OCR Vendor Comparison Report

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Overview

It has been determined that the current platform would benefit from incorporating OCR technology to help users expedite the data acquisition process when applying for deposit account. However, COMPANY does not want to "re-invent" the wheel by developing OCR technology in-house and prefers to implement this technology via a third-party vendor. Since COMPANY does not have a preferred OCR partner, this study compares the top four leaders of OCR Technology in regards to the financial industry.

What is OCR?

OCR, or Optical Character Recognition, is defined as the mechanical or electronic conversion of images of typed, handwritten or printed text into machine-encoded text, whether from a scanned document, a photo of a document, a scene-photo (for example the text on signs and billboards in a landscape photo) or from subtitle text superimposed on an image (for example from a television broadcast).

OCR in Software Platforms?

The primary use case for incorporating OCR technology in a platform is to provide the ability to scan an applicant's identification (e.g. driver's license), extract the personal information from the scanned image (i.e. .pdf, .jpg, .png, etc.), and populate a form with the extracted data. In addition to prefilling a form with data extracted via OCR technologies, the platform also requires that the vendor have the ability to authenticate documents and verify applicant identity.

With these platform requirements in mind, the vendors in this document are being compared in four broad categories: Data Capture, Document Authentication, Identity Verification, and Integration. Each these categories have been further subdivided as follows:

Data Capture	Doc. Authentication	ID Verification	Integration
Multi-ID Sup.	Multi-ID Sup.	Address Verification	Security
Multi-Device Sup.	Multi-Step Authen.	Age Verification	HTML5 integration
Real-Time Pop.	Real-Time Authen.	Multi-Source Sup.	API/SDK Avail.
No Local/3 rd Party Storage		Custom Source Sup.	Doc/Support Avail.

OCR Vendor Inclusion

The vendors have been included for an in-depth comparison based on their ability to meet the requirements listed in the previous section as well as, the companies' presence and experience in the industry. The chosen vendors are listed in alphabetical order.

Acuant provides solutions to automate workflows and minimize risk in all industries that transact with identity documents. We proudly work with hundreds of partners globally, empowering businesses to please and protect their customers. Our partners include start-ups, Fortune 500 and FTSE 350 organizations. Contact us today to learn more about our Identity Proofing and Credential Management solutions.

Acuant's Financial Services Clients include: FIS, Fiserv, Jack Henry & Assoc, D+H, Data Systems of Texas, Secure Cashing Systems, UniLink, and Benchmark.

KOFAX 🏶

Once you receive the customer's ID photo, Kofax Mobile ID extracts the data and prefills a form for a fast and frictionless customer onboarding experience.

- Document verification services to validate the document as real and unaltered.
- Identity verification services to ensure the person is a real person.
- Fraud, AML, and other sanction databases and watch lists for KYC compliance

http://www.kofax.com/mobile/mobile-frameworks/kofax-mobile-id

Kofax Financial Services Clients include: NCB, BPM, UniCredit, ING/DiBa.



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LexisNexis offers software that keeps up with these photo document changes. Our TrueID Document Capture and Authentication solution uses the world's largest and most accurate, patented forensic library to evaluate the authenticity of photo IDs. Features Optical Character Recognition (OCR) that provides automated capture and form fill http://www.lexisnexis.com/risk/identity/doc for faster, more accurate identity entry.

> LexisNexis Financial Services clients include Fifth Third Bank, Pan American Bank, SAFE Credit Union, and TRIAD Financial Services.



Mitek's ID document verification allows an enterprise to verify a user's identity during a mobile transaction, enabling financial institutions, payments companies and other businesses operating in highly regulated markets to transact business safely while increasing revenue from the mobile channel. Mitek also reduces the friction in the mobile users experience with advanced data prefill.

Mitek's Financial Services clients include: MerdianLink, Morgan Stanley, New Dominion Bank, Synchrony Financial, and Gambit Financial Solutions.

Vendor Product Profiles

The following Vendor Product Profiles provides details on how each vendor meets the specified requirements.

Acuant Vendor Product Profile

Data Capture

Data Capture Product	AssureID
Multi-Device Support	Yes. "Any mobile device" "or TWAIN compatible desktop scanner."
Real-Time Population	Yes. "Auto-populates into your application (CRM, EMR, Database, etc.) within seconds,"
Local/3rd Party Storage	No. "Information is then processed securely in the cloud without storing any data or images on the local device."

Document Authentication

Doc. Authentication Product	AssureID
Multi-ID Support	Yes.
Multi-Step Authen.	Yes. "Extracts biometric and alphanumeric data contained in an identity document to authenticate it by applying 50+ forensic document-specific tests and utilizing the industry's largest document library (supporting 200+ countries)."
Real-Time Authen.	Yes. "Working in real time, AssureID eliminates manual screening errors, speeds up the document inspection process and significantly reducing employee training, operating costs and customer inconvenience."

