# KOFAX



Briefing Document Kofax Intelligent Mobile Capture Platform

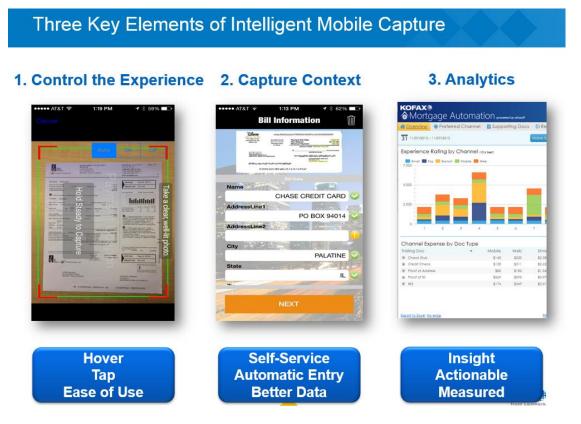
September 2015



# Kofax Mobile Capture Platform

The Kofax Mobile Capture<sup>™</sup> Platform enables organizations to rapidly deploy Kofax's patented and market leading image capture and perfection, real time data extraction and validation, process management and analytics capabilities into mobile apps.

It turns the cameras on smartphones and tablets into powerful information capture devices that "meet customers where they are"—when they want to be engaged and on their preferred channel.



Patented image processing technology running on the device automatically captures extracts and validates information from photos, videos and bar codes—eliminating the need for manual data entry. The platform can support virtually any application, and advanced analytics provide full process visibility to enhance the user experience.

Using this proven, unified platform, organizations can speed time-to-market with more dynamic mobile apps that improve customer service and accelerate transactions across all lines of business. They can achieve substantial cost savings and make better informed decisions to drive incremental revenue—all while avoiding the undesirable vendor dependencies associated with alternative approaches. The Kofax Mobile Capture platform is a combination of capture, process management and analytics capabilities, the Kofax Mobile Capture SDK, and Kofax smart mobile solutions for Bill Pay, Cheque Deposit, Mortgage, Proof of Identity, and Claims.

Key Benefits

- Eliminates the need for manual data entry with real-time data extraction and validation for any document type: Bill, Cheque, Tax Form, Application, ID etc...
- Provides better service with real-time customer engagement from the mobile device



- Speeds transactions and delivers self-service via the mobile channel
- Provides greater visibility and control in business processes
- Single, open platform: Deliver any mobile engagement app from one proven platform. Easily extend to new applications and solutions such as bill pay, cheque deposit, customer onboarding, balance transfer, new account opening, mortgage, claims, etc.
- Open integration capabilities whether utilizing one of the 140 different export connectors to ECM, workflow, BPM, CRM, or database systems, or creating your own custom connectors for data matching, validation, fraud, etc., Kofax provides tools and access points to integrate with 3rd parties across the spectrum of our portfolio ensuring a more robust and effective implementation.
- Advanced analytics: Real time dashboards provide insight into performance metrics. Analytics
  improve customer knowledge/intimacy and enable organizations to take advantage of up-sell
  opportunities generating new revenues.
- Vendor independence: Organizations can free themselves of the vendor dependencies associated with exclusive, hard-coded, closed, or proprietary solutions.
- Patented image perfection: Running natively on the device, Kofax image perfection ensures the best images are captured for more accurate information.
- Patented data matching: Captured information is automatically matched, validated and corrected, eliminating the need to burden customers with manual correction of data.
- Multichannel engagement: Beyond mobile, processes can be extended to web portals, email, fax, print streams and multifunction peripherals.

Kofax mobility solutions provide touchless processing that improves the usability of mobile apps. Advanced recognition capabilities automate document classification and separation, and information extraction and validation for:

- Self-service user just hovers over the document and Kofax extracts the data regardless of the document type.
- Ease of use don't burden your users with the keyboard, Kofax software will automatically identify the document type, extract and validate the data, and automatically submit to the correct system or process eliminating unnecessary steps for the mobile user and delivering a user experience that removes manual entry and unnecessary clicks.
- Increased speed Capture documents and information more quickly, accelerating business processes for better customer engagement and service.
- Reduced cost Reduce manual labor and headcount required to manually review and resolve exceptions.
- Increased quality Increase information and data quality and reduce exceptions
- Response Image quality assessment capabilities provide immediate feedback to the consumer at the time of capture that they have a high quality image that can be processed all on the device providing a more positive user experience.

