Aite

AIM Evaluation: Identity Document Capture and Verification

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IMPACT POINTS

- This Impact Report describes identity document capture and verification product functionality and includes seven vendors that agreed to participate in the evaluation. Participating vendors were required to complete a detailed product request for information (RFI) comprising both qualitative and quantitative questions, conduct a minimum 60-minute product demo, and provide active client references.

- Leveraging the Aite Impact Matrix (AIM), a proprietary Aite Group vendor assessment framework, this Impact Report evaluates the overall competitive position of each vendor, focusing on vendor stability, client strength, product features, and client services.

- The following criteria were applied to develop a list of eligible vendor participants: internal Aite Group knowledge, discussions with providers concerning their primary competitors, and online research.

- A total of 14 vendors were invited to participate, and seven vendors agreed to be evaluated under the AIM framework.

- While this is a relatively new product to the market, demand is strong and is anticipated to grow dramatically to assist with combating identity fraud and improving the customer experience in the mobile and online channels.

- Eighty-nine percent of financial institution (FI) executives state that account takeover is a top three cause of fraud losses in digital channels, along with 42% who state that application fraud is a top three cause of losses.

- For FIs to establish that they "know their customers" to comply with anti-money laundering (AML) regulations, additional steps must be taken in the face of high rates of identity crimes and the use of synthetic identities.

- Capturing the identity data from an identity document and using the data to prefill part of an application can make the process much more customer-friendly and eliminate costly keying errors.

- Online merchants have their own identity challenges; some must establish the age of the customer due to the type of goods they sell while others just want to curb their mounting card-not-present (CNP) fraud losses.

- Global IT spending by FIs is expected to grow to US$12.2 billion by the end of 2022.

- None of the participating vendors achieved best-in-class status in the AIM, a highly governed and quantitative vendor evaluation methodology introduced via this report. However, Mitek, Onfido, LexisNexis Risk Solutions, and IDology were all very close to achieving this designation.

INTRODUCTION

In today's global market, verifying the identity of the individual on the other side of a mobile device or computer is increasingly difficult. Verifying the consumer's identity document (often a passport or driver's license) can provide confidence that the person is who he or she claims to be. As the incidence of identity crimes continues to grow and consumers increasingly use their mobile devices to apply for new accounts and cards, make online purchases, and carry out various other high-risk processes, there is a strong need for FIs and other firms to be able to determine who is on the other side of the device. Scanning an identity document can enable a firm to identify a consumer and prefill much of the data obtained from the document into an application, requiring far fewer key strokes, reducing keying errors, and improving both operational efficiency and the customer experience. Similarly, websites that must verify the buyer's age (or other purchaser information) prior to selling goods can do so by simply verifying identity documents.

This Impact Report explores some of the key trends within the identity document verification market and discusses the ways in which technology is evolving to address new market needs and challenges. The report also compares and contrasts the offerings and strategies of the leading vendors and highlights their primary strengths and challenges. Finally, to help FIs make more informed decisions as they select new technology solutions, the report recognizes specific vendors for their strengths in critical areas.

METHODOLOGY

Leveraging the AIM, a proprietary Aite Group vendor assessment framework, this Impact Report evaluates the overall competitive position of each vendor, focusing on vendor stability, client strength, product features, and client services.

The following criteria were applied to develop a list of vendors for participation:

- Aite Group's knowledge of solution providers offering identity document verification solutions

- Discussions with known solution providers to identify primary competitors

- Online research to identify additional firms in the space

Although actual system performance is an important aspect of product evaluation, so many variables impact system performance that it could not be accurately compared for this evaluation. To accurately compare product performance, a lab test would be required to control all factors and ensure they are the same for every solution.

Participating vendors were required to complete a detailed product RFI comprising both qualitative and quantitative questions, conduct a minimum 60-minute product demo, and provide active client references. For this report, seven vendors participated in this process from March to July 2018. These vendors are Acuant, IDology, Jumio, LexisNexis Risk Solutions, Mitek, Onfido, and Paycasso. Yoti, a company with a unique approach to solving the identity problem, is profiled as a new market entrant.

Several solution providers that were invited to participate in the vendor evaluation decided not to do so for various reasons. These are Au10tix, Confirm.io, GB Group, Gemalto, ID.me, ID Analytics, and Kofax.

AIM INTRODUCED

The AIM is a comprehensive proprietary vendor evaluation process designed to provide a holistic analysis of participating vendors and identify market leaders in each evaluated vendor market. By incorporating many aspects of a vendor's essential characteristics for success and growth, including financial and client stability, product features, and customer service, the AIM provides an actionable guide for market participants looking for viable third-party vendor solutions and services. Figure 1 highlights the key stages of the AIM methodology.

Figure 1: AIM Methodology

RFI preparation and trend analysis	RFI distribution, client interviews, and market analysis		Vendor ranking analysis
Vendor RFI and client reference distribution	**Market overview and trend analysis**	**RFI collection and demos** / **Aggregation of vendor data and analysis**	**Vendor evaluation and growth analysis**
• Develop vendor RFI • Develop client survey • Distribute RFI and client surveys	• Analyze key market trends, opportunities, and challenges • Analyze competitive landscape • Leverage in-house Aite Group knowledge database	• Collect vendor data • Interview key market participants • View vendor demos / • Check data availability • Confirm data relevance and accuracy • Interview client references • Populate vendor scorecards	• Evaluate vendors' key criteria • Rank vendors • Project vendor market growth

Source: Aite Group

To ensure full transparency in terms of key areas of measurement and evaluation, Aite Group shares the entire AIM with each vendor prior to publication. Each participating vendor also provides client references to measure their overall satisfaction. Details of the client reference survey and questions to be discussed with clients are shared with the participating vendor prior to the interviews. Aite Group reserves the right to identify and interview other clients that may not be recommended by participating vendors to validate certain areas of analysis.

AIM COMPONENTS

The AIM has four key components: vendor stability, client strength, product features, and client services. Examples of the criteria that could be included in each component are listed in Figure 2.

Figure 2: AIM Key Components

- Number of employees
- Quality of management
- Risk management
- Office presence
- Financial stability

Vendor stability

- Number of clients
- Diversity of clients
- Diversity of products
- Client turnover
- Vendor reputation

Client strength

AIM

Product features

Client services

- Key features
- Implementation options
- Ease of user experience
- Ease of implementation and integration

- Level of support and service
- Training programs
- Online support
- Pricing structure
- Perceived value of product

Source: Aite Group

VENDOR STABILITY

The vendor stability component evaluates the overall strength of the vendors in terms of financial stability, management reputation, risk management, and global presence. This component determines whether a given vendor has the basic foundation to compete and sustain its overall market presence.

CLIENT STRENGTH

The client strength component focuses on the number and diversity of customers for vendors, vendor reputation among the clients, and overall customer turnover. This component measures whether a given vendor has a strong foundation of clients and a robust client pipeline to sustain its growth trajectory.

PRODUCT FEATURES

The product features component analyzes the key features and functionality of vendor solutions and services, including implementation options, user experience, and the strength of the future product roadmap. This component measures whether the vendor offers enough key features and functionality to remain competitive.

CLIENT SERVICES

The client services component evaluates the pricing structure and its various attributes as well as the comprehensive nature of the vendor's client support and service infrastructure. This component measures whether the vendor provides robust service and support to provide real value to the clients.

AIM

After a comprehensive analysis, Aite Group can assess participating vendors within the four key evaluation components (Figure 3).

Figure 3: Sample Assessment via Heat Map Representation

Vendors	Vendor stability	Client strength	Client service	Product features
Vendor 1	81%	65%	81%	84%
Vendor 2	69%	70%	83%	88%
Vendor 3	86%	61%	81%	88%
Vendor 4	89%	91%	92%	91%
Vendor 5	81%	74%	92%	82%
Vendor 6	86%	96%	81%	82%
Vendor 7	78%	78%	92%	90%
Vendor 8	89%	87%	81%	84%
Vendor 9	69%	61%	89%	88%
Vendor 10	86%	74%	75%	85%

Legend:

BEST IN CLASS   91% - 100%

81% - 90%

65% - 80%

INCUMBENT/ EMERGING   < 65%
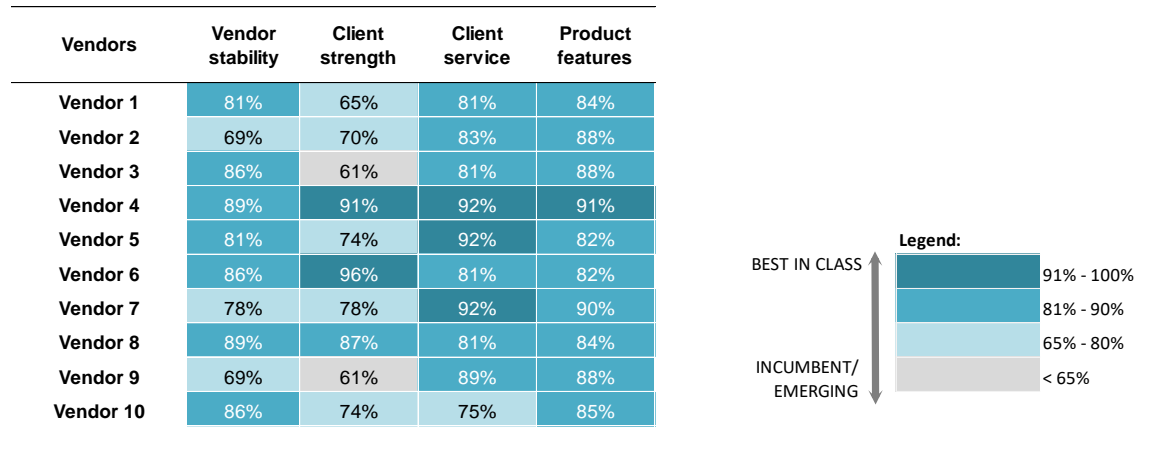
Source: Aite Group

The AIM leverages these four components to create a concise composite evaluation that identifies market-leading vendors:

- **Vendor strength:** Combining the scores from the vendor stability and client strength, this criterion measures the vendor's overall long-term business viability as a product and service provider.

- **Product performance:** Combining the scores from the product features and client service components, this criterion measures the product's ability to deliver key functionality and support.

Figure 4 provides a sample output of the AIM, presenting those market-leading vendors that provide robust product performance as well as showcase their ability to execute on their long-term strategies.

Figure 4: Sample AIM
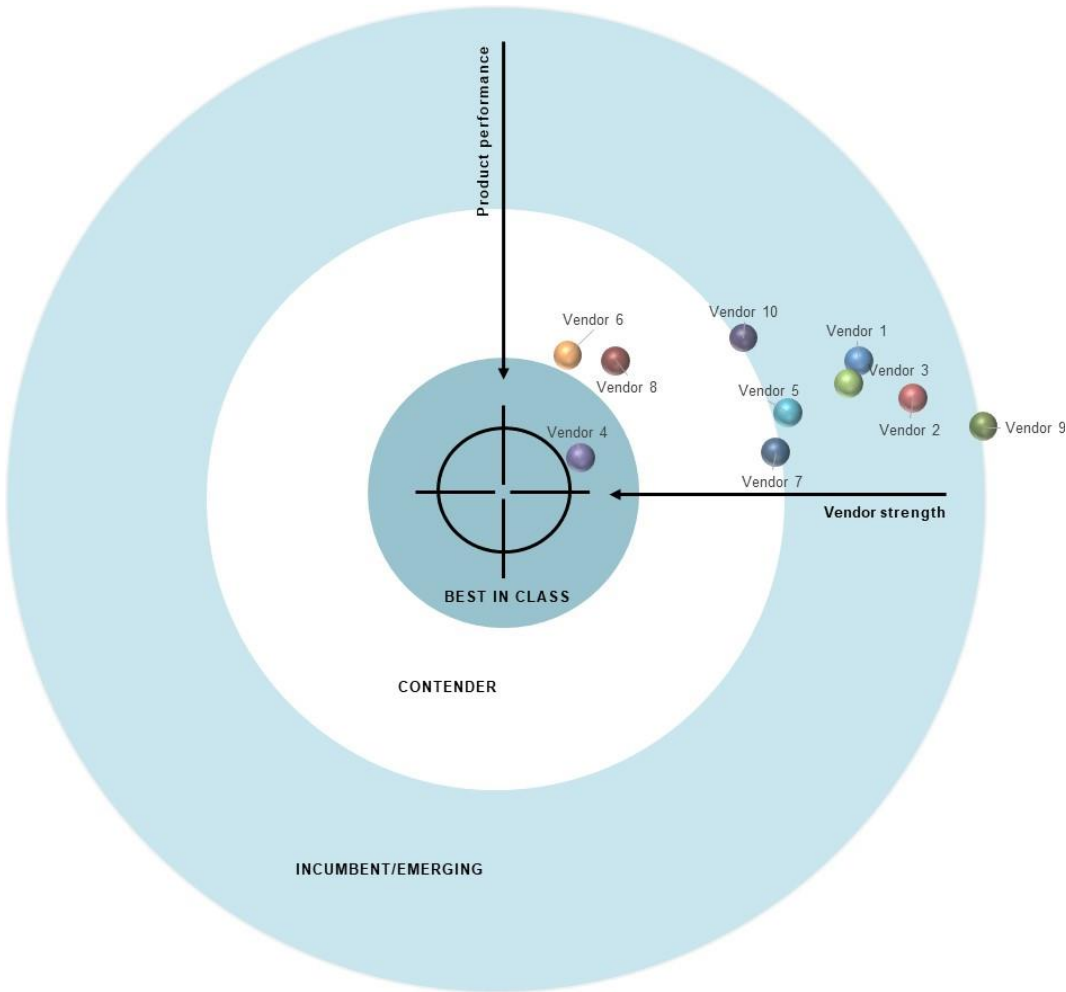
Source: Aite Group

The AIM highlights three specific types of vendor groupings as a result of the analysis:

- **Best in class:** Vendors in this grouping represent the leaders in the particular vendor market, with strong financials, diverse client bases, and robust product offerings with industry-leading functionality and reliable client service. These are essentially the leading vendors that everyone else is chasing.

