

APRIL 2020

DIGITAL IDENTITY TRACKER[®]



ROYAL BANK OF CANADA ROLLS OUT **DIGITAL ID VERIFICATION** FOR ACCOUNT OPENING

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DIGITAL IDENTITY TRACKER®

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ACKNOWLEDGMENT

The Digital Identity Tracker® is done in collaboration with Jumio, and PYMNTS is grateful for the company's support and insight. PYMNTS.com retains full editorial control over the following findings, methodology and data analysis.

WHAT'S INSIDE

Social distancing to curb the spread of the new coronavirus has led consumers around the world to work remotely and complete daily tasks from home. This sudden lockdown has caused many companies to pivot their operations and address how to reach consumers where they are while securing any sensitive information being transmitted between consumers and their banks or doctors, for example.

Consumers who need medical attention during the pandemic are connecting with doctors online for telehealth appointments instead of risking exposure at clinics. These clinics must ensure the authentication of patients' identities, however, such as by comparing selfies and videos against identity document scans. The United States has seen a [surge](#) in remote consultations since President Donald Trump waived restrictions on access to telehealth services under Medicare. This is just one area seeing a growing demand for digital identity verification services.

Measures are also being taken to protect consumers venturing out of their homes, with biometric innovations being used to detect individuals with fevers at airports and on public buses. Nearly 90 percent of Chinese citizens with COVID-19 have had fevers as a symptom, according to one [report](#). Biometric border control systems with integrated fever detection capabilities can be used at airports to take travelers' temperatures and alert officers if travelers need to be pulled aside.

Digital identity providers have ample opportunities during this time to help slow the spread of COVID-19

with verification tools, facial recognition and contactless identification for a newfound touchless society.

Around the digital ID world

COVID-19 is creating a [spike](#) in demand for online healthcare services, which remotely authenticate patients and connect them with virtual doctors. France, Germany, Norway, Sweden and the United Kingdom are seeing demand for remote consultations spike by 240 percent, according to Sweden-based doctor-by-video startup KRY. Increased demand is also being observed in the U.S., where several providers are enabling access to remote healthcare services.

National telehealth firm TelaCare is one such player. The company [announced](#) the rollout of a COVID-19 assessment tool. The solution requires patients to complete online questionnaires, after which those with signs or symptoms of COVID-19 can be connected with a TelaCare network physician for additional assessment via phone or video call.

A landmark [bill](#) passed in Washington state is requiring more stringent regulation of facial recognition software, which is used in many biometrics innovations. The bill will be fully vetted and tested for fairness since studies have raised concerns about the technology's ability to accurately identify women and people of color. Law enforcement agencies would need to secure a court order or warrant before using the technology, as well. Microsoft President Brad Smith called the [bill](#) "early and important" and "a significant breakthrough."

Some cities have passed facial recognition rules, but Washington is the first to enact regulations statewide, he added.

For more about these and other digital ID headlines, read the Tracker's News and Trends section (p. 10).

Royal Bank of Canada's efforts to improve onboarding with digital ID verification

[Royal Bank of Canada](#) recently rolled out a mobile app for digital government ID verification that allows customers to open accounts at bank branches or remotely. For this month's Feature Story (p. 6), RBC's senior vice president, Peter Tilton, gave PYMNTS a look into the bank's efforts to improve its account opening processes and discussed how the financial institution (FI) is using artificial intelligence (AI) to prevent bad actors from opening accounts.

Deep Dive: COVID-19 spurs biometric innovations for a contactless society

A range of new biometric innovations are emerging around the world to help businesses and healthcare institutions tackle the effects of the COVID-19 pandemic. A facial recognition software is being used in China to diagnose potentially infected patients on smart health-care buses. Efforts to tackle the pandemic are also being made in countries such as Japan, where technology providers have improved on their capabilities to use facial recognition technology on consumers that are wearing face masks. This month's Deep Dive (p. 15) explores how these biometric innovations are proving to be helpful in curbing the spread of the virus and why they are raising privacy concerns among consumers.

EXECUTIVE INSIGHT

How do you see the digital ID space evolving as countries recover from the COVID-19 pandemic?

"The COVID-19 pandemic has showcased the value of IT and digital transformation, and organizations should use this time to accelerate the transition. Organizations that have web-enabled businesses are in a much better position to weather this pandemic, both in the short and long term. Digital transformation covers a lot of territory, but starting with identity verification makes practical sense as it enables modern companies to streamline the customer onboarding journey. Similarly, for solution providers in the identity verification space, it has forced us to automate even more and leverage AI to replace human-based processes. For years, there has been a lot of lip service paid to digital transformation, but COVID-19 is now forcing most enterprises to rethink [their] digital account opening and identity verification processes and accelerate these initiatives in order to survive."

PHILIPP POINTNER

chief product officer at [Jumio](#)

FIVE FAST FACTS

80%

Share of government services supporting access from multiple digital identity service providers by 2023

\$31B

Estimated value of the digital ID market by 2024

85%

Portion of consumers who have experienced fraud when opening a digital account

21%

Increase in signups for online banking tools driven by stay-at-home orders in April

\$46B

Predicted value of the biometrics market by 2024



FEATURE STORY

Royal Bank Of Canada Rolls Out Digital ID Verification For Account Opening

COVID-19 has changed daily routines around the world as more consumers have had to stay at home, only venturing out into public for necessities. This is leading companies of all kinds to navigate how to reach them remotely. FIs are among the entities that are working to securely meet clients where they are through mobile and online channels to complete tasks that would more often be completed in person. The [Royal Bank of Canada](#) (RBC) is one such FI that recently rolled out digital government identity [verification](#) capabilities, allowing customers to verify their identities using its RBC mobile app.

This was the first product rolled out as part of an omnichannel technology stack the bank spent three years building, according to Peter Tilton, senior vice president of the Toronto, Ontario-based bank that serves 17 million customers in Canada, the U.S. and 34 other countries. The technology is available at bank branches and remotely via mobile and its website.

"It's a really sophisticated digital asset we are building," he said. "ID verification, in many ways, is the most

interesting first pass at using this technology so that we can build it once and deploy it across this technology."

Users can scan their IDs with the mobile app, and their personal details are automatically populated into their account profiles and into bank advisers' computers, essentially creating a connection between the app and the branch. The app uses near-field communication (NFC) for easy data transfers.

"With an ePassport, you can tap the chip on the card reader on the phone," Tilton said. "It sucks all the possible information in real time. Or with a driver's license or another form of government ID, the scanner uses the camera in real time, populating the information on the adviser's screen using this ... technology. The customers are in complete control [and can see] their information transmitted as the app pre-fills the application for us."

Supporting the shift to remote

RBC temporarily [closed](#) some of its branches in mid-March because of COVID-19, leading the bank to accelerate the program with plans to deploy a second

additional remote option connecting bank advisers with customers at home.

“This should help with the duration of COVID-19,” Tilton said. “As we shift to a digital world, particularly in times like this, when people are remote and disconnected, we’re trying to use real expertise we have with our human advisers to help out.”

The mobile app's development progressed relatively smoothly, requiring only a little work on government identities that were “glary.”

“We had to do some fine tuning, turning cameras to get things right ... before we deployed to the consumer,” he said.

Banks — like any organizations making sophisticated technology choices — should be careful about the accuracy of vendor-promoted technologies as these third parties are not created equal, according to Tilton. He also added that working with governmental authorities who serve as partners as well as regulators can be a long pathway.

“It’s an important part of the process and can be the long pole in the tent,” he said.

Bank advisers can identify customers remotely by sending an encrypted email, Tilton explained. Customers click on their IDs in the mobile app to receive and complete ID verification processes at home with a high level of security.

“When customers are completing the identification [verification process] at home, they will be taking a selfie, which provides a 3D model map of their face, allowing you to compare it to the info that comes off

the passport or the photo that was scanned off the license,” he said. “This is very strong prevention against fraudsters.”

Relying more heavily on the mobile app has improved efficiencies for both RBC and the consumer.

“We’re finding we can process opening new accounts comfortably in five to 10 minutes — the old-fashioned sit-down with an adviser [process] took an average of 44 minutes,” Tilton noted.

Using AI for onboarding

The RBC app relies on AI to verify clients’ government-issued identification documents against encrypted data found in driver’s licenses. There are templates and patterns set up for every form of government ID, and the AI system is constantly scanning to look for any sort of defects within the format, Tilton explained.

“You might not detect with the human eye, but most driver’s licenses include a format which makes them difficult to counterfeit,” he said. “Artificial intelligence is honed around trying to compare every license it looks at.”

AI can assist with learning from previous scanning to spot any little nuance that might indicate or flag that it is a counterfeit.

Keeping the system secure

Two-thirds of RBC customers use passports, meaning a fraudster would have to be technically skilled enough to defraud a passport to a very high level to successfully steal a person’s identity, according to Tilton.

“For instance, they would have to crack the encrypted chip and read the chip off the mobile phone using a near-field communication connection. Then they would have to somehow match the selfie and the 3D mapping that’s stored on the chip. That level of fraud would flag not only the concern of the bank, but every border security authority in the world,” he said, claiming the RBC mobile app provides a “very, very secure pattern.”

The system automatically flags the bank’s fraud department if something suspicious occurs within the customer identification process.

“We’ve got sophisticated machine learning, which continually learns from our phone platforms, and we can do things like block accounts and deal with the back office,” Tilton explained. “This is critical for our advisers so [they] no longer ... have to worry about whether they’re dealing with counterfeits.”

Another benefit of quick onboarding with the RBC mobile app is that, when visiting branches, it frees up RBC advisers to sit with the customer and talk more about their needs, Tilton noted.

“We’re finding that’s having a big impact, not just in terms of customers opening more products, but also deep engagement with the bank ... and they walk out of the branch with the mobile app, so it’s chin up, ready to go in one pass,” he said.

Such solutions may enable advisers to provide services more efficiently and with a deeper level of customer engagement than before they entered the pandemic when RBC reopens its branches and consumers resume visiting locations in-person.



NEWS & TRENDS

Responding to COVID-19

COVID-19 drives demand for online ID verification

Demand for telehealth is up in the U.S., Europe and other parts of the world as businesses and consumers embrace online services during the ongoing COVID-19 pandemic. France, Germany, Norway, Sweden and the U.K. have all seen a 240 percent [increase](#) in video-based consults since Feb. 1, according to Swedish doctor-by-video startup KRY. There has also been a surge in remote consultations in the U.S. since President Donald Trump waived previously imposed restrictions on access to telehealth services under Medicare, a federal health insurance program.

This spike in remote consultations is also resulting in greater demand for online ID verification services that can securely and quickly authenticate patients. Digital identity startup Passbase, which provides application programming interface (API) integration for developers, reported a steep demand in requests from European and North American MedTech companies in recent weeks. German telemedicine platform TeleClinic, a Passbase customer, assisted in diagnosing the first case of COVID-19 in Germany.

Other services, such as car rentals and online banking, are also seeing surges in demand, prompting many businesses and FIs to improve their know your customer (KYC) and onboarding processes with end-to-end verification services.

NYPD headquarters halts fingerprint verification to contain COVID-19

The ongoing pandemic is not just affecting the health-care and banking industries, but also the public services sector. The New York Police Department headquarters, for example, will no longer use fingerprint-based authentication to grant access to its headquarters at One Police Plaza in New York City. The edict is meant to [slow](#) COVID-19's spread among the police. The process previously required officers to scan their badge IDs and their fingerprints on a shareable scanner. The new mandate now requires officers to show their physical IDs instead. The NYPD plans to explore other tools if its fingerprint scanners are out of commission for a prolonged period, according to a spokesperson for the police.

NYPD's recent move sheds light on the downside of fingerprint-based authentication in high-traffic environments. Use of alternatives, such as mobile-based ID

verification and facial recognition, could prove to be viable options.

Digital ID verification players offer services for free to help fight COVID-19

There is a growing demand for digital ID verification services as more businesses and organizations around the world go digital to cope with the ongoing COVID-19 crisis. Many key players within the space have thus stepped up and are offering their services for free. Identity verification solution provider Jumio is [offering](#) its AI-enabled ID verification services for free with its fully automated Jumio Go solution. The tool can be leveraged by nonprofits helping with COVID-19 efforts, along with healthcare, online learning and other essential services. Accredited lenders can also use it to vet qualifying Coronavirus Business Interruption Loan Scheme applicants in the U.K.

