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About the Author
Maxine Most
Let the Prism Project Be Your Guiding Light!

### Biometric Digital Identity Financial Services Prism Report

## Introduction

Welcome to the **2024 Biometric Digital Identity Financial Services Prism Report**—the first vertical market-focused publication from The Prism Project. Expanding on the findings in the 2023 Biometric Digital Identity Prism, this report collates the various identity industry forces at work in the financial services space. The aim is to illuminate the complex and shifting ecosystem that keeps us transacting safely, privately, and conveniently in both the physical and virtual realms.

The Biometric Digital Identity Prism launched in 2023. Using original market research and easy-to-understand language, it serves to inform, educate, and motivate influencers and decision makers seeking identity solutions as they tackle the challenges of wide-scale digitization. A product of industry collaboration and ongoing research, The Prism Project uses a unique, proprietary framework to conceptualize biometric digital identity under these global conditions of digital transformation.

The initial deployment of the Prism framework revealed that the most viable vendors operating in the digital identity space had common traits and interacted in specific ways—cooperatively and competitively—with the brightest stars working together to enable highly orchestrated, secure, and convenient user experiences with baked-in privacy and ethics. The Prism Project distilled these characteristics into evaluation criteria based on a strategic philosophy:

- Digital identity belongs to the user it describes.
- True ID empowerment relies on government systems of record.
- Identity must be consistently and continuously orchestrated to remain secure.
- Biometrics must be at the core of any sustainable digital identity ecosystem.

On a fundamental level, Financial Services fits perfectly within this Prismatic paradigm. As digital transformation and mobile technology have pushed global markets toward a cashless society, currency has moved into a higher level of abstraction. Increasingly, money is data associated with your identity, not coins and bills you hold and carry, and that poses an identity

### **Financial Services Relying Parties:**

- Banks
- · Credit Unions
- Insurance Providers
- · Payments Networks
- Retailers (Including eCommerce)

### **Financial Services Key Use Cases:**

- Payments
- Account Opening
- Account Access
- Cash Withdrawal/Deposit
- · Pension & Benefits Management
- Money Transfer
- Credit Check
- Insurance Claims
- Membership and Loyalty Program

challenge. As a digital product, our relationship to money—how we save, access, receive, and spend it— has changed. By bringing humans back into the transaction via biometric digital identity, financial institutions can ensure your money belongs to you, not whoever has access to your phone, computer, or passwords.

As early adopters of biometrics in the years immediately following Apple's launch of Touch ID, banks, credit unions, and payment networks have helped pioneer commonplace digital identity technologies. For the ensuing decade, the popular uses of biometrics were most visible in the financial services industry—with finger, face, and even iris biometrics conveniently authenticating mobile wallet transactions on top tier smartphones, and selfie-based verification technology becoming a widespread standard for remote account opening and KYC processes. But as you will see in this report, the opportunity for biometric digital identity in financial services is still largely untapped. A prismatic framework can help spur adoption, in turn cutting down fraud and offering the best possible customer experience.

In this report you will find:

- A holistic analysis of the financial services industry framed around common pain points and the biometrics solutions that can solve them
- An original market forecast from Acuity Market Intelligence laying out the opportunity for biometric digital identity in financial services
- A financial services version of the proprietary Biometric Digital Identity Prism
- Evaluations of vendors operating at the intersection of biometric digital identity and financial services
- Case studies demonstrating real biometric digital identity vendors solving challenges for financial services players

The result is a vision of financial services that puts human beings first. By investing in biometric digital identity solutions like those identified in this document, financial services stakeholders will find measurable benefits—from increased conversion rates, to bulletproof compliance, to fraud rates approaching zero. But beyond the immediately tangible results, participating in the biometric digital identity ecosystem has a wider, global effect.

My collaborators and I are evangelists of strong identity and believe that the only way to safely move forward in our time

of digital transformation is to take human identity seriously. By reading and sharing our vision of a secure, convenient, and privacy-first future of user-empowered identity, you are participating in the positive change required to level-up financial services, increase inclusion, and secure the future of money.

Sincerely,

Maxine Most, Founder The Prism Project

# **Executive Summary**

Digital transformation is presenting a series of multifaceted challenges to the global financial services market. From new Al-powered fraud threats and regulatory challenges, to the difficulties inherent in massive financial inclusion schemes like the GSMA's mobile money program—the sector is constantly innovating and evolving as physical and digital spaces converge. At the core of each of these challenges is a stated need for solutions that improve security, compliance, and privacy, without adding friction to the user experience. Thankfully, biometric digital identity technology can address these needs.

Biometric digital identity technology brings human beings from the physical world into the digital realm. For financial services relying parties like banks, credit unions, payment networks, FinTechs, and crypto firms, that means securing the user lifecycle with strong identity proofing, verification, authentication, and account recovery. It means better conversion rates and greater accessibility. It means less fraud, more privacy, and better compliance. And based on our industry survey of financial services decision makers, there is institutional understanding of these benefits.

Each biometric digital identity transaction represents a revenue opportunity. Acuity's original proprietary research contained within this report shows a massive opportunity for the market in this respect. Nearly 1.2 trillion transactions are projected for the 2024-2028 time period, generating over \$40 billion globally, with North America leading in revenues with 35% of the market share, and Europe and Asia Pacific not far behind. APAC will lead in transactions, contributing 48% of the global volume. The opportunity is massive and world wide.

The question remains: given the complex needs of financial services players around the world and the various biometric digital identity vendors available to provide solutions to their problems, how do the various parties collaborate and interact to make those revenues possible?

The answer is The Biometric Digital Identity Financial Services Prism.

The market for biometric digital identity is expected to grow at an overall CAGR of 41.2% from 2024-2028 generating just over \$40 billion globally.

A holistic view of the intersection of biometric digital identity and financial services reveals a complex ecosystem in which biometric cor technology providers, identity verification vendors, risk assessment leaders, and financial solutions providers cooperate with orchestration platforms and decentralized finance innovators to break down silos, mitigate fraud threats, enhance customer experience, and build financial inclusion.

This landscape is defined by Financial Services Titans who anchor financial services biometric digital identity through their adoption, innovation, and leadership—recognizing the need for biometric digital identity and deploying it with meaningful results not just within their organizations, but in the wider market as others follow their example. The Prism Project's vendor assessments contained within this report show a high level of maturity in financial services biometric digital identity, with a multitude of catalysts and luminaries interacting and building a better future for money. Meanwhile, the case studies accompanying the evaluations show that vendors in both of these categories have documented success addressing financial services pain points—from fraud reduction, to help desk cost-savings, to increased conversion rates and marked improvements in accessibility.

In the end, the financial services biometric digital identity space is primed and ready for an identity-safe future.

# **How to Read the Prism Report**

The Financial Services Biometric Digital Identity Prism Report is divided into six sections:

### **Digitization in Financial Services**

The first section collects and analyzes the results of a vertical market focused survey examining how financial organizations view biometric digital identity solutions in relation to their digital transformation journeys. This high-level content is the starting point for the Biometric Digital Identity Financial Services Prism.

### The Prism Lens (Challenges and Solutions)

The second section draws on aggregate financial services industry research from leading analysts, government organizations, and NGOs such as McKinsey, Deloitte, GSMA, Kaspersky, World Bank, and Fenegro, as well as trusted international news sources. It provides a holistic visualization of eight core financial services challenges, then breaks them out individually to demonstrate how biometric digital identity can address them. The graphic visualization is supported by further written analysis. The pain points highlighted in the Prism Lens serve as the basis for the practical applications of biometric digital identity technology profiled later in the report.

### **Market Forcasts**

The third section presents original proprietary market research from Acuity Market Intelligence, forecasting the global revenue and transactions volumes, broken down by region, for biometric digital identity in financial services. The charts depict the immense market potential for the vendors, relying parties, and financial services titans in the current four-year period.

### **The Prism**

The fourth section is the proprietary biometric digital identity industry ecosystem framework: The Prism. This version of the Prism is specially focused on the financial services industry, depicting the various players that provide the solutions and initiative required to realize an identity-safe future of

commerce. The Prism is a living research program, subject to updates, showing a birds-eye view of how the biometric digital identity community is working together to fight fraud, improve UX, and empower people.

### **Evaluations and Case Studies**

The fifth section lists the vendors depicted in the Prism framework next to their evaluations. Each vendor is evaluated on a bell curve, grouped according to its Prism Beam. After each set of evaluations, use cases are presented to demonstrate how the solutions offered by sponsors of this report can address the challenges identified in the Prism Lens section. The evaluations and case studies demonstrate how biometric digital identity vendors currently operate in the financial services sector.

### The Prismatic Future of Finance

The sixth and final section contains strategic guidance and recommendations based on this report's research. It also contains author information, an overview of The Prism Project, and ways to get involved with future iterations of the Prism. The conclusion lights your way to the next steps on your digital identity roadmap.

Each section can be taken on its own, but together they offer a full picture of the current state of identity in finance and the massive potential for its biometrics-enabled future.

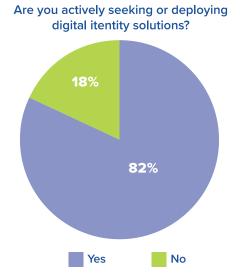
# Digital Transformation and Identity in Financial Services

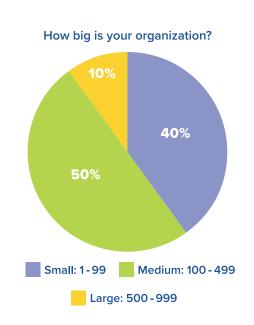
The Prism Project emerged from survey data comparing how biometric digital identity vendors' perception about identity's role in digital transformation lined up with the experience and views of of end users in vertical markets. Enhancing customer service, reducing fraud, and creating operational efficiency were identified as main adoption priorities in both segments, and data showed a prevailing support of converged physical and digital access. At large, we found biometric digital identity was moving from a paradigm of application-based point solutions to a holistic concept based on human users navigating digital spaces with a single ID.

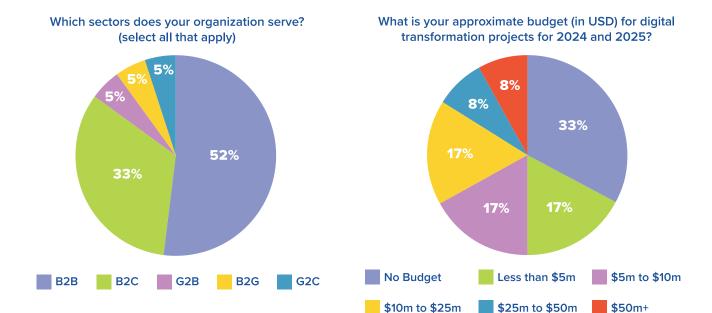
For 2024, we directly surveyed financial services professionals with digital identity expertise.

### **Survey Scope**

The Financial Services Prism Survey primarily reached small and medium organizations serving B2B and B2C sectors who were actively seeking or deploying digital identity solutions.





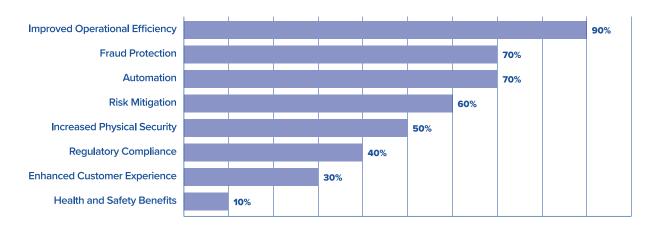


Their size of budget for digital transformation projects varied, but a third reported having no funds available—this is reflected in adoption challenges we will see later.

### **Motivation and Expectation**

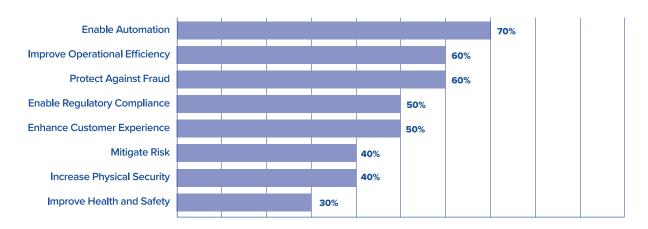
Overall, the respondents are motivated to adopt new digital technologies for reasons of efficiency, automation, and identity safety reasons like fraud protection and risk mitigation.

# Which benefits of digital transformation motivate your organization to adopt new digital technologies?



The motivation to adopt digital technology strongly aligns with respondents' confidence in digital identity solutions, which enable automation, improve efficiency, and protect against fraud.

