



AIFINTECH100

Profiles of the **AIFINTECH100**, the world's most innovative companies developing AI technologies in Financial Services that every financial institution needs to know about in 2022





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The **AIFINTECH100** is an annual list of 100 of the world’s most innovative AI solution providers for financial services selected by a panel of industry experts and analysts. These are the companies every financial institution needs to know about as they consider and develop their digital transformation strategies and new customer propositions.

The list is part of a series of studies that highlights the leading companies in sectors such as [RegTech](#), [InsurTech](#) and [WealthTech](#) to help executives stay on top of the latest innovations. Companies that won places on the preceding lists generated huge awareness among financial services firms. Many were approached directly by banks and financial institutions, while other got a more welcome reception from prospective clients and partners.

The **AIFINTECH100** list will help senior management and technology executives evaluate which applications of AI in financial services have market potential and are most likely to succeed and have a lasting impact on the industry.

CRITERIA

The criteria assessed by the Advisory Board and FinTech Global team include the following:

- Industry significance of the problem being solved
- Growth, in terms of capital raised, revenue, customer traction
- Innovation of technology solution
- Potential cost savings, efficiency improvement, impact on the value chain and/or revenue enhancements generated for clients
- How important is it for a financial institutions to know about the company?

PROCESS



RESEARCH AI FINTECH UNIVERSE

Analyse the universe of AI solutions in Financial Services on FinTech Global database and external sources



NOMINATE COMPANIES

Shortlist candidates that meet criteria along with companies nominated via the website



CONDUCT INTERVIEWS & SURVEY

Undertake in-depth interviews or surveys with founders and CEOs of shortlisted companies



IDENTIFY AIFINTECH 100

Determine which companies excel in terms of the criteria and can be classified as AI innovation leaders



PUBLISH

Announce results to media and finalists



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 Founded 2002

 Employees: 501-1,000

 Segments of Financial Services: Banking, Compliance & Fraud detection


 Regions of operations: United Kingdom, Europe, United States


ACA Group ("ACA") is the leading governance, risk, and compliance (GRC) advisor in financial services. They empower their clients to reimagine GRC and protect and grow their business. The company's innovative approach integrates consulting, managed services, and its ComplianceAlpha® technology platform with the specialized expertise of former regulators and practitioners and their deep understanding of the global regulatory landscape. ComplianceAlpha is ACA's award-winning regulatory technology platform that integrates risk and compliance activities, automated surveillance, ongoing monitoring, flexible workflows, enhanced analytics, and managed services delivery. Designed, developed, and supported by ACA's experienced team that includes over 200 former regulators and compliance officers, the platform is used by over 1,000 leading financial services firms worldwide to build more scalable and resilient compliance programs.



 Founded 2018

 Employees: 51-100

 Segments of Financial Services: Banking

 Regions of operations: United Kingdom


Acin is pioneering the global standard for operational risk management using innovative technology, data science and a collaborative peer-to-peer network to safeguard the world's leading firms. Acin uses in-house developed AI technology and SME expertise which provides customers with opportunities for enriched data, network benchmarking, integration of external data feeds to network controls to enable better decision making and a matching engine to improve efficiency. Through fully interactive visualised dashboards, Acin empowers firms with their first-ever complete view of their OpRisk data, and that of their peers.



 Founded 2015

 Employees: 101-250

 Segments of Financial Services: Banking, Insurance, Customer Experience, Compliance & Fraud Detection, Consumer/Personal Finance, Payments, Lending

 Regions of operations: Europe, North America, Latin America, APAC

Actico is an international provider of software for intelligent automation and digital decisioning that enhances day-to-day decision-making and end-to-end automation. Its ACTICO Platform is a flexible and scalable technology for digitalising and automating high-volume, operational business decisions. The company enables their clients to implement agile services and applications to automate decisions or improve human decision-making. Financial service providers and insurance companies can manage digital transformation via technology that helps them adapt regulatory requirements and serve customers in real-time. ACTICO Platform contains everything their clients need from capturing and design of decision models, to testing and monitoring automated decision-making across all their systems, workflows, and channels.

How Actico is automating key decision-making processes

In a climate of unpredictable political and economic changes, Actico is supporting banks, financial service providers and insurers with the tools they need to adapt.



actico
Smarter Decisions

Actico is a leading international provider of software for intelligent automation and digital decisioning. The company provides software and tools used across multiple industries to enhance day-to-day decision making and end-to-end automation.

Combining human knowledge and artificial intelligence (AI) with powerful automation technology, Actico's solutions can be deployed to manage risks, fulfil regulatory compliance obligations, prevent fraud, enhance digital customer engagement and optimise operations.

Hans-Jürgen Rieder, Actico's CEO, said the company has been working with banks, financial service providers and insurers for more than 20 years. It is proud to have clients from almost all continents, ranging from small and mid-sized companies to Fortune 500 companies.

This depth of experience means that the company has learnt "first hand" what challenges are emerging, Rieder said, "and we respond to them with appropriate advances in our software. This means we are always at the cutting edge of technology."

Credit risk management

When it comes to credit decisioning, underpinning most challenges, Rieder said, is the fact that political, economic and social circumstances change very quickly. Anyone analysing risks must be able to map reality and assess how likely certain scenarios are.

Demonstrating this, Rieder said, "Think back to the beginning of the year... there was peace in Europe and the key interest rate was around 0%. Six months later, the stock and commodity charts of the last few months look like some random children's drawings."

The ECB's policy of low interest rates is squeezing investors' returns as well as banks' margins in the lending business. According to Actico however, lending has recently increased despite this, driven by both supply and demand. There is strict competition between traditional financial institutions and neobanks as the economy picks up again post pandemic. However, it is increasingly difficult to assess how a borrower's situation will develop in a climate characterised by such uncertainty.

Actico aims to equip financial institutions with solutions to help them in the face of difficult and tumultuous circumstances. "We prepare our customers against these challenges by giving them the ability to react quickly to changes," Rieder said.

For example, Rieder explained customers can adjust the rules for their credit checks in real time. Actico's software also offers machine learning techniques and AI, which sharpens their criteria and thus makes their decisions more precise.

The need to improve credit risk management has never been greater, in tandem to making the credit decision and the ongoing monitoring of the borrower more efficient.

How can Actico help?

Actico's Decision Automation Platform is one tool in the toolbox for clients to solve these challenges in credit risk management.

Every day, high volumes of operational decisions have to be made along business operations. Particularly in a digital world where real-time decisions matter, Actico's platform allows companies to make data-driven decisions smarter and faster by combining AI-powered and rules-based technologies with a decision engine.

Rieder said, "You can think of it like a machine: at the top you tip in your individual case that you need to decide on, and at the bottom the decision comes out.

"To make this work smoothly, you enter in advance which static conditions, constraints and business rules apply to the decisions. Actico does this graphically by drag-and-drop. For each case-by-case review, Actico applies your criteria reliably and accurately, for every decision. No matter if it's one or a million decisions, all in milliseconds and real-time."

