

# Adobe® LiveCycle™ Barcoded Forms

## Bridge the paper-to-digital divide with 2D barcode-enabled, fillable PDF forms

### TAKE THE PAIN OUT OF PAPER FORMS PROCESSING

- Reduce the costs, errors, and time associated with manual data entry and OCR-based forms processing
- Support electronic and paper forms processing in a unified environment
- Process different types of forms with a single workflow definition
- Extend the value of your Adobe LiveCycle platform investment
- Enable better, faster customer service

Despite the increasing prevalence of electronic processes, many key business workflows continue to rely on information that is manually captured from paper forms. Paper forms persist for many reasons. For instance, many processes still require handwritten signatures, supplemental paper attachments, or review by third parties, such as attorneys or CPAs, prior to form submission.

Paper forms are not only less efficient and more error-prone than their electronic counterparts, but they also typically require entirely separate IT infrastructure and data integration. While IT departments generally oversee electronic forms systems, operations personnel oversee paper and faxed forms processing. Balancing these disparate processes involves spending money, time, and effort on tasks such as correcting data entry errors, which degrades your operation's efficiency and customer service, not to mention your ability to capitalize on revenue opportunities.

### Integrate paper form data into core systems

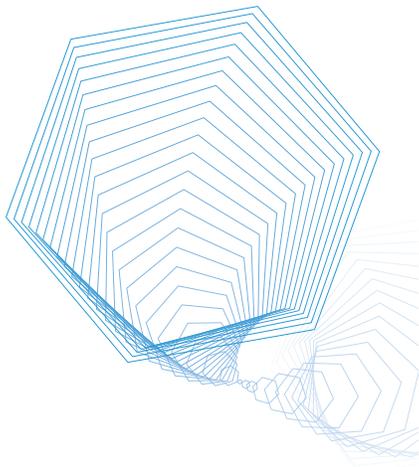
For enterprises and government organizations faced with processing high volumes of “fill-and-print” paper forms, Adobe LiveCycle Barcoded Forms software bridges the paper-to-digital divide. It automates the capture of fill-and-print paper form data and efficiently integrates captured information into an organization's core IT systems. By eliminating costly and error-prone manual data entry, the Adobe solution enables an organization to realize the benefits of an electronic forms workflow, even when digital processes revert to paper. In the United States alone, enterprises spend \$15-20 billion per year on manual data entry.<sup>1</sup>

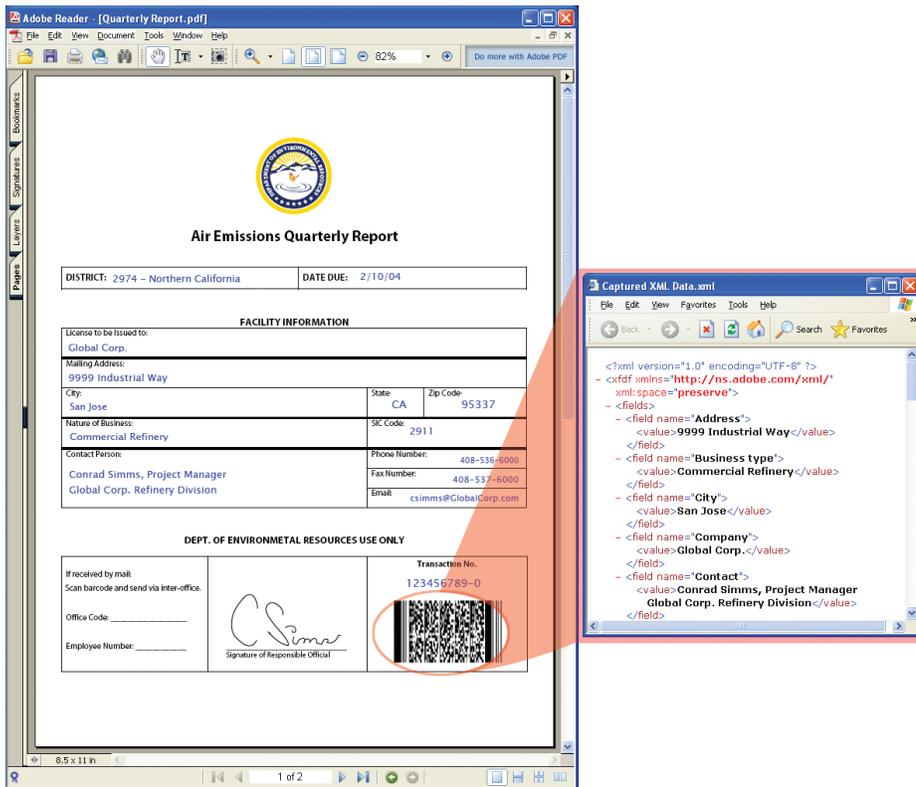
In order to meet the diverse needs of its customers, Adobe makes LiveCycle Barcoded Forms available in two versions, one intended to run as a “stand-alone” application (LiveCycle Barcoded Forms 7.0 ST) and one intended to interoperate with other Adobe LiveCycle technologies (LiveCycle Barcoded Forms 7.0). Although both can be integrated with third-party systems, these two versions are intended for organizations with different requirements. A more detailed overview of the differences between the two versions appears later in this document.