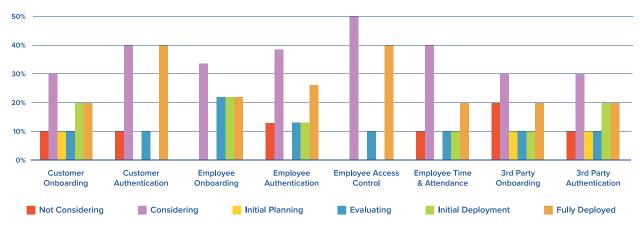
### Mostly confident that digital identity solutions can:



### **Priorities and Obstacles**

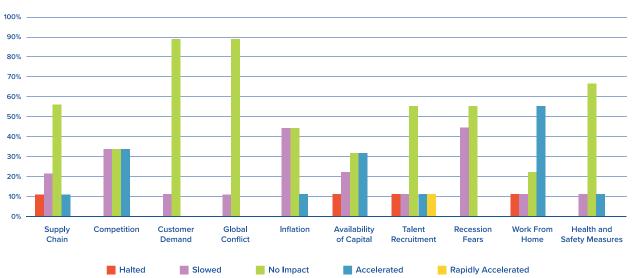
The priorities for identity-based access, onboarding, authentication, and time tracking are largely under consideration, with early adopters most prominent in customer and employee authentication, customer and employee on boarding, access control, and 3rd party authentication.

### Where would you place the following processes on your digitization roadmaps?



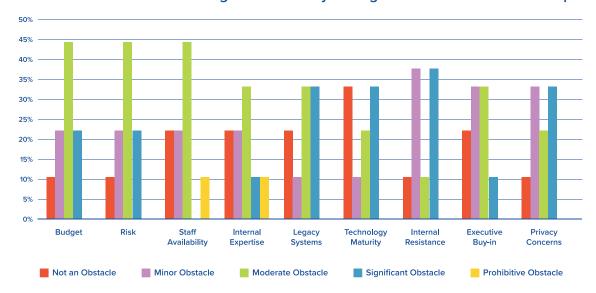
Meanwhile, global factors that impacted the wider industry in 2022 and 2023 are largely inert in 2024's financial services landscape according to our data.





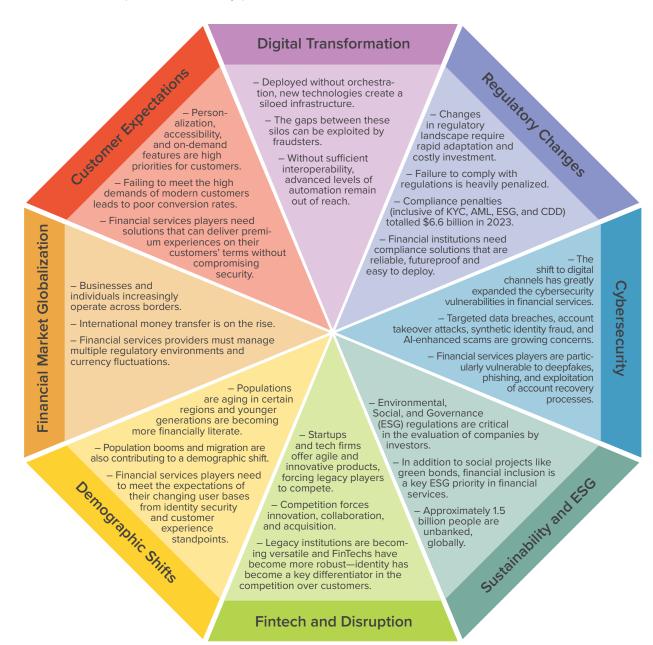
But the obstacles and adoption barriers to digital transformation are wide ranging. Economic and operational pressures, privacy concerns, and legacy systems are presenting challenges to financial services companies on their digital transformation roadmaps, while significant reports of internal resistance and executive buy-in imply a need for a strong value proposition.

### How severe are the following obstacles to your digital transformation roadmap?



# Viewing Challenges Through the Prism Lens

To understand how the broad benefits of identity-based convenient security can be applied to financial services, we use the **Prism Lens**. Each segment of this octagon represents one significant challenge for the market as it feels the effects of digital transformation, which is inextricable from the other issues. The Prism Lens represents the holistic view of financial services—by understanding these challenges together, we can see common elements of a pervasive identity problem.



### **Biometric Solutions**

Biometric digital identity solutions can be applied to each segment of the **Prism Lens** to address the digital transformation challenges faced by financial services providers.

### **Digital Transformation**

- Replacing passwords and PINs with biometric verification and authentication streamlines processes without sacrificing security.
- Biometric identity platforms can orchestrate the entire customer lifecycle, eliminating data silos and closing identity gaps.
- Biometric digital identity paves the way for innovative new products and services.

### **Regulatory Changes**

- Biometric digital identity systems provide the identity verification tools to help financial institutions comply with KYC, AML, PSD2 and other stringent regulatory frameworks.
- Biometric onboarding enables compliance via remote and mobile channels, increasing accessibility while maintaining integrity.
- In a fully orchestrated biometric identity system, the technology that enables compliance can be used to anchor trust for all future transactions—closing identity gaps and protecting transactions.

### Cybersecurity

- Biometrics expand the security perimeter to include all end users transacting within a financial system.
- Replacing passwords and tokens with biometrics protects against phishing, account takeover attacks, and mitigates the threat of targeted data breaches.
- Al-supported liveness detection prevents synthetic identity fraud.

### Sustainability and ESG

- Biometric digital identity lowers barriers to to economic participation.
- Biometric onboarding empowers rural and underserved populations with the ability to open bank accounts securely and conveniently.
- With biometric digital identity, financial services players enable greater financial participation, which is a prerequisite for development and sustainability.

### Fintech & Disruption

- Adopting biometric digital identity technology keeps established financial institutions competitive with versatile new entrants.
- New entrants can compete with biometrics-powered security, convenience, compliance, and orchestration.
- Biometric industry leaders have solved the identity problems of financial services—innovation is just a matter of adoption.

#### Demographic Shifts

- Biometrics enable fraud-proof, remote pension collection for seniors uncomfortable with traditional security.
- Strong identity solutions are
  the only security solution capable
  of meeting the user experience
  demands of younger generations
  who demand secure mobile finance
  whenever and wherever they are.
- Orchestrated biometric digital identity platforms allow for the scalability required as population centers shift and the unbanked come online.

#### Globalization

- Biometric digital identity solutions maintain security and regulatory compliance across international boundaries.
- Biometrics can enable secure access, trusted remittance, and account opening wherever users transact.
- That integrity enables financial services providers to expand their services and support their clients as they drive the global economy.

### **Customer Expectations**

- Biometrics reduce friction on every type of transaction—from account opening, to transaction authentication.
- Automated account recovery can only be achieved securely with orchestrated biometric digital identity.
- Biometric digital identity makes money intuitive, providing users a foundation of trust and convenience that leads to improved conversion rates.

# **Looking through the Prism Lens**

Let's take a closer look at each challenge and solution depicted in the Prism Lens.

### **Digital Transformation**

As financial institutions leverage digital technology to streamline operations, enhance customer experiences, and offer new services, they are deploying a variety of new technologies like Al, blockchain, and mobile banking without orchestration. This creates a siloed infrastructure with significant gaps in the customer identity journey that can be exploited by fraudsters and hinder advanced levels of automation.

Biometric digital identity systems are the cornerstone of digital transformation initiatives in financial services. By replacing traditional authentication methods like passwords and PINs with biometric verification and authentication, they streamline processes without sacrificing security. With biometric identity platforms that can orchestrate the entire customer lifecycle, connecting the onboarding process to authentication and account recovery, financial services eliminate data silos, closing identity gaps and paving the way for innovative new products and services.

The average financial services firm is deploying solutions from ten or more vendors to build a custom identity stack across a number of data silos, according to Jenna Hoffart, an investor at 9 Yards Capital. In 2022, she noted the emergence of orchestration players that can address the unnecessarily complex nature of this load-out.

### **Regulatory Challenges**

Financial services are among the most heavily regulated sectors. Changes in regulations require companies to adapt their operations, invest in new technologies, and even alter their business models. The penalties for non compliance are high: according to Fenegro, compliance penalties (inclusive of KYC, AML, ESG, and CDD) totalled \$6.6 billion in 2023.

Biometric digital identity systems help financial institutions comply with stringent regulatory frameworks by providing the identity verification tools for the job. Able to match a user's face biometrics to their government issued photo ID, biometric solutions enable fast and effective know your customer (KYC) and anti-money laundering (AML) compliance. Meanwhile, biometric authentication is satisfying payment regulations like PSD2 without hindering customer experience. Biometric digital identity protects financial integrity as digitization makes money mobile.

### **Cybersecurity**

With the increase in digital transactions, cybersecurity has become a critical concern for financial services. Targeted data breaches are of paramount concern in this sector, with Kaspersy pricing a single targeted attack at \$891,000 in associated costs. Meanwhile, overtly identity-related threats are seeing rapid ascent. Scammers, now empowered by AI, stole \$1.02 trillion globally between 2022 and 2023. Meanwhile synthetic ID fraud contributes to \$20-40 billion in annual losses, according to Thompson-Reuters.

According to Deloitte, over half of synthetic identities have a credit score of 650—"just shy of what agencies consider 'good."

Biometrics expand the traditional digital security perimeter from device and terminal endpoints to include the end users transacting within a financial system. Cyberattack threats are solved by replacing authentication mechanisms from vulnerable passwords and tokens with biometrics. Meanwhile, because biometrics cannot be shared, they are immune to phishing-based scams. And the latest innovations in Al-supported liveness detection can prevent synthetic identity fraud. With biometrics, financial services providers safeguard themselves against he most advanced identity-based security threats.

### **Sustainability and ESG**

Environmental, Social, and Governance (ESG) regulations are critical in how investors and regulators evaluate companies. This growing trend towards sustainable finance includes green bonds and other social projects like financial inclusion.

Financial participation in an economy is a prerequisite for development and sustainability. Biometric digital identity enables financial inclusion. Access to a personal bank account is essential for self-reliance, autonomy, and economic independence. With unbanked people in every economy, adding up to about 1.5 billion globally, the underserved financial population is largely made up of women, people experiencing poverty, undereducated populations, and people in rural areas, as well as the growing number of refugees and displaced persons. Biometric digital identity lowers barriers to economic participation, empowering these users with trusted ID and the ability to open accounts and transact with trust wherever and whoever they are.

### **Fintech and Disruption**

Startups and new technology firms are challenging traditional institutions by offering agile, innovative products. Legacy

players are forced to compete through innovation, acquisition, and collaboration. Meanwhile, in the wake of the 2022 FinTech bust, startups have become more robust and versatile. Competition is high, and identity is a key differentiator.

Fintech companies are versatile and innovative, often leading the way in new technology adoption. Established financial institutions can keep up with new entrants and stay competitive quickly by adopting proven biometric digital identity technology. The modern biometric digital identity ecosystem is characterized by highly interoperable, heavily orchestrated, easy-to-implement technology that can enable digital services securely and with natural compliance. Financial services' identity problems have been solved by biometric industry leaders. Identity innovation in this sector is just a matter of adoption.

McKinsey's Global
Banking Annual Review
2023 states: "Distinctive
technology development
and deployment will
increasingly become a
critical differentiator
for banks."

### **Demographic Shifts**

Aging populations in certain regions, increasing financial literacy of younger generations, population booms, and migration are all influencing product offerings from financial services players. But with demographic shifts come new challenges and expectations from both identity security and customer experience standpoints.

Aging populations, particularly in developed countries, are creating a growing demand for accessible solutions that cater to seniors uncomfortable with traditional digital security, making biometrics a popular solution for secure pension collection. Younger users, meanwhile, have highly specific customer experience demands that are only feasible with strong identity solutions baked-in to an intuitive, mobile-first platform. Furthermore, as population centers shift and the unbanked continue to come online, financial services providers primed with biometric digital identity solutions will be ready to provide for their needs.

### **Financial Market Globalization**

As businesses and individuals increasingly operate across borders, financial services providers must manage multiple regulatory environments and currency fluctuations. With the GSMA reporting international remittance as the fastest growing use case in its global mobile money initiative (which facilitates \$2.7 million worth of transactions *per minute*), it's clear this is a priority especially in recently banked populations.

As customer mobility breaks down borders, biometric digital identity solutions are there to maintain security and regulato-

According to FDIC, mobile banking in the US is more common among underbanked households. Meanwhile, McKinsey reports mobile payments are popular in Latin America because of their security, convenience, and low cost.

ry compliance. With fully-orchestrated biometric digital identity, financial services providers can expand their services and support their clients as they drive the economy on a global scale. Protecting remittance and enabling access from anywhere, biometrics ensure the global future of finance is easy-to-use, trustworthy, and identity-safe.

### **Customer Expectations**

Customers expect personalized, on-demand services accessible from their preferred device. Poor customer experience leads to poor conversion rates, and that carries a price tag. Research from The Baymard Institute shows that an average large-sized eCommerce website can gain a 35% conversion rate simply by improving its checkout design. Broadly speaking, that conversion rate has the potential to bring in \$260 billion in the EU and US alone.

The competitive edge in financial services is premium user experience. Biometrics reduce friction on every type of transaction—enabling account opening in a matter of seconds and near-instant authentication for transactions. Automated account recovery is also a major boon, lowering the need for users to call overburdened help desks. The promise of mobility in finance is empowerment, and users feel empowered when conducting monetary transactions feels natural. Biometric digital identity makes money intuitive, solidifying trust at the center of all interactions, improving conversion rates for financial services providers along the way.