Identity Verification

ID Verification Product	AssureID
Address Verification	Yes. "Employ AssureID for address and age verification"
Age Verification	Yes. "Employ AssureID for address and age verification"
Multi-Source Support	Yes. "check against watch lists such as Interpol, Office of Foreign Assets Control (OFAC) and

	Politically Exposed Persons (PEP) to provide the utmost security."
Custom Source Support	Yes. "or create your own custom list."

Integration

Integration available?	Yes. "Process images via Acuant's Web Services" & "Seamless integration into 3rd party applications."
Security	Yes. "Secured via SSL and HTTPS AES 256-bit."
HTML5 integration	Yes. "Seamlessly integrates into your iOS, Android, Windows or HTML5 solution."
API/SDK Avail.	Yes. "One API supports multiple platforms" & "Customizable SDK for fast development."
Doc/Support Avail.	Yes. "Acuant solutions easily integrate into your environment and have supporting API's, APK's and documentation. Our solutions are developer friendly and backed by our world-class support to ensure that you derive the maximum benefit."

Kofax Vendor Product Profile

Data Capture

Data Capture Product	Kofax Mobile ID
Multi-ID Support	Yes. "Driver licenses (also extracts data contained within barcodes), Passports (extracts and parses MRZ), National ID cards" & "river licenses, state IDs, passports, and national IDs in over 105 countries."
Multi-Device Support	Yes. "Both iOS and Android platforms. Compatible with both native applications and mobile browsers."
Real-Time Population	Yes. "done in about 10 seconds." "Kofax Mobile ID extracts the data and prefills a form for a fast and frictionless customer onboarding experience."
Local/3rd Party Storage	"The SDK stores all captured images in volatile memory and provides a method to delete the file after it has been sent to the server."

Document Authentication

Doc. Authentication Product	Yes. Requires Kofax TotalAgility Platform.
Multi-ID Support	Yes.
Multi-Step Authen.	No. Only "supports communication with any external service."
Real-Time Authen.	No. Only "supports communication with any external service."

Identity Verification

ID Verification Product	Kofax TotalAgility Platform
Address Verification	No. Only "supports communication with any external service."
Age Verification	No. Only "supports communication with any external service."
Multi-Source Sup.	No. Only "supports communication with any external service."
Custom Source Sup.	No. Only "supports communication with any external service."

Integration

Integration available?	Yes. "the results are returned in JSON format."
Security	"The SDK stores all captured images in volatile memory and provides a method to delete the file after it has been sent to the server. Using HTTPS is recommended to ensure the data is encrypted in transit to the server."
HTML5 integration	Yes. "An HTML5-compatible JavaScript API is included for native iOS, Android, and Windows browsers."
API/SDK Avail.	Yes. "The Kofax Mobile Capture SDK™ powers the document capture"
Doc/Support Avail.	Yes. See above.

LexisNexis Vendor Product Profile

Data Capture

Data Capture Product	<u>TruelD</u>
Multi-ID Sup.	Yes. "Supports over 2,800 different ID types internationally."
Multi-Device Sup.	Yes. "Works with IOS or Android smartphones and tablets"
Real-Time Pop.	Yes.
Local/3rd Party Storage	Yes. LexisNexis Storage. "Enrolling document into a hosted contributory database". However, more research needed to determine if this is required by vendor.

Document Authentication

Doc. Authentication Product	<u>TruelD</u>
Multi-ID Sup.	Yes. "Supports over 2,800 different ID types internationally."
Multi-Step Authen.	Yes. "Performs up to 50 different text- and image-based tests." "Automated forensic tests using a patented ID library check and identify suspicious items that may be invisible to the naked eye."
Real-Time Authen.	Yes. "TrueID Document Authentication returns results in a matter of seconds"

Identity Verification

ID Verification Product	TrueID
Address Verification	Unknown.
Age Verification	Yes. "Extracting identity data for form pre-population or additional identity proofing." "Defend against fraud and compliance risks, including date-of-birth verification for age-restricted goods and services."
Multi-Source Sup.	Unknown.
Custom Source Sup.	Unknown.

Integration

Integration available?	Yes. "TrueID easily integrates within an existing workflow and connects directly to other LexisNexis solutions." "Features an SDK to enable seamless integration into your existing app"	
Security	Yes. "LexisNexis also offers multi-factor authentication solutions to round out your IdM workflows."	
HTML5 integration	Unknown.	
API/SDK Avail.	Unknown.	
Doc/Support Avail.	Yes.	