Leveraging AI

In addition to the aforementioned challenges, incumbent banks are increasingly facing pressure from neobanks, having the advantage of having been "born digital". What's more, customers are increasingly demanding digitalised processes that are convenient and easy to use with fast turnaround times.

Existing operations and legacy IT infrastructure may not be adequate in meeting the demands of today. One of the "game changers" is believed to be AI and machine learning. Whilst these may have become somewhat of a trend or buzzword, their use does have the potential to sustainably improve business processes from customer acquisition to loan approval decisions, as well as monitoring and deepening existing customer relations.

Rieder said that a few years ago there were still some reservations about AI and machine learning solutions, but since then the technologies have proven their usefulness many times over.

"Efficiency, profitability, and effectiveness are eminently important. There is no way around AI and machine learning. Previously, there were deep divides between those who manage the data, those who develop the analysis criteria and IT," Rieder added.

Those initial concerns, Rieder said, were addressed by educating financial service providers about AI and machine learning. Yet, despite the proven value, some banks are still struggling to effectively operationalise machine learning into existing business processes and decision workflows. This is largely due to the fact that financial institutions need to be certain that the adopted solutions are aligned with all regulatory requirements and have a proof of compliance.

"Banks and insurers feared they would not be able to answer questions from regulators or customers about why certain decisions were made one way and not the other. Now, they know that nothing takes on a life of its own and that, even years later, they can understand all the criteria that led to a certain decision in the past. Actico has

implemented algorithms for this purpose that can ensure explainability even in the ML context"

Empowering banks to make better, more-informed lending decisions

In digital credit decision making, an applicant expects a credit decision whilst still on a banks' user touchpoint. This experience is a crucial driver of future business and as such, requires a software that enables fast, reliable and secure decision making at the core.

AI and machine learning, in combination with rule-based technology, can be leveraged to implement risk strategies and risk rating and scoring models. This can significantly improve the turnaround time of credit approvals.

Moreover, AI and machine learning can assist the evaluation of scanned documents as well as the analysis of multiple actions in the digital space. Credit institutions can also make use of PSD2 and/or open banking data. All of this allows institutions to build a very accurate prediction of a customers' ability to pay.

A further way in which AI has affected credit decisioning, is its impact on accessibility and objectivity.



"Efficiency, profitability, and effectiveness are eminently important. There is no way around AI and machine learning."

"This puts both the financial institution and the customer in difficult situations. However, the combination of business rules, AI and machine learning, means that credit decisions are rational and objective."

Ultimately, Rieder continued, this directly benefits the applicant and the bank. On the one hand, clients receive loans that actually fit the life and income constraints of the individual or household. And, on the other hand, financial institutions have a solid risk profile of a client and can price the loan accordingly. ●

FASTER AND BETTER FINANCING APPROVALS: SATISFIED CUSTOMERS

IMPROVED AUTO FINANCING APPROVAL PROCESSES WHILE MANAGING RISK MORE EFFECTIVELY WITH INTELLIGENT DECISION AUTOMATION

SCENARIO

The intelligent use of Advanced Analytics (AA), automation and Machine Learning (ML) is becoming increasingly important for banks in fraud prevention, especially in the credit risk assessment process. This approach enables analysis of huge amounts of data more efficiently than ever before, unearthing of suspicious patterns and thus, identifying potential risks at an early stage. This, in turn, **reduces effort, increases efficiency, and lowers costs.**

The **operationalization of ML models**, in particular, presents companies with major technical challenges. This case study demonstrates how the use of AA enhances the credit risk assessment process by using the ACTICO Decision Automation Platform – by **combining business rules and machine learning models.**

CHALLENGE

The high number of manual checks in the credit risk assessment process tied up human resources which could be better utilized for other, higher-value tasks. The introduction of Advanced Analytics allows to reduce the number of manual checks and thus, significantly increase efficiency. A platform that enables the integration and operationalization of AA models and deterministic rule-based models to achieve better and explainable, predictive business decisions was therefore required.

SOLUTION

Ultimately, the client selected Actico as its centralized platform for the credit risk assessment process. The Decision Automation Platform allows to **easily integrate decision logic** (classical business-rules) **and AI-based insights.** In this case it hosts and executes, amongst others, statistical forecasting models based on machine learning algorithms. These **evaluate the probability of fraud in a credit application** and thus, enables a targeted management of questionable applications.

RESULTS

By using the Advanced Analytics model in combination with ACTICO's high performance platform, the **number of manual checks were reduced by 80%.** This has increased employee productivity enormously, resulting in **freeing up of 8.5 full time employees** and making them available for other higher value activities within the auto financing giant. Overall, the client has been able to realize **annual savings of over 1 million Euros** with this automation initiative.

www.actico.com

The bottom of the page features a dark, abstract background with glowing blue and red network lines and data points. In the foreground, there is a semi-transparent image of a smartphone displaying a financial chart with various data points and numbers. The Actico logo, consisting of the word 'actico' in a lowercase, sans-serif font with a stylized upward-pointing arrow above the 'o', is prominently displayed in the bottom right corner. Below the logo, the tagline 'Smarter Decisions' is written in a smaller, white, sans-serif font.

actico[↑]
Smarter Decisions

Enable the digital future through

INNOVATION AND SPEED

with Smarter Decisions

With Actico, banks become innovative and disruptive players in financial services. Actico's technology achieves this by combining advanced analytics with decision automation.

- **DIGITAL DECISIONS**
- **INTELLIGENT DECISION AUTOMATION**
- **CREDIT RISK & DECISIONING**
- **ANTI-MONEY LAUNDERING**
- **PAYMENT SCREENING**
- **FRAUD PREVENTION**

Smarter Decisions with ACTICO

actico¹
Smarter Decisions



Founded 2018



Employees: 11-50



Segments of Financial Services: Risk Management, Compliance Management



Regions of operations: Europe & United Kingdom

Acuminor has developed a Software As A Service (SaaS) solution that aids the identification and assessment of threats such as money laundering, terrorist financing, bribery and corruption and circumvention of sanctions. Acuminor aims to become the global golden standard for financial crime intelligence. Their intelligence models enable the collection, analysis and assessment of criminal methods, predicate offences, legal and regulatory requirements from hundreds of trusted sources, more efficiently and effectively than traditional manual efforts. The platform enables the assessment of these threats against the risks associated with your business, which is emerging as a regulatory priority as best practice. Acuminor's solution aims to support organisations in conducting their regulatory responsibilities in a more efficient and effective way to reduce costs, and improve effectiveness of the financial crime ecosystem. Acuminor's existing customers' span the public and private sectors including banking, regulators, finance, law and gaming.