- **Contenders:** Contenders have created stable businesses and client bases as well as competitive product offerings. But they struggle at times to identify the next big market trend or product features, or lack consistent research and development (R&D) or IT investment, leading to a failure to update overall performance and infrastructure. Contenders' overall competitive positions will vary a bit, from vendors that are having a tough time keeping up with the best-in-class vendors— due to a lack of resources or stable but outdated technology stacks—to vendors that are just inches away from joining the best-in-class grouping if only they could properly execute on the next release or successfully capture a new client segment.

- **Incumbent or emerging:** This last grouping represents vendors that either have a large potential for future growth or are established vendors with stagnating offerings. This group may represent startups or vendors with limited resources. They may exhibit unstable business models, low client count, and limited client service capabilities. However, this group of vendors may also support innovative product features and transformative business models that will help them home in on the AIM framework.

The relative positions of vendors that have been bucketed into these three distinctive vendor groupings within the AIM are, of course, not static. In fact, an emerging vendor of today may, given the speed of innovation in recent years, find itself in the best-in-class grouping five years from now.

The beauty of the AIM is that by leveraging this framework, Aite Group analysts can pinpoint vendors' strengths and weaknesses, and vendors can utilize this framework to make sure they are on the right path to reaching the coveted best-in-class position. The flexibility of the AIM is also designed to be beneficial for those financial institutions looking to make vendor decisions tied to their unique set of internal requirements.

IDENTITY VERIFICATION

There is a multitude of identity verification solutions in the market; some have been around for decades while others are relatively new. In financial services, these products are primarily used to identify new applicants and existing customers when they are signing into online or mobile banking. Some broadly used methods (e.g., knowledge-based authentication questions) have been deprecated due to numerous data breaches, consumers' posting of personal information on social media, and phishing attacks whereby fraudsters obtain the information required to correctly respond to the questions and successfully impersonate a customer. Social engineering tactics are also particularly effective for overcoming authentication controls in contact centers. While steps can be taken to shore up such existing methods, fraudsters' inventiveness continues, and new technology solutions will be required to effectively combat burgeoning identity crimes.

One such relatively new technology solution is identity document capture and verification. These solutions often provide a variety of capture mechanisms, allowing them to be effective in any delivery channel. Scanning equipment enables usage in a branch, office, or store while mobile capture enables application in online, contact center, and mobile channels. There is a plethora of use cases for these solutions, and customers can select the capabilities desired to solve their specific needs. For example, an online merchant selling goods that require consumers to be of a certain age may only require that a picture be taken of the identity document so an age test can be applied prior to finalizing the sale. Other use cases may require further validation, such as a selfie to be taken that can be compared to the picture on the identity document or a liveness test to ensure that an existing picture stored on the device isn't used by a fraudster. The solutions generally provide all these steps so that the purchasing firm can stipulate which tests it requires prior to implementation.

THE MARKET

The following market trends are shaping the present and future of the identity document capture and verification market (Table A).

Table A: The Market

Market trends	Market implications
Identity crimes (e.g., identity theft, synthetic identities) are increasing rapidly.	Knowing your applicant and authenticating existing customers is increasingly more difficult, creating compliance difficulties and higher fraud losses.
Account takeover and application fraud are the top two challenges FIs face in digital channels.	New technology solutions will need to be implemented to enable FIs to determine who they are dealing with in digital channels.
Know Your Customer (KYC) regulation is more difficult to meet with sophisticated fraud scams, including the use of synthetic or manufactured identities.	Business cases are often easier to get approved if one of the drivers is compliance, enabling FIs to more easily justify new technology investments.
Online merchants must also comply with regulations requiring age verification prior to the sale of certain goods, and many other industries have their own requirements to meet.	Many segments of the economy are in need of technologies to prove who companies are dealing with in digital channels, and all can benefit from identity document verification.
FIs are focused on improving the customer experience in digital channels.	Consumers want to use mobile devices to perform a wide range of functions, but small keyboards can make applying for new accounts cumbersome.

Source: Aite Group

IDENTITY CRIMES

Identity crimes are increasing rapidly. Identity crimes include identity theft, manipulated identities (which contain some stolen data elements), and the use of manufactured or synthetic identities (which are often created without any stolen data elements).[1] Synthetic identities are often carefully nurtured for a period of time and developed by acquiring a mobile device and establishing a credit bureau file and social media profiles, which makes the synthetic identity extremely difficult to detect.

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1. See Aite Group's report *Synthetic Identity Fraud: The Elephant in the Room*, May 2018.

ACCOUNT TAKEOVER AND APPLICATION FRAUD

Account takeover and application fraud are financial institutions' top two challenges in the online and mobile channels[2] and often result in fraud losses. Eighty-nine percent of FI executives state that account takeover is a top three cause of fraud losses in digital channels, along with 42% who state that application fraud is a top three cause of losses, as shown in Figure 5.

Figure 5: Top Three Types of Fraud Losses in Digital Channels

Q. What are the top 3 types of losses being incurred in digital channels?
(N=19)
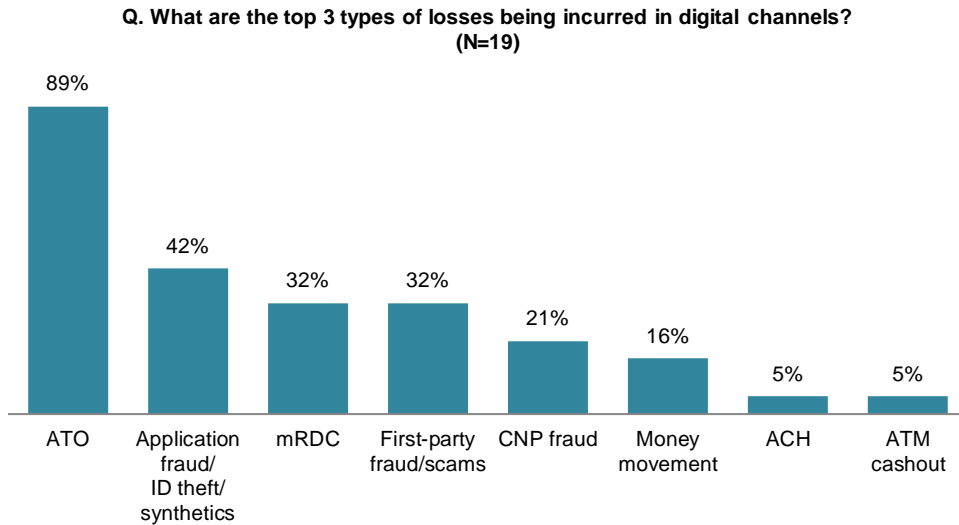
Source: Aite Group interviews with 28 fraud executives from 19 large North American FIs, July to September 2017

One FI executive recently shared that he has "never seen identity theft as rampant as it currently is during [his] three-decade career," and synthetic identity usage is also at an all-time high. Determining whether a real person—not a bot or synthetic identity—is applying for a new account or credit card is vitally important, as is establishing that the real person is who he or she claims to be. This is extremely difficult in faceless delivery channels, and the proliferation of authentic-looking fake IDs makes an identification difficult to prove even when the person is physically present. Identity manipulation, identity theft, and the use of synthetic identities are all components of the rise in application fraud, which will continue until technology is implemented to curb the trend. Figure 6 shows the projection for the U.S. market for application fraud associated with demand deposit accounts (DDAs). By 2020, application fraud losses related to DDAs are projected to exceed US$636 million.

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2. See Aite Group's report *Digital Channel Fraud Mitigation: Evolving to Mobile-First*, November 2017.

Figure 6: U.S. DDA Application Fraud Projection

U.S. DDA Application Fraud, 2015 to e2020
(In US$ millions)
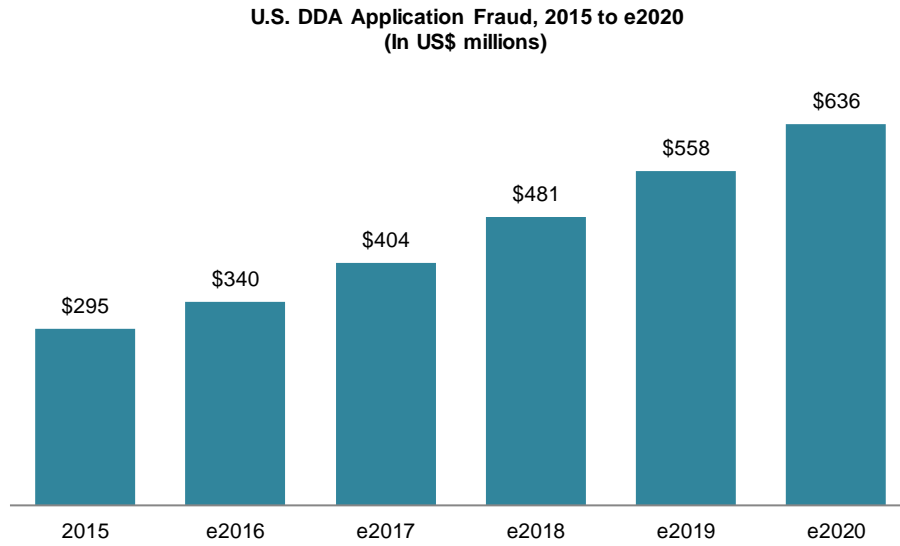
Source: Aite Group

Similarly, Figure 7 shows the projection for application fraud associated with credit cards in the U.S. market. By 2020, credit card application fraud is projected to exceed US$767 million.

Figure 7: U.S. Credit Card Application Fraud Projection

U.S. Credit Card Application Fraud, 2015 to e2020
(In US$ millions)
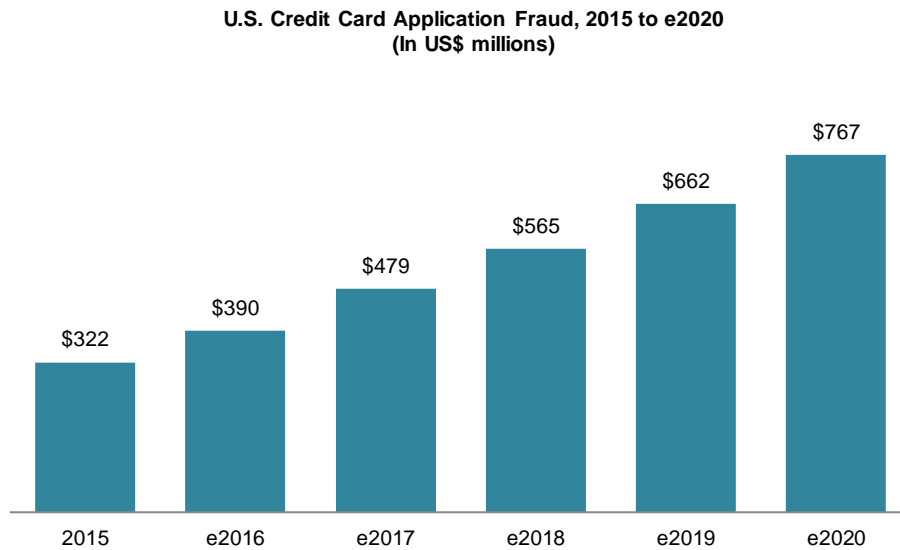
Source: Aite Group

REGULATORY REQUIREMENTS

Given the first two key trends, it is not surprising that it is difficult for FIs to establish that they "know their customers" to comply with AML regulations. As such requirements continue to evolve and become more stringent globally in the face of growing terrorist threats, regulators are sure to start cracking down harder if FIs cannot demonstrate the ability to know who they are dealing with.