Jumio Go is aimed at ensuring a seamless onboarding process while helping organizations meet anti-money laundering (AML) and KYC compliance requirements. It leverages AI to block fraudsters from creating accounts and prevent deep fakes, bots and sophisticated spoofing attacks.

Digital identity provider Yoti is another player in the space that is [offering](#) support for contactless ID verification for organizations involved in the fight against the pandemic.

TelaCare rolls out COVID-19 self-evaluation tool bundled with access to virtual doctors

National telehealth firm TelaCare Health Solutions [announced](#) several plans to fight COVID-19's spread. The company's offering includes a COVID-19 self-assessment tool that asks patients a series of questions regarding their symptoms and provides direct access to infectious disease doctors. TeleCare CEO Larry Jones said these measures combined with preventative acts are calls to action across the country. He



urged all Americans to review the Centers for Disease Control's (CDC's) recommendations immediately to prevent the virus's spread. TelaCare relies on a proprietary, Health Insurance Portability and Accountability Act (HIPAA)-compliant telemedicine system that utilizes the Amazon Web Services (AWS) cloud to enable remote consultation between doctors and patients.

Acuant, Ceevo partner on ID verification

Los Angeles-based identity verification services provider Acuant is [teaming up](#) with global payments services provider Ceevo to improve the latter's customer onboarding procedures with faster and more seamless ID proofing. Ceevo will use Acuant's Trusted Identity Platform to deploy multifactor authentication (MFA) for its customers. Ceevo's customers will now be able to interact with merchants on any channel and to complete MFA across different channels. The partnership

is aimed at improving Ceevo's support for omnichannel payments.

Acuant is reportedly offering support over iOS, Android and HTML. Its solution is also deployable on a range of devices, including desktops, kiosks and other smart devices.

Digital identity tools proliferate

Verizon releases digital identity and cybersecurity tools

Verizon is rolling out a variety of new tools to help customers [fight](#) cybercrime, which is on the rise as many work from home. Among them is a cloud-based managed detection and response (MDR) tool developed with Securonix technology. The tool works as an overlay for Verizon's existing threat detection technology and leverages Securonix's analytic and behavioral



monitoring to identify cyberthreats. The system collects real-time data and utilizes machine learning (ML) algorithms to determine if there are any potential threats a business needs to address.

This partnership will enable Verizon to scale its existing solution and provide services to companies of all sizes. The solution promises to help reduce the man-hours that companies spend maintaining their cyber defense systems.

iDenfy, Onfido, TruNarrative, Veriff announce digital verification upgrades

Four digital verification technology companies recently enhanced their products. RegTech platform TruNarrative [rolled out](#) address verification technology in collaboration with Window Book and Fluence Automation to reduce fraudulent activities against regulated U.S. and European businesses.

Estonian startup Veriff recently unveiled Assisted Image Capture (AIC) for quicker verification pass rates and improved user conversions, according to a company announcement. The service provides users real-time feedback during the verification process to help ensure accuracy and timeliness, such as feedback on poor photo quality and reminders to include both sides of a document.

London-based software company Onfido, which authenticates users' identity documents and compares them with their facial biometrics, recently updated its software development kit (SDK) to include new features for individuals with disabilities and impairments. Onfido partnered with the Digital Accessibility Centre and the Royal National Institute of Blind People to test the SDK,

which will allow individuals to connect remotely to more businesses and services.

ID verification startup iDenfy has received confirmation that its identity verification tool has met international standards for information security with ISO/IEC 27001 certification.

eftpos makes a play for Australian digital identity market

Electronic payment terminal provider eftpos has revealed [plans](#) to enter the local digital identity market in Australia. The aim of eftpos is to offer a new platform to local FIs that can be used for age verification for on-line transactions, including on phones with biometric capabilities. The move could establish a common identification utility infrastructure for local financial services companies under fire from the Reserve Bank of Australia to reduce fraud and improve debit functionality.

The concept is considered likely to appeal to FIs because it would prevent duplication among merchants accepting payments. A rise in scheme debit fraud has become a concern for consumers and regulators since the Australian Payments Network's official fraud statistics do not distinguish between the fake transactions made on credit cards versus scheme debit cards.

Digidentity releases digital identity service for remortgaging

London-based Digidentity is teaming up with Smartr365 to [provide](#) digital tools for remortgaging. A digital ID can be produced using Digidentity at the beginning of the mortgage application, used to verify the borrower's identity throughout the process, including to lenders, conveyancers or Her Majesty's Land Registry,

a government department that registers ownership of land and property in England and Wales. The tools enable the completion of the mortgage process in three days – 18 fewer than the typical amount of time when processing with paper documentation.

Digidentity claims to be the only identity product backed by GOV.UK Verify, with the required certification and accreditation to provide this service. The company said brokers who use Smartr365, a cloud-based mortgage application, will be able to [offer](#) digital remortgage deed signing to their customers.

Digital ID verification mobile apps

Bluink releases eID-Me app for Ontario residents

A new digital identity [app](#) will allow Ontario residents to store government-issued ID documents along with related identity information on their smartphones, according to the Ottawa-based identity and access management company Bluink. The app, eID-Me, is designed to make it easier for residents to verify their identities online and gain access to supported systems without requiring a password. Residents will have to submit selfies and scanned ID documents to a secure eID registration server before an eID-Me identity is issued and the smartphone becomes recognized as a digital certificate.

The company's goal is to improve access to services that require verified identifies, including government, financial, healthcare and legal, said Bluink CEO Steve Borza. The app is available for iOS and Android phones

and backed by \$1.2 million in funding from the Ontario Ministry of Economic Development, Job Creation and Trade.

TONIK partners with Daon for mobile onboarding and ID verification

Southeast Asia's first digital-only bank, TONIK, planned to [launch](#) in the Philippines later this year, will rely on Fairfax, Virginia-based Daon's cloud-based IdentityX services for mobile onboarding and identify verification. It will verify customers using face, voice and fingerprint biometrics.

IdentityX was created according to FIDO Alliance standards. Daon [claimed](#) to be among the first companies to achieve FIDO2 certification last year, attaining a protocol of UAD 1.1 on server certification in addition to certification for its Android client SDK. This is significant in advancing FIDO authentication standards, which would enable companies to operate without passwords.

Historic facial recognition bill passes in Washington state

Legislation requiring more stringent facial recognition regulations [passed](#) in Washington state and will require fairness testing since studies have raised concerns about the technology's ability to verify women and people of color. State Rep. Debra Entenman, a sponsor for the bill, said the agreement for the historic legislation was a reasonable compromise and that it contained ample protections for the developing technology. Law enforcement agencies using facial recognition would also need to secure a court order or warrant to use the technology.

DEEP DIVE

COVID-19 Spurs Biometric Innovations For A Contactless Global Society

Global concern over COVID-19 spreading on contaminated surfaces in public places is unleashing rapid development of innovative biometric products that could assist a touchless society. The New York City Police Department recently [stopped](#) using its fingerprint ID security procedure for employees entering buildings, for example, contributing to a spike in demand for contactless identification alternatives. The pandemic is also prompting facial recognition companies worldwide to track citizens who may have tested positive for the virus.

China is reportedly installing facial recognition to [detect](#) infected individuals on smart healthcare buses that screen passengers while they ride. The buses, developed by Shanghai-based Sunwin Bus Corporation, use AI and an infrared thermal-imaging camera that alerts the driver when a febrile person boards the bus and flags individuals who may not be wearing masks. They are also designed to kill the COVID-19 virus with ultraviolet (UV) lighting in the air ducts.

Japanese developers are [introducing](#) a range of innovations, including biometric authentication provider NEC's new security gates that can identify individuals

even when they are wearing face masks. Transportation systems supplier Fujitec and sensing technologies manufacturer Optex, also both based in Japan, are exploring ways to bring contactless hand signals to places such as elevators to open doors.

NEC [announced](#) earlier this month that it had named a new CEO, Aalok Kumar, for its Indian branch, effective immediately, to help grow its global biometrics and digital business, developing biometrics, Big Data and other technologies. One recent NEC Technologies India project was a contract with the Airports Authority of India to implement paperless biometric boarding platforms at four different airports to support Digi Yatra, an initiative for the digital processing of passengers at airports.

IT companies in Hyderabad, India, are meanwhile [disabling](#) fingerprint-based biometric systems, substituting such measures with card-based verification or facial biometrics. The companies need these authentication measures to mark attendance and track entry and exit of employees after one worker tested positive for COVID-19 last month in the capital of southern India's Telangana state.

The push to draw back use of fingerprint-based devices is wreaking havoc for fingerprint scanner manufacturers, however.

“People like facial and iris recognition companies are saying, ‘Well you don’t want to use fingerprint scanners anymore, they’re bad for you because of the virus.’ I think that’s a little ridiculous,” said David Gerulski, executive vice president of Integrated Biometrics, a mobile fingerprint scanner provider.

Integrated Biometrics is suggesting that consumers use hand sanitizer and wipe down the fingerprint scanner after use. The company also noted that using a device such as an iris scanner can still pose a risk as it requires close contact to a shared surface.

German biometrics company Dermalog, maker of fingerprint, iris and facial recognition hardware, recently [announced](#) it had adapted cameras to gauge body temperature. It introduced the tool at the Tire Technology Expo in Hanover at the end of February to help protect some 5,000 attendees. The system can scan up to five people for fevers in real time as they pass through the entrance, and sends measured temperatures to staff. It can detect a high fever with accuracy from up to 2 meters away.

Dermalog noted that [fevers](#) were a symptom in nearly 90 percent of individuals who received COVID-19 diagnoses in China, making screening a valuable tool to prevent the spread of the virus. The company recently [piloted](#) its biometric border control system with integrated fever detection at the Don Mueang International Airport in Bangkok, Thailand. The system can identify

fingerprints and faces, take travelers’ temperatures and notify border officers if travelers need to be sent for health checks.

Facial recognition combined with temperature sensing has become commonplace in Shanghai, China, but citizens are wondering whether this level of [surveillance](#) will subside after the virus has been contained.

“This epidemic undoubtedly provides more reason for the government to surveil the public. I don’t think authorities will rule out keeping this up after the outbreak,” said activist Wang Aizhong, who is based in Guangzhou, China.

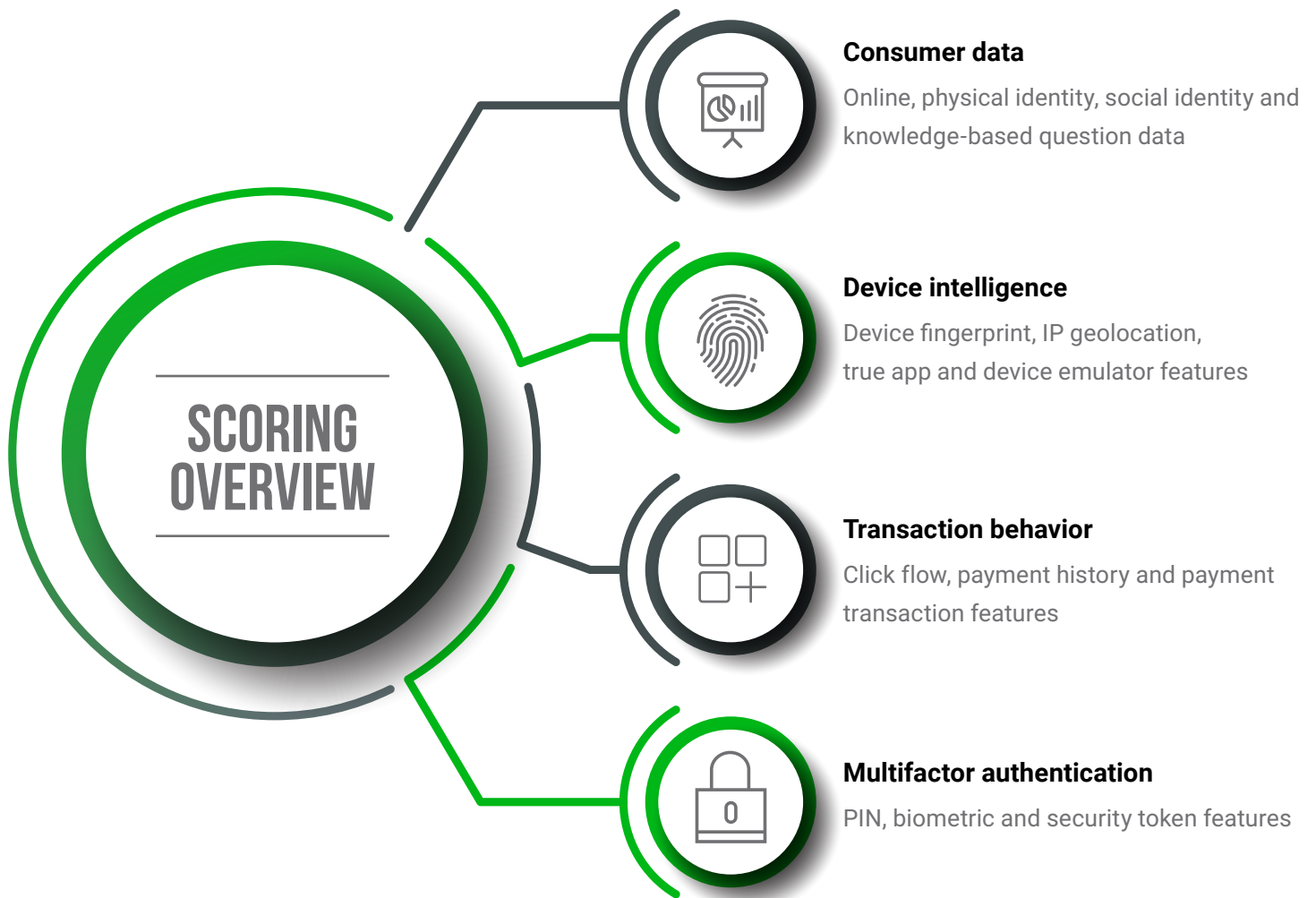
These surveillance technologies are [opening](#) a hornet’s nest of privacy and security concerns for citizens. The greatest concern is whether the U.S. government will follow in the footsteps of many Asian nations in relaxing protections of citizen’s data to track individuals suffering from COVID-19 and identify those with whom they have been in contact. The state-owned China Electronics Technology Group developed a smartphone [app](#) that allows users to scan quick response (QR) codes via Alipay or WeChat to determine if they are in the presence of someone who has – or had – the virus.