MITEK VENDOR PRODUCT PROFILE

Data Capture

Data Capture Product	Mobile Verify (includes Mobile Fill™ for mobile data pre-fill)	
Multi-ID Sup.	Yes." Driver's License, Passport, Residence Permit, Identity Card."	
Multi-Device Sup.	Yes. "MiSnap™ SDK is available for iOS, Android, and the Mobile Web."	
Real-Time Pop.	Yes. "Real-time feedback along the entire mobile capture and identity authentication process."	
Local/3rd Party Storage	No. "Neither the image nor any data from it are ever stored on the mobile device and MiSnap never communicates with the outside world; instead, it relies entirely on the customer's application for communication."	

Document Authentication

Doc. Authentication Product	Mobile Verify
Multi-ID Sup.	Yes. "Algorithmic-based checks for 3500 global ID documents" "Automatic ID type recognition."
Multi-Step Authen.	Yes.
Real-Time Authen.	Yes. "Instantly verifying identity."

Identity Verification

ID Verification Product	Mobile Verify
Address Verification	Yes.
Age Verification	Yes. "Age verification" "ID verification is instant via our enhanced auto-capture technology."
Multi-Source Sup.	Unknown.
Custom Source Sup.	Unknown.

Integration

Integration available?	Yes. "MiSnap™ SDK is available for iOS, Android, and the Mobile Web."
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Security	Uknown.	
HTML5 integration	Yes. "MiSnap™ SDK is available for iOS, Android, and the Mobile Web."	
API/SDK Avail.	Yes. "MiSnap™ SDK is available for iOS, Android, and the Mobile Web."	
Doc/Support Avail.	Yes.	

Vendor Reputation

Aside from a high-level technical comparison, the vendors were also compared on their "reputation." For the purposes of this document, a vendor's reputation is based on Better Business Bureau rating, internal employee reviews, and years in business. The vendors are listed in alphabetical order.

Acuant

Better Business Bureau (Not Accredited)	No Rating Available	
Employee Review at Glassdoor	4.0	Avg. 3.7
Employee Review at Indeed	3.3	
Years in Business	1999	

It is important to point out that Acuant also works with a number of our current vendors.

Kofax

Better Business Bureau (Not Accredited)	Pr Business Bureau (Not Accredited) No Rating Available		
Employee Review at Glassdoor	2.4	Avg. 3.5	
Employee Review at Indeed	4.5		
Years in Business	1985		

LexisNexis

Better Business Bureau (Not Accredited)	A-	
Employee Review at Glassdoor	3.6	Avg. 3.8
Employee Review at Indeed	4.0	
Years in Business	1977	

Mitek

Better Business Bureau (Not Accredited)	A+	
Employee Review at Glassdoor	3.4	Avg. 3.4
Employee Review at Indeed	3.4	
Years in Business	1983	

It important to point out that Mitek already works with our competitor.

Based on the preceding information, the included vendors all have a similar corporate reputation and the differences between them can be considered to be negligible. With all of the vendors on equal standing in terms of reputation, more emphasis can be put on how the vendors' products fulfill the high-level requirements outlined in this document.

Vendors At-A-Glance

The following table displays an "at-a-glance" comparison of the vendors included in this document based on the information included in the preceding vendor profiles and product factsheets. Vendors are listed from left-to-right, starting with the vendor that best fulfills the requirements and ending with the vendor that least fulfills the requirements based on this preliminary review.

Req. Legend Fulfills Req. Requires More Research Does not Fulfill Req.

	ACUANT	MITEK	LEXISNEXIS	KOFAX
Data Capture Product				
Multi-ID Support				
Multi-Device Support				
Real-Time Population				
Local/3rd Party Storage				
Document Authentication Product				
Multi-ID Support				
Multi-Step Authentication				
Real-Time Authentication				
ID Verification Product				
Address Verification				
Age Verification				
Multi-Source Sup.				
Custom Source Sup.				
Integration available?				
Security				
HTML5 integration				
API/SDK Avail.				
Doc/Support Avail.				

Recommended Next Steps

Based on this comparison, the following steps should be taken to gather more information.

- 1. Narrow Down the Vendor List. The list of vendors should be narrowed down from four to two to expedite the selection process.
- 2. Schedule a Demo. A demo of the final two vendor's products should be scheduled with the stakeholders.
- 3. Request for Proposal. This preliminary review does not factor in the cost of the product. An RFP should be made for a Cost/Benefit analysis. An RFP would also allow vendors to answer more technical questions and possibly provide answers to those items that are designated as "unknown" or "more research required".
- 4. Request For Technical Documentation. This preliminary review was based on information readily available on the internet via each vendor's website. A Request for Technical Documentation should be made so that it can be reviewed by development resource. (Note: this request can be made at the time of RFP.)