ONLINE MERCHANTS AND OTHER INDUSTRIES

Online merchants have their own identity challenges; some must establish the age of the customer due to the type of goods they sell, while others just want to ensure that they know who they are dealing with. CNP fraud is flourishing, and if merchants can ensure they know the customer is who he or she claims to be, they can help combat losses due to CNP fraud.

CUSTOMER EXPERIENCE

Many FIs in the U.S. are working hard to improve the customer experience in digital channels, hoping to drive growth to the channels and to meet customer expectations of being able to use mobile devices to perform a wide range of activity. Capturing the identity data from an identity document and using the data to prefill part of an application can make the process much more customer-friendly and eliminate costly keying errors.

KEY DRIVERS FOR AND AGAINST ADOPTION

Some factors contribute to overall adoption of identity document capture and verification technologies. In the current market, fraud losses related to identity crimes are growing rapidly in the online and mobile channels; recent Aite Group research shows that 89% of FIs state account takeover is one of three top causes of fraud losses, and 42% state that application fraud is one of three top loss types.[3] As identity crimes continue to spiral, it is only a matter of time until FIs are forced to re-evaluate their authentication strategies and consider new technology investments to defeat fraudsters. As always, FIs desire to move more activity out of branches to lower-cost delivery channels, and consumers' desire to use their mobile devices for almost every function plays well in that scenario.

Because identity document capture and verification solutions are still not mainstream, many FI executives are not familiar with them, and this could pose a challenge for vendors. Fortunately, a large number of industries and governments are making use of the technology, and similarly to how Apple helped consumers get comfortable with using a fingerprint biometric, consumers may be introduced to this technology through other use cases outside of financial services. Early adopters in banking using the technology with beneficial results will also make more FIs aware of the solution and comfortable with introducing it. For mobile account opening, it is an improvement over keying all the data into an application on a tiny keyboard. Budgeting for the

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3. See Aite Group's report *Digital Channel Fraud Mitigation: Evolving to Mobile-First*, November 2017.

technology investment may be easier to justify since it can help generate new-account revenue from digital channels in addition to reducing fraud losses (Figure 8).

Figure 8: Factors for and Against Adoption

Adoption promoters

- Burgeoning fraud losses due to identity crimes
- Outdated authentication methods that are no longer reliable
- Compliance requirements, e.g., Know Your Customer
- Desire to move more activity to low-cost delivery channels such as online and mobile
- Consumers' desire to do more banking/payments using their mobile devices

Adoption inhibitors

- Lack of familiarity with product
- Fear that product will cause abandonment of application or cart
- In denial that some existing authentication technologies are outdated or that additional security layers must be added
- Lack of technology budget
- Culture to avoid leading edge or fast follower
- Desire to streamline processes and improve customer experience appears to conflict with the process required by these solutions

Source: Aite Group

KEY FUNCTIONALITY

The key functionality of identity document capture and verification systems will vary slightly based on the industry using the solutions. For financial services, the basic requirements generally include the ability to take a photo of the identity document (may include front and back), verify that the document is authentic and has not been altered, capture key data fields and prefill an application, take a selfie to compare to the picture on the identity document, and perform a liveness test. For other industries, all these steps may not be as important or necessary.

To increase overall adoption and capture additional market share, vendors are focused on developing functionality that represents competitive differentiators. Competitive differentiators might not be attractive to all potential clients but often drive key client adoption and could mean the difference for those firms looking for specific functionality needs. For this product, key differentiators include processing speeds, cost, customer support and customer service levels, training methods, and reporting capabilities. While it would be helpful to assess factors such as false positive rates and overall document pass rates, these metrics vary from one implementation to another and cannot be evaluated here. Buyers should pay particular attention to such metrics in head-to-head proofs of concept (POCs). Next-generation features include greater use of machine learning to improve product performance, use of artificial

intelligence to increase automation, the ability to accept any type of device a consumer has access to, and the use of blockchain. Given the limited resources of each vendor, it is imperative that appropriate investments are made across the needs of past, current, and future clients (Figure 9).

Figure 9: Key Functionality Trends

Minimum requirements	Competitive differentiators	Next-generation functionalities
• Capture of identity document image • Verification of document's authenticity • Ability to take selfie and compare picture to ID document • Liveness test • Ability to prefill data on forms desired by client • Geographic coverage and document library to meet client needs	• 24/7 global support • Types of documents verified beyond passports and driver's licenses • Processing speeds • Pricing • Customer support and service • Training methods offered • Agent dashboards • Reporting capabilities	• Greater use of machine learning • Artificial intelligence for greater automation • Device agnostic • Blockchain

• **Minimum requirements**: Functionality considered competitive requirement

• **Competitive differentiators**: Functionality that might not be attractive to all potential clients but could mean the difference for those firms with specific functionality needs

• **Next-generation functionalities**: Ambitious functionalities that could become the standard industry practice within a decade or, on the other hand, could be completely ignored
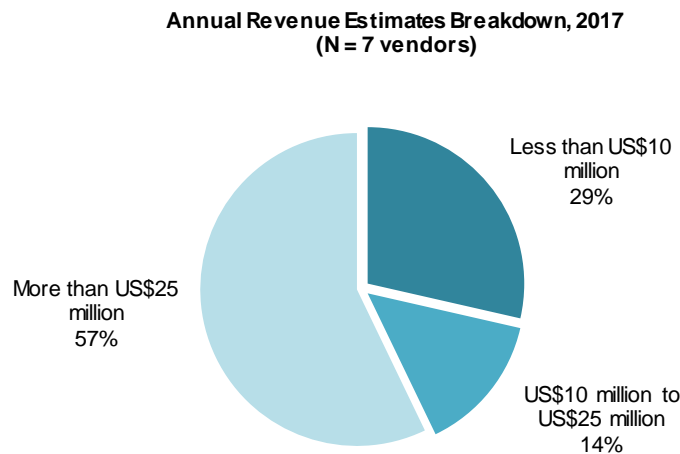
Source: Aite Group

KEY STATISTICS AND PROJECTED IT SPENDING

This section provides information and analysis on key market statistics as well as projected IT spending related to the vendor market for identity document capture and verification solutions.

ANNUAL REVENUE ESTIMATES ANALYSIS

Since this functionality is relatively new in the market, and because some of the providers are still in the startup phase, annual product revenue is still relatively low. Three of the vendors had product revenue of less than US$25 million in 2017, while the other four had higher revenue (Figure 10).

Figure 10: Annual Revenue Growth Estimates Breakdown

Annual Revenue Estimates Breakdown, 2017
(N = 7 vendors)

Less than US$10 million
29%

US$10 million to US$25 million
14%

More than US$25 million
57%

Source: Vendors

PROFITABILITY ANALYSIS

The market for identity document capture and verification solutions is very strong. While one vendor states that it is not breaking even, the CEO stresses that the only reason the company is not profitable is that it is choosing to invest a high percentage of profits back into research and development and into expanding the company geographically. In other words, the company could easily be profitable if ownership desired. Similarly, the vendor that is breaking even is doing so while investing heavily to expand geographically and enhance its product (Figure 11).

Figure 11: Vendor Profitability

Profitability Breakdown, 2017
(N = 7 vendors)

Negative
14%

Breaking even
14%

Positive
72%
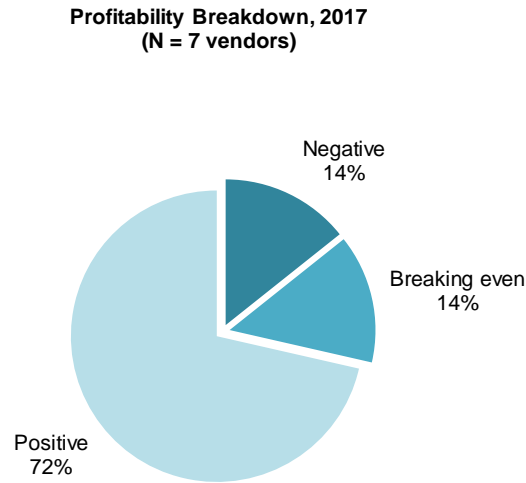
Source: Vendors

GROWTH RATE ANALYSIS

All of the participating vendors saw growth that exceeded 10% in 2017; the majority experienced growth in excess of 15% (Figure 12). Due to anticipated strong demand for this type of solution, these growth rates are sustainable unless a data breach or other negative factor derails one of the companies.

Figure 12: Growth Rate Breakdown

Growth Rate Breakdown, 2017
(N = 7 vendors)

11% to 15%
29%

Greater than 15%
71%
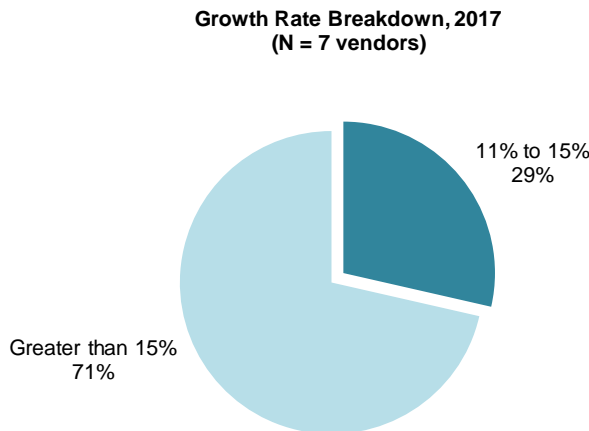
Source: Vendors

Particularly in the financial services sector, strong growth is anticipated; upcoming Aite Group research will report that the majority of FIs in the U.S. have identity document capture and verification solutions on their two-to-three-year roadmaps (Figure 13). An additional 27% of FIs have already implemented a solution or are in the process of implementing.
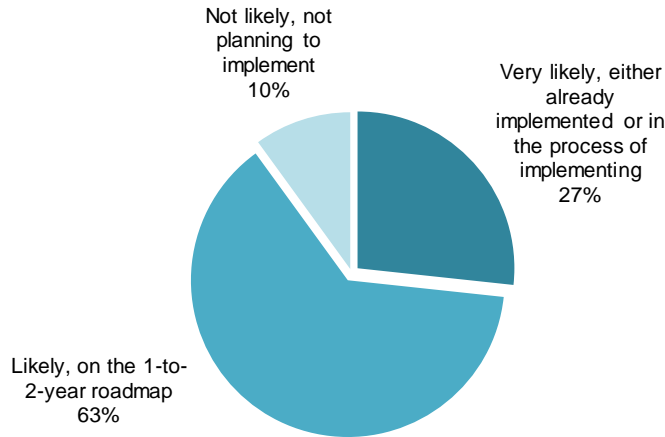
Figure 13: Likelihood of U.S. FIs Implementing Identity Document Verification

Q. How likely is your FI to implement mobile data capture/identity document verification (for DDA and credit card accounts)? (N=30)

Not likely, not planning to implement
10%

Very likely, either already implemented or in the process of implementing
27%

Likely, on the 1-to-2-year roadmap
63%

Source: Aite Group's survey of 30 financial institutions, March to June, 2018

R&D INVESTMENT ANALYSIS

Every company that participated in this evaluation invested over 10% of revenue in research and development, and over half the companies invested over 15%. At least one company invested all the annual profits back into R&D even though that resulted in the company appearing to be unprofitable for the year. Many of these products are similar in functionality, so it behooves each company to develop a way to differentiate itself (Figure 14).

Figure 14: Percentage of Revenue Invested in R&D

**Percentage of Revenue Invested in R&D, 2017
(N = 7 vendors)**

More than 15%
57%

11% to 15%
43%
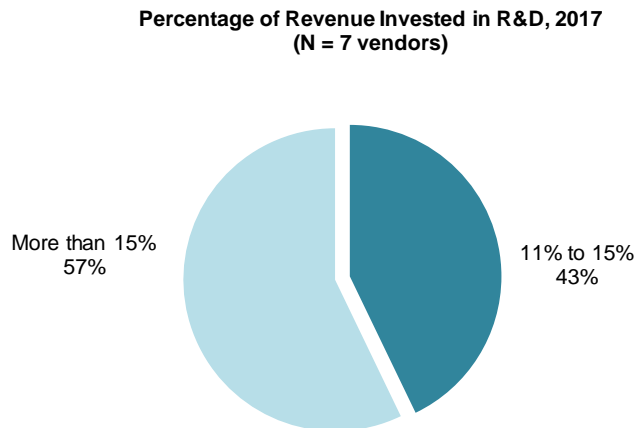
Source: Vendors

CLIENT BREAKDOWN BY TYPE

As mentioned previously, there is demand for identity document capture and verification in a wide range of industries. Most of the companies in this evaluation are focused on several industries, which can be challenging for a young or small firm. Older companies with other solutions have an advantage because they can cross-sell to existing clients. However, all the participating firms are seeing growth. Figure 15 demonstrates the diversity of the types of companies interested in these solutions while also giving a sense of the demand for POCs prior to purchase. A quarter of the firms interested in these solutions are in financial services (FIs, insurance companies, and brokerage/wealth management firms). Types of firms constituting the "other" category include gaming, gambling, property management, recruitment, professional services, technology and computing, money services, manufacturing, utilities, and hospitality.