# Learning technologies (online and offline)

Save in initial configuration and ongoing maintenance effort to deliver rapid payback and extract the most information with the highest accuracy levels for all types of documents.

#### Capture and process any document

Kofax supports all documents and information types so customers benefit from a single solution that extends the benefits of mobile across the organization, increasing ROI.

# Maximize touchless processing

Kofax uses advanced recognition technologies that provide industry leading extraction rates on all types of text, including machine print, hand print and cursive handwriting in over 140



languages. Higher extraction rates mean greater reductions in manual labor and headcount and more touchless processing.

# Minimize upfront configuration costs

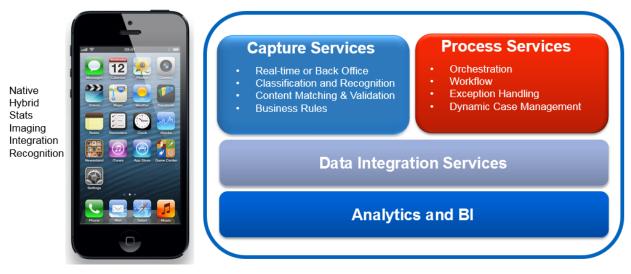
Kofax uses learn-by-example technologies for classification, separation and extraction that can be trained rapidly and work on all document types. Many competitive solutions use complex document templates and rules that take weeks or months to develop, or use auto-templating that doesn't work on letters, reports and other unstructured documents.

# Minimize ongoing maintenance costs

Kofax continues to learn as documents are processed in production, improving classification and extraction rates on the fly to increase ROI, and removing the need for manual reconfiguration when documents change or new documents are introduced.

### Kofax Mobile Capture SDK

Part of the Kofax Mobile Capture Platform, the Kofax Mobile SDK<sup>™</sup> provides mobile integration with Kofax real-time capture services, content extraction and validation, process management and analytics capabilities. It provides powerful mobile capabilities and interactive control over extracting information from images, videos, bar codes and more—from apps on both iOS and Android devices.



With the Kofax Mobile SDK and Kofax mobile frameworks, mobile apps can quickly and easily be enhanced with powerful functionality for processes such as cheque deposit, bill pay, capturing information from driver licenses for identity verification, and more.

The Kofax Mobile Capture SDK supports the following:

- Photo mode or video mode capture provides developers with the flexibility to decide which mode is best for their use case.
- Patented image processing on device real-time image clean-up, deskew, cropping, scaling, resolution normalization, DPI mapping, compression and automatic orientation
- Bar code recognition on device real-time bar code recognition (including QR Code and PDF417)
- Single or Multiple Documents capture one image or many in a single transaction
- Mixed Documents capture mixed sizes, formats, and document types in a single transaction



- Quality check automatically check for image quality related to blur, jitter, lighting, page detection and optionally enable app to communicate quality concerns to the user to rectify challenges up front before images are submitted
- Integration services the Kofax Mobile Capture SDK has default integrations to the Kofax Mobile Capture Platform, but can also be easily integrated into other apps and platforms.

# **Smart Mobile Frameworks**

Kofax smart mobile frameworks are pre-built open, out-of-the-box solutions readily deployable on the Kofax Mobile Capture Platform:

### Kofax Mobile Bill Pay

The Kofax Mobile Bill Pay<sup>™</sup> solution enables banks to better engage consumers via their preferred channel, the mobile device, empowering customers to easily and effectively capture bills and add payees to the bank's automatic bill pay system.

Utilizing their smartphone or tablet, customers simply snap a picture of their bill—data is extracted, corrected and perfected by Kofax technology—and information is automatically presented to the user for easy bill payment and payee onboarding. This not only improves customer service and satisfaction, but more importantly, it closely ties users to the bank's mobile and online banking solutions, which has proven to significantly reduce the likelihood of a customer switching banks and delivers a satisfying customer engagement.

### Kofax Mobile Deposit Capture

The Kofax Mobile Deposit Capture<sup>™</sup> solution provides banking customers with high-quality, cheque image capture capabilities, via Kofax software installed and executed on their mobile device, to ensure images are acceptable for downstream processing.