Founded 2017



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Customer Experience, Consumer/Personal Finance



Regions of operations: APAC

Aktivolabs is a digital health platform that empowers financial institutions to measure real-time chronic disease risk of populations and drive meaningful engagement at scale with customers about health and longevity. Aktivolabs has established a state-of-the-art, massively scalable and low-touch digital health data platform that affordably measures round the clock real-time risk to your health through smart phones, wearable technologies, and internet of things. Through their platform, Aktivolabs helps insurance, reinsurance, banks, corporations and telecommunication companies to understand their clients' health in real-time. Aktivolabs' flagship health app, Aktivio®, is powered by a proprietary algorithm that generates the Aktivio Score®. The Aktivio Score® is improved by increased physical activity and adequate sleep.



Founded 2018



Employees: 101-250







Segments of Financial Services: Insurance



Regions of operations: Global





Akur8 is revolutionizing insurance pricing with Transparent Machine Learning, boosting insurers' pricing capabilities with unprecedented speed and accuracy across the pricing process without compromising on auditability or control. Akur8's modular pricing platform automates technical and commercial premium modeling. It empowers insurers to compute adjusted and accurate rates in line with their business strategy while materially impacting their business and maintaining absolute control of the models created, as required by state regulators. With Akur8, time spent modeling is reduced by 10x, the models' predictive power is increased by 10% and loss ratio improvement potential is boosted by 2-4%. Akur8 already serves 50+ customers across 20+ countries, including AXA, Generali, Munich Re, Tokio Marine North America Services (TMNAS); specialty insurer Canopus and MGA Bass Underwriters; consulting partners Xceedance and Perr & Knight; and insurtechs Manypets and wefox. Over 700 actuaries use Akur8 daily to build their pricing models across all lines of business. Akur8's strategic partnerships include Milliman, Duck Creek, Guidewire and Sapiens.



-  Founded 2004
-  Employees: 1,001-5,000
-  Segments of Financial Services: Banking, Compliance & Fraud Detection, Payments, Anti-Money Laundering (AML)/Financial Crime
-  Regions of operations: United States, Canada, United Kingdom, Europe, Hong Kong, India, Brazil

AML RightSource is a technology-enabled managed services firm focused on fighting financial crime for financial institutions, FinTechs, money service businesses, and corporations around the globe. By integrating AI, allowing technology to simulate human intelligence; and intelligence amplification (IA), augmenting human intelligence with technology, the company seamlessly blends human and machine intelligence to optimize financial crime risk management and regulatory compliance. The industry experts at AML RightSource devise solutions that combine highly trained analysts with state-of-the-art technology to not just tackle day-to-day compliance tasks, but to cut compliance costs, lower risk, and increase productivity. Recognized by the AIFinTech 100, the AML RightSource QuantaVerse Platform leverages AI and machine learning to automate three components of AML compliance – reducing false positives, automating AML investigations, and identifying risk that is regularly missed by a TMS.



-  Founded 2022
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, API Management & API business operations
-  Regions of operations: Global

Apinity is the market-leading software provider for helping insurances worldwide successfully drive their API business operations. Apinity brings financial service (FI) company's API business strategy to the next level through end-to-end orchestration, publication, integration, monetisation, and metering of your API-driven business model. Their product, Apinity Exchange, is available in different tiers varying in the level of customisation. It allows FI companies to launch their own portals to increase API adoption, offer a great user experience to their internal and external stakeholders, and gain new revenue through their existing IT assets. In comparison to traditional API Management solutions, Apinity Exchange handles your API IT operations part and also covers all API business operations such as marketing-oriented service descriptions, contracting, and automated billing. This allows insurances to quickly establish their own API platform with an integrated marketplace to gain real business value out of their APIs.



-  Founded 2012
-  Employees: 11-50
-  Segments of Financial Services: Banking, Investment & Trading, Compliance/Fraud Detection
-  Regions of operations: United Kingdom, APAC, United States, Europe

AQMetrics builds award winning regulatory technology that delivers end to end automation for tier one banks, asset managers, fund administrators and hedge funds. Given the scrutiny from Central Banks on outsourcing, AQMetrics looks to provide one platform for regulatory risk and reporting for emerging regulation. The AQMetrics platform is an end to end automated data management platform for rules, risk and regulatory reporting. The AQMetrics regulatory reporting platform stands out from the crowd by having a turnkey product offering in the market that is cost-effective. This is coupled with a detailed ISMS (Information Security Management System) policy that customers trust when it comes to their data and information security. This customer-centric SaaS platform allows firms to onboard data from multiple sources, avail of smart-validations with real-time error handling, and machine-to-machine reporting to the competent authorities.





Fighting financial crime is what we do.


As the market leader for AML, fraud, holistic surveillance, and case management solutions, NICE Actimize uses the industry's most advanced AI and machine learning to help firms protect their customers and assets.


**Outsmart today's financial crime threats
with the power of smartest AI.**

See how at niceactimize.com >



 Founded 2018

 Employees: 11-50


 Segments of Financial Services: Insurance, Benefits


 Regions of operations: United States

Avibra is driven to make insurance, financial and well-being needs more accessible for everyone. With millions of Americans not having access to these basic benefits, Avibra created a new business model to address the growing problem. They are the first company to offer BaaS — Benefits as a Solution — which offers a solution to protect their members for their futures. Avibra gives life and AD&D insurance to all fintech users, at no cost to the fintech or their member. Additionally, at the affordable price of \$1 per week, the company provides an accessible way for their members to get benefits like dental plans, teletherapy and critical illness. Avibra is the first company in the United States to offer free insurance to the masses and to introduce benefits priced at only \$1 a week outside of any employer. They primarily serve uninsured and underserved populations that are largely ignored by incumbents.


 Founded 2018


 Employees: 51-100


 Segments of Financial Services: Insurance

 Regions of operations: Global

Benekiva is a leading provider of SaaS technologies that optimise and transform the claims and servicing operations within some of the most trusted life and annuity insurance companies. They offer the only solution that delivers straight-through, next-generation claims and policy servicing transformations, with asset retention enablement. The secure cloud-based system allows associates, policyholders, and beneficiaries to access the intuitive portal and user interface from anywhere, at any time, and from any device. Benekiva's rules-based, reflexive technology can help turn the claims process into a revenue driver by empowering carriers to retain newly acquired beneficiary assets. Their implementations are simpler, faster, and more cost-effective and offer more depth of capabilities than their competitors.


 Founded 2016

 Employees: 251-500

 Segments of Financial Services: Cybersecurity/Information Security, Compliance & Fraud Detection

 Regions of operations: North America, LatAm, EMEA, APAC

BigID's data intelligence platform enables organizations to know their enterprise data and take action for data privacy, security, and governance. Customers deploy BigID to proactively discover, manage, protect, and get more value from their regulated, sensitive, and personal data across their data landscape. By applying advanced machine learning and deep data insight, BigID transforms data discovery and data intelligence to address data privacy, data security, and data governance challenges across all types of data, at petabyte-scale, on-prem and in the cloud. BigID uses advanced Machine Learning, NLP, and patented innovation to help financial services customers manage and protect their data. Get actionable data intelligence with BigID: one platform, infinite possibility.

boltech

-  Founded 2020
-  Employees: 1,001-5,000
-  Segments of Financial Services: Insurance
-  Regions of operations: North America, Europe, Asia





Launched in 2020, boltech is a fast-growing international insurtech with a mission to build the world's leading, technology-enabled ecosystem for protection and insurance. With more than US\$44 billion in quoted premiums annually and 5,000 products from 180 insurers distributed by over 700 partners globally, boltech makes it easier and more efficient to buy and sell insurance. boltech envisions an inclusive insurance industry where any business can easily and efficiently provide their customers with relevant protection at the point of need. Today, boltech operates in 30 markets across three continents – North America, Asia and Europe.