Figure 15: POC Breakdown by Type

POC Breakdown by Type, 2017
(N = 399 POCs)
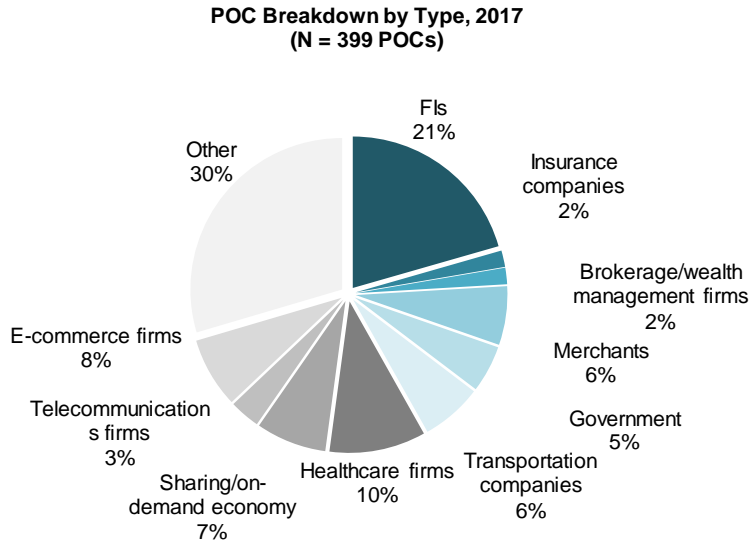
Source: Vendors

Similarly, existing clients of participating vendors come from many different sectors of the economy, further demonstrating the widespread need for reliable identity solutions and the attractiveness of this relatively new type of solution to the market (Figure 16). Twenty-three percent of the current client base is made up of financial services companies. The "other" category comprises the same types of businesses as documented in the previous paragraph.

Figure 16: Client Breakdown by Type

Client Breakdown by Type, 2017
(N = 2,630 client installations)
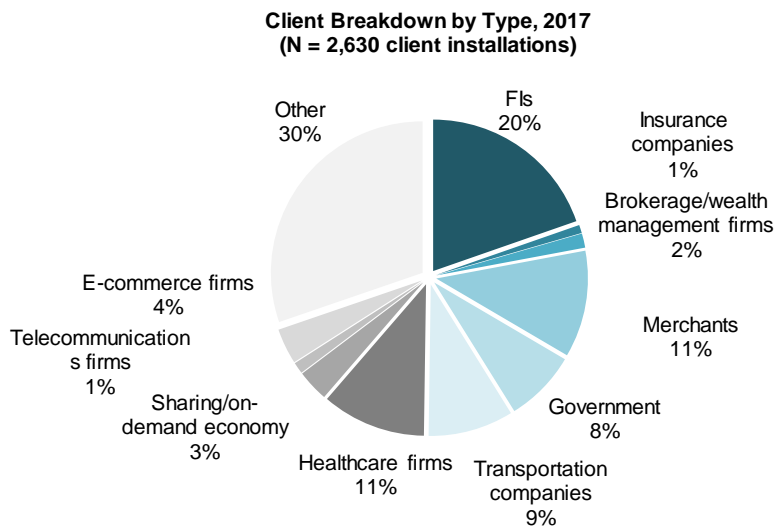
Source: Vendors

CLIENT BREAKDOWN BY REGION

North America and Europe constitute 85% of existing client installations disclosed in this evaluation. These markets have seemed to be the hardest hit with fraud and identity crimes in recent years, but those crimes are not limited to any geographies. Most of the participating vendors are focusing on expanding to other markets, particularly the Asia-Pacific and the Middle East. As sales efforts continue, there will be more market share across the world, especially as global banks implement such solutions throughout their footprint (Figure 17).
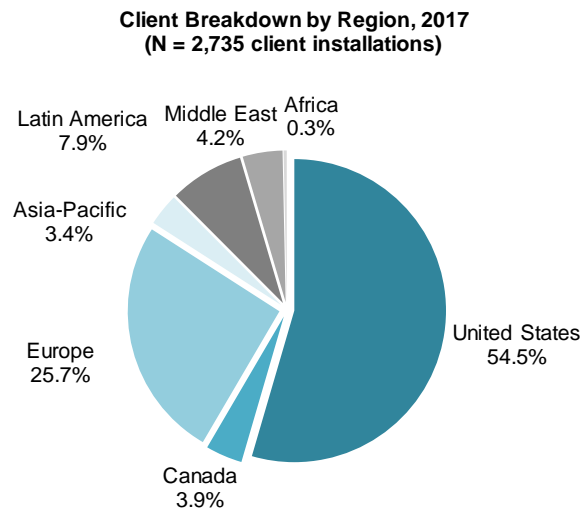
Figure 17: Client Breakdown by Region

**Client Breakdown by Region, 2017
(N = 2,735 client installations)**

- Latin America 7.9%
- Middle East 4.2%
- Africa 0.3%
- Asia-Pacific 3.4%
- Europe 25.7%
- United States 54.5%
- Canada 3.9%

Source: Vendors

ANNUAL CLIENT RETENTION RATE

Clients can change vendors for a variety of reasons; if the product doesn't require a lot of integration with other internal systems, changing providers is easier. With a product that is relatively new to the market, some companies may begin using it, then find it is offered by an existing provider and negotiate better terms for multiple products. A startup may win a deal but later have difficulty with implementation, servicing the client as expected (particularly with large-scale implementations), or providing desired reporting. These factors can be part of the growing pains startups must contend with.

Two of the participating vendors have retained over 95% of their clients over the past three years, and the others have all retained over 80% of their clients over that time period (Figure 18).

Figure 18: Client Retention Rate

Client Retention Rate, Last 3 years
(N = 7 vendors)

More than 95%
29%

81% to 95%
71%
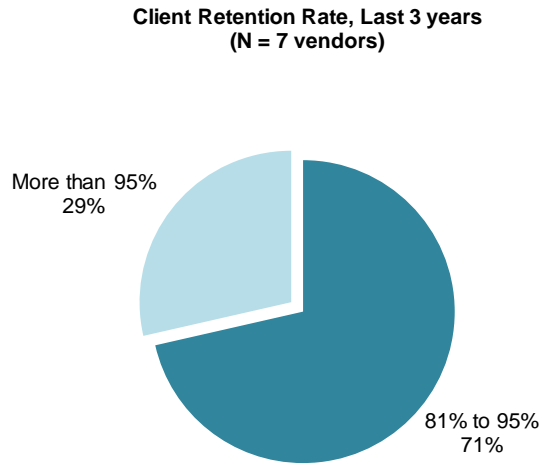
Source: Vendors

AVERAGE NEW CLIENT WINS

One participating vendor has averaged 15 or fewer new clients per year over the past three years; another has averaged between 16 and 30 new clients per year over the past three years, and the other five vendors have averaged over 30 new clients per year (Figure 19). While these numbers may seem low, it is important to consider the fact that four of these companies launched their identity document solutions in 2012 or later (Table C), and several have relatively small sales forces.

Figure 19: Average New Client Wins in Last Three Years

Average New Client Wins, Last 3 Years
(N = 7 vendors)

15 or fewer
14%

16 to 30
14%

More than 30
72%
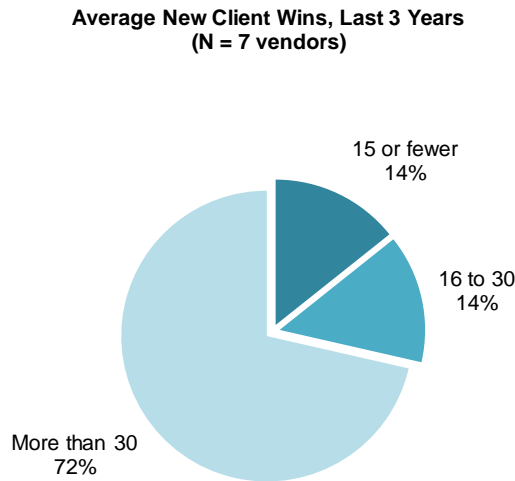
Source : Vendors

IMPLEMENTATION/DEPLOYMENT OPTIONS ANALYSIS

The vast majority of implementations are via private or public cloud (Figure 20). On-premises implementations are problematic because there are frequent changes to this type of solution. While there is growing market demand for these solutions, a number of companies are offering products that are similar in key functionality. As a result, competition is fierce and companies are driven to continually improve the results achieved with their solution. For example, some companies use machine learning models to improve product performance, and models are tweaked based on client feed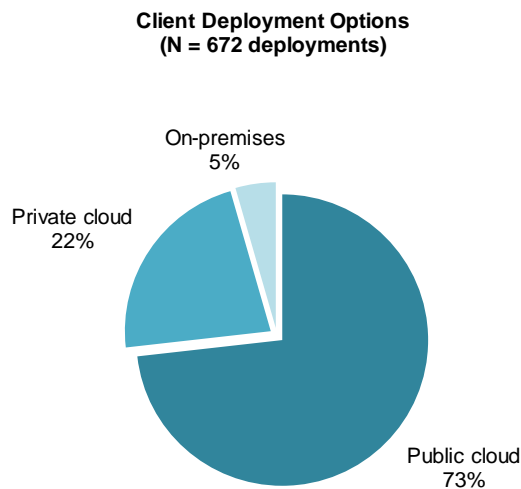back. On-premises implementations preclude those clients from being able to take advantage of product improvements rapidly. For this reason, one vendor that has offered on-premises implementations in the past has decided not to offer them going forward.

Figure 20: Deployment Options

Source: Vendors

PROJECTED IT SPENDING

Aite Group's IT spending estimates for the identity document capture and verification market for global financial services include the following key components:

- Implementation cost

- Tiered transactional volume

- Service and maintenance

The market is competitive with many providers of this service, which lends more negotiating power to buyers. Demand is growing rapidly for a wide variety of reasons. Once demand escalates, providers will have more negotiating power on pricing. Global spending by FIs is expected to grow to US$12.2 billion by the end of 2022 (Figure 21).

Figure 21: Projected Global IT Spending in Identity Document Verification Market

**Projected Total IT Spending on Identity Document Capture and
Verification Solutions, 2017 to e2022
(In US$ billions)**
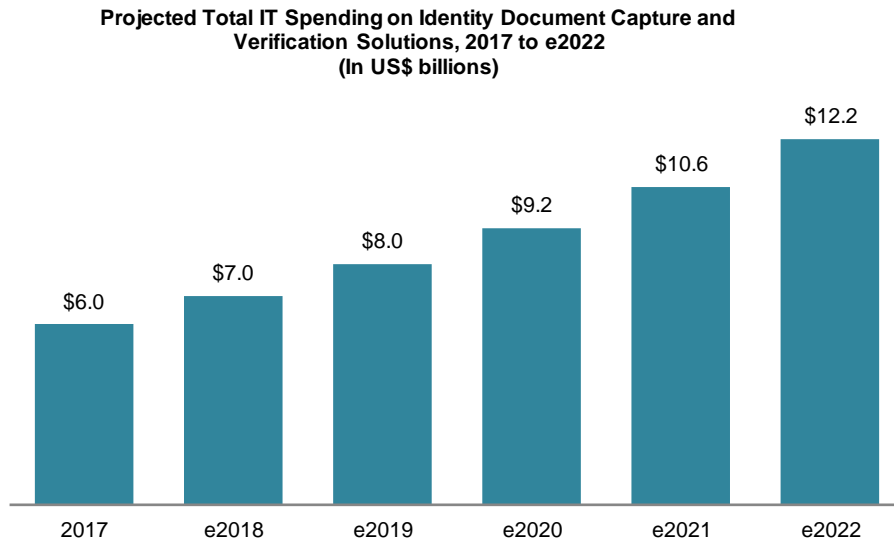
Source: Aite Group

VENDOR COMPARISONS

This section presents comparative data and profiles for the individual vendors that participated in the AIM evaluation. This is by no means an exhaustive list of vendors, and firms looking to undergo a vendor selection process should conduct initial due diligence prior to assembling a list of vendors appropriate for their own unique needs. Table B presents basic vendor information for the participating solutions.