COVID-19’s rapid spread has enabled the emergence of a diverse array of powerful new surveillance technology to slow transmission, but governments will have to carefully consider how to regulate tools that may compromise individuals’ privacies.

METHODOLOGY

Scoring overview

Companies featured in the Tracker Scorecard have been evaluated based on four primary criteria:



If you would like your company to be considered for inclusion in the Tracker's Scorecard or wish to have an existing listing reconsidered for an update, please head over to our [profile submission/update page](#).

Consumer Data Scorecard – All players are listed in alphabetical order.



01 Systems is a software application and solution provider. Its products include Arabization, signature management, biometric solutions, enterprise content management and digital vouchers.

Products: Biometric authentication, enterprise content management, signature management

Customer Focus: Financial services

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		



ABBYY provides document conversion, optical character recognition, data capture and linguistic software and services.

Products: Identity document recognition

Customer Focus: Business, information technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Acuant provides identity verification services. Its offerings include data capture, autofill, document authentication and facial recognition features.

Products: Autofill software, integration and hardware options, verification software

Customer Focus: Financial, government, healthcare, hospitality, security

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



Aeriandi offers voice security solutions. The company's services include call recording, archiving, Payment Card Industry-compliant phone payments, fraud detection and speech analytics.

Products: Call archive, call recording, payment card industry phone payments, phone fraud detection, speech analytics

Customer Focus: Banking, telecommunications, travel, utilities

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						✓	



Agnitio offers voice identification products that are used by government organizations worldwide. The company aims to help reduce crime, identify criminals and provide evidence for lawsuits. Agnitio's Voice ID product is also used by a number of other sectors.

Products: Criminal identification, voice biometrics

Customer Focus: Contact centers, enterprise security, financial services, governments, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						✓	



AllWebID prevents online identity fraud and data breaches caused by stolen passwords. It secures its customers' networks by converting the login workflows of their web portals and software-as-a-service applications to support two-factor authentication. Users identities are verified either by matching a one-time use PIN code texted to the user's cellphone or by matching fingerprint templates in real time.

Products: Identity verification, password management

Customer Focus: Banking, education, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Applied Recognition offers face detection, recognition and authentication technology for consumers, enterprises and application developers. The company serves a range of verticals, including financial services, IoT device manufacturers and software providers.

Products: Face recognition, photo tagging, Ver-ID software development kits

Customer Focus: eCommerce, enterprises, financial services, subscription services

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Aratek is a biometrics solution provider and a member of China's 863 program. Aratek provides fingerprint image processing, matching and searching software and hardware products, as well as middleware components.

Products: Fingerprint software systems, fingerprint tokenization, identity card fingerprint readers, scanners

Customer Focus: Finance, government, insurance, policy, power, social security, telecommunications, tobacco

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Arcanum Technology's nKode solution is a cutting-edge cypher algorithm that generates a series of unique tokenized system values to ensure customers' passcodes are never exposed. nKode reduces the complexity of passcodes by expanding their character sets to include alphanumeric characters, symbols, colors and key positions.

Products: nKode

Customer Focus: Banks, financial services organizations online merchants

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								✓

Consumer Data Scorecard – All players are listed in alphabetical order.



AU10TIX is a multi-channel identification authentication and record generation solutions provider. The company develops and implements solutions that help automate the capture, authentication, validation and generation of digital records of identifying documents. AU10TIX is a subsidiary of ICTS International.

Products: Front-end solutions

Customer Focus: Airports, public services, regulated commercial services, secured facilities

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Auraya Systems is a biometric voice verification technology provider enabling customers and businesses to interact and engage with security and convenience. Auraya's biometric voice verification engine, known as ArmorVox, is speaker-adaptive and constantly learns about the customers' unique voices to improve security.

Products: ArmorVox

Customer Focus: Financial services, government, healthcare, retail, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						✓	



Auth0 is a cloud service that provides a set of unified tools that instantly enable single sign-on and user management for any application, application programming interface or internet of things device. The company provides open-source software development kits for all popular platforms, operating systems, devices and programming languages. It also facilitates connections to various digital identity providers ranging from social and enterprise to custom username and password databases.

Products: Authentication, breached passwords, multifactor authentication

Customer Focus: Energy, financial services, healthcare, logistics, manufacturing, media, online services, retail, software

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓		✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Authasas provides an authentication framework that integrates with Microsoft, Novell, VMware and Citrix environments and interfaces to all single sign-on vendors. The company offers biometrics, contact and contactless card technologies, mobile out-of-band, one-time passwords, software tokens, USB flashdrives, passphrase authentication and federated authentication.

Products: Authentication

Customer Focus: Financial services, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓		✓			✓



AuthenticID is an identity proofing provider that aims to deliver accuracy and improve processes, customer service and regulatory compliance for financial institutions, telecommunication companies and any businesses that are required to develop a customer identification program.

Products: Facial recognition, global document authentication

Customer Focus: All industries

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Authentik Systems produces a remote access biometric time and attendance system that enables users to create a biometric time stamp via personal biometric keys and browser-enabled cellphones.

Products: Remote biometric timecard system

Customer Focus: Agriculture, home cleaning, home health, HVAC, landscaping

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Aware is a global biometric software, services and solutions provider. Its modular software products include software development kits and subsystems that enable fingerprint, face and iris recognition. It also offers user interface applications for biometric enrollment and forensic analysis, software development kits for name matching and identity resolution, a biometric services platform and an automated biometric identification system.

Products: Authentication and payments, border management, citizen identification, defense, elections, fraud prevention, identity proofing, intelligence, investigation, law enforcement, visitor screening

Customer Focus: Business, government, healthcare, law

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	



BioConnect is an authentication tools provider. BioConnect's core solutions include both physical and digital systems for enterprises of all sizes.

Products: Applications, hardware, identity platforms, software, terminals

Customer Focus: Data centers, education, enterprises, financial services, healthcare, retail, public sector

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓	✓	✓	✓	



BIO-key is a fingerprint biometric identification, mobile credentialing and user identity verification solutions provider. BIO-key's products are software-based and compatible with various fingerprint readers.

Products: Fingerprint readers, software solutions

Customer Focus: Blood centers, education, enterprises, financial services, government, healthcare, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



BioID is a cloud biometrics company. It offers face and voice recognition capabilities for any mobile device.

Products: Banking, eidentity, mobile payments, unified authentication

Customer Focus: Banking, government, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓		✓	



Biomatiques is an India-based manufacturer that provides compact iris scanner hardware and iris recognition software development kits, as well as custom casing design solutions to meet various requirements for its range of products.

Products: Identity management, security and access control, time and attendance

Customer Focus: Government, large businesses, medical

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Biomids is a biometric software security firm that provides authentication systems and technologies for enterprise users and developers. It allows customers to use facial recognition software in place of usernames and passwords to access a wide range of accounts.

Products: Biometric authentication and proctoring solutions, learning management systems

Customer Focus: Developers, education, enterprise, small business/personal

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



Bitium provides single sign-on and identity management for cloud-based, software-as-a-service applications. It allows end users to access all of their cloud software accounts using a single set of login credentials.

Products: Identity management, single sign-on

Customer Focus: Identity management, software

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



Blink is an enterprise security company focused on phone-as-a-token technology. Blink enables multifactor authentication and single sign-on using smartphones as a key. Consumers can use Bluink Key to log in to other services with long, random passwords, one-time passwords or FIDO Universal Second Factor public key authentication, which eliminates passwords altogether.

Products: Financial services

Customer Focus: Enterprises

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



B-Secur offers biometrics authentication solutions. The company's software uses patented electrocardiogram technology to read individuals' heartbeat patterns to verify their identities.

Products: Electrocardiogram biometrics

Customer Focus: Automotive, banking, finance, technology industries

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



CA Technologies' CA Advanced Authentication provides real-time protection for online and mobile applications. The solution can authenticate an employee, a partner or a contractor while providing a seamless login experience. It features multifactor authentication and risk-based methods such as device identification, geolocation and user activity.

Products: Advanced authentication, API security, identity management, payment security

Customer Focus: Enterprise, financial institutions

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓				✓



CBA provides fingerprint authentication modules and algorithms, fingerprint authentication chips, and USB keys. The company also supplies a fingerprint authentication system for mobile phone solutions to meet requirements of suppliers in various markets such as notebook PCs, PC/network security, door interlock, time information and entry systems, safes and internet/intranet authentication servers, among others.

Products: Algorithms, fingerprint sensors, modules, processors

Customer Focus: Internet/intranet authentication servers, mobile device suppliers, PC suppliers

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Centrify's identity-as-a-service solutions can be used to verify users, validate devices and put limits on access and privilege. It utilizes machine learning to discover risky user behaviors and apply conditional access, all without impacting user experience.

Products: Adaptive multifactor authentication, privileged access management, risk analytics, single sign-on

Customer Focus: Automotive, banking, defense, education, government, internet, manufacturing, retail, pharmaceuticals, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓

Consumer Data Scorecard – All players are listed in alphabetical order.

CHINCOTECH

Facial recognition software company Chincotech works with global governments and their agencies to combat issues including terrorism and immigration. The company provides 2D and 3D facial recognition algorithms and software solutions.

Products: Facial and general recognition

Customer Focus: Government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Civic allows people to control their identity information by using blockchain identity verification technology to secure and protect personal information transfers. Civic aims to become a trusted third-party source for securing and verifying users' identities. It is building partnerships with banks, credit card companies, online lenders, wireless and cable providers, employee verification services and other institutions that rely on users' identities.

Products: Identity codes, identity theft protection, reusable know-your-customer solutions, secure identity platforms

Customer Focus: Blockchain companies

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓				✓



Confirm offers authentication services for driver's licenses and other IDs. The company's software is used by financial institutions, healthcare providers, insurance carriers, retailers, shared economy companies and on-demand service providers.

Products: Form filling services, identity authentication

Customer Focus: Financial institutions, healthcare, insurance, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓							

Consumer Data Scorecard – All players are listed in alphabetical order.



Crossmatch helps organizations solve their identity management challenges. Its enrollment and authentication solutions create, validate and manage identities for a range of government, law enforcement, financial institution, retail and commercial applications. Crossmatch's solutions are designed using biometric technologies and multifactor authentication software.

Products: Authentication, enrollment, mobile, software development kits

Customer Focus: Defense, enterprises, finance, government, law enforcement, hospitality, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		



Cryptomathic provides security software solutions to businesses from a variety of industries. Its main product, the Authenticator, utilizes tokenization to match security needs for services such as eBanking and eGovernment.