### Ease the transition to electronic forms processes

In addition to improving the efficiency and accuracy of paper form processing, Adobe LiveCycle Barcoded Forms alleviates the challenges of transitioning from paper to electronic forms processes. Because Adobe Portable Document Format (PDF) documents retain the precise look and feel of their paper originals, Adobe barcode-enabled, fillable PDF forms can provide a consistent user interface regardless of whether the form is ultimately submitted on paper or electronically.

Adobe provides all the components you need to turn expensive, labor-intensive paper form processes into a streamlined workflow that's easy on both you and your customers or constituents.





**Figure 1.** Because they are automatic and reliable, 2D barcodes eliminate the need for manual data entry and can lower the costs associated with processing fill-and-print paper forms.

- With Adobe LiveCycle Designer 7.0 or Adobe Acrobat® Professional 7.0 software and the Barcoded Forms Authoring plug-in, you can publish interactive and intelligent 2D barcode-enabled, fillable PDF forms on the Web or deliver them by e-mail or on CD. The form author specifies the format of the data to be encoded into the barcode. Data can be formatted as eXtensible Markup Language (XML), making it easy to move across multiple systems or any other format that is applicable to your core systems.
- Adobe LiveCycle Barcoded Forms 7.0 customers can use Adobe LiveCycle Workflow Designer's intuitive graphical interface to define business processes that will automatically route a form's user-supplied information once it is processed. Each workflow description can include any combination of the ten kinds of business processes specifically intended for use with Adobe LiveCycle Barcoded Forms. These processes include the ability to easily discover the barcode and then decode the data, as well as the ability to route data on a form-by-form basis.
- Form end users fill in forms with the with free, cross-platform Adobe Reader® software, which dynamically updates the 2D barcode with user-supplied information. Form end users can then return the completed form electronically, by fax, or by mail.
- The Adobe LiveCycle Barcoded Forms Decoder allows you to capture user-supplied information from submitted forms. With Adobe LiveCycle Barcoded Forms 7.0, the extracted user-supplied information can optionally be integrated with other Adobe LiveCycle technologies through Adobe LiveCycle Workflow. This extends your IT investment across Adobe products as well as third-party infrastructure. Extracted form data arrives at your legacy processing system in the same exact format, whether the form was returned electronically or as a paper document.
- If your organization has already invested in barcode hardware or software, you can leverage Adobe LiveCycle Reader Extensions software to assign a 2D barcode usage right that will allow you to process Adobe barcoded forms with your existing third-party barcoded forms solution.

Combining industry-standard 2D barcode technology with the strengths of Adobe fillable PDF forms, Adobe LiveCycle Barcoded Forms draws on Adobe's expertise in providing superior process management solutions for enterprises and government agencies. Adobe's 2D barcode technology should never deliver a false positive, eliminating the need to test extracted data. In addition, the Adobe solution is designed to support workflows that rely on consumer-level printers and fax machines with highly successful barcode read rates.