Table B: Basic Vendor Information

Firm	Headquarters	Year founded	Target market	Target geographies
Acuant	Los Angeles	1999	Consumer, financial, security, government, auto, and new/sharing economy	U.S., Europe, the Middle East, South America, and Latin America
IDology	Atlanta	2003	Financial services, alternative financial services, banking, payments, mobile, healthcare, education, retail, government, gaming, and lottery	United States and Canada
Jumio	Palo Alto, California	2010	Financial services (banking, remittance, payments, foreign exchanges), online gaming/gambling, sharing economy, cryptocurrency (exchanges and initial coin offerings), e-commerce, and email platforms	North America, Europe, the Middle East, Africa, and the Asia-Pacific
LexisNexis Risk Solutions	Alpharetta, Georgia	2000	Financial services, retail/e-commerce, healthcare, hospitality, gaming, and government services	North America, Central America, South America, Europe, and Asia
Mitek	San Diego, California	1985	Financial services (including banking, payments, and lending), sharing economy, marketplaces, travel, cryptocurrency exchanges, education, and telecom	U.S., Western Europe, and Latin America
Onfido	London	2012	Financial services (banking, lending, payments, cryptocurrency), gambling, retail, healthcare, marketplaces, government, and travel	North America, South America, Europe, the Middle East, Africa, and the Asia-Pacific

Firm	Headquarters	Year founded	Target market	Target geographies
Paycasso	London	2012	Retail banks; wealth management; brokerage; life, health, and general insurance; payment services and foreign exchange; restricted goods and services; and healthcare	Europe, North America, the Asia-Pacific, Latin America, the Middle East, and Africa

Source: Vendors

Table C presents high-level basic product information. Reviewing the launch dates of products in the table demonstrates that a number of these solutions are very new to the market. The column highlighting each solution's current version also shows that many solutions are being updated rapidly due to tweaks to machine learning models, new fraud trends detected, and other factors to continually improve results.

Table C: Basic Product Information

Firm	Product name	Launch date	Current version	Pricing structure
Acuant	AssureID	2005	No version/ quarterly update	N/A
IDology	ExpectID	2006	9.8	Tiered pricing structure with one-time implementation fee and monthly recurring maintenance/ service fees
Jumio	Netverify	2012	No version/updated every two weeks	Per transaction (based on expected number of online verifications); implementation and maintenance/ service fees
LexisNexis Risk Solutions	TrueID for Windows, True ID for Web Service, TrueID for Mobile SDK, TrueID for Web Portal, TrueID for Risk Defense Platform (RDP)	Windows 1997, Web Service 2015, Mobile 2015, Web Portal 2017, RDP 2016	Windows 6.0.6, Web Service 2.13, Mobile 3.0, Web Portal 2.0, RDP 12.2	Subscription/per transaction

Firm	Product name	Launch date	Current version	Pricing structure
Mitek	MobileVerify	2015	On third generation for platform and fourth generation for software development kit (SDK)	Volume dependent
Onfido	Onfido Identity Verification: 1) Flash (fully automated) 2) Boost (hybrid human support) 3) Sherlock (expert inspection)	2016	1) Flash v3 2) Boost v5 3) Sherlock v2	Volume-based monthly minimum subscription
Paycasso	DocuSure, VeriSure, InstaSure, IdentiSure, PDA, and Paycasso Suite	2012 to 2013	6	Depends on the product; per user/month subscription, transaction fee

Source: Vendors

Table D presents high-level technical information associated with each product. For more detailed information, firms should consult individual vendors. Several of the companies are using machine learning, but they are hesitant to publicly share specific details since the resulting improved accuracy is a competitive advantage.

Table D: Product Technical Information

Vendor/ product	Core architecture	Modeling approaches	Desktop requirements	Out-of-the-box connectors
Acuant/ AssureID	Different architectures for on-premises and cloud options	Human-assisted machine learning	CPU Intel Core 2 Duo, 4 GB RAM, 20 GB disk space or higher	N/A
IDology/ ExpectID	LAMP stack, Java, Apache, MariaDB, PHP, Linux	Waterfall model in a sequential approach with each fundamental activity of a process represented as a separate phase, arranged in linear order	None	Proprietary

Vendor/ product	Core architecture	Modeling approaches	Desktop requirements	Out-of-the-box connectors
Jumio/ Netverify	Loosely coupled microservices with own persistence	N/A	Software-as-a-Service product requiring web browser	Perform Netverify REST API endpoint, Retrieval REST API endpoint, Callback, customer portal, web client
LexisNexis Risk Solutions/ TrueID	Windows PC to Windows Server; web services XML, SOAP, WSDL; iOS, Android	N/A	Windows PC, internet	Gemalto, ARH, Desko, Eseek, Scanshell ID scanners, IBM Filenet
Mitek/ MobileVerify	Cloud microservices with embedded computer vision and machine learning	Domain-driven design	Web browser	REST API
Onfido/ Onfido Identity Verification	Built of many microservices that carry out various tasks; deployed on a multicloud infrastructure	N/A	Application programming interface (API) and SDK for JavaScript, Android, and iOS	REST API
Paycasso/ DocuSure	Virtual private cloud/set of Docker containers deployed on client's infrastructure	N/A	Web browser	N/A

Source: Vendors

Table E presents each vendor's standard client service offerings. For certain vendors, stronger client support will be available with an additional fee. Most of the vendors provide service-level agreements, and they all provide online issue tracking as well as a single point of contact for clients. While there are differences in the types of support and training provided, this table shows the current environment, which can change rapidly, so this information should be validated with the vendors a company is comparing. Mitek and Onfido are the only two companies that offer all the services listed in the table.

Table E: Client Service Support

Vendor/product	Service-level agreement	Online issue tracking	Single point of contact	24/7 support	Global/localized support	Onsite training	Online training
Acuant/AssureID	■	■	■	■	□	■	■
IDology/ExpectID	■	■	■	■	■	□	■
Jumio/Netverify	□	■	■	□	■	■	■
LexisNexis Risk Solutions/TrueID	■	■	■	■	□	■	■
Mitek/MobileVerify	■	■	■	■	■	■	■
Onfido/Onfido Identity Verification	■	■	■	■	■	■	■
Paycasso/DocuSure	■	■	■	□	■	□	■

Source: Vendors

Key: ■= Yes; □= No

Table F presents the vendors' ability to support various deployment options. Three of the vendors support an onsite implementation via scanning equipment for in-person verification of identity documents. This may occur at various places, such as government offices, bank branches, or car rental kiosks. All the vendors offer their solution via a public or private cloud.

Table F: Product Deployment Options

Vendor/product	On-site	Hybrid cloud	Public cloud	Private cloud
Acuant/AssureID	■	■	■	■
IDology/ExpectID	□	□	□	■
Jumio/Netverify	□	□	■	□
LexisNexis Risk Solutions/TrueID	■	□	□	■
Mitek/MobileVerify	□	□	■	■
Onfido/Onfido Identity Verification	□	□	■	□
Paycasso/DocuSure	■	□	■	□

Source: Vendors

Key: ■= Yes; □= No

Table G shows the types of identity documents verified by each vendor. All the vendors verify passports, visas, driver's licenses, and government-issued IDs. Some also verify fiscal cards, voting cards, and other document types. Depending on the countries where their marketing efforts are targeted, vendors typically ensure they prioritize adding any documents used in that geography as they make product enhancements. Clients can also typically define the types of identity documents they are willing to accept during implementation, depending on the countries and types of documents they accept. IDology, LexisNexis Risk Solutions, and Onfido provide coverage for all the document types listed as well as some additional ones that are footnoted.

Table G: Key Functionality—Type of Identity Documents Verified

Vendor/ product	Passports	Visas	Driver's licenses	Government-issued IDs	Fiscal cards	Voting cards	Other
Acuant/ AssureID	■	■	■	■	□	■	Tribal IDs, etc.
IDology/ ExpectID	■	■	■	■	■	■	Resident permits, gun licenses, and tribal and travel documents, etc.
Jumio/ Netverify	■	■	■	■	□	■	□
LexisNexis Risk Solutions/ TrueID	■	■	■	■	■	■	■
Mitek/ MobileVerify	■	■	■	■	□	■	□
Onfido/ Onfido Identity Verification	■	■	■	■	■	■	POA.png, etc.
Paycasso/ DocuSure	■	■	■	■	■	■	□

Source: Vendors

Key: ■= Yes; □= No

Table H documents the most common business needs supported by each vendor's product. All the products are used for compliance and fraud prevention. Some are also used for employment screening and to help ensure physical security. All the vendors cover all the use cases except for physical security and employment screening, so coverage is similar.

Table H: Key Functionality—Business Needs Supported

Vendor/product	AML/KYC/ compliance	Other regulatory compliance	Physical security	New relationship screening	Improving customer experience	Fraud prevention	Employment screening
Acuant/ AssureID	■	■	■	■	■	■	■
IDology/ ExpectID	■	■	■	■	■	■	■
Jumio/Netverify	■	■	□	■	■	■	□
LexisNexis Risk Solutions/TrueID	■	■	■	■	■	■	□
Mitek/ MobileVerify	■	■	■	■	■	■	■
Onfido/Onfido Identity Verification	■	■	■	■	■	■	■
Paycasso/ DocuSure	■	■	□	■	■	■	■

Source: Vendors

Key: ■= Yes; □= No

Table I displays the wide variety of methods used to verify the authenticity of identity documents and which methods are used by each vendor. The variety of tests performed is one method of differentiation among vendors, but vendors are looking for ways to enhance their products continually, so this data may change quickly going forward. Mitek and Onfido both use all the listed methods to verify identity documents.

Table I: Key Functionality—Type of Methods Used to Verify Documents

Vendor/ product	Full document image presence	Black and white images	Blur	Glare	Data formatting	Data consistency	Format	Fonts	Security features	Photos of printed documents	Compromised/ altered images	Third-party databases	Government databases
Acuant/ AssureID	■	□	□	□	■	■	□	■	■	□	■	■	□
IDology/ ExpectID	■	■	■	■	■	■	■	■	■	■	■	■	□

Vendor/ product	Full document image presence	Black and white images	Blur	Glare	Data formatting	Data consistency	Format	Fonts	Security features	Photos of printed documents	Compromised/ altered images	Third-party databases	Government databases
Jumio/ Netverify	■	■	■	■	■	■	■	■	■	■	■	□	□
LexisNexis Risk Solutions/ TrueID	■	□	■	■	■	■	■	■	■	□	■	■*	■*
Mitek/ MobileVerify	■	■	■	■	■	■	■	■	■	■	■	■	■
Onfido/ Onfido Identity Verification	■	■	■	■	■	■	■	■	■	■	■	■	■
Paycasso/ DocuSure	■	■	■	□	■	■	■	■	■	■	■	□	□

Source: Vendors

Key: ■= Yes; □= No
*TrueID is used with ID Verification to check third-party databases and government databases

Table J shows how each vendor shares the results of the identity document's evaluation. Some vendors produce a risk score; each client can determine the cutoff score above which they will accept the verification. With some vendors, the score can drive additional tests to be performed using other products the vendor offers. Some vendors offer a good/bad result only (i.e., red light/green light) but may also offer a third category for suspicious documents (i.e., yellow light). A yellow light may lead to additional steps to be taken to decide whether to accept the person's document (e.g., requiring a secondary document such as a utility bill). All of the vendors share the reasons behind a failed evaluation, and two vendors indicate when a manual verification was completed on a document. Vendors cover the entire spectrum from fully automated verifications to a mix of manual and automated steps to mostly automated with a manual exceptions process. Jumio, which used to be known for manual verifications, has implemented machine learning techniques and is no longer completely reliant on manual processes that can be difficult to scale. Both Mitek and Acuant offer results in all the formats listed.

Table J: Key Functionality—Type of Output Post-Document Verification

Vendor/ product	Risk score	Green/red light	Green/ red/ yellow light	Document data points	Why document failed	Indication of manual verification completed
Acuant/ AssureID	■	■	■	■	■	■
IDology/ ExpectID	■	■	■	■	■	□
Jumio/ Netverify	□	■	□	■	■	■
LexisNexis Risk Solutions/ TrueID	□	■	■	■	■	□
Mitek/ MobileVerify	■	■	■	■	■	■
Onfido/Onfido Identity Verification	■	■	■	■	■	□
Paycasso/ DocuSure	■	□	□	■	■	□

Source: Vendors

Key: ■= Yes; □= No

Table K shows the mixture of processes companies are using to verify identity documents. All the vendors are using machine learning or artificial intelligence in their processes to some degree; some have been using machine learning models for years, while others have added the capability to their arsenal of tools more recently. High-performing machine learning models can rapidly improve pass rates and reduce false positives based on trends noted in the market and customer feedback loops. Most of the vendors use automated verification with human backup, as needed. Jumio uses a blend of automation and human verification as its primary model, while LexisNexis Risk Solutions only uses automation without human intervention in its process. Acuant, IDology, Onfido, and Paycasso offer all of the verification methods listed, so clients can select any option desired.