Biometric digital identity technologies can ease account creation, checkout, and form-filling, removing user friction while enhancing security. This is especially true on mobile, which accounts for 76.16% of abandoned carts globally, according to Dynamic Yield.

# The Biometric Digital Identity Financial Services Market Forecasts

Bolstered by higher-than-normal identity literacy and the converging industry trends illustrated in the previous section, which lend themselves to biometrics adoption, the Biometric Digital Identity Financial Services Market is on track for significant growth, globally.

The following data is based on original proprietary market research from Acuity Market Intelligence. These are bottom up market forecasts based on quantifiable 3rd party data such as regional banked population and digital adoption rates along with a series of assumptions about the current level of biometric adoption, average use, and projected growth of the user base and user adoption based on proprietary analysis.

This proprietary analysis is based on ongoing market research, third party data, vendor reported data, and industry expert assessments.

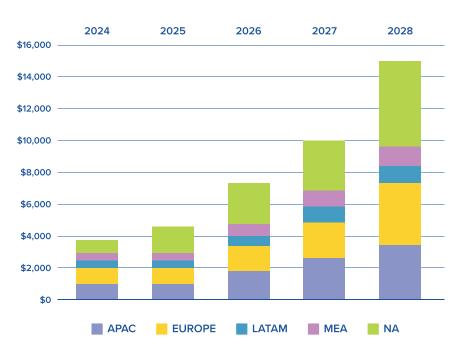
Interactive spreadsheets of these forecasts with further visibility into the market are available for purchase.

Contact cmaxmost@acuity-mi.com for inquiries.

### **Global and Regional Forecasts**

Total biometric digital identity financial services revenue from 2024-2028 is expected to grow at an overall CAGR of 41.2%, generating just over \$40 billion globally.

### Financial Services Total Revenue (millions)



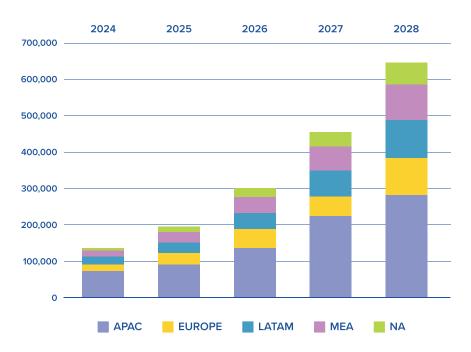
Total Revenue (millions)							
	2024	2025	2026	2027	2028		
APAC	\$1,060	\$1,152	\$1,673	\$2,421	\$3,479		
EUROPE	\$938	\$1,055	\$1,629	\$2,459	\$3,503		
LATAM	\$300	\$387	\$610	\$936	\$1,368		
MEA	\$259	\$343	\$532	\$804	\$1,143		
NA	\$1,181	\$1,505	\$2,802	\$3,343	\$5,365		
Total	\$3,739	\$4,442	\$7,246	\$9,963	\$14,858		

### **Global and Regional Transaction Volumes**

That revenue is generated by nearly 1.2 trillion transactions globally within the time period.

This model is built on a per transaction basis. While many industry revenue models are built on overall volume basis or a per person per month or annual basis, the per transaction bases was chosen to maximize flexibility. The model is broken up into two components: consumer facing and workforce applications. For the workforce component, an alternate model was also analyzed based on an annual per person cost/revenue. The results were similar to the transaction-based model so that model was used for the forecasts.

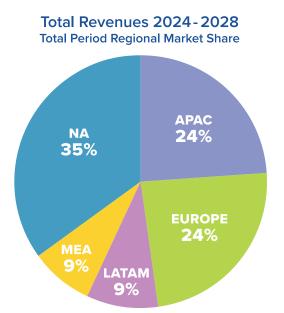
### Financial Services Total Transactions (millions)



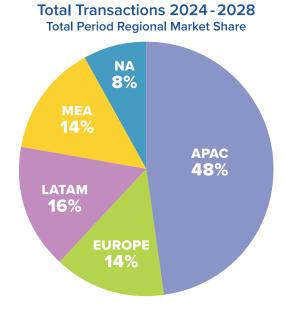
Total Transactions (millions)							
	2024	2025	2026	2027	2028		
APAC	68,641	96,051	147,739	216,185	294,972		
EUROPE	18,767	26,374	40,735	61,485	87,579		
LATAM	18,156	27,400	45,879	72,491	106,970		
MEA	19,335	27,572	43,608	66,665	94,824		
NA	7,675	12,480	22,318	37,944	60,458		
Total	132,574	189,877	300,280	464,770	644,802		

# **Total Regional Share of Revenues and Transactions**

North America leads in revenues for the period, with APAC and Europe close behind.



Meanwhile, APAC dominates in transaction volumes, with nearly 50% of the market share from 2024-2028.



# **The Financial Services Prism**

Just as a beam of light contains all colors, the biometric digital identity ecosystem is comprised of many vendors contributing to the grand idea of digital identity. The Prism Project conceptualizes this relationship through the Prism: a proprietary market landscape model intended to help reflect the components of the emerging reality of identity in a digitized world.

service offerings and is most closely aligned with their unique

### **Biometric Digital Identity Prism**

### **Fraud Assessment Tools**

These vendors provide and/or deploy behavioral biometrics along with other signals intelligence in the background of financial sessions to identify and prevent fraud.

### **Decentralized Financial Services**

These vendors use some combination of blockchain, VCs (Verifiable Credentials), SSI (Self Sovereign Identity), and crypto to innovate decentralized identity solutions for financial services.

These vendors leverage biometrics and OCR to enable fully remote and/or facilitated onboarding and/or provide solutions for easy compliance with KYC, KYB, and AML standards.

### Identity Verification (KYC, KYB, AML & Onboarding)

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### **Identity Orchestration Platforms**

These platform providers enable end-to-end orchestration for identity in financial services. They may or may not include biometrics, but if included, biometrics are treated as a feature rather than a foundation.

### Financial Services Titans

These leading financial services players are critical to global acceptance and adoption of biometric digital identity. To date, they have made various levels of investment in biometric tests, pilots, and deployments but they all understand the critical role biometrics will play as the digitally-driven global financial services ecosystem evolves.

These vendors protect financial accounts and sessions with biometric and non-biometric security.

#### Authentication

ACUITY MARKET INTELLIGENCE

Vendors are positioned in one of nine Prism Beams. Each Beam representing a critical component of the biometric digital identity landscape for financial services. For some vendors, it can be challenging to select one beam that represents their singular position in the marketplace. Many appear to span multiple beams. In these cases, we have selected the beam that most accurately reflects the breadth and depth of their product and

### Biometric Core Technology

These vendors develop biometric core technology deployed across the Prism for verification, authentication, and to detect synthetic identities and deepfakes.

### Identity Platform

These identity platform providers enable end-to-end orchestration for identity in financial services and are built on a foundation of biometrics.

These vendors incorporate proprietary and native biometrics into financial service solutions including digital payments, check-out, biometric cards, as well as a range of custom integrations.

### **Financial Solutions**

differentiators.

### **How to Read the Prism**

Within each beam, there are three Vendor Categories: Pulsars, Catalysts, and Luminaries.

### **Pulsar**

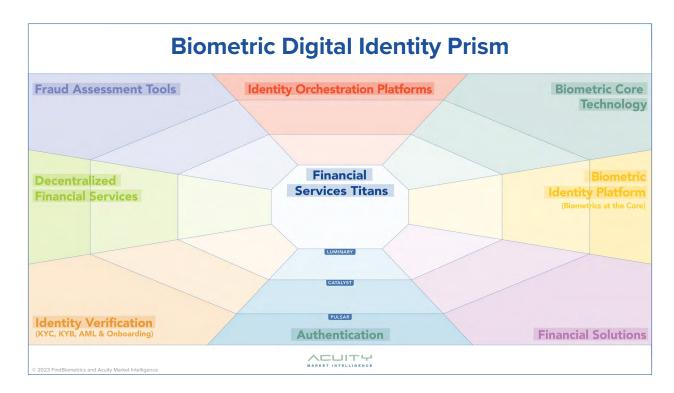
Pulsars are the bright upstarts and pivoting legacy vendors prioritizing the crucial elements of biometric digital identity. Startups with promising technology or established names with a proven aptitude for adapting to the new identity ecosystem, Pulsars have strong potential to influence the Prism landscape.

### **Catalyst**

Catalysts are established disruptors, innovators, and agents of acceleration. With high proficiency in certain areas of assessment, Catalysts are often one step away from ascending to Luminary status, whether it's through an acquisition, a technological innovation, or an injection of resources.

### Luminary

Luminaries are the guiding lights of their industry segment. They show the highest level of proficiency in their beam and are often responsible for setting trends in their fields.

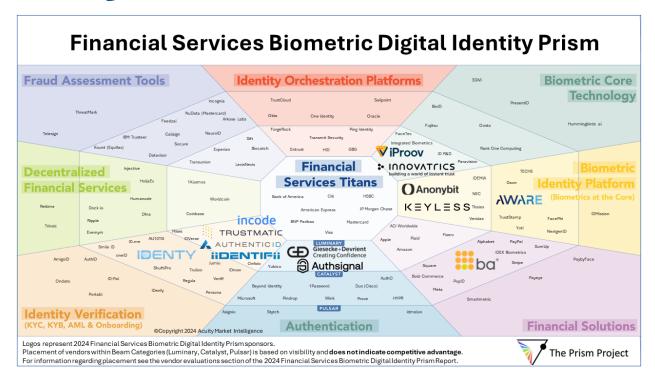


# **Refractors and the Financial Services Titans**

The center of the Prism is anchored by a special category—the Financial Services Titans. These companies, due to their size, global footprint, proven expertise, partner networks, and robust portfolios, have a definitive role in the financial services biometric digital identity landscape. This role is that of a Refractor: it is through their initiatives that the industry is viewed.

As the market evolves through acquisition, development, regulation, and innovation, the Refractor position may grow or diminish. Luminaries in the Identity Orchestration Platform Beams are best positioned to ascend to Refractor status.

# The Financial Services Biometric Digital Identity Ecosystem



### **Important Note on Prism Beams:**

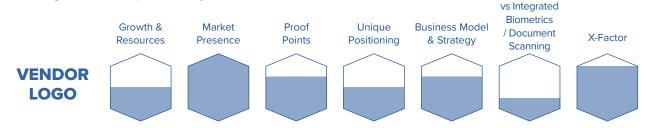
The Prism Beams and the classifications within represent important components of the emerging biometric digital identity landscape, and group vendors by the role they play therein. It is modality agnostic. Because of the broad nature of Prism Beams, many companies in the same areas are not direct competitors but represent the leading providers of their given solutions.

# **Evaluations & Use Cases**

In order to place vendors on the Biometric Digital Identity Prism, we are assessing the leading companies based on six criteria.

- Growth & Resources Current revenue, year-on-year growth, financial stability, and resources available to sustain and support ongoing growth.
- Market Presence Overall geographic footprint and market sector penetration, as well as specific geographic regions and markets where a level of dominance has been achieved.
- Proof Points Profile and size of overall and market sector customer base and key customers. Also includes 3rd party testing results and certifications and speed of implementation.
- Unique Positioning Unique Value Proposition (UVP) along with differentiable technology and market innovation generally and within market sector.
- Business Model & Strategy Overall marketing and sales
  positioning, messaging, and strategy as well as channel
  scope and quality and range of partnerships, channels,
  thought leadership, use of digital, social media presence,
  and engagement generally and within market sector.
- Proprietary Versus Integrated Biometrics and Document Authentication – Depending on the market, solutions(s), specific beam, may be rated higher as proprietary or integrated technology.
- X-Factor This is a unique beam and market sector specific metric.

We visualize this assessment as a Prism Evaluation Chart: an easy-to read graphic representation of a vendor's current activity, resources, and abilities. The more color filling a Prism hexagon, the higher level of proficiency.



**Proprietary** 

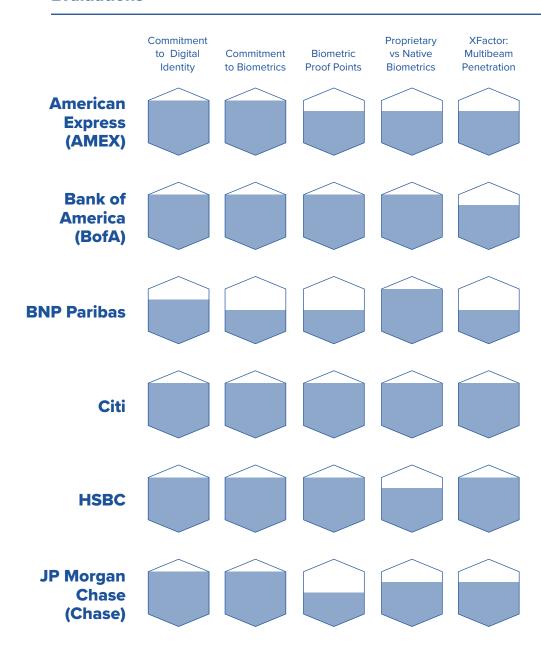
# Important Note of Evaluations and Prism Placement:

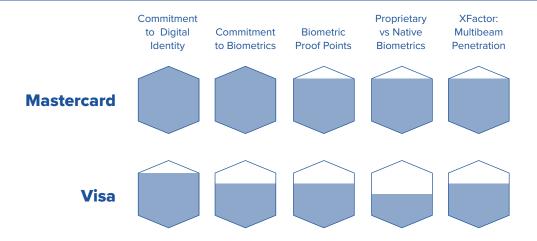
The vendor specific metrics in this report are based on publicly available data, survey data, interviews, and confidential briefings. It is presented in good faith as a representation of the financial services biometric digital identity ecosystem according to the values stated previously in this report. If you see your company here and have questions about your evaluation or placement within the Prism, please contact: info@the-prism-project.com.