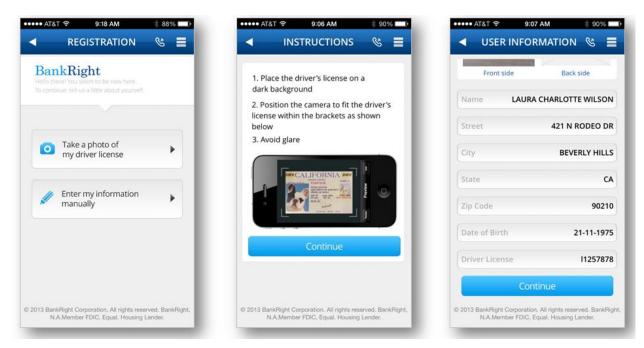
On the device itself Kofax detects and reads the MICR line to ensure the image quality of the cheque being submitted in addition to validating the document is truly a cheque. Additionally, natively on the device Kofax also can detect the presence of a signature on the cheque. Both capabilities improve customer engagement and success rates for cheque processing. Kofax capabilities extend beyond retail checks and can process business, government, rebate and non-traditional cheque formats.

This process is delivered quickly and easily, without the need for specialized app developers, resulting in a faster ROI for financial institutions. Kofax technology captures all data elements in cheques from 22 countries, and customers can make deposits from anywhere. Patented image perfection technology ensures the accurate capture of cheques, with no manual entry required, resulting in a better user experience.

### Kofax Mobile Driver License

The Kofax Mobile Driver License<sup>™</sup> solution enables organizations to quickly and easily provide the ability for customers to take a picture of a driver license, and have the information extracted and populated into a mobile app. Since the process is automated, the need for back-office manual data entry is eliminated, reducing overall costs.





Kofax Mobile Driver License supports driver licenses used in Europe and can read information from the front or back (bar code) of the license. No manual typing. No aggravating auto-correct. With just a photo, information is processed to accelerate and simplify virtually any information-intensive business interaction.

# Kofax Mobile Mortgage

The Kofax Mobile Mortgage<sup>™</sup> solution enables financial services organizations to quickly and easily deliver apps that engage customers and brokers in the loan process, giving them the ability to submit required documents in support of the loan application—all from the convenience of their mobile device.

When loan and mortgage processes reach a "not in good order" status, lenders can engage customers via their mobile device to submit the supporting documents and accelerate the loan process. With a simple photograph from a smartphone or tablet, the borrower can capture, submit and validate driver licenses, proof of earnings forms, paystubs and more to keep the process moving forward—with immediate, automated acknowledgment or confirmation back from the lender.



# **Other Mobile Use Case Development**

The Kofax Mobile Capture Platform allows you the control and flexibility to extend beyond the default capabilities delivered with Bill Pay, Cheque Deposit and Mortgage to create a customer or purpose built projects for any document type that might benefit your organization. The open platform and the common tool set for document recognition and training, you can create and deploy your own mobile use cases.

- Bill Pay/Payee Enrollment
   Credit Card Balance
   Transfer
- Customer Onboarding
- Funds Transfer
- · Cheque Photo Capture
- FNOL
- Speeding Ticket Management

Lending Processes

Cheque Deposit

- Gift Card Balance
- ID Photo Capture
- Insurance Quoting
- Medical Claims

#### Kofax Analytics

Kofax Analytics for Capture<sup>™</sup> provides intelligent dashboards for increasing the effectiveness of Kofax solutions. It delivers interactive views into system performance, accuracy and productivity to better enable you to report its effectiveness and improve system throughput. You cannot improve what you do not measure. Kofax Analytics provides the real-time interactive dashboards to understand the overall effectiveness of your app, operational performance, costs, bottlenecks and success rates.

Specifically for mobile, Analytics helps customers drill down into the types of devices submitting content, the overall success/performance of images submitted by various device types, errors, accuracy, timing, performance, etc. All this data is critical to developing and delivering meaningful and impactful mobile solutions.

Challenges Organizations Want to Address with Kofax Analytics:

- Better insight into, and control over, system performance, accuracy and productivity
- Need to better enable administrators to report on the effectiveness of their solution
- Need to improve overall system throughput: identify bottlenecks and drill down to root causes (is
  it the device, is it the user, is it the system) and then proactively take measures to improve the
  results and performance
- Drives critical insights into all operational areas to monitor performance, accuracy, and costs
- Monitors performance and productivity of human operators
- Uncovers real-time trends through for more timely decisions
- Adapts to customers' unique requirements and supports customized dashboards and reports



Kofax Analytics provides optimized, out-of-the-box, dashboards that can be viewed via any standard web browser, with a focus on elevating the visibility into the effectiveness of your mobile capture solution. More importantly, Kofax Analytics delivers interactive views into users, devices, system performance, accuracy and productivity to better enable administrators to report on the effectiveness of their mobile capture solution and improve app usability, effectiveness, and overall system throughput. Kofax Analytics tracks data as it progresses through the mobile capture workflow and produces actionable business intelligence (BI) dashboards from the collected data. It also provides near real-time and historical reporting via preconfigured dashboards requiring no programming.