Table K: Key Functionality—Type of Configurations Supported

Vendor/ product	Automated verification	Manual verification by staff	Blend of automated and manual verification	Various analytical techniques	Artificial intelligence or machine learning
Acuant/ AssureID	■	■	■	■	■

Vendor/product	Automated verification	Manual verification by staff	Blend of automated and manual verification	Various analytical techniques	Artificial intelligence or machine learning
IDology/ ExpectID	■	■	■	■	■
Jumio/ Netverify	☐	■	■	■	■
LexisNexis Risk Solutions/ TrueID	■	☐	☐	■	■
Mitek/ MobileVerify	■	■	■	☐	■
Onfido/Onfido Identity Verification	■	■	■	■	■
Paycasso/ DocuSure	■	■	■	■	■

Source: Vendors
Key: ■= Yes; ☐= No

Table L shows which vendors offer various key performance indicators (KPIs) to their clients. It also documents various types of reporting offered by the vendors. Reporting is one area in which Jumio and Paycasso have an opportunity to improve, since their current reporting is somewhat rudimentary. Among all the participants, Mitek and Onfido have the most reporting capabilities, followed closely by Acuant and IDology.

Depending on the industry, reporting needs may vary. In financial services, FIs often desire a variety of out-of-the-box reports as well as the ability to create custom reports as needed.

Table L: Key Functionality—Type of KPIs/Reporting Available on Online Dashboard

Vendor/ Product	Volume processed	Conversion/pass rate	Unprocessed rate	Flagged/suspicious rate	Turnaround time	Uptime	Daily, weekly, monthly report summaries	Year-to-date reports	Year-to-date report comparisons
Acuant/ AssureID	■	■	■	■	■	■	■	■	☐
IDology/ ExpectID	■	■	■	■	■	☐	■	■	☐

Vendor/ Product	Volume processed	Conversion/pass rate	Unprocessed rate	Flagged/suspicious rate	Turnaround time	Uptime	Daily, weekly, monthly report summaries	Year-to-date reports	Year-to-date report comparisons
Jumio/ Netverify	■	□	□	□	□	□	□	□	□
LexisNexis Risk Solutions/ TrueID	■	■	■	■	□	□	■	■	□
Mitek/ MobileVerify	■	■	■	■	■	■	■	■	■
Onfido/ Onfido Identity Verification	■	■	■	■	■	■	■	■	■
Paycasso/ DocuSure	■	□	□	■	□	□	■	□	□

Source: Vendors

Key: ■= Yes; □= No

Table M displays information related to key security issues; the positive news is that in most categories, all the companies are performing desired functions such as screening employees and contractors, performing in-house audits and penetration testing, providing employees with security training, and documenting their business continuity/disaster recovery plan. The two areas of differentiation are whether the company complies with industry standards for single sign-on to systems and whether it has a 24/7 security operations center (SOC) or computer emergency response team (CERT). LexisNexis Risk Solutions, IDology, and Onfido are the only companies offering integrated single sign-on; four of the participating vendors provide 24/7 coverage.

**Table M: Key Functionality—Security Measures**

Vendor/product	In-house security audits/penetration tests	In-house security audits/penetration tests by independent parties	24/7 SOC/CERT	Integration with industry standard single sign-on systems	All employees and contractors vetted	Security training for employees and all third parties	Business continuity/disaster recovery plan	Regular testing of BCP/DRP	Incident management process
Acuant/AssureID	■	■	■	□	■	■	■	■	■
IDology/ExpectID	■	■	■	■	■	■	■	■	■
Jumio/Netverify	■	■	□	□	■	■	■	■	■
LexisNexis Risk Solutions/TrueID	■	■	■	■	■	■	■	■	■
Mitek/MobileVerify	■	■	■	□	■	■	■	■	■
Onfido/Onfido Identity Verification	■	■	□	■	■	■	■	■	■
Paycasso/DocuSure	■	■	□	□	■	■	■	■	■

Source: Vendors

Key: ■= Yes; □= No

Figure 22 compares the total number of clients across the participating vendors. For more detailed analysis of vendor clients, please refer to the Vendor Profiles section. Three of the vendors did not disclose how many clients they currently have; for two of them, this is because they are publicly traded companies. Acuant has the most clients and is offered to FIs through several core processor partners.

Figure 22: Total Number of Clients

Total Number of Clients, 2017
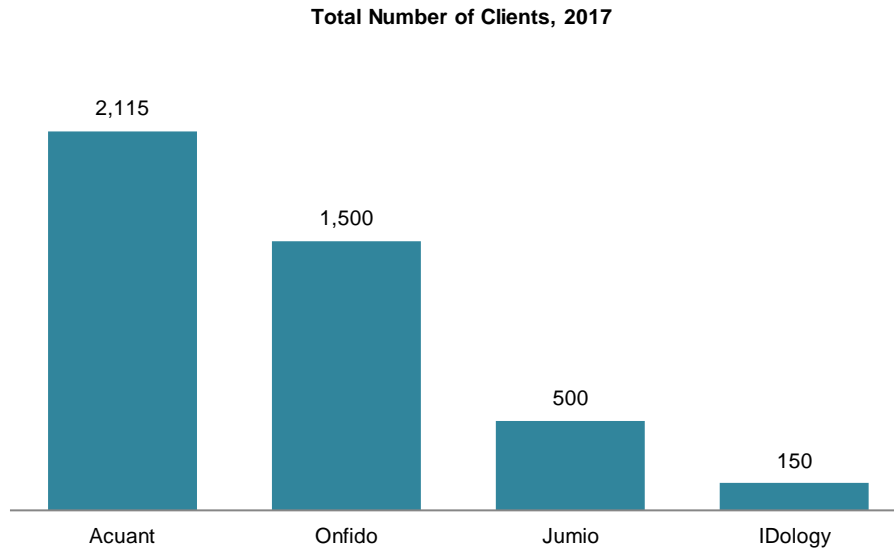
Source: Vendors
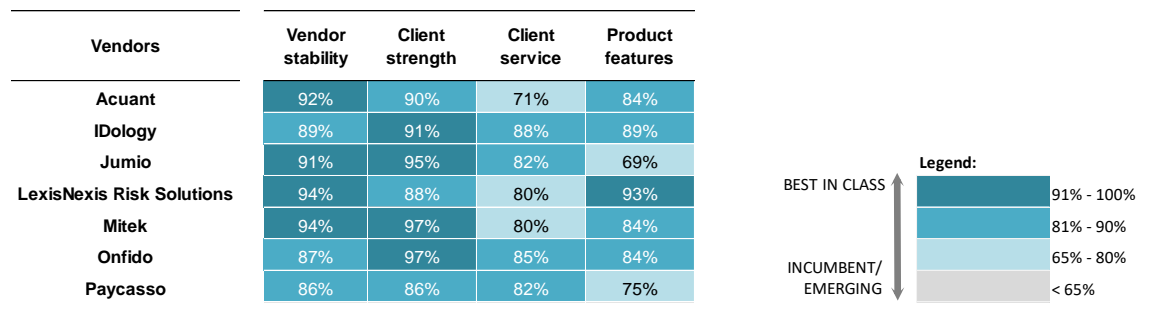*Note: LexisNexis Risk Solutions, Mitek, and Paycasso did not disclose their client numbers*

AIM EVALUATION

This section will break down the individual AIM components, drawing out the vendors that are strong in each area and how they are differentiated in the market.

THE AIM COMPONENTS ANALYSIS

Figure 23 overviews how each vendor scored in the various areas of importance. Each vendor is rated, in part, based on its own data provided when responding to the RFI distributed by Aite Group as well as product demos and follow-up discussions as part of the AIM process. Ratings are also driven by the reference customers of the examined vendors to support a multidimensional rating.

Figure 23: AIM Components Analysis by Heat Map

Vendors	Vendor stability	Client strength	Client service	Product features
Acuant	92%	90%	71%	84%
IDology	89%	91%	88%	89%
Jumio	91%	95%	82%	69%
LexisNexis Risk Solutions	94%	88%	80%	93%
Mitek	94%	97%	80%	84%
Onfido	87%	97%	85%	84%
Paycasso	86%	86%	82%	75%

Legend:
- BEST IN CLASS
- 91% - 100%
- 81% - 90%
- 65% - 80%
- INCUMBENT/ EMERGING
- < 65%

Source: Vendors, Aite Group

VENDOR STABILITY

Vendor stability is extremely important to FIs because they hesitate to implement a vendor's solution if they fear the vendor won't be around to support that product in the long term. Leaders in this category score well because they are typically diversified and have a large number of customers over which to spread risk. LexisNexis Risk Solutions and Mitek score highest in vendor stability, followed closely by Acuant and Jumio. All these firms can be considered best in class for vendor stability.

CLIENT STRENGTH

Client strength is also an important component to ensure that the loss of a major client doesn't cause financial stress to the provider (as one example) or that issues in one geography don't put the company at risk. The companies that score highest in this category tend to have customers that are very satisfied with the company's reputation in the market and with the performance of the product. Mitek, Onfido, Jumio, and IDology all are rated best in class with regard to client strength.

CLIENT SERVICE

Client service is one area in which many vendors have room for improvement. Clients want to ensure that when they need support, they will receive it quickly and without having to jump

through too many hoops. They also want good communication from their vendors, with adequate advance notice of product changes that could affect them. This is the only category in which none of the vendors scores best in class; all the vendors have room to improve. IDology scores the highest of all the participating vendors in this category with a score of 89% followed by Onfido with a score of 85%.

PRODUCT FEATURES

Aite Group asked each company's reference clients to rank their vendors across indicators such as features and functionality, user interface and user experience, ease of implementation and integration with in-house or third-party systems, ease of upgrades, and support for customization. Every vendor is unique, and clients tend to have high expectations and harsh judgments when their expectations aren't met. With a relatively new product in the market, misunderstandings related to pass rates or false positives can lead to dissatisfaction. Clients most commonly say that improved communication from their vendor could raise satisfaction levels. In terms of current product features, LexisNexis Risk Solutions scores best in class. IDology ranks second highest, followed by Acuant, Mitek, and Onfido.

THE AIM RECOGNITION

To recap, the final results of the AIM recognition are driven by three major factors:

- Vendor-provided information based on Aite Group's detailed AIM RFI document

- Feedback from participating vendors' client reference and/or feedback sourced independently by Aite Group

- Analysis based on market knowledge and product demos provided by participating vendors

Figure 24 represents the final AIM evaluation, highlighting the leading vendors in the market.

Figure 24: Identity Document Verification AIM
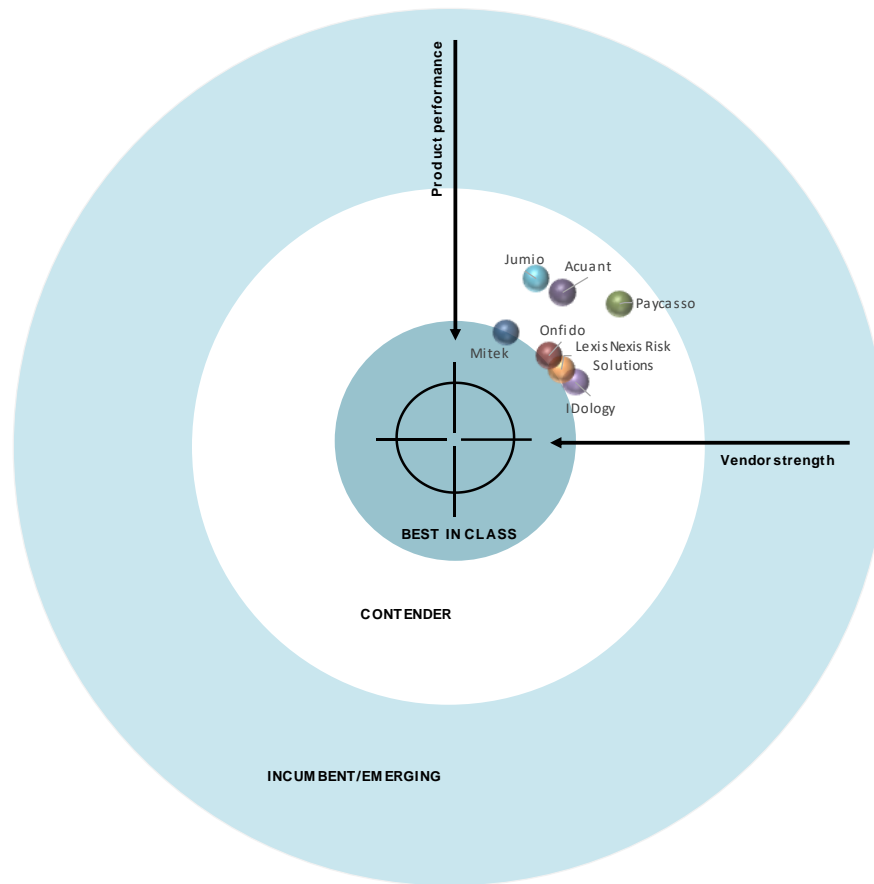
Source: Vendors, Aite Group

BEST-IN-CLASS VENDOR

None of the vendors that participated in this evaluation made it to the best-in-class category.