# **Financial Services Titans**

These leading financial services players are critical to global acceptance and adoption of biometric digital identity. To date, they have made various levels of investment in biometric tests, pilots, and deployments but they all understand the critical role biometrics will play as the digitally-driven global financial services ecosystem evolves.

### **Evaluations**





### **Refractor Beam Penetration**

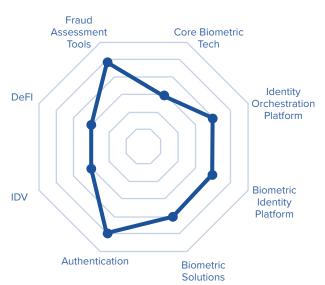
The Financial Services Titans are positioned in the center of the Prism because of their demonstrated ability to define the financial services biometric digital identity landscape through their participation in each other Prism Beam. The following Refractor Charts display each Titan's leadership within every aspect of the biometric digital identity ecosystem.

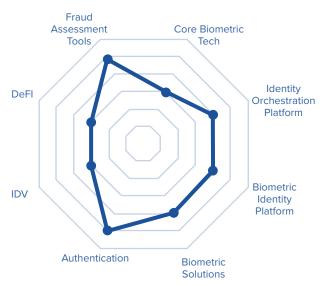
#### **American Express Bank of America** Fraud Assessment Core Biometric Assessment Core Biometric **Tools** Tech Tools Tech Identity Identity DeFl DeFI Orchestration Orchestration Platform Platform **Biometric Biometric** IDV IDV Identity Identity Platform Platform **BNP Paribas** Authentication Authentication Biometric **Biometric** Solutions Solutions Fraud Core Biometric Assessment Tools Tech Identity DeFl Orchestration Platform Biometric IDV Identity Platform

Biometric Solutions

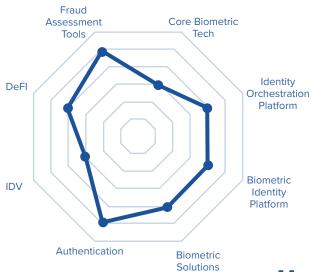
Authentication

### Citi HSBC





### JP Morgan Chase



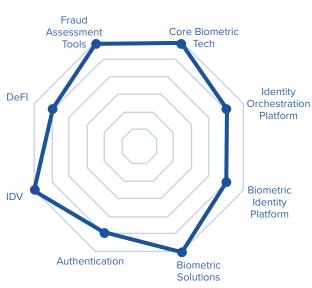
### Visa

# Fraud Assessment Tools Tech Identity Orchestration Platform Biometric Identity Platform

**Biometric** 

Solutions

### **Mastercard**



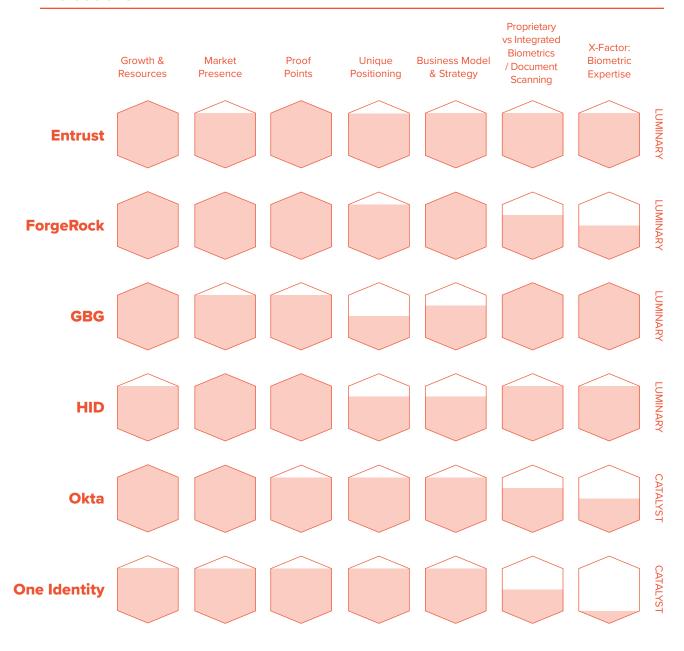
Authentication

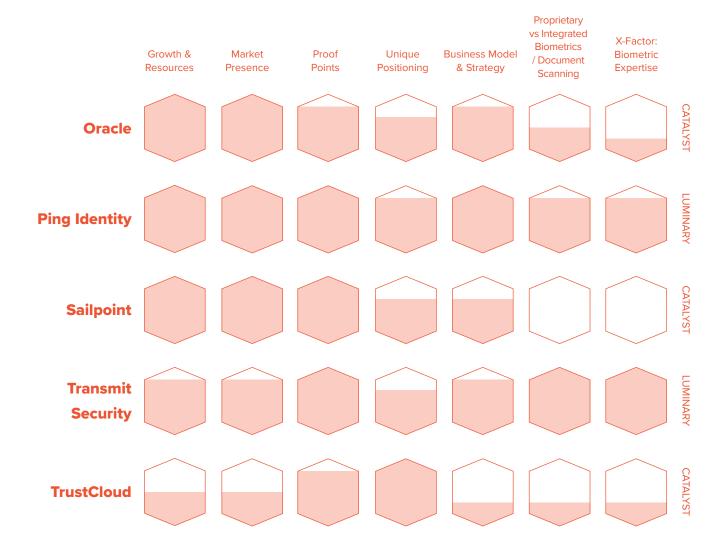
# **Identity Orchestration Platforms**

These platform providers enable end-to-end orchestration for identity in financial services. They may or may not include biometrics, but if included, biometrics are treated as a feature rather than a foundation.

**Prism XFactor:** Biometric Expertise

### **Evaluations**

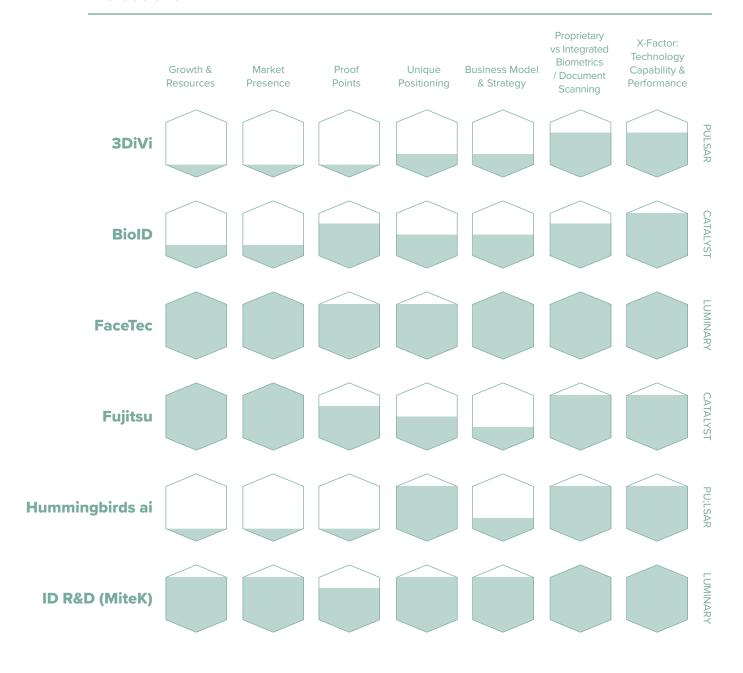


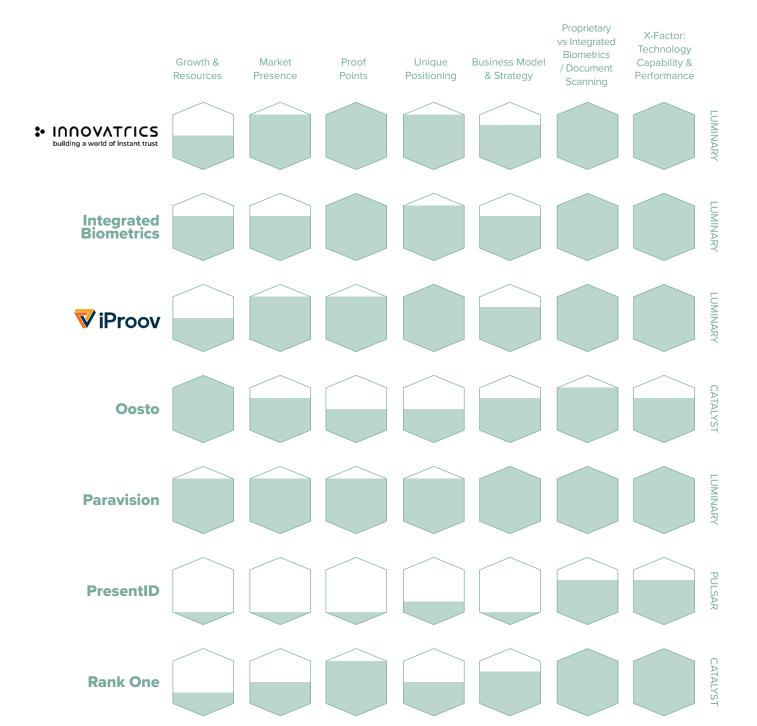


## **Biometric Core Technology**

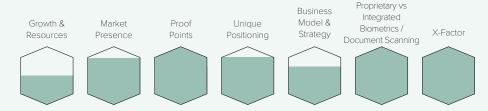
These vendors develop biometric core technology deployed across the Prism for verification, authentication, and to detect synthetic identities and deepfakes.

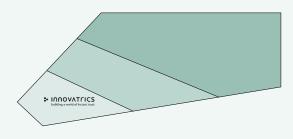
Prism XFactor: Technology Capability & Performance





### BEAM: Core Biometric Tech / CLASSIFICATION: Luminary





With over 20 years of industry innovation, EU-based Innovatrics is dedicated to enabling accessibility in financial services, heightening security while improving user experience. Boasting a comprehensive suite of biometric technologies that span modalities, and offices around the globe, Innovatrics is making financial services safer and more convenient with its Digital Onboarding Toolkit (DOT). Developed in-house like all of this Biometric Core Tech Luminary's offerings, DOT is billed as a one-stop-shop for remote identity verification thanks to its face matching, facial liveness, ID document OCR, and NFC reading capabilities for ePassports. DOT can be deployed on premises in a matter of weeks and is already making a difference with financial services customers like Tatra Bank, Erste Group, 365bank, Altaif Islamic Bank, and Home Credit.

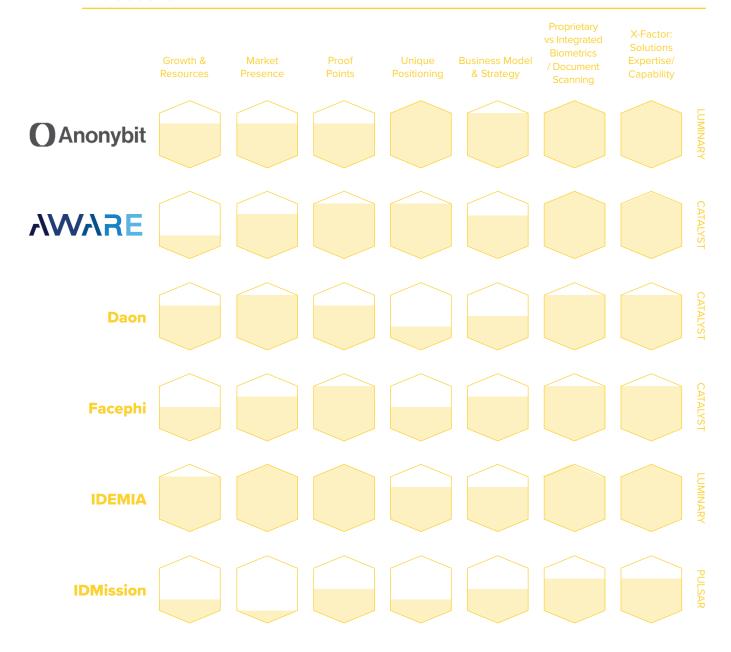
International consumer finance provider Home Credit operates in nine countries, serving over 131 million customers to the tune of €21 billion in loans annually. The company was facing a variety of identity related challenges, particularly in regions with underbanked populations. These largely rural areas were characterized by a lack of credible ID documents and a high rate of identity fraud. Home Credit's in-person onboarding process in these areas used to take five weeks and cost \$20 per customer. But once it deployed DOT and Innovatrics' Trust Platform—which enables biometric de-duplication—things turned around quickly. With simplified onboarding through its native app, Home Credit can enroll more than 100,000 customers daily in four of the countries it serves. The process now costs just \$0.05 per user, takes five minutes, and is finally untethered by geographic restrictions. That's not even mentioning an improved repayment rate, which jumped from 86% to 98%. In addition, Home Credit is further protected from fraud. That's the power of having biometrics at the core of financial services.