Castlepoint.

-  Founded 2016
-  Employees: 11-50
-  Segments of Financial Services: Cybersecurity/Information Security, Compliance & Fraud Detection
-  Regions of operations: Australia, New Zealand, United Kingdom

Castlepoint Systems has a vision to change the way the world manages information, so that people, communities, and companies are safer and smarter. With Castlepoint AI, they can now find high-risk data anywhere in the network, including emails and shared drives, so that it can be protected. The company can automatically determine which data can be legally disposed of, which can significantly reduce threat surface. Castlepoint is the first technology in the world to be able to read any data, in any system, without any impacts on those applications. They are able to achieve this using a mix of proprietary technology such as Natural Language Processing, Unsupervised Machine Learning, and Regulation-as-Code. For the first time, we can know all of our data, what risk and value it has, what rules apply to it, and whether they are being met.

clausmatch

-  Founded 2012
-  Employees: 51-100
-  Segments of Financial Services: Banking/Asset managers/ FinTech/Payments/Insurance; Policy lifecycle management; Compliance automation
-  Regions of operations: United Kingdom, Europe, US, North America, Singapore (APAC), Middle East



Clausematch is an award-winning regulatory technology (RegTech) company that enables heavily regulated organizations and other regulated companies to run their businesses safely and meet compliance obligations. Clausematch's AI-powered platform provides end-to-end policy management and regulatory compliance solutions to help organizations navigate the compliance lifecycle. Clausematch applies a deep understanding of the regulatory lifecycle and machine learning to help teams working in Compliance, Finance, Legal and Risk collaborate on documents in real-time and demonstrate compliance to regulators, while significantly reducing costs: www.clausematch.com





The **smarter** way to monitor your communications data.

Victor Ochen
Done, they're all yours.
I'll send the ticket over, Did you...

WHATSAPP now
Sandra Clark
Make an offer on FEI for AUG/SEP.. I don't....

 **Laura Davis**
mobile  


 **Jacob Murray**
 Incoming Call 10.55am

Rebecca Gavin
I'll take 200m.







Cloud Insurance

 Founded 2016

 Employees: 11-50


 Segments of Financial Services: Insurance

 Regions of operations: Global


The company's all-in-one SaaS solution features all the aspects of the daily work of insurance providers, helping them automate policies, claims, distribution, product launches, workflow, financials, and reports through innovative technology. Global Insurance and Risk Management Awards recognised the platform with a SaaS Solution of the Year. Its adaptability has enabled Cloud Insurance to deploy globally across different products with varied distribution models. The company's services include Admin & Backend functionality (for employees and partners), Purchase Journey (for customers and claimants), My Account Portal (for customers and claimants), and open APIs to integrate with 3rd party vendors. Cloud Insurance customers benefit from the platform's flexibility, shorter time-to-market, and partnership focused on growth. On average, they see a 50% decrease in time-to-market and a 40% increase in revenue from the platform's deployment.




COGNITIVE VIEW

 Founded 2018

 Employees: 11-50

 Segments of Financial Services: Banking, Insurance, Compliance & Fraud detection


 Regions of operations: United States, United Kingdom, and Australia

Cognitive View monitors customer and employee voice and video communications and automates compliance, quality, customer experience, and conduct risk. It supports remote working compliance by analysing most collaboration platforms and contact centres. It provides the necessary tools to create a customer-centric culture, risk-based supervision and allows firms to automate their 1LOD. The analytic integrates with several business applications, including Salesforce, ServiceNow, Tableau, GRC & IRM systems.

cogo

 Founded 2016

 Employees: 51-100

 Segments of Financial Services: Consumer/Personal Finance, Tax & Accounting, Business Finance

 Regions of operations: United Kingdom, Europe, APAC

Cogo is an impact-led FinTech whose carbon tracking API and consumer app enables users and businesses worldwide to measure, reduce and compensate for their impact on people and planet. The company believes in a new 'impact economy' where all businesses are a force for good. Cogo supports behaviour change (reduction) through its world-leading 'ethical nudge framework'; and offers users the ability to offset (compensate) the balance of their impact via carbon credits. The company's pioneering API technology and data helps people better understand the effects of their daily decisions and helps them take climate action.



COMPANY RESEARCH PROFILE

COMPLY ADVANTAGE

PRODUCT NAME:

ComplyData™, Customer Screening and Monitoring, Transaction Risk Management and Know Your Business

- Founded 2014
- London, United Kingdom
- www.complyadvantage.com
- contact.uk@complyadvantage.com
- Employees: 251-500
- Regions of operation: Globally

KEY EMPLOYEES:



Charlie Delingpole
Founder and CEO



Vatsa Narashima
COO



Nabeel Vilcassim
CFO

Segments of Financial Services: **Banking, Insurance, Compliance & Fraud Detection, Payments, Lending, AML Monitoring Solutions**

OFFERING

By combining, harmonising and then structuring data from over 20,000 sources, ComplyAdvantage has created a massive living knowledge graph called ComplyData™ that gives the company unprecedented global reach and depth of intelligence. ComplyData then feeds the company's advanced machine learning models to contextualise and uncover even the most minute of financial crime indicators in real-time. This innovative approach has enabled the company to grow into a global provider serving over 1000 customers in countries around the world.

PROBLEM BEING SOLVED

There are many market challenges that are driving ComplyAdvantage innovation including: Accelerated Digital Transformation: The unexpected acceleration of digital transformation due to the pandemic left many companies under prepared with risk strategies that could not respond effectively to the tectonic changes in business models and unanticipated market dynamics.

TECHNOLOGY

ComplyAdvantage uses machine learning and natural language processing to help regulated organisations manage their risk obligations and prevent financial crime. The company's proprietary knowledge graph called ComplyData™ is derived from millions of data points and billions of insights that provide dynamic, real-time insights across sanctions, watchlists, politically exposed persons, and negative news.

PRODUCT DESCRIPTION

ComplyAdvantage's hyper-scale approach to financial crime risk detection was designed to provide the following benefits: Global Reach, Depth of Coverage, Data-Driven Accuracy: ComplyAdvantage has created the largest and most comprehensive connected living database of individuals and business entities as well as sanctions events, watch lists, adverse media profiles, publicly / politically exposed people (PEPs) and more.