LEADING CONTENDERS: MITEK, ONFIDO, LEXISNEXIS RISK SOLUTIONS, AND IDOLOGY

- **Mitek:** Mitek's product is simple to use and dependable, and clients appreciate the relationship they have with the company.

- **Onfido:** Onfido continues to aggressively improve its fraud detection and pass rates through machine learning models, which its engineers improve regularly.

- **LexisNexis Risk Solutions:** LexisNexis Risk Solutions offers a wide array of products that complement its Identity document product, enabling all aspects of an authentication strategy to be supplied by one vendor.

  IDology: IDology also offers a broad array of products, enabling clients to customize their enterprise authentication process with one vendor.

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VENDOR PROFILES

This section provides profiles of the vendors that have participated in this AIM evaluation.

ACUANT

Acuant is an identity verification platform that instantly reduces fraud while providing seamless customer experiences. Solutions include intelligent data capture and auto-fill software, identity document authentication, chip and e-passport authentication with public key infrastructure, facial recognition software, and expert manual review of documents. Human-assisted machine learning powers the ID library, processing identities from more than 196 countries monthly, and has completed more than 3 billion transactions worldwide. Acuant mitigates risk and meets AML regulatory requirements while protecting personally identifiable information.

AITE GROUP'S TAKE

Acuant has strong partners that successfully offer its products to many other companies; this go-to-market strategy has worked well for the company and has enabled tremendous expansion in the market.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: Los Angeles

- **Launched in:** 1999

- **Number of employees**: 65 to 80

- **Ownership**: Privately held

- **Main issues the vendor is trying to address**: Acuant strives to seamlessly and securely provide trusted transactions anywhere proof of identity is required; this includes proof of identity, age, etc., to reduce fraud and increase revenue.

- **Market positioning:** Acuant serves to instantly reduce fraud for identity document and biometric-based transactions, minimizing risk and providing secure workflows for trusted transactions that are user-friendly**.**

- **Key products and services**:

  - AssureID offers both cloud and on-premises versions of identity document verification products with human-assisted machine learning.

  - AcuFill enables captured data to be automatically filled in on applications and other documents, ending the need for photocopying, manual entry, and paperwork.

- **Target customer base**: Includes consumers, financial services, security, government, automotive, and new/sharing economy

- **Number of clients**: More than 2,000

- **Current revenue sources**: Wide variety of clients, including financial services, insurance, merchants, government, automotive, e-commerce, and healthcare

- **Implementation options**: Both on-premises and cloud versions

- **Pricing structure**: No data shared

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- Acuant claims to have the largest document template library.

- The majority of Acuant's clients view all the extracted data from the identity document and stop at that point, but in the mobile channel, Acuant offers selfie comparisons to the identity document photo.

- All data extracted from the identity document is aggregated to assign a final score, and the client can choose the cut-off to pass or fail verification.

- Verifications to third-party databases are also offered, if desired.

- The verification process is completely automated; however, if the document fails, a manual review of the face only can be performed, if the client desires.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Mobile AssureID image capture improvements

- Image tampering detection

- Ozone acquisition

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- Continued enhancements to AssureID workflow

- Continued enhancements to AssureID library

- Expansion of identity platform

IDOLOGY

IDology provides a streamlined end-to-end authentication solution that allows companies to verify identities, deter fraud, and provide a seamless customer experience. IDology provides a wide range of products, and companies can select the ones they desire to tailor their enterprise authentication strategies and meet their specific needs.

IDology offers a wide range of authentication capabilities that enable a company to define the authentication process it desires, including stepped-up measures when needed. FI executives often state they prefer dealing with fewer vendors (due to required vendor management processes), so a company that offers a wide range of capabilities has an advantage over a one-pony provider. Being able to offer a range of products and devise a comprehensive authentication strategy is a strong competitive advantage.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: Atlanta

- **Launched in:** 2004

- **Number of employees**: More than 70

- **Ownership**: Private company, with investors

- **Main issues the vendor is trying to address**: IDology offers real-time and on-demand identity verification and fraud prevention solutions for organizations operating in both customer-not-present and customer-present environments (some banks are using this product in their branches).

- **Market positioning:** No other service provider can offer the range of identity verification services and fraud prevention solutions that IDology provides to its clients. IDology serves as a one-stop control center that allows clients to configure their verification rules and enable different settings without requiring the use of IT resources or contacting IDology's customer service team. The vendor also acts as a platform for collaboration through its Network Fraud Consortium, which correlates fraud indicators and attributes reported by IDology clients to benefit all companies within the network.

- **Key products and services**: ExpectID (scan products are named ExpectID Scan Verify, ExpectID Scan Onboard, ExpectID Scan Verify with Forensics, and ExpectID Barcode Scan)

- **Target customer base**: IDology is the to-go provider of identity verification and fraud prevention across multiple industries, including financial services, alternative financial services, banking, payments, mobile, healthcare, education, retail, and government.

- **Number of clients**: More than 150 for all ExpectID Scan products listed above

- **Current revenue sources**: Multiple authentication, compliance, and fraud prevention solutions sold across a wide range of business sectors, predominantly in the U.S.

- **Implementation options**: Private cloud

- **Pricing structure**: Tiered structure

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- Consumer is provided with clear instructions on what to do and how to do it.

- If issues arise, they are detected so corrective action can be taken during the process flow (e.g., "take a better photo" if the image is too blurry to use).

- The process controls many items, such as turning on the flash on the camera to capture a better photo of the barcode on back of a driver's license.

- The liveness test is optional; a consumer can be asked to blink, if client wants it performed.

- All clients have to do is provide a link to the consumer, then they get all the data from IDology.

- Due to all the other products offered by IDology, customers can choose to customize the authentication processes desired.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Release of Scan with Forensics to perform deeper analysis of document template to check for modification

- Release of Scan Camera Utility SDK, which makes it easier for clients to capture images

- Release of ExpectID Barcode Scan, which can be used to reduce the friction involved with filling out an electronic application

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- Not disclosed

JUMIO

Jumio develops and delivers digital identity verification solutions that enable a company to verify an ID (e.g., driver's license, passport), identity, or document. Netverify consists of three pillars. With Jumio's ID Verification, companies verify whether an ID is authentic. Identity Verification not only verifies the authenticity of an ID but also determines whether the person behind a transactions is "present" and is who they say they are by comparing a selfie to the picture on the ID. Jumio's Document Verification extracts data from supporting documents, such as utility and bank statements, to provide an additional layer of identity proofing. Jumio offers these capabilities via mobile SDK, desktop webcams, or API implementations.

AITE GROUP'S TAKE

Jumio has a strong solution but has historically been heavily dependent on manual verification. The company has made great progress in automating more of the verification process and reducing the average verification time requirement. Additional progress will be needed to ensure necessary scale can be achieved in a cost-effective manner. Continuing to provide strong results and customer satisfaction while recreating and automating basic product functionality will be key to success as well.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: Palo Alto, California

- **Launched in:** 2010

- **Number of employees**: 2,000

- **Ownership**: Privately held company

- **Main issues the vendor is trying to address**: Dramatically improve online conversion rates (through streamlined user experience) and industry-leading fraud detection while helping companies meet compliance (KYC, AML, and General Data Protection Regulation) mandates

- **Market positioning:** Positioning the company as the global leader in trusted identity as a service—the one to trust when identity matters

- **Key products and services**: Netverify is the primary product that can be implemented in various ways. Jumio's Netverify consists of three pillars:

  - **ID Verification:** Verify customer authenticity in near real time.

  - **Identity Verification:** Know the true identity of the person by comparing a selfie to the image on the identity document. Embedded liveness detection ensures that the person is physically present and not using a picture.

  - **Document Verification:** Capture and extract customer information (such as an address) from a utility bill or credit card statement to provide an added layer of identity assurance.

- **Target customer base**: Financial services (banking, remittance, payments, foreign exchanges), online gaming/gambling, sharing economy, cryptocurrency (exchanges and initial coin offerings), e-commerce, and email platforms

- **Number of clients**: Over 500

- **Current revenue sources**: Diverse client base primarily located in North America, Europe, and the Asia-Pacific

- **Implementation options**: Offered via mobile SDK (iOS and Android), desktop, and API implementations

- **Pricing structure**: The vendor charges on a per-transaction basis (based on expected number of online verifications).

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- The product is offered via mobile, desktop, and API channels.

- The first step in the process is to select the country the ID was issued by, then various IDs issued in that country are listed to choose from. (Countries in the list can be shortened to include only those where a specific client operates.)

- Once the automated part of the process is completed, detected manipulations are shared with the human who is doing the verification. The human verifier provides a pass or fail to the client. Approximately 90% of the process is automated, with the final 10% using humans to improve verification accuracy and inform the machine learning models.

- Mobile is easier to use than online, although the webcam can be used to take a photo to compare to the picture on the ID.

- Investments in machine learning and deep learning are helping the company move to fully automated verifications in the future.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Redesign of the platform toward microservices as well as scalability and migration to the cloud

- Major identity verification upgrade (liveness detection plus automated comparison)

- Document verification enhancement (support of all Latin character documents)

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- Expand usage of artificial intelligence and machine learning for automation purposes

- Reverification to provide a use case desired by business customers that want to routinely reverify users to ensure they are the same people as those who initially signed up for services

- Device cross-over to assist in adding use cases

LEXISNEXIS RISK SOLUTIONS

LexisNexis Risk Solutions offers a broad array of solutions to companies and agencies in many sectors (e.g., financial services, corporations and nonprofits, insurance, government, and healthcare) that use data and analytics to assist with effective risk management.

AITE GROUP'S TAKE

LexisNexis Risk Solutions is well-established in the identity space, so verifying identity documents is a logical addition to the vendor's repertoire. The company's client base is diverse, and many current clients represent an opportunity to cross-sell this product. Financial services firms often prefer to obtain new services from an existing provider to minimize vendor management requirements, which will bode well for LexisNexis Risk Solutions in this space.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: Alpharetta, Georgia

- **Launched in:** 2000

- **Number of employees**: 4,888

- **Ownership**: Parent organization is RELX Group, which is a FTSE 100 company and trades on NYSE as RELX

- **Main issues the vendor is trying to address**: LexisNexis Risk Solutions offers a comprehensive portfolio of fraud and identity management solutions for in-person, remote, and mobile identity document capture and authentication, identity verification, risk scoring, and identity authentication. These solutions are deployed to help (1) streamline and reduce errors in data collection, (2) prevent new account opening and account takeover fraud attempts, and (3) deter other fraud, including synthetic identity fraud.

- **Market positioning:** The vendor offers fully automated ID document authentication for all customer contact channels (in-person and remote) that can seamlessly integrate into a broader set of identity verification and authentication services to determine not only the risk of the identity document but also the risk of the identity. It offers all solutions globally.

- **Key products and services**:

    - TrueID for Windows

    - TrueID Web Service

    - TrueID Mobile SDK

    - TrueID Web Portal

    - TrueID RDP

- **Target customer base**: Financial services, retail/e-commerce, communications, healthcare, hospitality, and gaming and government services

- **Number of clients**: Not publicly available

- **Current revenue sources**: Global client base with many different risk management solutions deployed

- **Implementation options**: Windows EZ install or SDK for integrators, web service access via web portal for desktop or mobile users, mobile apps via Apple App Store and Google Play, integrator web service guides SOAP/REST

- **Pricing structure**: Subscription/per transaction

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- The ability to use the product via online, mobile, or scanner (in physical location) provides flexibility in deployment.

- The product works in self-service environments (e.g., mobile onboarding, car rental kiosk).

- The scanner enables infrared and ultraviolet light sources to be used (not available on phones or computers).

- The vendor is partnering with a scanner manufacturer to offer an all-in-one scanner that can be used without any other equipment required.

- The client has the ability to integrate with other LexisNexis Risk Solutions products and capabilities, as desired.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- **TrueID Portrait Match:** Integrating facial biometrics to compare a user's selfie to the photograph on the user's ID to further bind the ID to the person submitting it

- **iFrame:** Capabilities to embed TrueID on a customer's website with full web services functionality

- **TrueID Web Portal:** Offering for customers desiring a TrueID deployment without coding or hardware

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- New plug-and-play scanners for simplified deployments requiring limited footprint and minimal support

- Expanded use of biometrics with the document authentication offerings

- Improved call center delivery options for document authentication

MITEK

Mitek is best known for its Mobile Deposit product, which enables the retail customers of thousands of FIs to deposit checks by submitting images of the front and back of checks via smartphones. The vast majority of large banks in the U.S. and many small FIs use this product.