Kofax Analytics provides the necessary insights and data to understand the true performance and effectiveness of your mobile solution.

With Kofax Analytics, you can:

- Gain critical insight into all aspects of your mobile app and solution
- Uncover real-time process trends through data visualization and manipulation to improve process performance and minimize costs.
- View accuracy metrics between extraction and validation to identify possible improvements
  - By device, users, time of day, geography, document types...
  - Drill down to field level activities to identify low confidence fields that cause manual corrections; then, set the right actions to improve the process quality.





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# Addressing User Errors

### Image Quality

Everything begins with a good image. Using Kofax patented image perfection technology running natively on the device, Kofax ensures that an optimized image is captured and process ready in spite of many challenges related to jitter, blur, lighting, distance, document size, camera optics and backgrounds.

# **Camera Controls**

Kofax provides multiple camera controls supporting both video and photo modes. This enables customers to default or support the best user experience possible for the user to capture a document. Custom overlays and guidance tips can be used to improve user success. Video mode enables the user to simply hover over the document, while photo mode prompts the user to push a button when ready. In both cases, the Kofax patented image perfection technology ensures the entire document was captured and then optimizes the image for processing and submission.

# Real-time Automatic Extraction

Kofax has the ability to extract data from documents in 140 different languages. The automatic extraction of content relieves the user from manually entering information on the device. More importantly with the real-time capabilities of the Kofax platform extracted and validated data can be presented back to the user on the device for review. Additionally more data is available for the process than just the account number or amount that the user was being asked to enter. Any additional data contained within a document can also be extracted and delivered to the process that may help support Know Your Customer, upsell, or cross selling initiatives.

# Patented Data Matching

Kofax can leverage the entire content of a document to match against context of a database. In the example of bill pay, Kofax uses all the context of the entire bill (addresses, phone numbers, dates, account numbers, etc.) to match and determine the right answer from the database for the biller, biller address, etc. Not only does this make for a very accurate and fast system, but more importantly it significantly reduces errors caused by OCR challenges. This data matching process can be performed within the mobile session as part of the real-time interactive dialogue with the customer. Because of this unique data matching capability, Kofax can match against truth data residing in proprietary and third-party databases, and still allow for a transparent experience for the customer while avoiding latency and delay.

### Analytics

Understanding what the users are doing and the overall effectiveness of the app in a visual dashboard is critical to make meaningful and measured improvements to the app or system.



# Summary: What makes Kofax Intelligent Mobile Capture Different?

- Single/Open Platform deliver any mobile capture and engagement use case from a single open platform all under your control and resources. Don't be stuck with closed point solutions. Start with Bill Pay, Cheque Deposit and Customer Onboarding and easily extend to new use cases and solutions all from the same platform.
- 2. **Real-time data extraction and validation** simply point, click and confirm. Data contained within documents is now automatically entered for the user eliminating the need for tedious manual entry. Promotes self-service and significantly simplifies and accelerates transactions.
- 3. **Patented, advanced image perfection** running natively on the device, Kofax turns your mobile phone into a production document scanner ensuring the best images are captured for the user while overcoming challenges for lighting, blur, jitter, optics, background, and document size. Simply point and Kofax does the rest.
- 4. **Native, Hybrid, and Mobile Web Support** Regardless of your development platform or design strategy, the Kofax Mobile Platform can support your use case.
- 5. **Patented, advanced data matching** captured information is automatically matched, validated and corrected eliminating the need to burden the user with manual correction of data. More importantly more accurate data is available to the downstream processes and systems for analytics, upselling, and revenue generating opportunities. Easily connect to any database for data matching, correction and extraction.
- 6. Multi-Channel beyond mobile, any app or process use case can be extended to additional customer engagement channels like portals, web, email, fax, print streams, scanners and multi-function peripherals. Engage your customers where they are on their preferred channel, mobile, but also enable them to engage you and your services via whatever channel is available.

For further information visit <a href="http://www.MobileCapture.com">www.MobileCapture.com</a>