This means that compliance teams have greater confidence that the information they are making decisions on is both extensive and highly accurate. Real-Time Analysis / Contextualisation For Hidden Insights Discovery: The company's machine learning models with overriding ontology logic are capable of processing millions of data points to uncover hidden insights in seconds.

Operational Efficiency & Cost Savings & Growth Accelerant: By leveraging the power of ComplyData and advanced machine learning, ComplyAdvantage can scale its intelligence gathering infinitely without the need for additional overhead. As a comprehensive unified solution, ComplyAdvantage is easier to manage than multiple point products and more cost-effective. Lastly, ComplyAdvantage accelerates the trusted onboarding and ongoing monitoring of customers so companies can quickly grow with confidence.

TRACTION/GROWTH

- ComplyAdvantage's clients include: Gemini, Paxos, Raisin Bank, Bank Novo, Fireblocks, TransferMate, Upgrade, Affirm and others.
- ComplyAdvantage partners with leading companies including: Elliptic is a data partner for crypto money laundering, Raisin Bank is a banking as a service partner, Resistant. AI as AI optimisation partner.
- ComplyAdvantage raised \$70m in their latest Series C funding round bringing their total funding to \$120m.

This document is being provided for information purposes only. It is not designed to be taken as advice or a recommendation for any specific investment or strategy decisions.

How ComplyAdvantage is fighting financial crime

Compliance officers must perform a delicate balancing act between new regulations, a wave of sanctions and evolving financial crime threats. ComplyAdvantage equips companies with a global connected database of people and companies specifically designed to detect and prevent financial crime.



COMPLY ADVANTAGE

Founded by Charlie Delingpole, ComplyAdvantage provides an AI-driven financial crime risk technology that is powered by ComplyData, which has positioned itself as the world's "hyperscale source" of financial risk insight.

For Delingpole, this is his third company. He previously co-founded MarketFinance, a UK-based business finance lender, and online student community platform The Student Room.

At MarketFinance, Delingpole explained they were lending to SMEs, and building a real-time marketplace, "and in doing that, we were sending millions of pounds around the world." Once he took on the role of money laundering reporting officer however, he realised there was an opportunity. "The technology was really bad. So, I thought, I can start a database of say two billion people from using a team of 1,000 researchers."

That is exactly what ComplyAdvantage set out to do. The company is building what it calls the first global connected database of people and companies, powering tools for

detecting and preventing financial crime. "It is far superior to everything that has gone before," Delingpole said.

"Technologies such as natural language processing, entity resolution, allow us to build a real-time, sophisticated map of every person or company in the world and every connection between them. It's lower cost and lower risk for everyone than the old way of doing things."

Staying on top of sanctions

The company has played a vital role in helping companies stay protected amid the unprecedented wave of sanctions following Russia's invasion of Ukraine on February 24th. Since then, the three main sanction regimes targeting Russia so far are the US, EU and UK.

"Countries such as Switzerland or Poland, who hadn't previously frozen assets at all at scale, are now building their own regimes to fight back against Russia. We play a leading role in terms of collating that information and helping thousands of companies around the world stay protected and help enforce asset freezes and travel bans against those entities linked to the Russian regime."

Sanction regimes against Russia change fast, ComplyAdvantage provides continued accurate coverage to its customers. Many sanctions updates are captured automatically, with automatic scrapers on sanctions lists. However, government officials sometimes announce new sanctions before they are officially designated. Other measures are announced through non-standard sources such as press releases, or require major changes to legislation, as is the case in the EU.

While updating sanctions designations quickly is important, data quality is also critical. So, ComplyAdvantage's team assesses data before it is pushed into production. This helps to account for potential inaccuracies or discrepancies in information provided to ComplyAdvantage – in fast-changing situations where governments and regulators are moving quickly, this is inevitable.

Although they have come into the fore as of late, sanctions are not confined to the fight against Russia.

ComplyAdvantage advises they will remain a key foreign policy and national security tool.

In December 2020, the EU adopted a global human rights sanctions regime, focused on creating comprehensive financial restrictions against individuals and entities involved in human rights abuses, and other jurisdictions, including Australia, are likely to enact similar regimes in the near future. Countries may also use sanctions to target state-led cyber-attacks or the misuse of crypto wallets to finance terrorism.

As such, ComplyAdvantage advises firms use reputable adverse media and sanctions data providers to screen their customer base, both on and off an on-going basis, and transactions in real-time where possible. This will support their ability to prevent sanctions breaches and identify bad actors linked to corruption, tax evasion or other financial crimes.

Emerging challenges

One of the key challenges in financial crime currently, Delingpole said, is cryptocurrency and decentralised finance. With regards to cryptocurrencies in particular, as they become increasingly mainstream, regulators, the media and policymakers are paying more attention to the financial crime risks associated with them.

Typically, when it comes to crypto on and off ramps, Delingpole said money has to move from a bank account to the blockchain, ComplyAdvantage can help screen those clients.



"eToro, Gemini, Binance and other clients, screen millions of individuals and monitor them to see where there is a risk"

Additionally, Delingpole continued, once they begin transacting, companies need to determine if entities are clean and if there is behaviour which will be indicative of terrorist financing or fraud. "We help them with that as well. We have an AI-based system to be able to be able to detect not just rules but also other patterns or typologies indicative of those threats."

Another emerging challenge is 'cuckoo smurfing'. Delingpole explained that cuckoo smurfing is a method of money laundering used by criminals to disguise their movements of funds. 'Papa smurf', a drug or crime lord exploits banks accounts of unsuspecting customers expecting to receive legitimate funds, unaware that the funds derive from

criminal activity.

Individuals are more vulnerable to cuckoo smurfing than businesses. Delingpole said this has led to thousands of students who need the cash, responding to fraudulent work from home schemes. It is then very difficult to determine where the money came from, and who ultimately committed the crime.

The role of AI

So, what is the role of AI in preventing and fighting financial crime? Delingpole outlined three forms of AI that have been applied. Firstly, there is image recognition, "everyone has basically moved the bank branch on to a phone." Second, there is fraud detection; monitoring transactions and finding features which are indicative of commonly associated with certain typologies like fraud or money laundering. Finally, there is natural language processing and image resolution.

Part of the reason behind founding ComplyAdvantage, Delingpole said, was the "huge explosion" in the capabilities of machine learning and AI. Particularly as criminal methodologies grow more sophisticated, many firms are turning to AI and machine learning systems to help them detect money laundering activities and to meet their compliance obligations.

AI, deployed as part of a firm's AML compliance programme, represents a series of algorithms that control the digital measures put in place to detect money laundering (and other criminal activities). These algorithms analyse huge amounts of customer data, including customer due diligence (CDD), sanctions screening and transaction monitoring inputs, to perform a variety of automated tasks in order to remediate suspicious activity.

In theory, the application of AI and machine learning means that anti-money laundering can become more efficient. "There is an insatiable appetite for applications of AI," Delingpole said. "It's become a kind of euphemism for advanced technology. People aren't happy with how things are running now; they want new cool stuff."