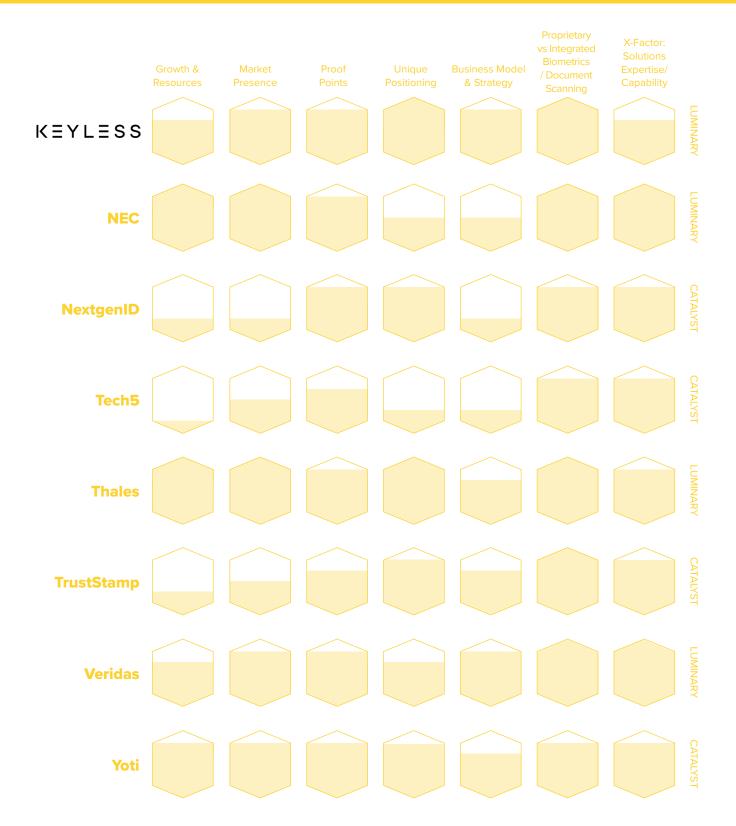
Contact Innovatrics: info@innovatrics.com

# **Biometric Identity Orchestration Platforms**

These identity platform providers enable end-to-end orchestration for identity in financial services and are built on a foundation of biometrics.

Prism XFactor: Solutions Expertise/Capability

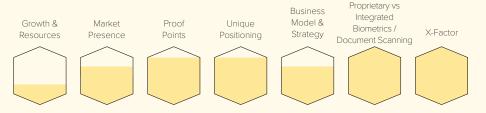


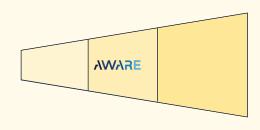






### BEAM: Biometric ID Platform / CLASSIFICATION: Catalyst





Aware is a pioneering Biometric Identity Platform provider with a proven track record of being ahead of the curve, anticipating trends with its innovative research and development. For decades it has been true that to understand where the identity industry is heading, one only needs to check in with Aware's latest efforts. With a robust and versatile product portfolio, the company is capable of meeting a variety of financial services challenges while serving its commitment to security, accuracy, compliance, and innovation. Privacy, data security, and ethical alignment are priorities for Aware, and are foundational to its platform, which leverages individual offerings like AwareID®, Knomi®, and BioSP™ to address three significant and well documented pain points in this sector: fraud, customer experience, and regulatory compliance.

### **A History of Success**

For years, Aware's technology has been actively addressing those three pain points and seeing measurable success. From helping a Fortune 500 bank meet new regulatory requirements in the wake of the 2008 financial crisis, to aiding a Turkish retail bank as it improved its operations and became a regional leader in the wake of the COVID-19 pandemic, Aware has consistently shown versatility and adaptability, anchoring its clients in trust through the course of turbulent world events. Whether it's a workflow management provider using Aware's technology to process loans four-times faster through its mobile channel without compromising security, or a commercial bank in Brazil deploying its biometric platform to keep fraud low while growing by a factor of 10 in a five-year period—Aware delivers solutions that meet the evolving demands of financial services.

### **Dispatches form the Fraud Arms Race**

Biometric digital identity evolves as a result of an ongoing arms race between bad actors and security innovators. A leading Brazilian bank, serving 55 million customers across the Americas, Europe, and Asia, initially came to Aware because of this arms race—the facial recognition system it already had in place was unable to defend against increasingly prevalent presentation attacks during account creation. Aware deployed its Knomi Liveness Detection solution to ensure fraudsters weren't making accounts with stolen IDs and spoofs. But the fight wasn't over. A new, more sophisticated threat emerged: injection attacks.

#### Orchestration in the War on Fraud

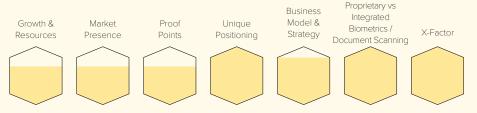
To address the injection attacks, Aware implemented three additional levels of security—securing the biometric capture process, adding a layer of biometric analysis for presentation attacks, and integrating non-biometric best practices to verify the security of a user's biometric data on acquisition, in transit, and during processing. This holistic approach was immediately successful, reducing fraud by 86% in the first six months of implementation. By taking a hands-on, proactive approach with its client, this Biometric Identity Platform Catalyst was able to move quickly and successfully at a massive scale.

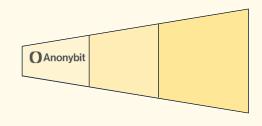
**Contact Aware:** 



### O Anonybit

### BEAM: Biometric ID Platform / CLASSIFICATION: Luminary





Anonybit takes a one-of-a-kind approach to biometric storage and management, breaking biometric templates into encrypted fragments and securely distributing them across a network. And it works—naturally eliminating honeypot risks and privacy concerns. Relatively fresh on the scene, the company is already seeing major successes on its quest to connect digital onboarding to downstream identity processes, closing what CEO Frances Zelazny calls "the Circle of Identity." Its flagship product, Anonybit Genie, unifies the user lifecycle, carrying strong identity assurance from onboarding to authentication and account recovery. Genie is enabled by Anonybit's decentralized biometric cloud and decentralized data vault. It supports all biometric modalities and clocks amazing speeds, preforming 1:1 matching in under 200 milliseconds and 10 million 1:N searches in a split second.

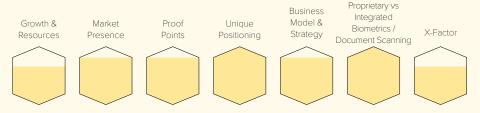
A tier 1 Latin American banking group in Colombia, serving 14 million customers through retail banking and its P2P platform leverages Anonybit's technology to great effect thanks to an integration with standard IDV provider Ado Technologies. To enable self-service and account recovery applications for the banking group, Ado needed a solution to safely manage and store biometric data, so it turned to Anonybit. In less than two weeks, the biometrics firm set Ado up with a biometric storage and management facility, enabling the full range of biometric functionality needed with the highest level of privacy. Now, Anonybit runs 1:N matches on every account opening, and 1:1 matches for every account recovery request made by the bank's clientele. With zero processing failures to date, Anonybit is saving the banking group money, specifically help desk and in-branch processing costs, which Forrester pegs at \$70 per event. When a Biometric Identity Platform Luminary like Anonybit is orchestrating identity processes, financial services providers benefit from the convenience and speed of automation without compromise. Anonybit is a recommended vendor for financial services players seeking a full lifecycle identity orchestration solution with biometrics at the core.

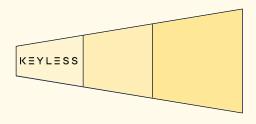
Contact Anonybit: info@anonybit.io



### KEYLESS

### BEAM: Biometric ID Platform / CLASSIFICATION: Luminary





Particularly well-known for its privacy-preserving technology, Keyless is a biometric identity platform pioneer. The company stands out in the financial services sector with its patented Zero-Knowledge Biometrics technology, which ensures that no biometric data is stored either on a given device or in the cloud. This approach enhances user privacy and helps ensure compliance with stringent regulatory requirements like GDPR and PSD2. Keyless is versatile, able to integrate seamlessly into consumer-facing apps and offering SDKs for various platforms, enabling a user friendly and secure authentication upgrade for relying parties still relying on cumbersome controls like SMS OTPs and struggling with costly account recovery management. Keyless addresses these issues with its advanced biometric solutions, offering a more secure, user-friendly, and cost-effective alternative to traditional methods.

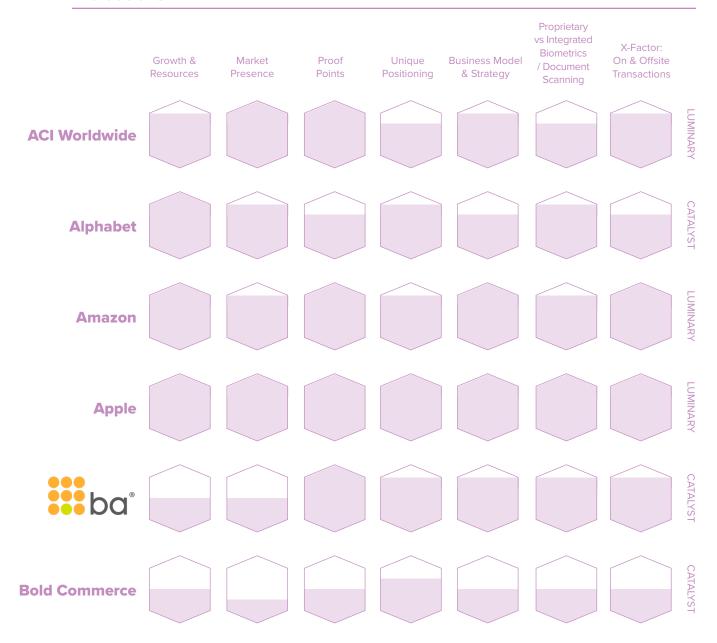
When a regional bank found it was spending millions of dollars annually on customer support and SMS OTPs, it turned to Keyless for a solution. In addition to shrinking those costs, the bank—which manages billions of dollars in assets and serves hundreds of thousands of customers—needed to address the poor customer experience and significant security risks posed by those outdated identity processes. Implementing Keyless' biometric technology transformed the bank's digital identity processes. The self-service biometric account recovery feature enabled users to recover their accounts independently with a glance, significantly reducing the dependency on call center support. For high-risk transactions, the bank deployed step-up authentication using facial biometrics, eliminating reliance on SMS OTPs and enhancing security. The bank reduced its annual password and account management costs by millions while substantially increasing protection against phishing and SIM swapping attacks, thereby reducing the incidence of account takeover fraud. The improved user experience minimized disruptions and improved transaction success rates, leading to higher customer satisfaction. It's an example of the numerous knock-on benefits that come with implementing biometric digital identity—that's what you get when you follow the light of a Biometric Identity Platform Luminary.

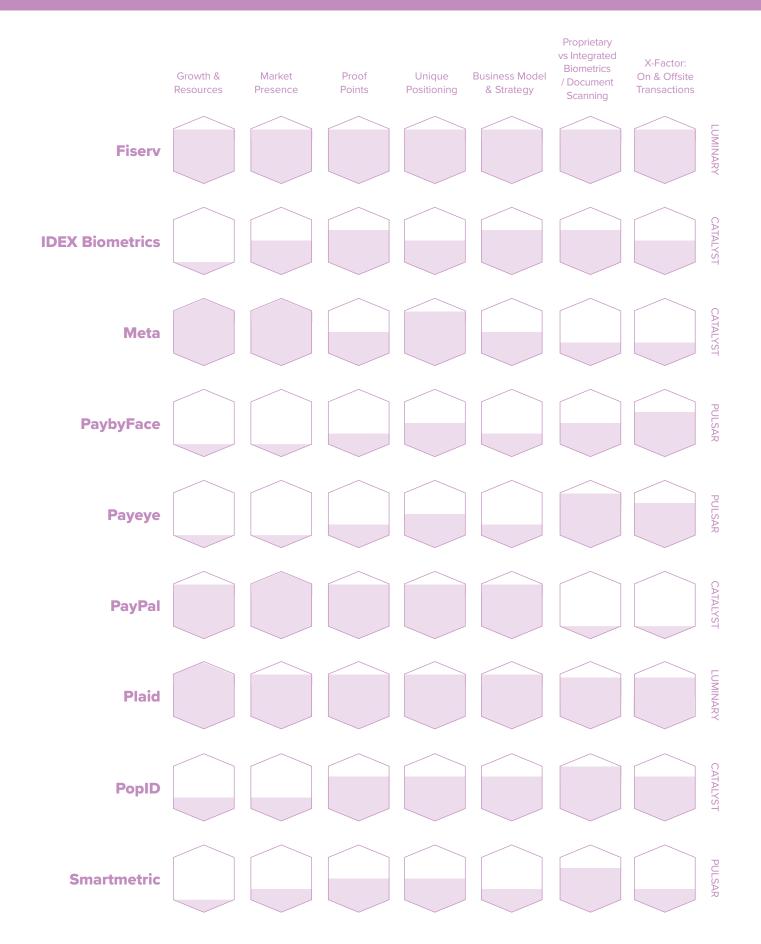
Contact Keyless: info@keyless.io

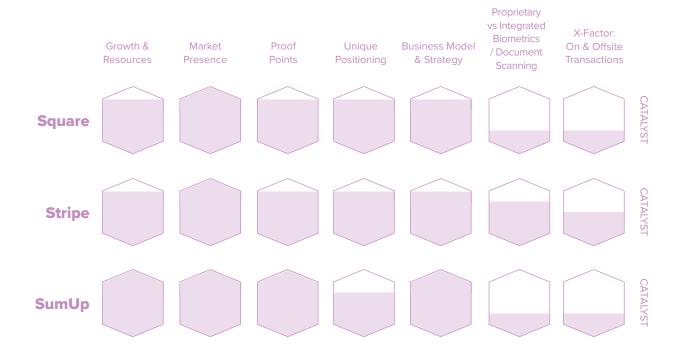
### **Financial Solutions**

These vendors incorporate proprietary and native biometrics into financial service solutions including digital payments, check-out, biometric cards, as well as a range of custom integrations.