AITE GROUP'S TAKE

The technology development for Mitek to offer Mobile Verify is a logical progression from its Mobile Deposit product. Taking pictures of identity documents on mobile devices is very similar to taking pictures of checks to deposit, and millions of consumers already know how. With all the FIs already using Mobile Deposit, this seems like a cross-sell opportunity that Mitek can take advantage of easily.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: San Diego, California

- **Launched in:** 1985

- **Number of employees**: 305

- **Ownership**: Publicly traded; Nasdaq: MITK

- **Main issues the vendor is trying to address**: Verifying the identity of consumers in the digital channel for onboarding, transactions, and interactions

- **Market positioning:** Mitek helps financial institutions and companies in other industries create a seamless digital customer journey while complying with KYC requirements and stringent regulations, such as AML laws or the provision of fair, transparent financial services (Bank Secrecy Act in the U.S. as well as the fourth and fifth Anti-Money Laundering Directives and the second Payment Services Directive [PSD2] in Europe). Mitek's identity verification uses the same ID document verification accepted in the physical world in the digital world. It verifies the authenticity of ID documents and pairs it with additional factors of identity verification, including biometric face comparison and external data checks for fast and accurate digital identity verification.

- **Key products and services**: Mobile Verify

- **Target customer base**: Financial services, including banking, payments, and lending, as well as the sharing economy, marketplaces, travel, cryptocurrency exchanges, and education and telecommunications firms in the U.S., Latin America, and Western Europe

- **Number of clients**: Not disclosed

- **Current revenue sources**: Mitek has provided guidance to public investors that it will reach over US$62 million for its fiscal year 2018. Mobile Verify and Mobile Deposit represent the great majority of the revenue. Mobile Deposit is broadly used by many FIs that offer mobile remote deposit capture to retail customers. The stability of this product enables Mitek to continue to invest in new products and services and expand Mobile Verify.

- **Implementation options**: Scanning equipment for in-person use; SDK integrated, then API calls

- **Pricing structure**: Not disclosed

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- Mobile Verify works similarly to taking a picture of a check for deposit; many consumers are already familiar with that process since they use mobile remote deposit capture.

- Prompts help customers know exactly what to do as they take pictures of the front and back of the ID, take a picture of themselves, etc.

- The consumer doesn't have to push any buttons for the best photo of the ID to be captured. Both passive and active liveness checks are performed by the technology to ensure that the selfie used for face comparison is in fact of a live person and not a photo of a photo.

- The process is easy for the end user, and is available across Android and iOS platforms as well as mobile web.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Next-generation cloud platform

- Automated facial comparison

- Expanded identity document coverage

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- Additional authentication methods

- Expanded countries supported

- Additional data sources

ONFIDO

One of the newer firms offering identity document verification, Onfido is a software company that verifies a person's identity by comparing his or her identity document with facial biometrics using machine learning models. All clients use Onfido's product via a public cloud, which makes providing ongoing updates simple and efficient.

AITE GROUP'S TAKE

Onfido's product is indeed simple and quick to use. Onfido focuses on a wide range of industries, including financial services, and has established a second headquarters in San Francisco to enable faster growth in the U.S. market. There is a huge addressable market, enabling Onfido tremendous future growth opportunity.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: London

- **Launched in:** 2012

- **Number of employees**: 200

- **Ownership**: Privately held

- **Main issues the vendor is trying to address**: Onfido helps businesses verify that their users are who they claim to be in a world where businesses no longer meet their users face to face. It does this by comparing a person's government-issued ID with his or her facial biometrics.

- **Market positioning:** The key verticals Onfido serves are financial services, gaming, marketplaces and communities, retail, and healthcare. As online interactions are becoming mainstream in other verticals, the vendor is ready to support additional use cases as they emerge.

- **Key products and services**: Onfido Identity Verification

- **Target customer base**: Onfido serves its key verticals in the U.K., the U.S., and India. It is expanding to other geographies in 2018 and beyond through direct points of presence (in the Asia-Pacific) and partnerships.

- **Number of clients**: 1,500

- **Current revenue sources**: Revenue is growing rapidly due to swift expansion in the U.S., the U.K., Europe, and the Asia-Pacific.

- **Implementation options**: Its product can be set up with different integration implementations: API, SDKs, and web forms. Customers can also configure various aspects of the implementation to align with their specific business processes. Onfido is also the only identity verification provider that is fully integrated on the Salesforce Financial Cloud platform.

- **Pricing structure**: Per-transaction pricing with tiered pricing structure

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- The product is offered via both online and mobile applications, including a cross-device option that leverages the mobile device camera when originally on a PC website.

- The user selects the type of document he or she has; the client can customize the list of acceptable documents.

- Both the document and the user's face are captured; the consumer has the option to take a video, if desired.

- Instructions are given to make the user experience easy. For example, a consumer may be instructed to move away from direct light if the image quality is poor and take the picture again. Real-time alerts inform the user if the image of the document is blurry or contains a glare.

- The process is automated unless the machine cannot complete it; then it is escalated to a human. Each human-processed task is then labeled and annotated for closed-loop machine learning improvements.

- The dashboard allows clients to see high-level results as well as access reports. An analyst can download a PDF of a specific report.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Expansion to China, Japan, and other key Asia-Pacific regions, and the addition of local processing capabilities in the region

- Liveness test to prevent spoofing or impersonation attacks (e.g., when a fraudster holds up a photo of another person to the camera)

- Facial verification using specialized machine learning on photos in government IDs

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- **Identity documents:** Further automating its document fraud detection techniques and applying them to its ever-growing global library of supported documents (includes improving data and visual fraud detection techniques)

- **Facial verification:** Continual process optimization (i.e., processing speed) and ensuring global applicability and accessibility

- **Risk engine:** Flexible, customizable quantitative system to calculate risk from a broad set of input signals, including document, biometric, database, and device profiles

PAYCASSO

Paycasso is a software company that verifies the identities of consumers engaged in online, mobile, and in-person transactions using identity documents and other information. The company offers a suite of products via public cloud or on premises.

AITE GROUP'S TAKE

Paycasso has been offering identity document verification globally for six years, and clients use the product to help verify identities, enabling them to combat fraud and achieve regulatory compliance. The product is offered through direct sales and partners.

BASIC FIRM AND PRODUCT INFORMATION

- **Headquarters**: London

- **Launched in:** 2012

- **Number of employees**: 45

- **Ownership**: Privately held company

- **Main issues the vendor is trying to address**: Every organization in today's world is challenged to verify the identity of customers in an efficient, reliable, and consistent way; manage the risks associated with money laundering and broader financial crime; and meet their regulatory obligations. Paycasso's unique, patented suite of products provides customers with technology solutions that address these key challenges.

- **Market positioning:** Increase customer registrations while decreasing operational costs as well as the risk of impersonations and financial crimes, and achieve regulatory compliance

- **Key products and services**:

    - DocuSure examines government-issued IDs only.

    - VeriSure ties the individual to the ID presented; this is the flagship onboarding product.

    - InstaSure, a login product, ties back to the onboarding transaction. Face is turned into a hash value and encrypted for later use (comparing hash value to hash value).

    - IdentiSure looks for duplicates across the clients' customer bases using the face/picture.

    - Paycasso Suite is a bundle of products to provide a comprehensive solution.

- **Target customer base**: Financial services, payment services and foreign exchange, restricted goods and services, and healthcare companies in the Asia-Pacific, Latin America, Africa, and the Middle East

- **Number of clients**: Not disclosed

- **Current revenue sources**: Current clients primarily located in North America, Europe, the Asia-Pacific, Africa, and the Middle East

- **Implementation options**: The product is offered via online and mobile applications, and is offered via public cloud or on premises.

- **Pricing structure**: Tiered pricing structure with per-transaction pricing and monthly subscription fee

KEY FEATURES AND FUNCTIONALITY BASED ON PRODUCT DEMO

- The variety of products offered allows prospects to choose how secure they want the process to be.

- The short video clip that is taken allows liveness detection as well as a picture for comparison to the identity document.

- There are no manual processes; everything is fully automated.

- The firm uses response codes to communicate any discrepancies noted.

- Paycasso doesn't interact with the client; if there is a problem with data capture quality, the next step is up to the client.

TOP THREE STRATEGIC PRODUCT INITIATIVES OVER THE LAST 12 TO 18 MONTHS

- Machine learning technology

- Continuous improvement of image quality and optical character recognition

- Region of interest design feature and interrogation measures

TOP THREE STRATEGIC PRODUCT INITIATIVES IN THE NEXT 12 TO 18 MONTHS

- Continue regulatory certification/approval of product suite for PSD2 and eIDAS (electronic Identification, Authentification, and trust Services).

- Improve reporting capabilities

- Extend global coverage of product capabilities

NEW MARKET ENTRANT

Yoti is a technology startup with a huge mission. The company is headquartered in London and is working to create a global identity platform that makes it easier and safer for consumers to share verified personal information. Consumers download a free app to start creating a profile called a Yoti, or "Your Own Trusted Identity." They then take a selfie and add an ID document. Yoti matches the selfie to the document and then encrypts all the personal data. The encryption keys needed to decrypt and share the personal information are then stored on the user's device. Yoti does not have access to any user data once the account has been verified.

Yoti also asks people creating a Yoti to record a short video of themselves saying three random words to ensure they are real people. Yoti uses both AI and a trained security team to check the integrity of documents and ensure that they match the selfie of the user. After the identity has been verified, images of the documents are deleted.

Yoti is working with various companies from a wide range of industries that accept Yoti as a proof of identity. The vision is that Yoti can be used in many different ways (e.g., to prove your identity to businesses and governments, to prove your age at nightclubs, or to swap verified details with someone you meet online).

Over 2 million people have installed the app so far, and Yoti is already starting to work with governments, multinational brands, and a host of other businesses around the world.

While this vision sounds a bit like trying to solve world hunger, it is easy to see how it can appeal to consumers. Consumers want to retake control of their personal information, and Yoti allows them to do so. The toughest part of the puzzle will be signing up enough companies that will accept Yotis to entice consumers to create them.

CONCLUSION

After recent years of upwardly spiraling identity crimes, increasing regulatory compliance requirements, consumers' love affair with their mobile devices, and FIs' desire to move more activity to cheaper digital channels, the rise of the identity document capture and verification product is not surprising. While the process of taking pictures of identity documents and selfies may initially sound like a high-friction one, when you factor in the capture of information and prefilling applications or other documents, it may actually prove to be highly customer-friendly. It certainly will prove easier than typing a lot of data on a tiny mobile keyboard. Also, as these solutions are adopted by other industries, and as more consumers are exposed to the technology and the process to use it, FIs will adopt it in increasing numbers.

Buyers:

- **Test product performance.** Test across all documents and geographies for your client base, measuring each product's ability to detect fraud, its processing times, and its ability to provide a pass/fail assessment. Ensure you can select the best product to meet your specific needs and expectations based on POC results.

- **Evaluate total cost of ownership.** Ensure that all costs are fully understood and determine whether monthly expenses will be easy to predict and budget for. Explore what it might cost if additional use cases are desired after implementation.

- **Define all use cases desired.** Some use case(s) that are top-of-mind can be used to justify investing in one of these products. However, as consumers become accustomed to this new technology, it may serve well for authentication of existing customers rather than just assisting with new applications. Using it for password resets and other use cases can significantly reduce fraud. Evaluate the solution chosen to ensure it will meet both current and future needs.

- **Negotiate pricing.** Until the demand for the product grows and gives sellers the advantage, early adopters have a number of providers to choose from. Pricing can be negotiated in this environment.

- **Consider reporting needs.** One area in which some providers aren't particularly strong is reporting. After determining the reports desired, ensure the provider offers those reports or can develop them without additional charge.

Vendors:

- **Speak the language.** FI executives expect vendors to understand their challenges. If salespeople can't relate to an FI's needs, they can quickly lose its attention.

- **Be prepared to help with an FI's business case.** Based on experience with other clients, be prepared to help with both increased income and expense projections to help prospects put a business case together to request funding for your solution.

- **Focus on customer service.** Bankers expect strong service from their providers and won't be happy if they don't receive it. Particularly in the fraud area, executives talk to peers at other FIs; if customer service doesn't meet expectations, other prospects will certainly hear about it.

- **Stay focused.** Particularly for startups, there is always the danger of trying to do too much too quickly. Don't chase every rabbit and lose sight of longer-term goals for successful, steady growth while providing existing customers support.

- **Manage growth.** Demand for these products is sure to grow; be prepared to take full advantage of opportunities that arise without committing to more than can actually be delivered.

RELATED AITE GROUP RESEARCH

Synthetic Identity Fraud: The Elephant in the Room, May 2018.

Digital Channel Fraud Mitigation: Market Trends Influencing FI Strategies, November 2017.

Digital Channel Fraud Mitigation: Evolving to Mobile-First, *November 2017.*

Financial Institution Fraud Trends: ATO and Application Fraud Rising Rapidly, May 2017.

Machine Learning for Fraud Mitigation: The Substance Behind the Buzz, April 2017.

ABOUT AITE GROUP

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