Products: Authentication, EMV, key management, public key infrastructure

Customer Focus: Banking, cloud, government, manufacturing, mobile, technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



Products: Java card frameworks, public key infrastructure, smart card middleware

Customer Focus: Automotive, defense, financial, government, industry, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
								✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Cryptsoft provides interoperable enterprise key management and encryption technology solutions. The company also offers key management interoperability protocol software development kits.

Products: Universal Second Factor, one-time password authentication tokens

Customer Focus: Security systems

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



Daon is a biometric identity assurance software products and services provider focused on meeting the needs of governments and large commercial organizations worldwide. Daon supports customers and system integrators in building enterprise solutions.

Products: Biometrics, border management, employee credentialing, identity, immigration, mobile authentication, national identification

Customer Focus: Commercial enterprises, financial institutions, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓	✓	✓	✓	✓



Dashlane offers products that are compatible with Mac, PC, iPhone, iPad, Android phones and tablets and Kindle Fire.

Products: Password manager, secure digital wallet

Customer Focus: Businesses, internet users

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓		✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Diamond Fortress' solution ONYX is a software-based authentication solution that captures users' unique fingerprints via devices' cameras. The company's software library is offered via a software development kit and allows developers quick access to the technology.

Products: ONYX

Customer Focus: N/A

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



DigiFlak offers business solutions that secure workers' digital keys, passwords and certificates in a separate hardware environment. The company manufactures Flak security USB dongles, licenses its technologies and offers subscriptions to services and third-party applications.

Products: Flak classic, Flak classic business edition

Customer Focus: Businesses, private users

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								✓



Duo aims to protect organizations against data breaches by ensuring that only legitimate users and appropriate devices have access to sensitive data and applications.

Products: Devices, identity verification

Customer Focus: Education, financial, healthcare, legal, retail, technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Early Warning provides payment and risk solutions to financial institutions, government entities and payment companies. Its identity and authentication offerings improve account opening, simplify and unify authentication through a single application programming interface and fight fraud with behavioral biometrics.

Products: Authentication, payment, regulatory solutions

Customer Focus: Financial institutions, government entities, payment companies

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓	✓	✓				



eBureau is a predictive analytics and information solutions provider.

Products: Credit risk assessment, collections and recovery, fraud protection, marketing and lead management

Customer Focus: Automotive, financial services, higher education, insurance, retail, telecommunications, utilities

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								



Entrust Datacard, formerly known as Datacard Group, offers digital identity solutions to financial institutions, governments and corporate enterprises that conduct highly secure transactions. Some of its solutions include central card issuance systems, passport and identification cards, security certificates and communication channels.

Products: Authentication, border control, employee identification, identity credential management, mobile authentication, Secure Sockets Layer certificates

Customer Focus: Corporate, education, financial, government, healthcare, retail, transit

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓	✓	✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



ePortID, a division of ePortation Inc., provides biometric identity verification solutions. ePortID delivers identity verification using palm vein scanning for a range of industries.

Products: Biometrics, ePortPass, palm vein scanners

Customer Focus: Banking, education, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Equifax is a consumer, commercial and workforce information solutions provider that organizes, assimilates and analyzes data on consumers and businesses. Its identity authentication solution features a five-step process that works by asking “intelligent questions” related to applicants' histories..

Products: Identity authentication

Customer Focus: Banks, credit unions, financial institutions, government, insurance firms, retail, utilities

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓	✓	✓



EyeLock is an iris-based identity management technology company that develops systems for border control, logical access, global access control and identity management. It supports governments, businesses and consumers through its distributors and partners.

Products: Hardware and software solutions for iris identification

Customer Focus: Automotive, businesses, consumers, consumer products, financial services, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



EyeVerify's biometric solution, Eyeprint ID, uses mobile devices' cameras to image- and pattern-match the blood vessels in the whites of the eye and other microfeatures in and around the eye.

Products: Eyeprint ID

Customer Focus: Device manufacturers, financial institutions, government agencies, healthcare services

IDENTITY DATA					BIOMETRICS			
Online Data	Physical		Knowledge	PIN	Camera	Fingerprint	Microphone	Security Tokens
	Social	Based Questions						
	✓				✓			✓



Facebanx has developed an integrated facial recognition technology that utilizes webcams, mobile phones and tablets. It uses cloud-based technology to allow multiple users unlimited access worldwide, manually or automatically. It is an identity verification solution in the registration, single sign-on and know-your-customer processes.

Products: Facial recognition, video chat, voice recognition

Customer Focus: Banking, gambling, insurance, local government, payments, police, security

IDENTITY DATA					BIOMETRICS			
Online Data	Physical		Knowledge	PIN	Camera	Fingerprint	Microphone	Security Tokens
	Social	Based Questions						
	✓				✓		✓	



FaceFirst is a real-time biometric face recognition software provider. The company's solution matches users' live images with their facial data stored in the system's database.

Products: Face recognition platform

Customer Focus: Airports, commercial security, gaming, law enforcement, retail, transportation

IDENTITY DATA					BIOMETRICS			
Online Data	Physical		Knowledge	PIN	Camera	Fingerprint	Microphone	Security Tokens
	Social	Based Questions						
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



FacePhi provides facial recognition technology that utilizes the camera on a user's mobile device to take a selfie. That photo then becomes their method of identification and interaction with banks' mobile applications.

Products: Selphi, software development kits

Customer Focus: Financial institutions, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



FICO is an analytics software company. Its solutions help businesses make better decisions through big data and mathematical algorithms to predict consumer behavior. FICO provides analytics software and tools used across multiple industries to manage risk, fight fraud, build more pro-table customer relationships, optimize operations and meet strict government regulations.

Products: Analytics, communications, fraud, security, scores

Customer Focus: Transportation, travel

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓						



Fingerprint Cards AB markets, develops and produces biometric components and technologies that verifies identities by matching individuals' fingerprints. The technologies consist of biometric sensors, processors, algorithms and modules that can be used separately or in combination with each other and can be implemented in volume products such as smart cards and mobile phones. The company's technologies can also be used in IT and internet security and access control.

Products: Area fingerprint sensors, swipe, touch

Customer Focus: Automotive industry, internet of things, smart cards

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.

New!



Folio harnesses advanced biometrics, artificial intelligence and smartphone technology to analyze and verify users' identities through documents, photo identification and physical attributes. Encrypted credentials can be certified and issued directly via the Folio app and they are accessible only to registered, biometrically paired users. Folio gives users complete control over their data.

Products: Authentication, digital mobile wallet, issuance, platform, registration

Customer Focus: Banking, central government, education, local government, membership, organizations, legal applications, accounting

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓					✓	✓		✓



ForgeRock, an identity relationship management vendor, helps companies and governments build secure, customer-facing relationships across apps and devices. Its access management solution provides authentication possibilities with several out-of-the-box authentication modules to fit the businesses' needs, including device fingerprinting, one-time passwords and adaptive risk authentication.

Products: Access management, directory services, identity gateways, identity management, user managed access

Customer Focus: Communications, digital health, financial services, government, media, omnichannel retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



Gemalto develops software and other technologies for businesses and governments to help them with identity authentication and data protection. It delivers secure digital services for payments, enterprise security and the internet of things. Gemalto's authentication, identity management, data encryption and crypto management solutions enable organizations to protect sensitive information and ensure compliance.

Products: Access management, cloud security, crypto management, data encryption, identity management

Customer Focus: Access security, eCommerce, financial services, government, identity security, machine-to-machine, mobile, identity security, retail, training, transportation

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓	✓	✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Gigya's customer identity management platform is designed to identify customers, aggregate data into customer profiles and produce personalized campaigns. The platform helps companies build better customer relationships and turn visitors into known, loyal and engaged customers.

Products: Customer identity management

Customer Focus: Brands, eCommerce, entertainment, leisure, media, organizations, publishing

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓				✓		✓



GlobalSign is an identity and security solutions provided aimed at helping businesses with digital processes and transactions.

Products: Access management, identity management, internet of things, public key infrastructure

Customer Focus: Businesses, cloud service providers, internet of things, large enterprises

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								✓



Goodix is devoted to the research and development of human-computer interaction technologies, including chip design, software development and touchscreen solutions.

Products: Fingerprint sensors, tablets, touch controllers for mobile phones

Customer Focus: Smartphone and tablet manufacturers

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



GoTrust creates secure micro SDs and delivers hardware security for mobile devices using SDs and micro SDs GoTrust innovates powerful, fast and smart micro SD embedded chips and sophisticated supporting applications.

Products: Biometric virtual SDs, FIDO Universal Second Factor authenticators, iOS readers, passwordless solutions, secure micro SDs

Customer Focus: Consumers, enterprises, financial, government, military

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓		



HID Global produces products related to the creation, management, and use of secure identities. Unique identities can be confirmed and counterfeiters can be combated by using multifactor authentication provided by the company, such as biometrics, tokens or digital certificates.

Products: Access control, asset tracking, border protection, embedded solutions, identity management, secure transactions

Customer Focus: Banking, corporate, education, enterprise, financial, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		



HooYu is a global identity verification service. The company’s software uses digital footprints, identity document authentication and facial biometrics to prove customers' identities.

Products: Identity verification

Customer Focus: eCommerce, peer-to-peer sites, regulated companies

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓			✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



HYPR provides biometric authentication solutions that utilize existing cameras, fingerprint sensors and microphones on mobile devices.

Products: Biometric security software development kits, key password manager, tokenization

Customer Focus: All industries

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	✓



ID Analytics provides actionable insights into enterprises' credit and identity risks. It does this with a combination of proprietary data, patented analytics and up-to-the-minute consumer behavior insights from the ID Network, one of the nation's largest cross-industry data networks.

Products: Authentication, credit risk, fraud risk management, verification

Customer Focus: Automotive lending, communications, credit card companies, government, online lending, retail banking

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓					



iDefend is a fraud prevention software provider offering biometrics-driven identity authentication for companies, governments and organizations. Solutions include video-based face, voice and lip verification.

Products: Biometric authentication

Customer Focus: eCommerce, financial, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓	✓		✓	

Consumer Data Scorecard – All players are listed in alphabetical order.



IdentityMind provides identity-based risk management, fraud prevention, and anti-money laundering services for a variety of sectors.

Products: Anti-money laundering, merchant risk, online fraud prevention

Customer Focus: Acquiring banks, digital currency exchanges, financial institutions, online merchants, payment processors and gateways, payments services providers

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



IDEMIA is a digital identity service provider for companies in the payments, gaming, communication and commerce space. IDEMIA is the result of the merger between embedded digital security provider Oberthur Technologies and identity and security solutions provider Safran Identity & Security.

Products: Access control

Customer Focus: Corporates, financial institutions, government, internet of things, mobile networks, retail, transportation authorities

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



IDEX has developed advanced fingerprint imaging, recognition and authentication technology. The company sells sensors or licenses its intellectual property to global original equipment manufacturers for use in biometric products.

Products: Touch sensors

Customer Focus: Identification, internet of things, mobile, smart cards

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



IDology provides real-time technology solutions that verify the identities and ages of consumers who are not present.

Products: N/A

Customer Focus: Distance learning, eCommerce, financial services, gaming, healthcare, insurance, retail, tax, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓	✓				



ID R&D is a biometric solution provider focusing on the development of new biometric solutions to increase security and enhance user experience. The company has developed a suite of core biometric technologies for mobile login, chatbots and virtual assistants, and its solutions utilize various data points and biometric modalities – including behavioral, voice and facial recognition – to create frictionless biometric authentication in emerging communication channels.

Products: IDBehave, IDSquared, IDVoice, SafeChat 2.0

Customer Focus: United States

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓		✓	



ImageWare Systems provides identity management solutions driven by biometrics. Its solutions provide multimodal biometric authentication using voice, fingerprint and facial recognition, and combine cloud and mobile technology to offer multifactor authentication for smartphone, tablet and desktop users.

Products: GoVerifyID, IWS Biometric Engine, IWS CloudID, IWS Credentialing, IWS Law Enforcement, Pillphone

Customer Focus: Enterprise, financial, healthcare, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	

Consumer Data Scorecard – All players are listed in alphabetical order.



Imprivata enables healthcare providers to access, communicate and transact patient information securely. The Imprivata platform addresses critical compliance and security challenges while improving productivity and patient experiences.

Products: Electronic medical record adoption, electronic prescriptions for controlled substances, multifactor authentication, secure communications, single sign-on, virtual desktop access

Customer Focus: Healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓						✓		✓



Inflection is a family history website and a people search engine. The company aggregates and makes available personal records. It ensures that the information it collects is done so with privacy in mind.