**Prism XFactor:** Integrated Mobile Onboarding, Payments, Other On & Offsite Transactions

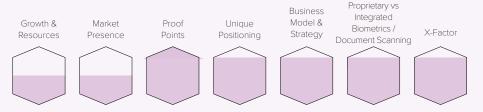


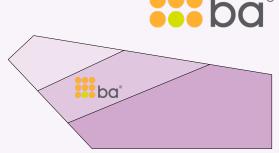






### BEAM: Financial Services Solutions / CLASSIFICATION: Catalyst





Based in Mexico, Biometria Aplicada is a versatile integrator of best-of-breed biometric solutions with a customer-focused mandate and dedication to creative innovation and problem solving. As digital transformation hits the banking sector, the company finds itself bridging the gap between the traditional systems embedded in the financial services industry and the bleeding edge of opportunity. It's no wonder that financial inclusion is a pain point of interest for this Financial Services Solutions Catalyst, and one it addresses with its EMi Plus and Identium Cloud Solutions, which have a proven track record of significantly reducing credit approval and customer onboarding times as well as improving customer transaction conversion rates.

Biometria Aplicada's work with a National Pension Fund for State Workers based in Mexico City shows its ability to meet complex demands in financial services with biometric solutions while furthering its mission of inclusion. The fund in question, which serves public sector employees with flexible pension accounts that secure their financial future, needed a partner to enable the registration and transfer of accounts for workers in a reliable, compliant, secure, and convenient way. Biometria Aplicada provided the tools for enrollment, prospecting, evaluation, and authorization processes, leveraging identity document validation, fingerprint authentication, signature technologies, and video solutions. The implementation took one month, and the results are highly effective. The National Pension Fund for State Workers has increased its service offerings and seen an uptick in productivity while achieving its initial goal of compliant and convenient security to enable safe and inclusive pensions. Biometria Aplicada is a shining example of an identity industry vendor taking a pragmatic approach with cutting edge technologies to make the world a better place with biometrics.

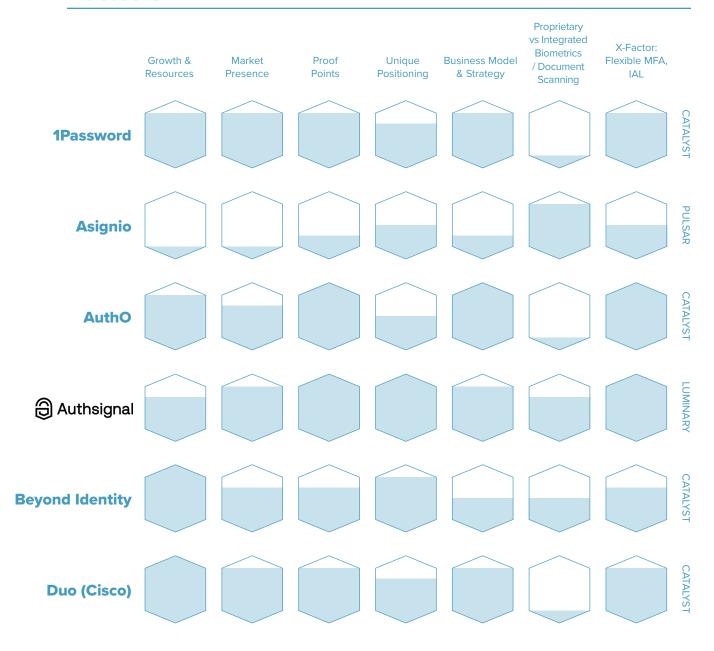
**Contact Biometria Aplicada:** 

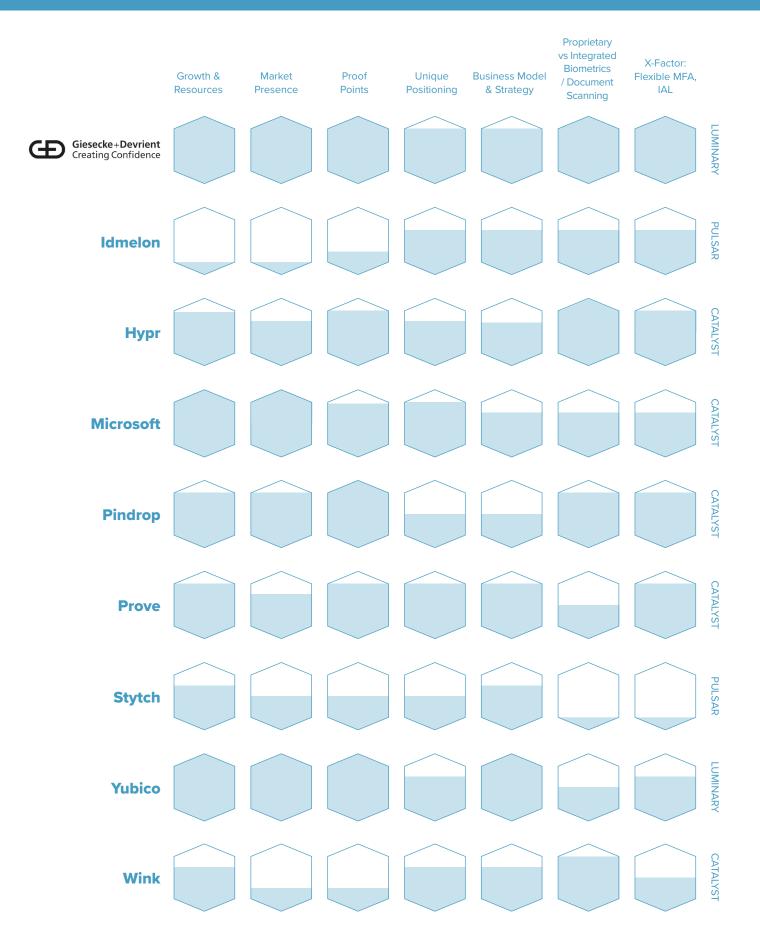
ventas@biometriaaplicada.com

### **Authentication**

These vendors protect financial accounts and sessions with biometric and non-biometric security.

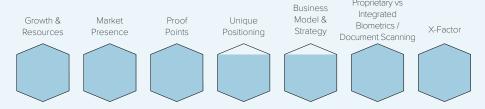
**Prism XFactor:** Flexible MFA (Multifactor Authentication), IAL (Identity Assurance Level)

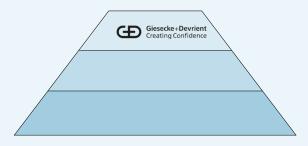






### BEAM: Authentication / CLASSIFICATION: Luminary





With over 170 years of expertise and experience in making the lives of billions of people more secure, Giesecke+Devrient as a global SecurityTech organization shapes trust in the digital age, with built-in security technology in three segments: Digital Security, Financial Platforms and Currency Technology, It has guided the finance-adjacent security and identity industries through many phases of evolution. Now, in this era of digitization, the Munich-headquartered Authentication Luminary is using biometrics to bridge the gap between physical and virtual paradigms in financial services. Legacy security controls like passwords and One-time-passwords (OTPs) are still prevalent in customer-facing finance, and that is a multi-layered problem. Vulnerable to phishing and Al-enhanced identity scams, those old school authenticators are prone to account takeover. A lack of biometrics also hinders assurance in KYC compliance during the onboarding process. And after that initial enrollment, continuous identity verification and authentication is rarely achieved due to added friction, creating further regulatory issues around AML.

G+D offers a single elegant solution to solve these three connected identity problems in financial services: Convego AUTH-U. Versatile and interoperable with G+D's suite of hardware authentication devices, AUTH-U is deployable on premises or in the cloud, and across mobile and web channels, enabling a consistent identity secure experience that checks all the right boxes: it's compliant, easy to use, future proof, interoperable, and supports multiple authenticators. In practice, it spans the entire financial services end user customer journey. AUTH-U can be used on registration of existing customers for mobile banking access, authenticate logins and transaction authorizations, and it can even work as a remote digital signature given the proper integrations. G+D is dedicated to creating confidence, and by shaping the future of authentication and making it passwordless, this Financial Services Prism Luminary is doing exactly that.

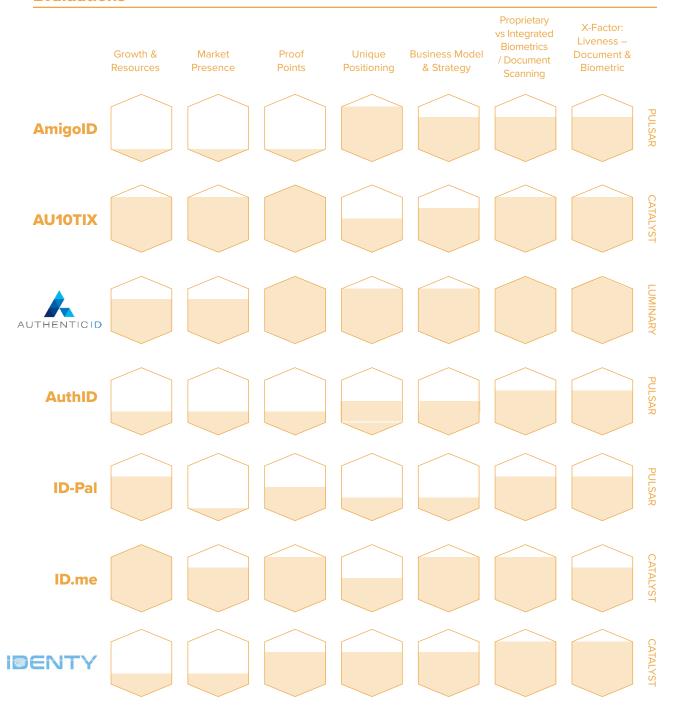
**Contact Giesecke+Devrient:** 

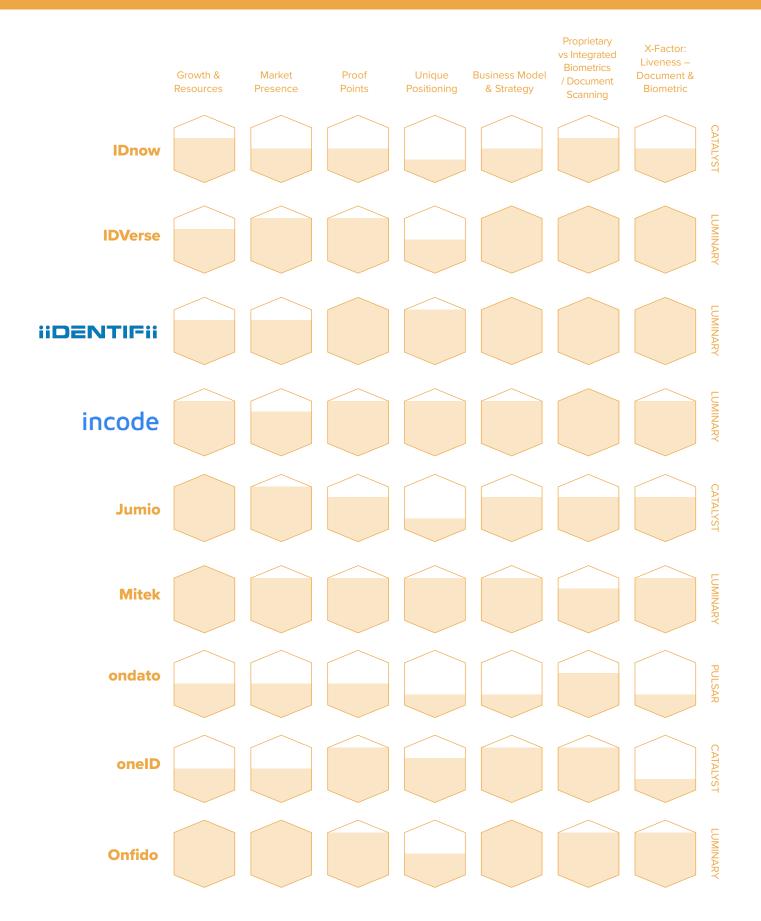
Quintin Stephen, Global Business Lead, Authentication quintin.stephen@gi-de.com