Despite this positive reaction, there are some roadblocks to the widespread adoption of AI. The biggest roadblock, according to Delingpole, is salaries and skills. Salaries are becoming increasingly competitive, as firms compete for scarce talent. "Hiring talent is really difficult because the best talent tends to stick around in big companies and is hard to extract."

Although difficult to rectify, Delingpole said this is just a frictional roadblock and not a permanent one. "Over time, people will learn the skills, but right now everything is new and changing fast so it will take time."

In terms of ComplyAdvantage's offering to the market, Delingpole said it is the only company doing what it's doing via the means of AI technology, and it is investing a lot of capital into doing so. Other companies, he said, are collating information manually. This means it offers more accurate and objective data. ●

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[Complyadvantage.com](https://complyadvantage.com)



-  Founded 2021
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, Investment & Trading, Lending
-  Regions of operations: Singapore, Canada, India





CredQuant is a Credit & ESG risk monitoring platform empowering the clients to effectively manage risk in their investment, lending & insurance portfolios. They offer Next Gen AI Powered Hyperscale SaaS technology with global coverage for Credit & ESG risk scoring, which can analyse real time news, financial and sustainability data, at volume-based pricing. CredQuant's microservice APIs can be easily integrated with any infrastructure, and can be customised in a matter of days to meet each company's respective needs. Their Proprietary AI-based methodology for Credit and ESG Ratings empower Asset Managers and Insurance Companies to make better, more informed, decisions.



-  Founded 2019
-  Employees: 11-50
-  Segments of Financial Services: Investment & Trading, Data and Portfolio Analytics
-  Regions of operations: Switzerland, the UK, Germany, Hong Kong, Turkey

CryptoIndexSeries™ provides institutions with data, benchmarks, access to trading and portfolio analytics API & tools for digital asset markets. Wealth managers, asset managers, hedge funds or any financial institution looking to offer digital asset services to their customers would need to deal with inconsistent, BIG, live data collection from many incompatible sources, aggregation and standardisation of the data, integration to many trading venues, collection of transactions from multiple venues and generation of meaningful portfolio analytics. CryptoIndexSeries™ products POWER institutions' in-house digital asset solutions through a robust API & enable them to SAVE cost, ECONOMISE on their resources, FOCUS on their strategic activities, and MAKE the right trading decisions on time. Based in the UK and acting as a crypto data contributor to Refinitiv operating under LSEG, CryptoIndexSeries™ is THE trusted solutions partner for Digital Asset Market participants.



-  Founded 2010
-  Employees: 101-250
-  Segments of Financial Services: Insurance
-  Regions of operations: Global with offices in Switzerland, North America, Australia, Japan and China

Dacadoo, named a 2021 "Cool Vendor in Insurance" by Gartner, licenses its Digital Health Engagement Platform, including its Health Score and Risk Engine to Life & Health insurance operators (B2B), supplying InsurTech and health-tech solutions to over 35 of the top 100 Life & Health insurance operators globally. Available in over 18 languages, dacadoo's technology is provided as a fully branded, white label solution or it can be integrated into customers' products through its API. Through its 'Connect, Score, Engage' offering, dacadoo supports Life & Health operators to motivate their clients to lead healthier lifestyles through its SaaS-based Digital Health Engagement Platform. dacadoo also provides its Risk Engine, which calculates relative risk on mortality and morbidity in real-time. dacadoo has over 120 employees across locations in Europe, North America and Asia-Pacific and over 100 filed patents around their digital Life & Health solutions.

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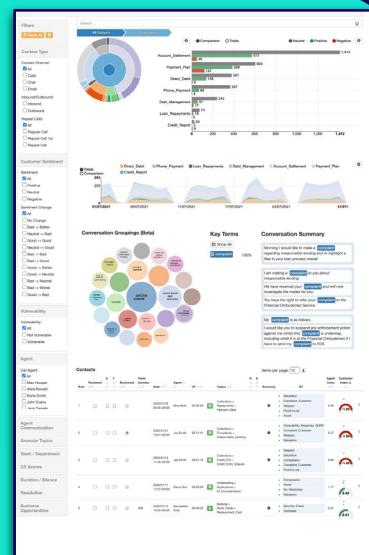


1

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2









-  Founded 2003
-  Employees: 11-50
-  Segments of Financial Services: Insurance, Compliance & Fraud Detection
-  Regions of operations: North America, Latin America, Netherlands, United Kingdom, Italy, Middle East, Asia





Daisy is an AI software company that delivers explainable Decisions-as-a-Service for insurance risk management. Daisy's unique, autonomous AI system elevates your employees, enabling them to focus on delivering your mission, servicing your customers, and creating shareholder value. The company offers AI-powered solutions to resolve identities, detect suspicious claims and avoid costly fraudulent payments, all while automating claims processing. The corporation's AI-based methodologies and high-performance computing coupled with its proprietary mathematical theory provide specific, actionable, ranked recommendations and decisions. For insurance clients, the Daisy system detects and avoids fraudulent claims while enabling claims automation, minimizing human intervention in claims processing. Daisy's solutions deliver verifiable financial results with a minimum net income return on investment of 10X.



-  Founded 2020
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, Compliance & Fraud Detection, Real Estate, Investment & Trading, Tax & Accounting, Lending
-  Regions of operations: United Kingdom

DG enables businesses to cut prospecting time and underwriting by connecting to multiple data sources and allowing users to access insights through one business intelligence platform. The DG platform is a B2B SaaS ecosystem that enables businesses to access interconnected public and private corporate datasets to improve their business performance through advanced prospecting and effective financial risk management and analysis. The platform's unique selling points are speed, real-time data updates, and connecting various sources via sophisticated algorithms. With multiple different data sources, the company is unique in being able to run sophisticated search queries in a very quick period of time.



-  Founded 2017
-  Employees: 51-100
-  Segments of Financial Services: Compliance & Fraud Detection
-  Regions of operations: United States, India, United Kingdom

DataSeers is an Atlanta-based FinTech that has engineered a unique solution for effectively harnessing complex data. DataSeers developed an Artificial Intelligence (AI) and Machine Learning (ML)-powered solution that helps these organisations deal with their increasing data volumes, velocities, varieties, and veracities. This platform, known as FinanSeer®, has been developed to be a simple solution to a complex problem. Their software is AI-powered and specifically designed to help banks and payments companies greatly improve their reconciliation, compliance, fraud detection, and analytics, all in one single user-friendly platform. The company's solution is simple yet effective - saving time, money, and valuable resources by integrating all essential services into one, centralised location and minimising the chances of human error.