Products: Background checks, employment screening, identity checks, identity protection, identity verification, people search, privacy

Customer Focus: Trust and safety, identity protection, employment screening, identity verification, privacy, background checks and people search

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓		✓			



Innovatrics offers biometric technologies for identity management. Its biometric automated biometric identification system includes fingerprint identification, facial verification, facial identification and iris verification.

Products: Digital Onboarding Toolkit, Innovatrics ABIS, original equipment manufacturing, SmartFace

Customer Focus: All Industries

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Integrated Biometrics develops fingerprint scanners. The company's FBI-certified fingerprint sensors use a light-emitting sensor film, enabling them to work in direct sunlight on dry or moist fingers and resist abrasion.

Products: Fingerprint scanners

Customer Focus: Commercial, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Intercede offers cybersecurity services and specializes in identity, credential management and secure mobility services. Its MyID products manage identities and credentials, enabling organizations to create and assign trusted digital identities to employees, citizens and machines. It also allows secure access to services, facilities, information and networks.

Products: MyIDaaS, MyID CMS, MyID Platform, RapID

Customer Focus: Enterprises, governments, organizations

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Iritech provides iris biometric technology. The company offers compact iris camera modules and iris-based authentication solutions that can be integrated in any handheld device.

Products: Iris camera hardware, iris recognition software

Customer Focus: ATMs, education, government, healthcare, nonprofits, workforce management

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



Is It You provides mobile identity and facial verification. Its technology works in almost complete darkness, bright sunlight and with most poses – even while a user is holding the phone at waist level or to the side.

Products: Mobile face recognition

Customer Focus: Banks, enterprise, personal security

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			✓



Janrain created the first customer identity and access management solution. It also invented social login and is a founding member of the OpenID Foundation, which has established many of the digital authentication protocols used globally today. It continues to lead the customer identity and access management market, and over half of the world's connected users are on its Identity Cloud network.

Products: Identity management, security, social, social media

Customer Focus: Businesses

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓				✓		✓



Jumio provides identity verification and authentication solutions. The company utilizes proprietary computer vision technology and biometrics to verify users against their government-issued credentials in real time.

Products: Financial services, banking, gaming, telecommunications, sharing economy, travel

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



LastPass offers single sign-on and password management solutions. The company's offerings help customers increase security, maintain compliance and boost productivity.

Products: Cloud applications, federated identity management, identity management, mobile application, password management, single sign-on, software-as-a-service, web applications

Customer Focus: Password management, identity management, single sign-on, SaaS, cloud, web applications, mobile applications, federated identity management and password management

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓		✓		



Irisys is an iris security solution company. Its technology includes an iris recognition solution for smartphones, an iris recognition camera module for smartphones and a subminiature iris USB called Lockit.

Products: Iris recognition modules, Lockit one-time passwords, Lockit USB

Customer Focus: Enterprise, banks

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



LoginRadius is a customer identity management platform offering customer registration services, profile data storage, single sign-on and more.

Products: Data integration, identity management, software, software as a service

Customer Focus: Business, information technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓				✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



M2SYS Technology provides enterprise solutions that enable customers and partners to utilize or integrate biometric technology. It also offers a biometric software development kit that allows developers to add biometric recognition to any software application.

Products: Biometric hardware, biometric technology, cloud solutions

Customer Focus: Banking, government, healthcare, workforce management

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓		



MePIN provides an authentication and transaction authorization solution designed to offer customer authentication with a single touch. Its solution implements universal two-factor authentication, strong customer authentication for payments and mobile ID services.

Products: Authentication, authorization

Customer Focus: Banks, government, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		



MetaStudio offers fraud defense solutions. Its products provide actionable cyber intelligence to combat fraudulent registrations, bogus leads, account hijacking and organized cyber criminals. The solutions also contribute data on known fraudsters that helps email service providers, internet service providers, lead generators and global online businesses stop criminal efforts.

Products: Customer authentication, email validation, instant bank verification, military lending, phone verification, ringless voicemail

Customer Focus: Banks, commerce, military

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								

Consumer Data Scorecard – All players are listed in alphabetical order.



Microsoft's Azure Active Directory is a cloud-based directory and identity management service. It enables single sign-on and grants employees access to numerous software-as-a-service programs with multifactor authentication.

Products: Azure Active Directory

Customer Focus: Communications, consumer products and services, financial services, manufacturing, media, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓						✓



miniOrange offers security solutions in cloud security, identity and access management, mobile, and vulnerability management.

Products: Cloud identity broker service, fraud prevention, network security, single sign-on, social log-in, two-factor authentication

Customer Focus: Education, financial services, healthcare, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓	✓	✓			✓	✓



MIRACL is a London-based company that applies elliptic curve cryptography to ensure trusted business transactions between people, applications and devices. Its MIRACL Trust® multifactor authentication service integrates into web and mobile applications through a cloud-based service and complies with European Union requirements for financial services companies. The company's zero-knowledge proof, M-Pin, removes the need to send or store authentication credentials, eliminating password databases.

Products: Multifactor authentication

Customer Focus: Banking, education, healthcare, government, subscription services, pharmaceuticals

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓		✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Mitek provides mobile capture and identity verification software solutions. Mitek’s identity document verification can enable enterprises to verify users’ identities during mobile transactions, helping financial institutions, payments companies and other businesses operating in highly regulated markets transact business safely. Mitek also reduces the friction in mobile users’ experiences with advanced data prefill.

Products: Deposit, mobile verify, prefill

Customer Focus: Enterprises, financial institutions

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Mobile Authentication Technologies offers mobile security and authentication solutions using smartcards and biometrics for iOS and Android devices.

Products: AuthentiKey, FIDO Universal Second Factor, fingerprint biometric algorithms

Customer Focus: Corporations, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		✓



MYPINPAD enables secure multifactor authentication for unsecured touchscreen devices like smartphones and tablets. It provides a modular platforms-as-a-service or customer-hosted platforms that deliver security with familiar and user-friendly authentication interfaces, like biometrics and cardholder personal identification numbers.

Products: Face-to-face transactions, online transaction authentication

Customer Focus: Banks, consumers merchants

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Neustar provides identity resolution solutions designed for a variety of industries.

Products: Communications, compliance risk and fraud, marketing, registry, security

Customer Focus: Automotive, communications, consumer packaged goods, financial services, hospitality, retail, technology, travel

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								



Nexmo's Verify application programming interface provides authentication by phone verification. Verify detects a phone number type and selects the appropriate channel for identification – either SMS or voice.

Products: Verify

Customer Focus: Enterprises, FinTechs

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓			✓	



Nok Nok Labs' ambition is to transform authentication by enabling end-to-end trust across the web using authentication methods that are natural to end-users and provide strong proof of identity. Its solutions remediate and unify authentication silos and provide organizations with greater flexibility to utilize strong authentication solutions in adaptable ways.

Products: S3 Authentication SDK, S3 Authentication Suite, Strong Authentication-As-A-Service

Customer Focus: Device manufacturers, first responders, government, identity service providers, mobile network operators, public safety, security vendors

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	✓

Consumer Data Scorecard – All players are listed in alphabetical order.



NXT-ID provides products that work with the internet of things. The company also has experience with identity verification and data protection and security.

Products: 3D-ID, biocloud, facematch, voicematch, Wocket

Customer Focus: Enterprises, financial institutions, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	



NtechLab is an intelligent security solutions and software provider. The company provides facial recognition software and a security software development kit for third-party developers.

Products: Facial authentication

Customer Focus: Corporate, government, law enforcement

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓			✓			



OneLogin is an identity and access management provider that offers enterprise-level single sign-on and identity-management solutions that work in the cloud. The company is based in San Francisco, California, and its products are used by more than 2,000 enterprise customers.

Products: Adaptive authentication, mobile identity, single sign-on, web access management

Customer Focus: Aeronautics, education, finance, government, healthcare, high technology, insurance, manufacturing, media, nonprofit, professional services, retail services

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓	✓	✓				

Consumer Data Scorecard – All players are listed in alphabetical order.



Okta is an independent identity solutions provider for enterprises. Its Okta Identity Cloud includes workforce and customer identity solutions and developers can use Okta's application programming interfaces to build customizable and secure user experiences.

Products: Adaptive multifactor authentication, application programming interface access management, life cycle management, secure server access, single sign-on, universal directory

Customer Focus: Financial services, technology companies

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓		✓		✓



OneVisage provides a disruptive digital identity platform for financial services, identity and access management providers, integrators and mobile operators.

Products: Premier Face SDK, Premier Secret SDK

Customer Focus: Access management, financial services, identity management, integrators, mobile operators

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Onfido's solutions are powered by machine learning, which validates identity documents by comparing them with facial biometrics. Users identities can be cross-referenced against international credit and watchlist databases.

Products: Document check, facial check, identity record check

Customer Focus: Businesses

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓				✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



PalmID provides authentication and security solutions for devices with cameras. Its offerings convert a users' palm images into unique signatures.

Products: Biometric authentication

Customer Focus: Automotive, banking, enterprise security, healthcare, IoT, payments, virtual reality, wearables

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Paycasso's software verifies consumers' identities when they are engaging in mobile, online or in-person transactions.

Products: DocuSure, IdentiSure, InstaSure, VeriSure

Customer Focus: Financial services, healthcare, insurance, restricted goods and services, retail banking

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Payfone is a mobile and digital identity authentication provider. Its platform, Lotus, generates proprietary Trust Scores for mobile identities.

Products: Lotus

Customer Focus: Banks, brokerages, insurance, technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Ping Identity provides security for borderless enterprises, allowing employees, customers and partners access to the applications they need. The company's solutions ensure that individuals are granted secure, seamless access.

Products: Federated access, management capabilities

Customer Focus: Airlines, automobile, banking, communication, computing, education, entertainment, government, healthcare, insurance, publishing, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓			✓	✓



PointPredictive provides fraud solutions that enable lenders and online retailers to stop fraud and reduce first payment and early payment default at low positives via analytic and big data platforms.

Products: Artificial intelligence solutions, risk management

Customer Focus: Auto finance, consumer lending, consumer rental, mortgage lending, online retail, real estate

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								



Precise Biometrics creates fingerprint recognition solutions that can be applied to identification cards, enterprise and bank cards, as well as to systems that control access to buildings, computers and networks.

Products: Fingerprint technology, smart card readers

Customer Focus: Business, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



RCDevs is a security company specializing in multifactor authentication and public key infrastructure. Its OpenOTP is an enterprise-grade user authentication solution based on open standards. It supports single-factor and multifactor user access with one-time password technologies and Universal Second Factor.

Products: OpenOTP

Customer Focus: Financial, government, healthcare, information technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		✓



Risk Ident offers anti-fraud solutions used to prevent payment fraud, account takeovers and fraud within account and loan applications.

Products: DEVICE IDENT, FRIDA

Customer Focus: eCommerce, financial, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								



SailPoint helps organizations manage user access from any device. Its solutions grant users transparency, enabling them to prevent fraud and mitigate risks.

Products: Identity governance platform

Customer Focus: Enterprise software, identity management, risk management, software, software development

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓				✓

Consumer Data Scorecard – All players are listed in alphabetical order.



SecureAuth provides access control solutions, allowing organizations to determine identities. It provides authentication security, sign-in and self-service tools together in a single platform.

Products: Authentication security, single sign-on, user self-service

Customer Focus: Financial institutions, government, healthcare, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓				✓



SecureKey is an identity and authentication provider that simplifies consumer access to online services and applications. The company's identity and authentication networks connect people to online services using digital credentials they already have and trust.

Products: Digital identity ecosystem, SecureKey Concierge

Customer Focus: Government, healthcare, online marketplaces, telecommunications

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓								



SEKUR.me reduces online payment frictions for eCommerce sites with single-click technology and multifactor authentication.

Products: Branded mobile payments, frictionless payments

Customer Focus: Mobile login and payment

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		

Consumer Data Scorecard – All players are listed in alphabetical order.



Sensory offers fraud prevention solutions to improve consumer electronics user experiences through machine learning technologies. It enables safer experiences and specializes in deep net and learning technologies for speech recognition, machine vision and biometrics on embedded smaller footprint platforms.

Products: Audio technologies, hardware, software, speech technologies

Customer Focus: Automotive, home electronics, internet of things, mobile devices, toys, wearables

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓		✓	



Shufti Pro is a digital verification software system. It seeks to create online marketplaces that do not have to worry about fraud and theft.