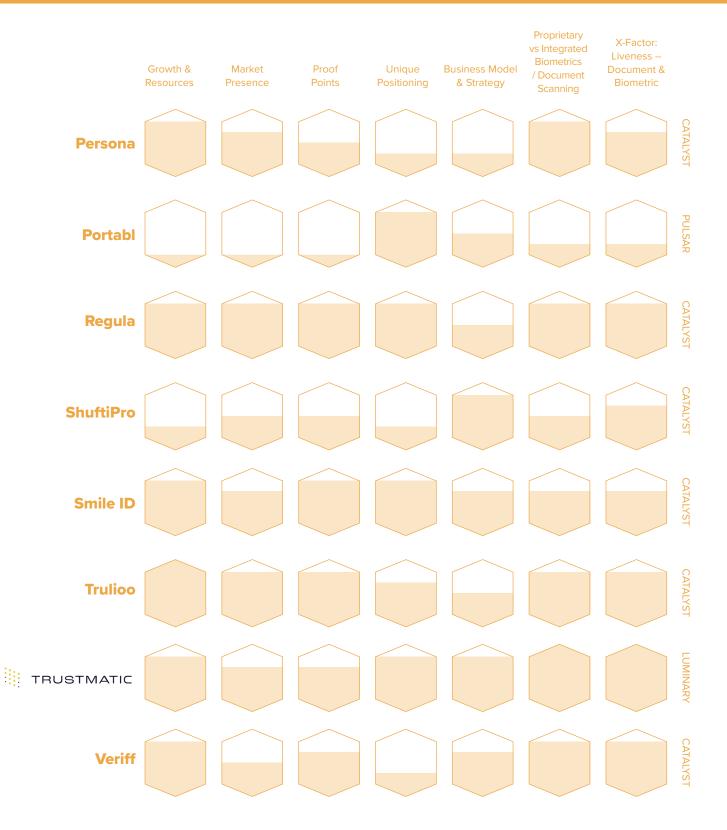
## **Identity Verification**

These vendors leverage biometrics and OCR to enable fully remote and/or facilitated onboarding and/or provide solutions for easy compliance with KYC, KYB, and AML standards.

Prism XFactor: Document and Biometric Liveness



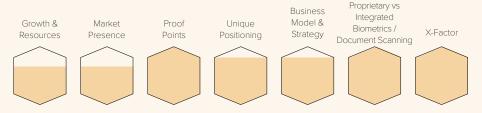








### BEAM: Identity Verification / CLASSIFICATION: Luminary





With post-pandemic digital transformation in full swing, unleashing a wave of Al-powered cyberthreats like deepfakes, cheapfakes, synthetic identity fraud, and account takeover attacks—AuthenticID is dedicated to combatting fraud and empowering users to confidently assert their identities on their terms, wherever and whenever they transact. The company's fully customizable solution is protecting financial services providers at the front door. Its powerful ID verification technology, supported by facial biometrics, liveness detection, and government ID matching makes the onboarding process simple for end users while protecting against spoofs, injection attacks, and non-fraud challenges like demographic bias.

#### **IDV With Extra Armor**

AuthenticID stands out thanks to the added protection offered by its proprietary FraudShield service, which maintains a bad actor watchlist. Updated in real time, it prevents successive fraud attempts by the same bad actor no matter how fast they act, making it particularly useful in our current era of live cyberattacks. The gains are easily quantifiable—when deployed by a leading wireless provider, it was able to detect 46,291 fraudsters and add them to its list. Accounting for the 420,000 fraudulent transactions halted by AuthenticID's IDV, the wireless provider saved an estimated \$504 million in fraud losses. And this success can be seen in financial services too.

### The Big Bank's Big Problem

When one of the 10 largest banks and credit card issuers in North America was experiencing a high rate of app-based fraud and account takeover losses, it turned to AuthenticID. The bank already had identity solutions in place, but they were particularly vulnerable to a flavor of stolen identity fraud in which bad actors submitted legitimate stolen IDs altered to have their own photo displayed. This allowed them to score positive biometric matches on fake IDs. The situation had a cascading effect on the bank—customer experience tanked as good customers were being rejected during onboarding. The bank's first-time pass rate for verifications was a dismal 61%.

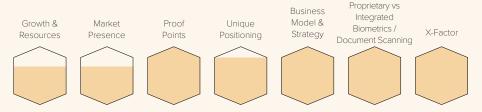
### Zeroing-in on a Perfect Score

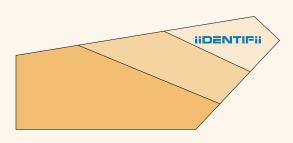
Implementing AuthenticID's biometric authentication and liveness detection allowed the bank to achieve an incredible reduction in fraud. It has recorded zero successful fraud attempts since June 2023. And as amazing as that stat is, it's just the start; the first-time pass rate has skyrocketed to 98%. This success in fraud reduction and improved customer experience was so strong that the bank is expanding AuthenticID's technology across all channels and use cases—an endeavor made easy given that implementation requires no system downtime. This massive success on such a large scale with a household name in financial services is an example of how a focused approach to specific identity pain points can have a dramatic impact on customer experience and the bottom line.





### BEAM: Identity Verification / CLASSIFICATION: Luminary





Financial Services IDV Luminary iiDENTIFii understands the human element of identity—from the impact of fraud on its victims to the need for customer education, to the core source of financial crime: money laundering and false identity. iiDENTIFii solves the connected challenges of identity fraud, live attacks on digital payments systems, and the need for better customer experience. This is achieved through its IDV platform which uses face biometrics supported by 3D and 4D Liveness®—a proprietary technology that incorporates a temporal element in its identity assessments. That fourth dimension is particularly useful in high-risk financial transactions, as it allows for stronger audit trails, which in turn help trace risk-based trends and keep relying parties ahead in the fraud arms race.

### **Africa's Identity Advantage**

iiDENTIFii has a significant footprint in South Africa's financial services sector, with more than 60% of the country's largest Tier 1 banks using its technology platform. With the no-code and low-code solutions, iiDENTIFii's technology is easy and quick to deploy, and it is constantly improving thanks to daily success and failure rate audits. Further setting it apart is its integration with government and authoritative databases, which bolster its identity proofing capabilities, and its built-in redundancies which allow it to fully operate even when regional connectivity infrastructure fails. The success is evident in its clients' enthusiasm for expanding their use of the company's remote identity verification services. Most notable among those financial services clients is Standard Bank.

### A High Watermark

Standard Bank is South Africa's largest commercial bank on the African continent. With 161 years of history, it operates in 20 sub-Saharan African countries, serving nearly 19 million clients through 12,000 points of presence, including branches. With a mission based around integrity and ethics, Standard Bank turned to iiDENTIFii when it needed to upgrade its identity security in the face of rising levels of fraud.

### **Spoof-proof, Privacy Forward, Partner Friendly**

iiDENTIFii deployed its solution in a matter of months. In doing so, it enabled Standard Bank to onboard and verify customers in seconds and comply with FICA, KYC, RICA, and AML regulations. The enhanced security and convenience earned the company the full-throated endorsement of Standard Bank, which also offers iiDENTIFii's identity verification technology through its OneHub platform. Beyond the market penetration this enables, this Standard Bank case study stands as a glowing example of how getting identity right in financial services can help spread best practices, strong technologies, and customer education.

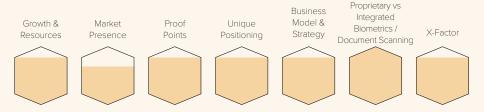
Collaboration, innovation and the proven ability to deliver are essential to the future of identity in financial services. Through its work on the African continent, iiDENTIFii is leading by example, lighting the path forward to a fraudless financial future.

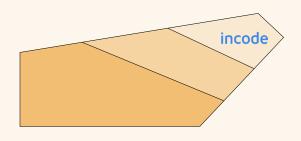
Contact iiDENTIFii:



## incode

### BEAM: Identity Verification / CLASSIFICATION: Luminary





Pursuing its vision of one identity everywhere, Financial Services Identity Verification Luminary Incode is on a mission to power a world of trust—reducing fraud and transforming human interactions. The company verifies over 100 million users on an annual basis across a wide range of vertical markets, but its work in the financial services sector stands out. With its frictionless, scalable onboarding technologies, Incode serves the full spectrum of financial services clients, from legacy institutions and credit unions, to disruptive fintechs, neobanks, and crypto wallets. Easy compliance at breakneck speeds, fraud reduction, and improved conversion rates—these are the benefits offered by Incode's identity verification platform.

#### **IDV** Orchestrated

Incode's platform approach to identity verification makes it shine. Its Al-driven technology is supported by liveness detection, constantly adapting to the accelerating fraud landscape. But it doesn't stop there. Incode's technology is fully customizable, offering confident identity defense at the front door during onboarding, and step-up verification in authenticated sessions. What's more: Incode is one of the rare IDV providers that can boast connections with government databases, bringing it to the leading edge of identity innovation. This integration with systems of record enable levels of identity verification and identity proofing beyond those that can be achieved simply through biometric matching to photo IDs.

### **Boosting a Neobank**

When the largest neobank in the United States required an IDV solution for step-up verification on higher-risk transactions, it chose Incode. The caliber of its fraud detection capabilities made it perfect for the job. But it was Incode's remarkably consistent ability to positively verify authorized users and reject impostors that caught the client's attention. In addition to lower fraud, the neobank saw higher conversion rates, indicating that customer experience had improved along with identity security. Now, the financial services firm is sending a larger portion of its overall verification traffic to Incode. And the numbers explain why—Incode is responsible for a 15% increase in successful user verifications and 38% reduction in fraudulent activities. This, according to a product leader at the neobank, equates to millions in additional revenue and cost savings.

### **Delivery On-demand and Fraud Free**

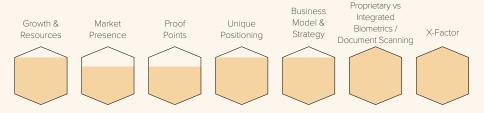
As impressive as it looks, that case study isn't an outlier. Rappi—the largest on-demand delivery service in Latin America and creator of the region's first SuperApp—implemented Incode Verify and its system of record integrations in Mexico and saw over 98% reduction in fraud. This success prompted Rappi's CEO to state the company's plans to replicate this success in all nine of its countries of operation. It's real examples like this that demonstrate how Incode's approach to identity verification furthers its ambitious plans to build an identity-first world.

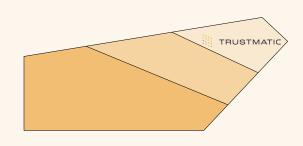
Contact Incode: +1 (650) 446-3444





### BEAM: Identity Verification / CLASSIFICATION: Luminary





In October 2023, Financial Services IDV Catalyst Trustmatic was acquired by Certn, a global leader in background screening. Now operating on a single platform, its formidable identity verification technology is bolstered by thorough human intelligence processes. Already a vendor of note, Trustmatic's footprint greatly expanded in the wake of the acquisition—its IDV solution is now deployed with over 3,000 organizations. And its transaction volume is growing by 110% month over month. This context is crucial in understanding Trustmatic's significant value in financial services. The company's highly ambitious goal is to give people control over all aspects of their identities and become global citizens. In financial services, this starts by giving users frictionless and secure access to banking while also addressing challenges in KYC compliance, fraud, and the onboarding process.

### **Anatomy of Trust**

Trustmatic's no-code platform can be deployed in minutes, with its API only taking a matter of hours to implement. In both cases, the technology can be up and running on the day of purchase. Its functionality is quick too, with identity verification requiring zero clicks and taking less than 30 seconds to complete. It's not all about speed and efficiency, though—Trustmatic's identity verification is supported by advanced fraud detection, ensuring resistance to modern threats like deepfakes, and it maintains industry leading accuracy and pass rates.

### **Exceeding Expectations**

Prior to Trustmatic's acquisition, Certn was facing challenges with an implementation of its own. Serving a leading financial services provider, it was unable to meet the pass rates and accuracy rates required by the project. The pain points were particularly evident around identity related challenges like fraud detection and performance in areas of automation and user experience. Certn turned to Trustmatic as a vendor and received more than it needed to satisfy the customer. The results were impressive. Trustmatic reduced verification times by 75%, dropping them from 120 seconds to 30 seconds. Meanwhile, the automation rate shot up to 97%, while false accepts and false rejects plummeted to 0% and 1% respectively.

