channels—or competitors. Key challenges for form processes include how to get new offers to market quickly, streamline eligibility and approvals, and secure PII as it moves through the approval process. In particular, banks are interested in integrating digital forms and documents as part of a unified customer experience across web, mobile, app, and email. Popular use cases include:

- Account opening and onboarding
- Applications for benefits
- Claim filing
- Statements, account notices, and disclosures

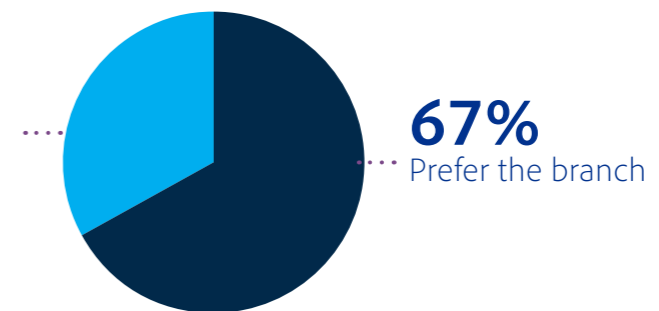
Consumers have changed in how often they wanted to visit a branch to open a bank account or apply for a consumer loan.

11%
Prefer Digital



2009

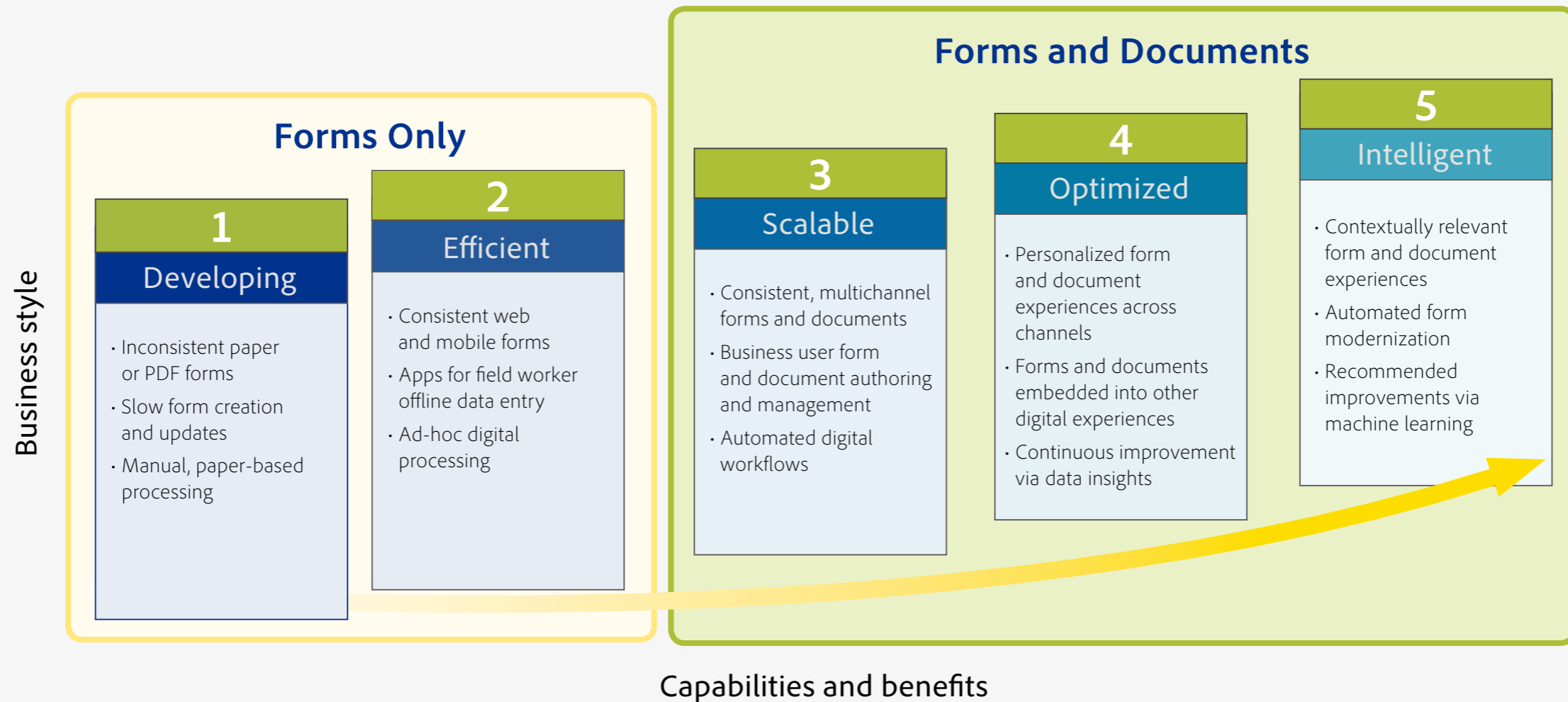
33%
Prefer Digital



2016

6. "Trends 2015: The Future of Customer Service," Forrester Research, Inc., December 2014.
7. "2016 U.S. Consumer Channel Preference Survey," IDC Financial Insights, December 2016.

Digital forms maturity model.



Digital forms maturity model looks at modernization from three aspects:

- How your clients experience onboarding, service enrollment, and ongoing communications
- How you create, manage, update, and expose forms and their associated communications to clients
- How you process forms and connect them to business processes and data systems

Stage 1: Developing.

Insurance applications, employment benefits, inspection checklists, and more—for many organizations, these forms are still paper-based. Organizations that started their digital transformation years ago typically digitized forms on an ad-hoc or departmental basis as static PDFs that clients now have to print, sign, and scan, fax, or mail. If they are dynamic PDFs, they require developers to painstakingly code individual forms.

As the number of forms grows, this approach becomes impossible to manage. Each department develops their own forms and has different-looking forms on different web pages. Changes to forms can take months to deliver to clients, as they rely on infrequent IT release cycles. As clients submit paper forms, all data must be rekeyed, resulting in inefficiency and errors. But the real push to move beyond this stage is the dramatic growth in smartphones and other mobile devices. Even if available digitally, typical government or regulated forms require too much scrolling and typing to be usable on a smartphone.

For clients, forms may be:

- Difficult to find on websites
- Unusable on mobile devices
- Inconsistent across departments
- Printed and mailed

Form creation requires:

- Programmers to develop and update every form

Form processing involves:

- Data rekeying
- High rates of incomplete or inaccurate data in forms
- Manual routing
- Long delays

8. "Mobile Fact Sheet," Pew Research Center, January 2017.