Products: Anti-money laundering, identity governance platform, identity verification, know your customer

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Signicat is a digital identity and signature solutions provider based in Europe.

Products: Advanced authentication, Digital Identity Hub, Digital Identity Service Provider, electronic signatures, Identity Assurance as a Service, identity verification, Preservation Archive

Customer Focus: Financial service providers, from large banks to FinTech startups

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓		✓		✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Socure provides digital identity verification in over 180 countries. It assists enterprises with preventing fraud and account takeovers while increasing customer acceptance rates.

Products: ID+

Customer Focus: Financial institutions, sharing economy

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓			✓			



Sonovation provides authentication and protection services for digital and physical environments. It offers stand-alone products as well as embedded ones.

Products: Biometric sensor, sensor-under-glass technology, ultrasound biometrics

Customer Focus: eCommerce, financial services, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



The Sovrin Network is a public service utility enabling online self-sovereign identities.

Sovrin is open-source and offers the tools necessary to create secure data management solutions.

Products: Digital identity libraries and tools

Customer Focus: Blockchain companies

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓				✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Sthaler enables consumers to pay for goods and services, gain entry to events and manage payments online with their fingerprints.

Products: Fingopay

Customer Focus: Financial services, retail

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



Synacts offers identity protection tools for consumers. The company develops online services to give internet users full control over their data. The solution is intended for use in digital onboarding, online checkouts, eSigning, secure messaging and payment.

Products: Digital identification

Customer Focus: End users

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		



Synaptics develops human interface solutions.

Products: Biometrics, display drivers, touch controllers, TouchPad

Customer Focus: Automotive, technology, wearables

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓		✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Tascent develops biometric identity products and solutions with a focus on iris recognition and multimodal high-throughput and mobile biometrics.

Products: High throughput iris recognition, mobile identity

Customer Focus: Borders, defense, humanitarian aid, identity, law enforcement, personal data, public safety

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	



TeleSign is a mobile identity solutions provider. It also offers account security and fraud prevention with two-factor authentication.

Products: Account registration, access and usage recovery, smart start services

Customer Focus: Customer relationship management software, loyalty marketing, social platforms

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓				



Trulioo is a global identity verification company that provides secure access to over 200 unique and reliable data sources worldwide to instantly verify identities.

Products: GlobalGateway

Customer Focus: Banking, eCommerce, financial services, foreign exchange, online trading and lending, payments, remittance

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓			✓			

Consumer Data Scorecard – All players are listed in alphabetical order.



Trusona offers an insured digital identity authentication solution that does not require passwords. Instead, it relies on technology to analyze automated clearing house transactions to verify each digital interaction.

Products: Access management, consumer identity, identity proofing, multifactor authentication

Customer Focus: eCommerce, education, financial services, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		



Trustev is a fraud prevention solution powered by technology that uses information surrounding users' behaviors, devices, emails and social media accounts when attempting to determine identity.

Products: Digital data, identity checks

Customer Focus: Airlines, banking, digital goods, insurance, retail, travel

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



Ubisecure offers a digital identity and authentication services platform. It includes customer identity and access management and identity-as-a-service solutions, enabling businesses to determine and authenticate new customers' identities.

Products: Identity cloud, identity platform, identity server

Customer Focus: Banking, eCommerce, eGovernment, insurance

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓				✓

Consumer Data Scorecard – All players are listed in alphabetical order.



Veiris provides advanced computer vision technology for real-time identity verification, facial detection, facial recognition and facial analysis to address enterprises' know-your-customer needs.

Products: Face detection, identity verification

Customer Focus: eCommerce, financial institutions, FinTechs, travel

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



Veridium offers biometric authentication technologies that increase security, reduce fraud and cut costs associated with passwords and traditional multifactor authentication solutions. VeridiumID is a software-only platform for biometric authentication that works in conjunction with a front-end mobile software development kit to embed biometrics into mobile apps.

Products: VeridiumID, VeridiumAD

Customer Focus: Enterprises, financial, government, healthcare

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓					✓		



VerifyMe offers ID services to replace passwords and PINs with multifactor authentication. The company also authenticates individuals using facial recognition, fingerprint, voice and retina scanning, swipe pattern recognition, location detection and approved IP detection.

Products: Anti-counterfeiting, biometrics, identity protection

Customer Focus: Individuals, industries, government

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	

Consumer Data Scorecard – All players are listed in alphabetical order.



VisionLabs offers security and authentication products and solutions that utilize face recognition, object recognition, augmented reality and virtual reality.

Products: FACE.DJ, LUNA PLATFORM, LUNA SDK

Customer Focus: Banking, construction, retail, security, transportation

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓				✓			



VoicePIN is a voice-based biometric system for user authentication that enables users to log into a system without having to remember passwords or PIN numbers.

Products: Voice authentication

Customer Focus: Banking, eCommerce

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						✓	



VoiceVault provides voice biometrics solutions that focus on ease of use along with convenience. Solutions are developed and delivered through partners or direct-to-client organizations, and can be deployed through a range of hosting models.

Products: ViGo Mobile Identity Verification, ViGo Wear For Wearables, ViM Identity And Access Management, VoiceAuth, VoiceSign

Customer Focus: Healthcare, financial

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						✓	

Consumer Data Scorecard – All players are listed in alphabetical order.

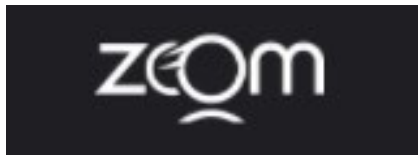


VoiceTrust offers biometric authentication experiences that are ISO 9001 and Common Criteria compliant. The products include biometric solutions consulting, solution deployments and customer support. Its voice-, face- and knowledge-based identity verification solutions are used across North America, Europe and the Middle East.

Products: Caller authentication, face login, password reset, proof of life, voice login

Customer Focus: Call centers, financial services, healthcare, helpdesk, information technology

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓		✓		✓		✓	



Zoom replaces passwords with selfie-style authentication by matching users' faces via recognition algorithms and verifying liveness with motion and three-dimensionality.

Products: Biometric authentication and verification
Commercial retailers

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓			✓	✓	✓		



Applied Recognition offers face detection, recognition and authentication technology for consumers, enterprises and application developers. The company serves a range of verticals, including financial services, IoT device manufacturers and software providers.

Products: Signature management, enterprise content management, biometric authentication

Customer Focus: Financial services

IDENTITY DATA					BIOMETRICS			
Online Data	Physical	Social	Knowledge Based Questions	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓	✓	✓	✓	✓	✓	✓

Device Intelligence Scorecard – All players are listed in alphabetical order.



01Systems is a software application and solution provider. Its industry products are a portfolio offering arabization, signature management, a biometric solutions integrator (finger vein, fingerprint), ECM and digital vouchers.

Products: Signature management, enterprise content management, biometric authentication

Customer Focus: Financial services

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓	✓	✓	✓	✓	✓	✓



BeyondTrust is a global cybersecurity company that prevents data breaches by exercising control over internal and external risks.

Products: AD auditing, AD bridge, assessment, data security solutions, information security management systems, least privilege, Linux privilege management, privileged access management, privileged account management, privileged password management, secure shell key management, session monitoring, Sudo, threat analytics, Unix privilege management, vulnerability management, Windows privilege management

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



BioCatch provides behavioral biometric, authentication and malware detection solutions for mobile and web applications. It collects and analyzes cognitive parameters to generate user profiles.

Products: Behavioral authentication, fraud prevention, remote access tool detection

Customer Focus: Banking, eCommerce, enterprise

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							

Device Intelligence Scorecard – All players are listed in alphabetical order.



CA Technologies' CA Advanced Authentication provides real-time protection for online and mobile applications. The solution can authenticate an employee, a partner or a contractor while providing a seamless login experience. It includes features multifactor authentication and risk-based methods such as device identification, geolocation and user activity.

Products: Advanced authentication, API security, identity management, payment security

Customer Focus: Enterprise, financial institutions

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓				✓



Callsign offers Intelligence Driven Authentication, a software designed to enable informed and adaptive access control decisions via location and behavior analytics, biometrics and machine learning.

Products: Intelligence Driven Authentication

Customer Focus: Enterprises, customer-facing digital services, financial institutions

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓			✓	✓	✓	✓	✓



CardinalCommerce provides authenticated payments, secure transactions and alternative payments for both eCommerce and mobile commerce.

Products: Alternative payments, big data, consumer authentication, mobile, solution design

Customer Focus: Banks, merchants

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							✓

Device Intelligence Scorecard – All players are listed in alphabetical order.



Centrify's identity-as-a-service (IDaaS) solutions can be used to verify users, validate devices and put limits on access and privilege. It utilizes machine learning to discover risky user behavior and apply conditional access, and all without impacting user experience.

Products: Single sign-on, adaptive multifactor authentication, privileged access management, risk analytics

Customer Focus: Automotive, banking, defense and government, education, internet, manufacturing, retail, pharma, telco

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



CounterTack provides predictive enterprise protection platforms to mitigate risk.

Products: Cloud security, cybersecurity, network security, security

Customer Focus: Enterprise customers

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓				✓



Duo Security aims to protect organizations against data breaches by ensuring that only legitimate users and appropriate devices have access to sensitive data and applications.

Products: Verify user identity, devices

Customer Focus: Education, financial, healthcare, legal, retail, technology

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓				✓

Device Intelligence Scorecard – All players are listed in alphabetical order.



Easy Solutions is focused on the detection and prevention of electronic fraud across devices, channels and clouds.

Products: Fraud intelligence, fraudulent transaction and activity detection, mobile anti-fraud protection suite, mobile authentication, safe browsing, strong authentication

Customer Focus: Airlines, enterprises, financial services, infrastructure, retail, security

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓		✓						✓



Encap Security offers strong authentication and eSignature solutions for the financial services industry. Its smarter authentication platform is integrated into individual customer infrastructures and delivers security and user experience across all applications, channels and devices. The platform supports Apple Touch ID and Samsung fiFingerprint.

Products: Smarter authentication platform

Customer Focus: Banking, enterprise, healthcare, identity providers

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓						✓		✓



Entersekt offers push-based authentication and app security with products that comply with most regulatory guidelines.

Products: Card-not-present authentication, mobile app, mobile banking, online banking

Customer Focus: Banking, healthcare, insurance, mobile

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓				

Device Intelligence Scorecard – All players are listed in alphabetical order.



Entrust Datacard, formerly known as Datacard Group, offers digital identity solutions to FIs, governments and corporate enterprises that conduct highly secure transactions. Some of its solutions include central card issuance systems, passport and ID cards and offering security certificates and communication channels.

Products: Authentication, identity credential management, SSL certificates, employee ID, mobile authentication, border control

Customer Focus: Financial, government, corporate, education, healthcare, retail, transit

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓	✓	✓		✓



Evernym provides data security solutions. It works with other organizations to create and deploy private-by-design solutions offering control and ownership of personal data.

Products: Claims exchange, claims issuing, decentralized application stack, identity owner tools, trust anchor services, verification tools

Customer Focus: Commerce, education, finance, healthcare, travel

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓	✓						✓



EZMCOM is a security access software developer. The company's biometric authentication solutions can be deployed to protect users, data and applications from credential theft, account takeover and breaches.

Products: 3D Secure, behavioral authentication, document authentication, fusion biometrics, hardware, mobile public key infrastructure tokens, multifactor authentication, risk-based authentication

Customer Focus: Banking, eCommerce, enterprises, government, law

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓	✓	✓	✓	✓

Device Intelligence Scorecard – All players are listed in alphabetical order.

New!



Folio harnesses advanced biometrics, artificial intelligence and smartphone technology to analyze and verify users' identities through documents, photo identification and physical attributes. Encrypted credentials can be certified and issued directly via the Folio app and they are accessible only to registered, biometrically paired users. Folio gives users complete control over their data.

Products: Authentication, digital mobile wallet, issuance, platform, registration

Customer Focus: Banking, central government, education, local government, membership, organizations, legal applications, accounting

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
					✓	✓		✓



ForgeRock, an identity relationship management vendor, works to help companies and governments to build secure, customer-facing relationships across apps and devices. Its access management solution provides authentication possibilities with several out-of-the-box authentication modules to fit the needs of business, including device fingerprinting, one-time passwords and adaptive risk authentication.