Founded 2013



Employees: 101-250



Segments of Financial Services: Banking, Insurance, Cybersecurity/Information Security, Compliance & Fraud Detection, Payments



Regions of operations: United States, Europe, Southeast Asia

DataVisor is the world's leading fraud and risk management platform powered by transformational AI technology. With a cloud-native and open SaaS platform, DataVisor's solution scales infinitely, enabling organisations to respond to fast-evolving fraud attacks and mitigate risk as they happen in real time. Its patented machine learning technology, combined with native device intelligence, a powerful decision engine, and intuitive investigation tools provides comprehensive protection across every customer channel. DataVisor's platform is architected to support multiple use cases across business units flexibly to drastically reduce the total cost of ownership. It is recognised as an industry leader and has been adopted by many Fortune 500 companies across the globe.



Discai



Founded 2021



Employees: 1-10



Segments of Financial Services: Banking, Insurance, Compliance & Fraud Detection, Consumer/Personal Finance, Payments



Regions of operations: Global

Discai empowers financial service providers to fully focus on their core business. It sets new standards with innovative AI solutions, offering worry-free smart fin tools. As a full subsidiary of KBC Group, one of Europe's leading Financial Institutions, Discai delivers hyper-performant and proven solutions to the market. These were developed in-house and therefore feature an unbeatable mix of domain and technology expertise, having passed the highest legal, compliance and risk standards.



Founded 2002



Employees: 101-250



Segments of Financial Services: Compliance & Fraud Detection



Regions of operations: United States, Canada

Docupace is a solutions provider focused on digitizing and automating operations in the financial advice and investment industry. Wealth management firms spend thousands of hours processing endless documents each year. Docupace uses its' Intelligent Mailroom to cut time, cost and mistakes out of this mission critical process. The Intelligent Mailroom replaces manual-based indexing and processing with intelligent, comprehensive automation. increasing productivity, improving accurate document processing, and reducing operational burden and costs on the overall organisation. Their platform utilises the cloud, big data, artificial intelligence, machine learning, and robotic process automation. When compared with manual indexing, Docupace increases workplace efficiency by 7.5x each day.



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-  Founded 2016
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, Customer Experience, Cybersecurity/Information Security, Compliance & Fraud Detection, Payments, Lending
-  Regions of operations: United States





Duality is the leader in privacy enhanced secure data collaboration, empowering organisations worldwide to maximise the value of their data without compromising on privacy or regulatory compliance. The Duality platform enables multiple parties to securely compute on sensitive data while preserving privacy, confidentiality, and regulatory compliance. Duality seamlessly integrates with existing systems so you can set up collaboration projects quickly and at scale. Duality uses multiple privacy enhancing technologies (PETs) including fully homomorphic encryption, multiparty computation, federated learning, differential privacy, and synthetic data (among others) to facilitate privacy-preserving machine learning across multiple data sets without ever decrypting the data - and without devaluing data.



-  Founded 2011
-  Employees: 101-250
-  Segments of Financial Services: Banking, Compliance & Fraud detection
-  Regions of operations: Global

Dubber is the world's leading Unified Call Recording and Voice AI platform. Native to the cloud, Dubber is integrated into the leading service provider networks and collaboration platforms globally. Provisioned with a click, the Dubber platform enables the compliant capture of voice data, which is then delivered to Dubber's infinitely scalable Voice Intelligence Cloud. From there Voice AI generates business insights, transcriptions and alerts of keywords and phrases for proactive compliance.



-  Founded 2016
-  Employees: 1-10
-  Segments of Financial Services: Banking, Insurance, Compliance, Risk Management, Real Estate, EU Taxonomy, CO2 Supply Chain Risk monitoring
-  Regions of operations: Europe, Switzerland, United Kingdom

DYDON AI is a Swiss company offering transparent and flexible AI solutions for Sustainable Finance (FinTech), InsurTech and MedTech. The Sustainable Finance AI Suite provides a fast, easy, traceable, and transparent assessment of all the necessary criteria to rank and analyze the sustainability level concerning ESG, EU Taxonomy and Supply Chain Risk. One of Dydon AI's key products for financial institutions is the TAXO TOOL, developed in collaboration with Bundesverband Öffentlicher Banken Deutschlands (VÖB), and VÖB-Service GmbH, which is evaluating economic activities as environmentally sustainable in order to implement the EU taxonomy for sustainable investments. To learn more about DYDON AI: <https://dydon.ai>



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Founded 2001



Employees: 251-500



Segments of Financial Services: Provides real-time AI-driven rating, dynamic pricing, product personalization, and fully operationalized telematics solutions for leading insurance carriers and banks across the globe



Regions of operations: Global

Earnix is the premier provider of mission-critical solutions that are composable and intelligent and are designed to transform how global insurers and banks are run. Its solutions unlock value across all facets of the business, breaking away from the status quo imposed by legacy monolithic, inefficient systems. Earnix solutions offer the capability to quickly model, simulate and compare the impact of various pricing models and personalised product offers in real time. Deploying AI-driven solutions that include machine learning models and an open ecosystem allow the import of all ML models provides carriers with the ability to manage their libraries with optimal efficiency and precise governance. This extends to the full pricing process and offers significant value in analysing and leveraging the data to better assess risk, conversions, loyalty, growth, and profitability.



Founded 2016



Employees: 101-250



Segments of Financial Services: Banking, Insurance, Customer Experience



Regions of operations: United States, United Kingdom, Israel, Germany, Australia, Japan

EasySend is a no-code platform that empowers organisations to transform complex forms into easy digital experiences. EasySend transforms any customer data and signature intake process into an interactive, digital experience, empowering organisations to streamline customer interactions, improve customer experience, and ensure data accuracy. The company can quickly transform their manual customer data intake processes and PDF forms without the need for lengthy and expensive development projects. By leveraging no-code technology, their customers can go live with the company's solution digital transformation at a fraction of the cost.



Founded 2004



Employees: 11-50



Segments of Financial Services: Banking, Compliance & Fraud detection



Regions of operations: United Kingdom, Europe, North America, Asia-Pacific

For over 20 years, eflow has provided workflow and regulatory software solutions within the financial markets. The company's offerings include post-trade surveillance for market abuse, best execution and transaction cost analysis, custom and bespoke regulatory reporting, transaction reporting, MiFID II record keeping and more. The purpose of all eflow solutions is to ensure compliance with the everchanging global regulatory landscape. However, what sets the company apart from competitors is its exception-based approach. This approach solves the problems of slow, cluttered and confusing workflows as well as the risk of human error. The company's data-driven system allows clients to have full visibility of their trading and compliance procedures without being overloaded with a lot of unnecessary and irrelevant data, allowing them to maintain control of the entire compliance process.

How is customer data collection and automation crucial for accelerating digital transformation?

Companies are getting overwhelmed by digital transformation by trying to do everything at once. Eran Shirazi - Co-Founder and CTO of EasySend - believes the best approach to digital transformation is step-by-step.



Digital transformation is a big priority for financial services. According to the Cornerstone Advisors' 2022 What's Going On in Banking study, 75% of banks and credit unions have launched a digital transformation strategy, with another 15% planning to implement one this year. Of those to have launched their digital transformation journeys before 2018, only 15% have completed it.