9. "Citizen Satisfaction with Digital Government Services Doubles in Two Years, Accenture Report Shows," Accenture news release, February 2017.

10. "Nedbank, bullish on digital," Adobe customer story for Nedbank, December 2016.

The importance of mobile:

77% of American adults own a smartphone.⁸

44% of citizens say they place priority on smartphone access to government digital services.⁹

27% of a South African bank's customers arrived on their site via a mobile device in 2016.¹⁰



Stage 2: Mobile.

The first, and often largest, step is to modernize form experiences for a mobile-centric world. With careful attention to design, mobile-friendly web forms reach more people, simplify the filling process, and reduce errors. Submission becomes as simple as applying a quick e-signature and clicking a button, leading to increased conversion, client satisfaction, and efficiency.

Design for today's customer journey.

Your clients interact with you on many channels and screens. Yet forms can be difficult to fill on mobile devices, resulting in abandonment. Offering streamlined, consistent forms optimized for every screen increases usability and the number of submissions you receive.

Empower field workers.

Using mobile forms, your workers can streamline data capture outside the office. For example, enabling caseworkers or inspectors making site visits to capture information—including photos, video, and signatures—digitally on mobile devices can dramatically reduce paperwork and administrative burdens.

Best practices for designing mobile-friendly forms.

- Start with the most popular forms.
- Redesign for all screens.
 - Ensure forms adapt to different screen sizes and orientations.
 - Enable interactivity based on user responses.
- Support accessibility via:
 - Device features such as speech to text.
 - Web accessibility standards.
- Reduce keystrokes.
 - Include pick lists.
 - Leverage device features such as date pickers and cameras.
- Eliminate the need for users to enter the same information multiple times.
- Reduce filling errors.
- Validate form fields; for example, ensure phone number has correct number of digits.
- Ensure mandatory fields are not left blank.
- Allow users to save, so they can return to complete.
- Enable digital submission.
 - Support legal and compliant e-signatures.

For clients, forms are typically:

- Easy to find on websites
- Consistent across departments
- Easy to fill out on mobile devices
- Submitted digitally

Form creation enables:

- Authoring a form once for excellent presentation across all screens

Form processing may include:

- Data submission directly to a business system
- Manual routing
- Ongoing paper or electronic responses

Why move beyond this stage?