Products: Access management, user managed access, identity management, identity gateway, directory service

Customer Focus: Digital health, financial services, omnichannel retail, communication and media, government

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓				✓



FusionPipe offers secure software authentication solutions to improve productivity and enhance data and network security. Its QuikSafe Authentication platform leverages personal devices to provide secure, convenient multifactor authentication without the need for smart cards, readers or hardware-based solutions.

Products: QuickID, QuickID Smart, QuickSafe, two-factor authentication

Customer Focus: Enterprises, first responders, healthcare, mobile field service

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		

Device Intelligence Scorecard – All players are listed in alphabetical order.



IDology, Inc. provides real-time technology solutions that aim to verify the identities and ages of consumers who are not present.

Products: Financial services, tax, distance learning, health care, insurance, retail, gaming, telecommunications, eCommerce

Customer Focus: N/A

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓				



InAuth is a digital device intelligence company. The InAuth Security Platform delivers advanced device identification, analysis and risk assessment to help organizations reduce fraud.

Products: Analysis, device identification, integrity screening, risk assessment

Customer Focus: Banking, eCommerce, enterprise, healthcare, payments

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓	✓	✓	✓	✓		✓	



iovation exposes online fraudsters in real time and provides multifactor authentication services. Its software-as-a-service solution examines the devices' reputations to provide security.

Products: ClearKey, fraud prevention, LaunchKey, multifactor authentication, SureScore

Customer Focus: Financial services, retail

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓	✓		✓		

Device Intelligence Scorecard – All players are listed in alphabetical order.



Kount helps online businesses increase sales by reducing fraud and allowing them to accept more orders. For each transaction, Kount's decisioning engine analyzes hundreds of relevant variables and activity from across the globe in real time.

Products: Access, fraud prevention platform

Customer Focus: Healthcare, insurance, payment processors, retail, telecommunications

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



LiveEnsure is an interactive authentication company with solutions that authenticate users, mobile devices, sessions, locations and behavior contexts with app-to-app rollover or touch-to-tap engagement. LiveEnsure offers mobile security solutions for cloud, web and apps on iOS, Android and Windows.

Products: Four factors of authentication

Customer Focus: eCommerce, financial services, telecommunications, web developers

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



MaxMind's GeoIP data is used to locate internet visitors and show them relevant content and ads, prevent fraudulent online transactions and reduce manual review.

Products: GeoIP2, minFraud

Customer Focus: eCommerce

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							

Device Intelligence Scorecard – All players are listed in alphabetical order.



MetaStudio offers fraud defense solutions. Its products are designed to provide actionable cyber intelligence to combat fraudulent registrations, bogus leads, account hijacking and organized cyber criminals. The solutions also work to contribute data on known fraudsters that helps email service providers, internet service providers (ISP), lead generators and global online businesses stop fraudsters efforts.

Products: Customer authentication, Instant bank verification, Military lending act, Phone verification, Ringless voicemail, Email validation

Customer Focus: Bank, Military, Commerce

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



miniOrange offers security solutions in the areas of cloud security, identity and access management, mobile Security, and vulnerability management. Its products include miniOrange Strong Authentication, miniOrange Single Sign-on solution and the miniOrange Fraud Prevention solution.

Products: Cloud identity broker service, 2FA, single sign-on, fraud prevention, network security, social login

Customer Focus: Financial services, retail, healthcare, education

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓			✓	✓



mSIGNIA offers mobile authentication and device recognition solutions. The company's software helps businesses limit risk, reduce fraud and enhance customer experiences within fast-growing digital channels. mSignia uses authentication, intelligent behavior data analytics and biometric authentication.

Products: 3DS Merchant With Data Gateway, EMV 3DS Compliancy Platform, USDK And SDK Manager

Customer Focus: Banking, eCommerce, gaming, healthcare, payments

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓	✓	✓		✓		

Device Intelligence Scorecard – All players are listed in alphabetical order.



Neustar provides identity resolution solutions designed for industries including marketing, security and communications, among others.

Products: Marketing, Compliance Risk and Fraud, Security, Registry, Communications

Customer Focus: Retail & Consumer Packaged Goods, Financial Services, Automotive, Travel & Hospitality, Communications & Technology.

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓							



NoPassword, powered by WiActs, offers identity management and password-free single sign-on solutions. Its products are designed around biometrics and feature multifactor authentication.

Products: Hidden multifactor authentication, human multifactor authentication, NoPassword Authentication

Customer Focus: Financial, government, healthcare, insurance, retail, technology, travel

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓		✓	✓	✓	



Okta's Identity Cloud solution is designed to securely connect enterprises to their partners, suppliers and customers. It uses deep integrations to secure access from any device.

Products: Single Sign-On, Multi-Factor Authentication, Lifecycle Management, Universal Directory, API Access Management

Customer Focus: Cloud, Consumer, Education, Finance, Government, Healthcare, Manufacturing, Media, Non-Profit, Retail, Services, Technology, Transportation

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓		✓		✓		✓	✓	✓

Device Intelligence Scorecard – All players are listed in alphabetical order.



OneLogin is a cloud-based identity and access management provider that offers enterprise-level single sign-on and identity-management solutions. The company's solution is used by more than 2,000 enterprise customers for securing and managing identities in cloud, legacy and hybrid environments.

Products: Adaptive authentication, mobile identity, single sign-on, web access management

Customer Focus: Education, finance, government healthcare, high-tech, insurance, manufacturing, media, nonprofit, professional services and retail services

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓				



OneSpan's security and eSignature solutions protect people, devices and transactions from fraud, providing rock-solid security and a frictionless customer experience. This enables even the most regulated companies to drive bold digital transformations and deliver powerful digital interactions with their customers.

Products: Cybersecurity, information technology, security

Customer Focus: Banks, businesses

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓	✓	✓	✓	✓



PrivaKey offers multifactor authentication without requiring passwords, password managers, SMS messages, out-of-band codes or other protocols. It allows users to use personal devices like phones, tablets or computers with a PIN or biometrics as the unstored second factor. This protects against phishing, keylogging, device cloning, account takeover and other common attacks.

Products: Two-factor authentication

Customer Focus: Financial services

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓		

Device Intelligence Scorecard – All players are listed in alphabetical order.



Products: OpenOTP™ server (multi-factor with OTP and FIDO-U2F)

Customer Focus: SMEs, IT, financial, healthcare and government sectors

RCDevs is a security company specializing in multifactor authentication and PKI. RCDevs provides solutions to customers ranging from SMEs to large corporations in the IT, financial, healthcare and government sectors. Its OpenOTP is an enterprise-grade user authentication solution based on open standards. It supports the combinations of single-factor and multifactor user access with one-time password technologies (OTP) and universal second factor (FIDO-U2F).

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓			✓		✓		✓



Products: FRIDA fraud manager, DEVICE IDENT device fingerprinting, EVE evaluation engine

Customer Focus: eCommerce, telecommunication, financial sector

Risk Ident is a software provider that offers anti-fraud solutions to companies within the eCommerce, telecommunication and financial sectors. Risk Ident's key products are FRIDA Fraud Manager, DEVICE IDENT Device Fingerprinting and EVE Evaluation Engine, designed for use in payment fraud, account takeovers, and fraud within account and loan applications.

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓		✓					



Products: Access management, authentication, credential management, credit/debit card information protection, consumer identity protection, data protection, identity administration, mobile workforce security, password management, portal and partner integration, regulatory compliance

RSA provides business-driven solutions for advanced threat detection, cyber incident response, identity and access management and governance, risk management and compliance.

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓		✓	✓			✓

Device Intelligence Scorecard – All players are listed in alphabetical order.



SecureAuth provides access control solutions, allowing organizations to determine identities. SecureAuth™ IdP provides authentication security, sign-in and self-service tools together in a single platform.

Products: Authentication security, single sign-in and user self-service

Customer Focus: Financial institutions, healthcare, retail, government and other industries

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓			✓				✓



Sift offers fraud detection systems, using large-scale machine learning technology to predict fraudulent behavior. The solution catches fraud that is unique to different businesses and stops fraudsters in real time.

Products: Device fingerprinting, machine learning

Customer Focus: Digital cash, eCommerce, on-demand services, online marketplaces, payment gateways, travel

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓					



Socure provides digital identity verification. The company's technology applies machine-learning techniques with trusted online/offline data intelligence from email, phone, address, IP, social media and the broader internet to authenticate identities in real time. The company has established global channel partnerships with credit bureaus, identity verification vendors and other solution providers. The company powers financial inclusion verifying identities in over 180 countries, helping enterprises combat identity fraud, prevent account takeover and increase customer acceptance.

Products: ID+ (digital identity verification), perceive (remote facial biometrics), business verification

Customer Focus: Financial institutions, sharing economy

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓				✓			

Device Intelligence Scorecard – All players are listed in alphabetical order.



ThreatMetrix offers advanced fraud prevention and context-based security solutions that authenticate consumer and workforce access to mission critical applications using real-time identities and analytics.

Products: Advanced fraud protection, content-based authentication

Customer Focus: eCommerce, Federal Financial Institutions Examination Council, financial institutions, government, healthcare, insurance, social networks

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓	✓	✓	✓			



Trustev, owned by Transunion, is a fraud prevention solution powered by technology that uses information surrounding a user's behavior, device, email and social media when attempting to determine identity. Trustev provides services to retail, banking, digital goods, insurance, airlines and other travel-related companies.

Products: ID checks, digital data

Customer Focus: Retail, banking, digital goods, airlines & travel, insurance

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓							



Vantage Point stops friendly fraud by creating digital video recordings of customers placing orders online. The recordings contain the device and environment fingerprint – combined with customer interactions as they navigate websites – adding an extra layer of security.

Products: Devices fingerprinting

Customer Focus: eCommerce

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓		✓					

Device Intelligence Scorecard – All players are listed in alphabetical order.



VASCO provides two-factor authentication and electronic signature solutions to financial institutions. The company also offers access to data and applications in the cloud and provides tools for application developers to integrate security functions into their web-based and mobile applications.

Products: Compliance, documents, eSignature, fraud prevention, identity and access, mobile app security, transaction signing

Customer Focus: eCommerce, enterprise, financial, government, healthcare

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓	✓		✓		✓



Veridium offers biometric authentication technology. The company's solutions help organizations increase security, reduce fraud and cut costs associated with passwords and traditional multifactor authentication solutions. VeridiumID is a software-only platform for biometric authentication which works in conjunction with a front-end mobile SDK to embed biometrics into a company's mobile app.

Products: VeridiumID, VeridiumAD

Customer Focus: Financial, healthcare, enterprise, government

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓						✓		



VerifyMe offers ID services to replace passwords and PINs with multi-factor authentication. The company also provides the ability to authenticate individuals using facial recognition, fingerprint, voice and retina scanning, swipe pattern recognition, location detection and approved IP detection.

Products: Biometrics, identity protection, anti-counterfeiting

Customer Focus: Industries, governments, and individual

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
	✓				✓	✓	✓	

Device Intelligence Scorecard – All players are listed in alphabetical order.



Yoti provides security software solutions. Its offerings include a digital identity platform to improve online and in-person security by verifying and authenticating the user.

Products: Age checks, biometric log-in, building access, customer authentication, digital identity, identity verification

Customer Focus: eCommerce, financial services, healthcare, venues

Device Fingerprinting	IP Geolocation	True Application	Device Emulator / With Malware	PIN	BIOMETRICS			
					Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓		✓	✓	✓		✓

Transaction Behavior Scorecard – All players are listed in alphabetical order.



AimBrain is a mobile biometric authentication platform. It uses behavioral, facial and voice recognition as well as patent-pending technology to authenticate the user.

Products: Biometric authentication

Customer Focus: Financial

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓					✓	✓	



AuthenWare is a cybersecurity software firm providing businesses with solutions to fight identity theft. Its AuthenWare Technology enables customers to deliver enterprise application, website and transaction security, as well as installation, configuration, identification, testing, instructor-led product training and production deployment services.

Products: Online authentication

Customer Focus: Consumers, cybersecurity, government, security, small and medium-sized businesses, software

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						



Balabit is a contextual security technologies provider that prevents data breaches without constraining business. Balabit operates globally with offices across the United States and Europe. The company's platform offers real-time protection from threats posed by the misuse of high-risk and privileged accounts.

Products: Application log management, behavioral analytics, privileged user monitoring, user behavior analytics

Customer Focus: Cloud and managed service providers, finance, government, healthcare, higher education, telecommunications

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						✓

Transaction Behavior Scorecard – All players are listed in alphabetical order.