### So Good We Bought It

Trustmatic's success story is evident in the first paragraph on this page: Certn was so convinced by the IDV Luminary's immediate results that it subsequently acquired the company. This is a notable development, not just in financial services, but in the identity industry as a whole. The Biometric Digital Identity Landscape as represented by the Prism is a true ecosystem, in which interactions between vendors leads to meaningful adaptation and evolution through partnerships, collaborations, and in this case full-on acquisitions. As Trustmatic continues on its mission to empower users with the full scope of their identity within this ecosystem, expect it to thrive.

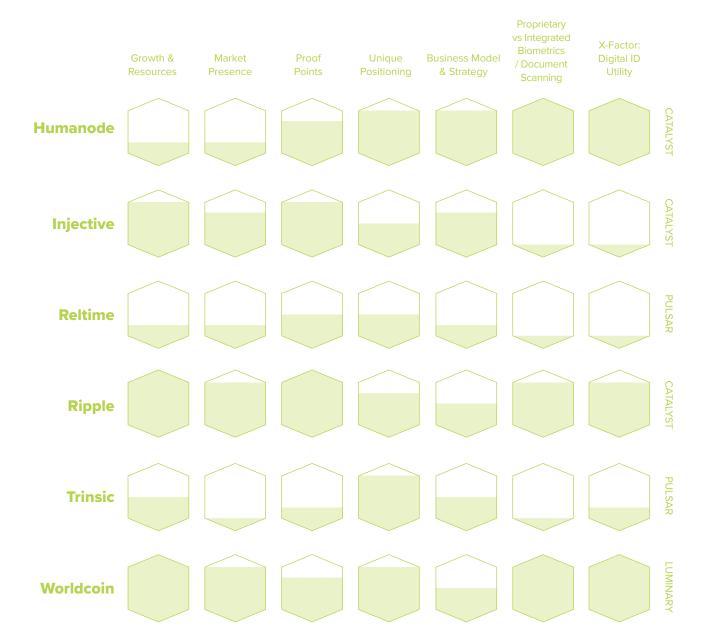
Contact iiDENTIFii: info@trustmatic.io

# **Decentralized Financial Services**

These vendors use some combination of blockchain, VCs (Verifiable Credentials), SSI (Self Sovereign Identity), and crypto to innovate decentralized identity solutions for financial services.

Prism XFactor: Biometric Digital Identity Vision

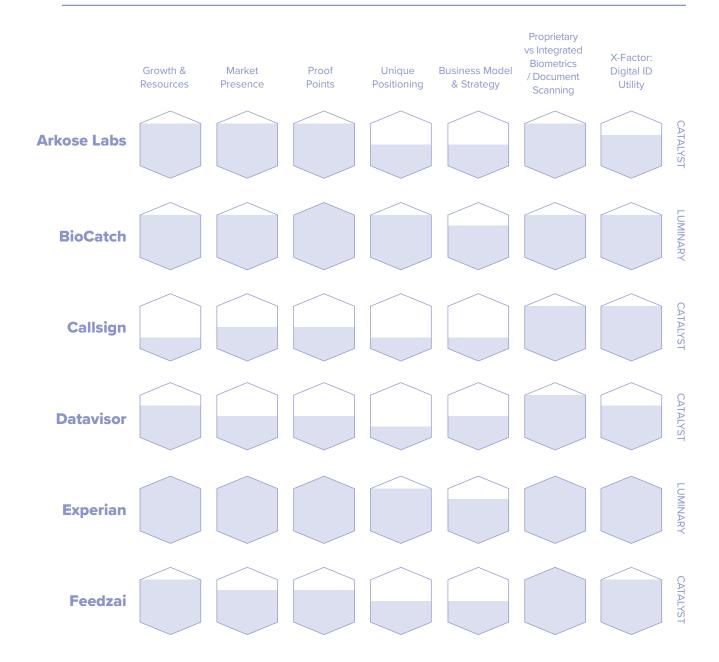


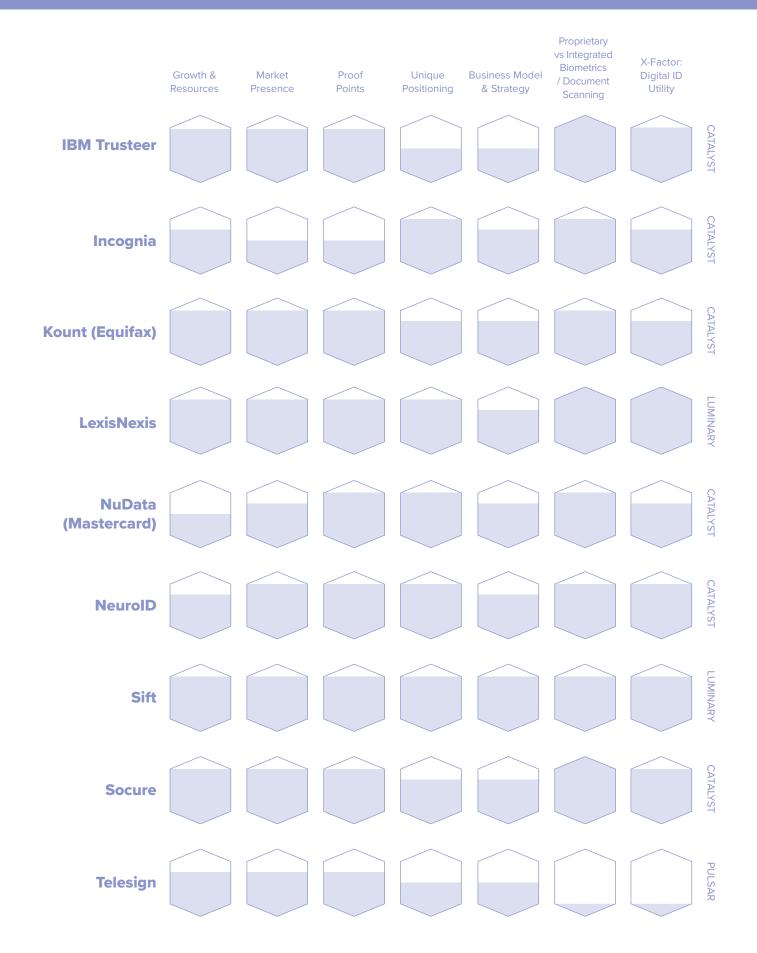


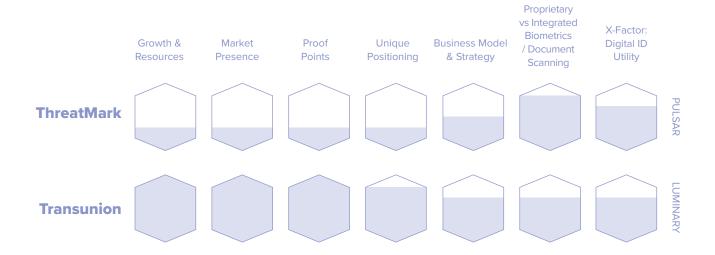
### **Fraud Assessment Tools**

These vendors provide and/or deploy behavioral biometrics along with other signals intelligence in the background of financial sessions to identify and prevent fraud.

Prism XFactor: Biometric Digital Identity Vision







### The Prismatic Future of Finance

Financial services has been at the forefront of consumer biometric digital identity adoption for over a decade. This history of secure identity innovation has positioned financial services players to significantly benefit from the biometric digital identity solutions explored in this report.

The future of financial services biometric digital identity demands:

- Al-powered anti-fraud solutions that can compete in the ongoing cybersecurity arms race.
- Easy and accessible onboarding that can anchor trust at the beginning of the customer journey, rejecting synthetic identities and complying with shifting regulations.
- Strong authentication that carries the trust from that onboarding process forward through every transaction including account recovery.
- A convenient end user experience meeting the evolving demands of customers that doesn't compromise security.

Financial services organizations have a multitude of biometric digital identity options to choose from. Those highlighted in this report are ready to deploy and have an eye toward the orchestration and proficiency required to compete in the dynamic financial services biometric digital identity landscape. By choosing biometrics with Al-enhanced liveness detection and full lifecycle orchestration, financial services leaders are opting to define the massive financial services biometric digital identity market, not just participate in it.

### **The Prism Project**

### **Showing Identity in a New Light**

The Prism Project arose organically out of a collaborative survey-based research project launched by Acuity Market Intelligence and FindBiometrics in late 2022. The initial proof-of-concept Prism graphic was developed and debuted in the winter of 2023. It instantly became the most shared asset in our history, receiving over 50,000 impressions within weeks. By September 2023, we developed that proof-of-concept into a robust Prism Report, which served as the foundation for The Prism Project. The intent of the Project is to use the Prism as the lens through which we continue to analyze and evaluate the rapidly evolving biometric digital identity industry as we help influencers and decision makers understand, innovate, and implement digital identity technologies.

### **Reports and Collaborations**

The Prism Project will publish, promote, and distribute four reports in 2024:

- The Annual Biometric Digital Identity Prism Report the foundational report defining the Prism Framework initially published in September 2023.
- The Financial Serices Biometric Digital Identity Prism Report.
- The Government Services Biometric Digital Identity Prism Report.
- The Travel and Hospitality Biometric Digital Identity Prism Report.

Visit www.the-prism-project.com/prism-reports to download Previews of the reports.

### **Prism Project Brain Trust**

The Prism Project is the brainchild of Maxine Most, Principal, Acuity Market Intelligence and Peter Counter, Author, Technology Writer, and former Editor and Chief, FindBiometrics. This innovative new framework for understanding and evaluating the rapidly evolving biometric digital identity marketplace is the only market model that is truly biometric-centric based on the foundational conviction that in the age of digital transformation

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the only true, reliable link between humans and their digital data is biometrics.

# Ongoing Collaboration and Sponsorship Opportunities.

The Prism Project is conducting on-going research and continuing to explore how biometric digital identity is being used today, where the roadblocks to adoption lay, what obstacles must be overcome to successfully deploy these technology solutions, and where they are being used and by whom. We welcome collaborators and are open to discussing how your organization might benefit from and/or leverage the opportunities The Prism Project presents. To reach out, visit www.the-prism-project.com or email us at info@the-prism-project.com.

### **About the Author**

### **Maxine Most**

Internationally recognized biometrics and digital identity thought leader celebrated for provocative market insights, accurate market predictions and forecasts, and unbiased, pragmatic market intelligence. Tenacious strategic marketer with a prolific career hallmarked by success designing and executing ground-breaking strategies for technology innovators and leaders.

Maxine Most (@cmaxmost) is the founding Principal of Acuity Market Intelligence (www.acuity-mi.com), a strategic consultancy recognized as the definitive authority on global biometrics market development. Throughout her 30-year career, Ms. Most has evangelized emerging technology on five continents. Since 2001, she has focused on biometric and digital identity markets where she has earned a stellar reputation for innovative thought leadership and a proven ability to accurately anticipate biometric and digital identity market trends.

As an executive strategist, Most has provided expertise in emerging markets such as biometrics, authentication, and digital identity, e-commerce, interactive services, and 2D and 3D visualization and image processing. She has worked with startups, established technology market leaders, Global 1000's, and a range of organizations in between. Most leverages her deep understanding of technology evolution, emerging market development, and the process through which industry leaders are created to provide candid strategic analysis, highly targeted implementation plans, and quantifiable, measurable results.

Ms. Most is the author of numerous biometric and digital identity research reports including Face Verification & Liveness for Remote Digital Onboarding," "The Global Automated Border Control Industry Report: Airport eGates & Kiosks," "The Global Biometrics and Mobility Report: The Convergence of Commerce and Privacy," "The Global National eID Industry Report," "The Global ePassport and eVisa Industry Report," and "The Future of Biometrics," as well as a contributor to several books including "Digital Identity Management" edited by digital identity thought leader David G. Birch.

Ms. Most regularly offers insight and analysis in on and off-line publications, is quoted often in industry, business, and consumer



press, and presents regularly at industry events on the evolution and development of biometrics and digital identity markets. She is a graduate of the University of California, San Diego with a multi-disciplinary degree in Mathematics and Computer Science and minors in Visual Arts and Economics.

# Let The Prism Project be your guiding light!

#### The Prism Project (www.the-prism-project.com)

The Prism Project is the brainchild of Maxine Most, Principal, Acuity Market Intelligence and Peter Counter, Author, Technology Writer, and former Editor and Chief, FindBiometrics. This innovative new framework for understanding and evaluating the rapidly evolving biometric digital identity marketplace is **the only market model that is truly biometric-centric** based on the foundational conviction that in the age of digital transformation the only true, reliable link between humans and their digital data is biometrics.

#### **Maxine Most**

Principal, Acuity Market Intelligence cmaxmost@acuity-mi.com Founder, The Prism Project cmaxmost@the-prism-project

#### **About Acuity Market Intelligence:**

With decade of practical expertise in the unpredictable and volatile world of emerging technology, Acuity Market Intelligence consistently delivers consistently original, thought-provoking, and reliable insight and analysis. Proud, self-proclaimed technology business development and marketing geeks, Acuity is globally renowned for its uniquely customized business and marketing strategies and for creating and deploying innovative programs that integrate digital and traditional channels and platforms.

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