As digital form submissions increase, consider how to scale effectively. Organizations in stage 2 still struggle to:

- Manage content, versions, and analytics across hundreds or thousands of digital forms
- Process submissions efficiently and in a timely manner
- Create and deliver digital communications that keep clients informed and engaged

Stage 3: Scalable.

Governments and regulated businesses often have thousands of forms and handle millions of submissions per year. The data in each submitted form is routed across many back-end systems and is used in communications from documents of record to monthly statements. Efficiencies and automation in form management, processing, and client communications can add up to a huge savings in cost and time, enabling your organization to devote more resources to high-value tasks that improve client satisfaction and retention.

Scale forms and document management.

As your collection of digital forms and documents grows, so does the task of maintaining consistent, up-to-date versions. Centralizing form and document creation and management ensures every department presents the same look and feel to your clients, enhancing your brand. And rather than treating each form and document as a separate, standalone entity, create and manage them as libraries of common elements. Reusing templates, CSS styles, and text blocks or standard sections across a collection of forms or documents helps maintain consistency and gets forms to market quicker. By designing forms and documents as libraries, an update to a single element is automatically propagated to all forms and documents that use it.

Investitionsbank Berlin (IBB) form designers create forms by dragging and dropping form components, which each include logic, dependencies, help text, field length, validation, links, or other elements.

"It used to take half a day to design a form, but now it only takes five minutes."

ASTRID NACHTWEY-PLATH
Customer Portal Project Leader, IBB

Automate processing.

Paper processes or human-powered routing doesn't scale. Design digital workflows that guide submitted service requests through predefined tasks, processes, and business rules. Measure and track steps and handoffs to gain visibility and ensure processing doesn't get bogged down.

Eliminate data silos.

Submitting filled forms digitally opens up the opportunity to connect form data to multiple business systems, streamlining the service process. For example, a bank that is processing online credit card applications may connect their form data not only to their submissions database, but also to their CRM, billing, document management, and credit check systems.

For clients, forms and documents are:

- Easy to find
- Always up-to-date

Business-friendly authoring allows non-technical users to:

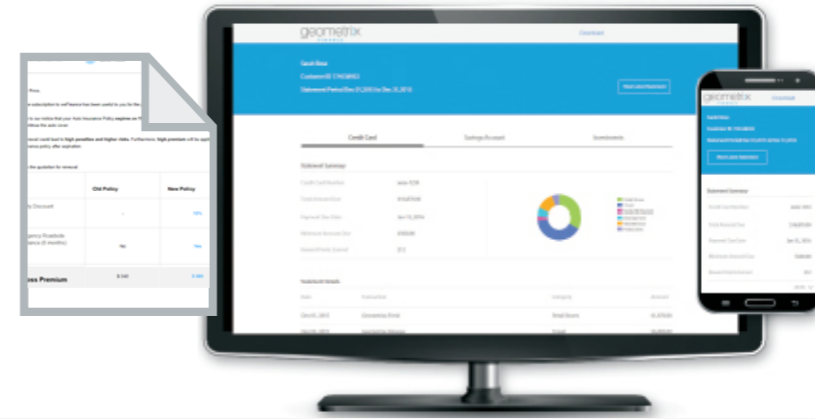
- Quickly create consistent forms and documents
- Centrally manage and secure a large repository
- Propagate updates across a library of forms or documents

Form processing may include:

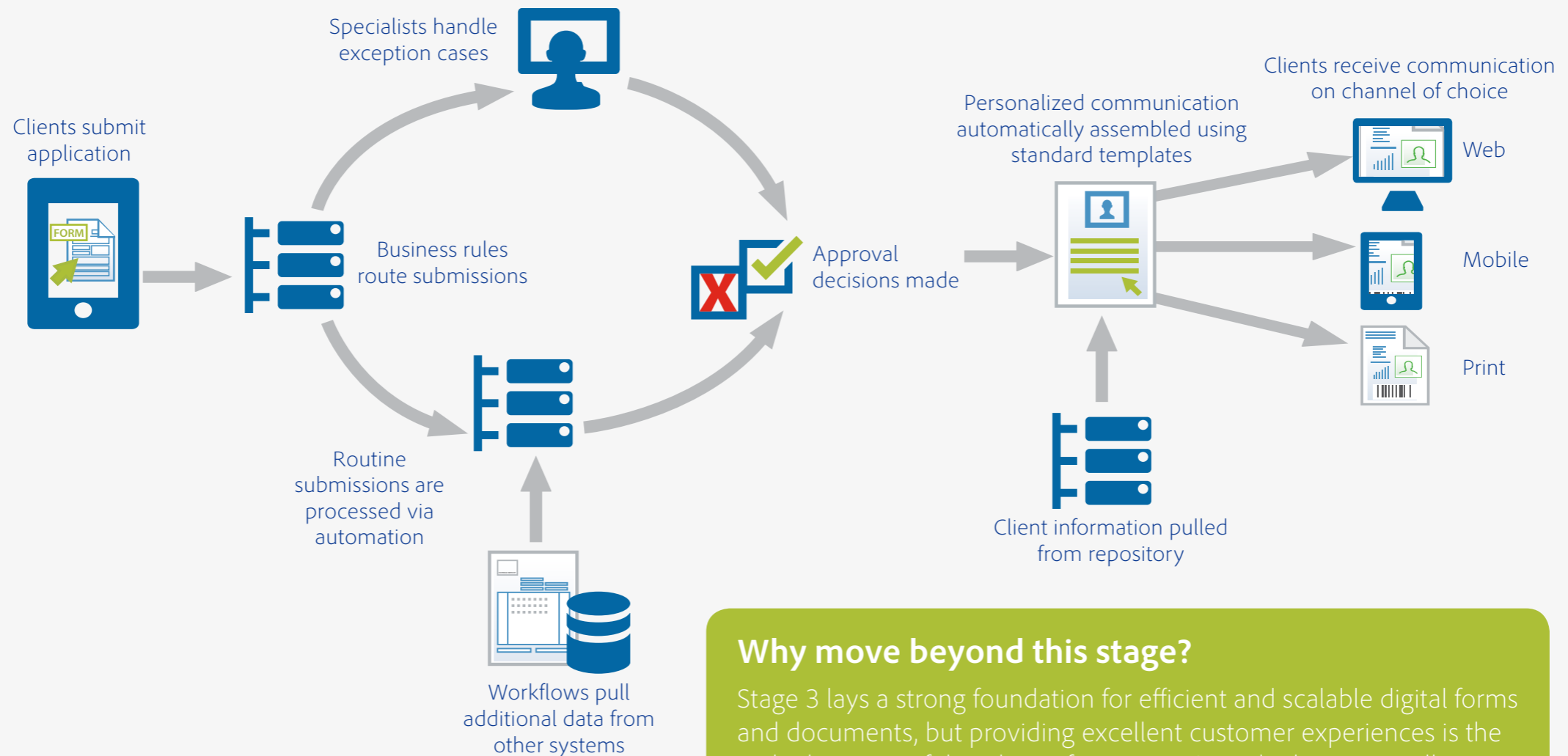
- Connecting form data to multiple systems
- Automated, digital workflow and tracking
- Triggered or regular communications

Integrate customer communications.

Submission receipts, account notices, regular statements—customer communications are a vital part of any digital form transaction. Sharing data between form and document systems improves accuracy, and a user interface that designs and manages both forms and associated documents offers better consistency and speed to market.



Scale application processing through integration and automation.



Why move beyond this stage?

Stage 3 lays a strong foundation for efficient and scalable digital forms and documents, but providing excellent customer experiences is the real advantage of digital transformation. Consider how you will:

- Add personalization to form and document experiences to increase engagement
- Leverage data to continuously optimize the customer journey

Stage 4: Optimized.

Once you can scale to reach many users with mobile-enabled forms and documents, the next stage is making sure those forms and documents continue to retain existing clients and acquire new ones. The right tools can help you deliver standout digital experiences that differentiate your customer experience from the competition.

Personalize experiences.

You are competing for your client's attention, and reaching them with personalized and relevant communications drives higher retention and satisfaction. Increase personalization by linking your form and document system with a customer profile or CRM, and prefill forms with accurate information, such as client number and address. By understanding customer preferences, you can send documents or regular communications associated with their request via their preferred channel: web, mobile, print, app, or email that directs them to their personalized client portal. Use experience targeting to serve relevant offers to clients through the most appropriate channels, based on their interaction with forms and documents—or the information contained within them. For example, you could serve a successful mortgage applicant an offer for home insurance. Or provide investment services information to clients with checking accounts that exceed a certain balance.

Measure and improve experiences.