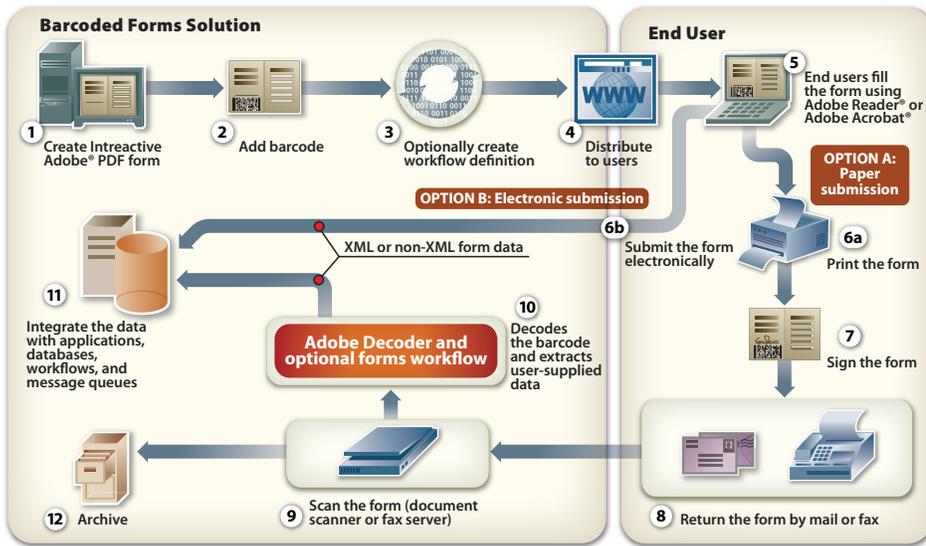
#### **TAKE FORMS EVEN FURTHER WITH THE ADOBE INTELLIGENT DOCUMENT PLATFORM**

The Adobe Intelligent Document Platform provides a secure and flexible way to extend the power and reach of enterprise applications inside and outside the firewall. It helps automate and accelerate the flow of business-critical information among employees, customers, suppliers, and constituents. By leveraging the platform's key components, enterprises and government agencies can streamline their forms-based processes beyond basic automated processing of 2D barcoded, fillable PDF forms.

For instance, organizations can enable Adobe Reader users to take advantage of enhanced capabilities, such as:

- Saving forms locally for offline filling and archiving of completed forms
- Adding comments and routing via e-mail for third-party reviews
- Applying digital signatures to authorize applications or transactions

With more than 500 million downloads to date, the free and ubiquitous Adobe Reader allows anyone to view and interact with a fillable PDF form. The broad global acceptance of Adobe Reader means your organization can collect information from anyone in a way that is convenient, intuitive, and completely free of charge for form end users.



**Figure 2.** Adobe LiveCycle Barcoded Forms enables organizations to capture paper-based form data with near-100% accuracy and export the information into their core systems.

### The solution at work: Government

Governments the world over are striving to improve their constituent services by implementing processes that are more responsive, convenient, customer oriented, and cost effective. To achieve these goals, agencies must find an efficient process for capturing user-supplied data from paper documents and returning it to core systems.

By deploying Adobe LiveCycle Barcoded Forms, agencies can lower costs, improve service quality, and increase responsiveness to constituent requests. For example:

- **Citizen tax forms:** Using the Adobe solution, agencies can reduce data entry time and effort, improve accuracy, and speed processing of completed tax returns and other forms. As a result, agency costs are lower and taxpayers receive their refunds sooner.
- **Motor vehicles forms:** Barcode-enabled forms allow Department of Motor Vehicles (DMV) agencies to eliminate manual rekeying and decrease the time and cost of processing applications, renewals, and registrations. By tying constituent data directly into back-end systems, the DMV can also streamline the automation of ongoing services, such as renewal reminders.
- **Voter registration:** With 2D barcode capabilities, governments can produce registration forms that not only reduce expenses but also minimize pre-election waiting periods.