BehavioSec offers Biometric solutions for risk-based authentication of end users. Biometrics identifies unauthorized users by detecting anomalies in keyboard/mouse or environment behavior and creates digital fingerprints from user behaviors.

Products: Authentication, behavioral biometrics, fraud detection, information technology security, information theft

Customer Focus: Financial, information technology, online services

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



BioCatch provides behavioral biometric, authentication and malware detection solutions for mobile and web applications. Available as a cloud-based solution, BioCatch collects and analyzes cognitive parameters to generate a user profile.

Products: Behavioral authentication, RAT detection, fraudulent activity

Customer Focus: Banking, eCommerce, enterprise

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



Biometric Signature ID develops biometric ID verification software solutions that use multifactor authentication. The company helps organizations control risk, reduce fraud, manage security and maintain compliance.

Products: BioName-ID, BioProof-ID, BioSafe-ID, BioSig-ID, BioTect-ID, reporting and forensics

Customer Focus: eCommerce, education, enterprise, financial, healthcare

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							

Transaction Behavior Scorecard – All players are listed in alphabetical order.



CA Technologies' CA Advanced Authentication provides real-time protection for online and mobile applications. The solution can authenticate an employee, a partner or a contractor while providing a seamless login experience. It includes features multifactor authentication and risk-based methods such as device identification, geolocation and user activity.

Products: Advanced authentication, API security, identity management, payment security

Customer Focus: Enterprise, financial institutions

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						



Credence ID offers biometric authentication tools, including mobile fingerprint, iris and facial recognition technologies.

Products: Mobile biometric hardware and software

Customer Focus: Biometrics, enterprise, ePayments, government, identity

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



Crossmatch aims to help organizations solve their identity management challenges. Its enrollment and authentication solutions are used to create, validate and manage identities for a range of government, law enforcement, financial institution, retail and commercial applications. Crossmatch's solutions are designed using biometric technologies and multifactor authentication software.

Products: Authentication, enrollment, mobile, SDKs

Customer Focus: Defense, finance, government, law enforcement, hospitality and retail, enterprise

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓		✓		

Transaction Behavior Scorecard – All players are listed in alphabetical order.



Early Warning provides payment and risk solutions to financial institutions, government entities and payment companies. Its identity and authentication offerings are intended to improve account opening, simplify and unify authentication through a single API, and fight fraud with behavioral biometrics.

Products: Authentication, payment, regulatory solutions

Customer Focus: Financial institutions, government entities, payment companies

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓		✓				



Easy Solutions is focused on the detection and prevention of electronic fraud across devices, channels and clouds. Easy Solutions products range from fraud intelligence and secure browsing to multifactor authentication and transaction anomaly detection.

Products: Mobile anti-fraud protection suite, fraudulent transaction and activity detection, fraud intelligence, strong authentication, save browsing for any environment, mobile authentication

Customer Focus: Financial services, security firms, retailers, airlines

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓		✓				



FICO is an analytics software company, with solutions designed to help businesses make better decisions through Big Data and mathematical algorithms to predict consumer behavior. FICO provides analytics software and tools used across multiple industries to manage risk, fight fraud, build more profitable customer relationships, optimize operations and meet strict government regulations.

Products: Analytics, fraud and security, scores, communications

Customer Focus: Transportation and travel

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓					

Transaction Behavior Scorecard – All players are listed in alphabetical order.



Forter's decision-as-a-service system eliminates fraud prevention frictions, such as the need for rules, scores or manual reviews. The company's machine learning technology combines cyber intelligence with behavioral and identity analysis to create a multilayered fraud detection mechanism.

Products: Behavioral analysis, cyber intelligence, elastic identity

Customer Focus: Online merchants

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓					



FST Biometrics offers solutions that utilize biometric identification technology to provide secure access. The company's motion identification system combines facial recognition, behavioral analytics and voice analytics to identify authorized individuals from a distance and in motion.

Products: Digital doorman, in-motion identification, mobile

Customer Focus: Airports, corporates, education, entertainment, financial, healthcare, residential, retail, pharmaceuticals

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓	



ID Analytics' solution provides actionable insights into enterprises' credit and identity risk. It does this through a combination of proprietary data, patented analytics and up-to-the-minute consumer behavior insights from the ID Network, one of the nation's largest networks of such cross-industry data.

Products: Authentication and Verification, Credit Risk, Fraud Risk Management

Customer Focus: Automotive lending, communications, credit card, government, online lending, retail banking

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						

Transaction Behavior Scorecard – All players are listed in alphabetical order.



IdentityMind Global platform provides identity-based risk management, fraud prevention, and anti-money laundering services for online lenders, acquiring banks, payment processors, gateways, payment service providers, digital currency exchanges, financial institutions, and eCommerce merchants.

Products: Online fraud prevention, anti-money laundering, merchant risk

Customer Focus: Online merchants, acquiring banks, payment processors and gateways, payments services providers, digital currency exchanges, and financial institutions

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						



ID R&D is a biometric solution provider focusing on the development of new biometric solutions to increase security and enhance user experience. The company has developed a suite of core biometric technologies for mobile login, chatbots and virtual assistants, and its solutions utilize various data points and biometric modalities (including behavioral, voice and facial recognition) to create frictionless biometric authentication in emerging communication channels.

Products: IDSquared, SafeChat, IDVoice, Voice Anti-spoof, IDBahave

Customer Focus: N/A

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓		✓	



KeyTrac provides companies with biometric solutions to identify users. Its offerings can be accessed using a common and commercially available computer keyboard.

Products: Keystroke biometrics

Customer Focus: eLearning, financial, legal, online services, startups, universities

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							

Transaction Behavior Scorecard – All players are listed in alphabetical order.



miniOrange offers security solutions in the areas of cloud security, identity and access management, mobile security and vulnerability management. Its products include miniOrange Strong Authentication, miniOrange Single Sign-On solution and the miniOrange Fraud Prevention solution.

Products: Cloud identity broker service, 2FA, single sign-on, fraud prevention, network security, social login

Customer Focus: Financial services, retail, healthcare, education

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓				✓



NetGuardians provides software that uses data to correlate and analyze behaviors across an entire bank system. The solution allows banks to target specific anti-fraud or regulatory requirements.

Products: Fraud protection

Customer Focus: Financial

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓						



NoPassword, powered by WiActs, offers identity management and password-free single sign-on solutions. Its products are designed around biometrics and feature multifactor authentication.

Products: NoPassword Authentication, Human and hidden multifactor authentication

Customer Focus: Financial, Insurance, Healthcare, Technology, Government, Manufacturing, Retail, Travel

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓				✓	✓	✓	

Transaction Behavior Scorecard – All players are listed in alphabetical order.



NuData Security positively verifies users online with real-time passive biometrics and behavioral analytics.

Products: Cybersecurity, enterprise software, fraud detection, internet

Customer Focus: Financial

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓					



Plurilock's solutions use artificial intelligence to identify, prevent and eliminate insider threats.

Products: Plurilock Adapt, Plurilock Aware, Plurilock Defend

Customer Focus: Banks, critical infrastructure, financial, government, healthcare, military

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



SecureAuth provides access control solutions, allowing organizations to determine identities. SecureAuth™ IdP provides authentication security, sign-in and self-service tools together in a single platform.

Products: Authentication security, single sign-in and user self-service

Customer Focus: Financial institutions, healthcare, retail, government and other industries

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓				✓

Transaction Behavior Scorecard – All players are listed in alphabetical order.



SECUREDTOUCH

SecuredTouch offers behavioral biometrics for mobile devices. The company collects and analyzes different behavioral parameters to create a unique user behavioral profile to authenticate transactions. The company offers both application- and device-based solutions.

Products: Behavioral biometrics

Customer Focus: Financial

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						



Sift Science offers fraud detection systems, using large-scale machine learning technology to predict fraudulent behavior, leveraging a global network of fraud data. The solution is intended to catch fraud that is unique to different businesses and to train specific customer customized models to stop fraudsters in real time.

Products: Machine learning, device fingerprinting

Customer Focus: Travel, digital cash, on-demand, online marketplace, eCommerce, payment gateway

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓					



Solus Connect's platform uses multifactor authentication and biometrics to verify users with no hardware necessary

Products: Behavioral authentication, eyeprint, multifactor authentication

Customer Focus: Banks, enterprises, finance, government, healthcare

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓			

Transaction Behavior Scorecard – All players are listed in alphabetical order.



TeleSign is a provider of mobile identity solutions and offers account security and fraud prevention with two-factor authentication, based on each user’s mobile identity (phone number, device and behavior), which is driven by real-time global intelligence, including reputation scoring and device data.

Products: Account registration, access and usage recovery, smart start services

Customer Focus: Software CRM, loyalty marketing, social platforms

PAYMENTS			BIOMETRICS				
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓	✓	✓		✓



ThisData offers an advanced data security application to protect client information through cloud-based storage. It leverages behavioral biometrics and advanced machine intelligence to create user profiles based on user activity. The profile will automatically detect unusual behaviors, such as accessing an application from an unrecognized device or a new location.

Products: Account takeover, adaptive authentication, continuous authentication, fraud detection, intelligence community, risk scoring, threat intelligence, two-factor authentication

Customer Focus: Commerce, education, finance, healthcare, travel

PAYMENTS			BIOMETRICS				
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓	✓					



ThreatMetrix offers advanced fraud prevention and context-based security solutions. These solutions authenticate consumer and workforce access to mission critical applications using real-time identity and analytics.

Products: Advanced fraud protection, content-based authentication

Customer Focus: eCommerce, financial institutions and FFIEC, enterprise, insurance, social networks, government, healthcare

PAYMENTS			BIOMETRICS				
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓		✓	✓			

Transaction Behavior Scorecard – All players are listed in alphabetical order.



Trusteer provides endpoint cybercrime prevention solutions and clientless fraud prevention products. Its offerings protect against financial fraud and data breaches.

Products: Banking, fraud detection, network security

Customer Focus: Brokerages, online banks, retailers

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓	✓						



Trustev, owned by Transunion, is a fraud prevention solution powered by technology that uses information surrounding a user's behavior, device, email and social media when attempting to determine identity. Trustev provides services to retail, banking, digital goods, insurance, airlines and other travel-related companies.

Products: ID checks, digital data

Customer Focus: Retail, banking, digital goods, airlines & travel, insurance

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



Twosense provides a mobile software development kit that offers continuous, invisible user authentication practices through behavioral biometrics. It can be integrated with a few lines of code, and observes and models authorized users' behavioral fingerprints to deny entry to attackers. The solution also applies deep learning tools to reduce fraud and improve user experiences.

Products: Behavioral biometrics, fraud protection

Customer Focus: Call centers, mobile banking, mobile payments

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓					✓		

Transaction Behavior Scorecard – All players are listed in alphabetical order.



TypingDNA provides biometric technology. It offers proprietary artificial intelligence software to identify users by the way they type on their keyboards. The solution also provides quick integration via application program interfaces.

Products: Authentication solutions

Customer Focus: Financial

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							



Unbotify's security solution leverages behavioral biometrics data and machine learning models to offer bot detection. It analyzes hundreds of features extracted from mouse movement data, keystroke dynamics, touch events and mobile device orientation sensors, and isolates bots that carry out malicious activities.

Products: Attribution, analytics, audience builder, fraud prevention, Unbotify

Customer Focus: Agencies, eCommerce, finance, gaming, subscription, travel

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
	✓	✓				✓	



UnifyID offers authentication services with solutions that rely on implicit authentication and are based on location, technology usage habits and sensor technology. The company also offers machine learning software.

Products: Implicit authentication

Customer Focus: All industries

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							

Transaction Behavior Scorecard – All players are listed in alphabetical order.



VASCO is a provider of two-factor authentication and electronic signature solutions to financial institutions. The company also offers access to data and applications in the cloud, and provides tools for application developers to integrate security functions into their web-based and mobile applications. The company primarily serves clients in the financial, enterprise, eCommerce, government and healthcare markets.

Products: Mobile app security, compliance, fraud prevention, transaction signing, identity and access, documents eSignature

Customer Focus: Financial, enterprise, eCommerce, government, healthcare

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓			✓			✓	✓



Zighra's provides user recognition by adding an invisible biometric layer to mobile and internet of things authentication. Zighra applies the intelligence of biological systems to security to deliver continuous authentication to mobile transactions.

Products: SensifyID

Customer Focus: Mobile financial services, retail

PAYMENTS				BIOMETRICS			
Click Flow	History	Transaction	PIN	Camera	Fingerprint	Microphone	Security Tokens
✓							

ABOUT

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