Measure how often clients start and submit forms, as well as which documents they engage with. Granular analytics can help identify points of abandonment or sections where clients spend too much time filling fields, clicking charts, or reading Help text. These insights into client experiences, combined with KPI tracking after submission, can inform design and process improvements.

AXA Bank in Belgium leveraged sophisticated customer data and communications software to personalize messages and deliver them through multiple channels. This led to an 80% loyalty email open rate and a 10% increase in email conversion.¹¹

11. "AXA Bank embraces all channels," Adobe customer story for AXA Bank, February 2015.

For clients, forms and documents are:

- Delivered on their channel of choice

Tools enable business users to:

- Serve relevant offers and communications
- Identify barriers to conversion

Processing may include:

- Testing of forms and documents to improve conversion and engagement

Why move beyond this stage?

If you're at stage 4, you are a customer experience leader that has increased conversions and reduced operational costs. The next opportunity is to automate your optimizations by taking advantage of recent innovations in artificial intelligence (AI) and machine learning. Automation increases agility, enabling you to meet changing client expectations sooner or differentiate yourself from competitors.

Stage 5: Intelligent.

The future of digital interactions is intelligent and automated. AI and machine learning will leverage granular analytics and big data to further automate repetitive or administrative tasks, continually improving customer experiences with digital interactions.

In the future, each interaction with a form will be an opportunity for the system to learn and improve entire form collections. Some ways in which AI and machine learning will transform digital enrollment, onboarding, and customer communications in the future include:

- **Real-time optimization:** AI can optimize forms and documents to maximize customer experiences without human intervention.
- **Drafting documents:** AI can assemble documents on demand based on routine client inquiries and review outgoing communications for compliance.
- **Answering questions:** Chatbots could handle common queries, while customer service experts focus on more detailed requests.
- **Reducing backlogs:** Machines could handle routine application processing, leaving humans to focus on complex decisions and exception cases.
- **Automated transformation:** Machine learning could accelerate the transition from paper and legacy forms to modern, mobile-responsive communications. Converted forms could intelligently ingest existing forms, recognizing fields and content to apply styling, common navigation, logic, and validations.
- **Content management:** AI can review existing forms and identify common form elements to be extracted and converted into reusable form fragments. The reusable fragments would allow form authors to reduce the number of forms needed to create, simplify, and maintain up-to-date form collections.

Few organizations today are at this stage, but many market leaders are already including these concepts in discussions and technology investment planning for innovation in the face of industry disruption.



Adobe can help.



Adobe has solutions for organizations at any stage of the maturity model. [Adobe Experience Manager Forms](#)—our flagship product for regulated industries—helps business and IT teams design, manage, and rapidly deliver compelling digital forms and communication experiences across all touchpoints and channels. With Experience Manager Forms, organizations can eliminate fragmented experiences and enable engaging, connected, and personalized customer journeys across web, mobile, app, and even print channels.

Mobile.

Make it easy for your clients to complete and submit error-free forms anywhere, on any device. Give your staff an app that enables them to fill out forms and collect data remotely and that automatically synchronizes when connected back to your network.

“The patients we see are typically quite ill, so we need to make the process as effortless as possible. Since Adobe Experience Manager Forms automatically propagates reusable information, patients can just sign the tablet once, reducing signature times from minutes to seconds.”

RANDY FUSCO

SVP Product Engineering, Change Healthcare

[Read the customer story](#)

Scalable.

Get large numbers of consistent forms and documents to market quickly, process them efficiently, and reply with communications on any channel.

“Integrating Adobe Experience Manager Forms helps us improve customer service by sending timely, automated communications to taxpayers with the status of their requests.”

TAJEL SHAH

Chief Assistant Treasurer, Office of the Treasurer & Tax Collector

[Read the customer story](#)

Investitionsbank Berlin launched end-to-end digital enrollment and reduced processing time by more than half using AEM Forms.

[Read the customer story](#)

Optimized.

Personalize and continually improve customer experiences across channels, leveraging [Adobe Analytics](#), [Adobe Target](#), both part of [Adobe Experience Cloud](#).

Nedbank used Adobe Analytics and Adobe Experience Manager Forms to increase successful forms completion from 33% to 80%.

[Read the customer story](#)

Intelligent.

Adobe has decades of knowledge in documents and digital marketing. [Adobe Sensei](#), our unified AI and machine learning framework, harnesses learnings from trillions of content assets.



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