### The solution at work: Financial services

Financial services companies are under more pressure than ever to reduce operational expenses while finding new and innovative ways to retain valuable customers and acquire new ones. Despite the industry’s technological sophistication, certain financial processes still require ink signatures on physical paper for regulatory or historical reasons. These mandates present unique challenges to banking, securities, and insurance firms looking to streamline critical processes by integrating XML data derived from forms into their core content management, enterprise resource planning, and customer relationship management systems. Overcoming these obstacles is easy with Adobe LiveCycle Barcoded Forms.

- **Account applications:** 2D barcode-enabled account applications can reduce processing time and expense, improve customer service, and speed time to revenue.
- **Manually initiated funds transfer (MIFT):** With 2D barcode capabilities, you can reduce rekeying and costly inaccuracies common to manually initiated funds transfer processes.
- **Insurance policy applications:** The forms-intensive insurance industry can streamline the process of capturing data from paper forms—when forms are faxed from independent agents to affiliated insurance companies, for example.

## Choosing the paper-to-digital solution that's right for you

The table below outlines some of the key considerations to use when deciding which paper-to-digital solution is right for you and your organization.

	VERSIONS OF ADOBE LIVECYCLE BARCODED FORMS	
	LIVECYCLE BARCODED FORMS 7.0 ST	LIVECYCLE BARCODED FORMS 7.0
What kind of customer is this intended for?	This version is intended for organizations with existing paper-based business processes that want to automate paper forms processing quickly. These customers may already have existing electronic workflow or business processes in place.	This version is intended for organizations looking to build an infrastructure around several Adobe LiveCycle capabilities, including Adobe LiveCycle Barcoded Forms and Adobe LiveCycle Workflow. They may have existing infrastructure they wish to integrate.
Does this require the use of other Adobe LiveCycle products?	Although LiveCycle Barcoded Forms 7.0 ST works with other Adobe LiveCycle technologies, including Adobe LiveCycle Reader Extensions and Adobe LiveCycle Designer, <b>it does not require</b> other Adobe LiveCycle products.	LiveCycle Barcoded Forms 7.0 is designed to work with other Adobe LiveCycle products and <b>requires</b> the use of Adobe LiveCycle Workflow.
Can I use a single workflow process to differentiate user-supplied data from different types of forms?	Although this type of automated business logic can be implemented, Adobe LiveCycle Barcoded Forms 7.0 ST does not have any out-of-the-box capabilities to differentiate between data from different types of forms.	LiveCycle Barcoded Forms 7.0 specifically integrates with Adobe LiveCycle Workflow in order to create unified workflows that will differentiate data from different types of forms and route them accordingly.
Can I use existing paper forms scanning technology, including fax servers, document scanners, and imaging systems?	Both versions can take advantage of existing imaging and scanning technology.	
Can I use my existing barcode decoder technology?	LiveCycle Barcoded Forms 7.0 ST does offer a licensing model for use with a third-party barcode decoder. The Adobe barcode decoder offers extremely high success rates when compared to other decoders.	LiveCycle Barcoded Forms 7.0 requires the use of the Adobe barcode decoder. It cannot be used with a third-party decoder. The Adobe barcode decoder offers extremely high success rates when compared to most other decoders.
Which version will help me reduce manual data entry costs and paper forms processing errors?	Both versions automatically encode user-supplied data from fillable PDF forms into a 2D barcode in real time using Adobe Reader. When the printed paper form is returned, the barcode is scanned to capture user data from the paper form. For successful barcode reads, the data will be 100% accurate (no false positives).	
Can I use a single tool to create interactive forms that can be used for either paper or electronic forms processing?	Both versions allow form designers to use Adobe graphical tools to create a single barcode-enabled forms that can also support electronic submission.	

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<sup>1</sup>Pacific Crest Securities, Harvey Spencer Associates.  
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## Extract more from your paper forms with Adobe

For more information on how you can leverage Adobe LiveCycle Barcoded Forms and other Adobe Document Services to cut costs, improve data accuracy in core systems, and streamline mission-critical processes, visit [www.adobe.com/barcodedforms](http://www.adobe.com/barcodedforms).