There is clearly a need for firms to accelerate their digital transformation strategies and Shirazi believes the key lies in customer data collection and automation. He said, "It's one of the main things that drives digital innovation."

Collecting information is one of the hardest things firms have to do at scale. Whether it is having phone calls with clients or filling out paper forms. It is even time consuming in a digital workflow, with customers needing to answer a bunch of questions or provide extra documents, such as medical forms in a life insurance policy.

Data collection is "super hard" on customers and companies alike, Shirazi explained. The customer needs to complete long forms, which are often written in technical jargon they struggle to understand. A streamlined data collection process would take them step-by-step through a document, with explanations when needed, and provide an option to come back to it at a later date.

As for the company, sifting through documents is tedious. Often there are teams of a thousand people collecting data. Shirazi said, "Not many people think about the fact that paper sucks also for the company. They have to have someone who reads it and in longer forms there are often mistakes, requiring you to call the customer again. This creates a lot of frustration for both sides."

Finding an efficient digital customer data collection service can then save teams a lot of time for companies. The data is collected, automatically validated and then flows into the organisation's system, whether it is a CRM, core banking system, insurance system or something else.

In the modern world, data has become a sort of golden chalice. Most things in our daily lives are creating data, whether it is how often we exercise, what websites we visit, how often we watch a show, there is no escaping data creation. With so much data being created, firms can personalise services to each individual, rather than a blanket approach. However, the only way to do this is by getting the collection step right.

Shirazi said, "Getting the collection process fixed is the first step of being able to even do more complicated stuff with the data later." When the collection and validation of data is optimised, then a firm can make the most of their data and provide customers with the best service. That said, fixing the data collection process is the hardest part to solve.

Getting overwhelmed

One of the most common issues that Shirazi sees companies have when updating their data collection process is that they get overwhelmed. He said, "There are a lot of companies doing a lot of things and there are so

many options - it can be overwhelming. Sometimes there is a tendency to try and plan projects that are too complicated or create such a dramatic change in the organisation, that it's hard for the organisation to accept the transition."

As mentioned, some of these data collection teams can be 1,000+ people and drastically changing the process overnight will only cause issues. Shirazi said the best approach is to handle change in a step-by-step process and reduce the magnitude of the change over a short time.

A good first step, Shirazi outlined, is to take away a task that is done either face-to-face with a broker or through snail mail and convert it into a digital experience for the end user. "For example, there is an automated system that generates the same old document, as if the customer would have filled it out by hand. It will then still go to the same operations team, and they will do what they do best. But they'll still have less work because everything got validated already for them."

Once this digital approach has successfully been implemented, the company can move on to another stage and digitise another part of the workflow. "Let's take one process, start with that and gain the confidence that we can do it. By having small successes with a digital approach, I think the organisation also learns how to handle digital transformation. It also gives a lot of positive energy to these processes, because it gives motivation to the organisation that it was pretty simple, and they can do more of these."

This positivity then flows across the organisation. Maybe another department sees how smoothly the transition has gone and wants to accelerate their own digital transformation.

Future of data collection

Consumers are increasingly wanting streamlined interactions with companies. A recent study from Signicat claimed that 68% of consumers abandoned a financial application during the onboarding process. Companies are at risk of losing customers to rivals that have a better user experience or streamlined data collection process.



"People are more considerate of their time today and they don't have time to spend understanding complex legal forms. I think part of the reason for this is just because there are good alternatives that don't ask you to do that. Eventually, younger people may never even have to fill in one form in their life, hopefully."

What is EasySend?

One of the companies helping firms make the most of customer data collection is EasySend. The Israel-based company was founded in 2016 by Eran Shirazi, Omer Shirazi and Tal Daskal. The trio hadn't planned to start EasySend, but the idea came to them. Omer Shirazi and Tal Daskal were working in sales for an insurance company and so many of their processes were completed manually, which was frustrating for them and the customers. This manual workload even lost the insurer business due to mistakes and inefficiency. This led the trio to create EasySend to resolve the issue – EasySend's first client ended up being that insurance company they had worked for.

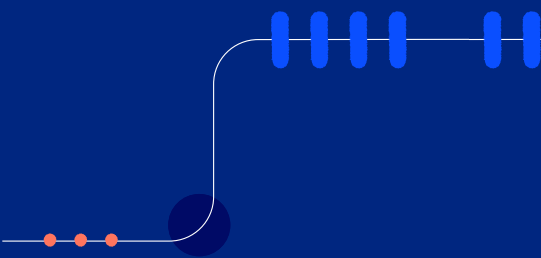

EasySend offers a no-code customer experience platform that helps companies streamline their customer data intake and automate workflows. Its platform generates a better user experience with more advanced features. For example, a company can collaborate with an end user on a specific form and guide them through it.

Its no-code approach ensures firms have the flexibility to change their systems. Going back to the idea of taking digital transformation one step at a time, the no-code approach allows teams to implement new solutions easily, without building a whole new system.

"Since you're often dealing with people's lives, money and sensitive data, whenever there's an update to these systems and new lines of code are added to support the new digital process, there is a complicated process. For example, launching this to production and having all the security inspections in place to make sure that everything is really safe, and nothing can be stolen, or fraud can be committed. EasySend takes care of all that so you can spend some time putting together a digital strategy and inspecting a specific platform that checks all the right boxes that you need."

Its platform can transform PDFs into interactive digital experiences and can integrate with business applications, CRM, ERP and core systems to streamline customer data collection, as well as collate information into an analytics dashboard to help track each process and see where people are having difficulties.

Shirazi concluded, "EasySend is a great platform to take your amazing existing products, whether it's insurance, financial or banking, and provide the digital experiences on top of them that your end users are expecting to get. And we are experts in helping you do it simply and integrate it into your entire organisational workflow on one hand, but also do the process gradually, so it doesn't shake your organisation." ●



Digital customer data collection & automation is crucial for accelerating digital transformation

Modern business runs on data.

Data fuels our understanding of what customers want and need, what they will do next, and how to best reach them. Data also allows businesses to automate processes and make decisions faster.

Yet, the way organizations in insurance, financial services, healthcare, and many other industries collect customer data is often manual. This prevents them from reaping the full benefits of data-driven transformation.

The problems with manual data collection

Digital transformation is the integration of digital technology into all areas of a business, resulting in fundamental changes to how businesses operate and how they create value for their customers.

When data is collected manually, it creates multiple obstacles to digital transformation:

- Manually collected data is siloed in different departments or software applications. This makes it difficult to get a comprehensive view of the customer and limits the ability to automate processes.
- It is time-consuming to collect and process. This limits the ability to make real-time decisions or to scale operations quickly.
- It is often inaccurate. This limits the ability to make good business decisions based on data.
- format in order to be used in automation. This transformation is often difficult and time-consuming and can result in lost data or inaccurate data, resulting in piecemeal automation at best.

The benefits of digital customer data collection

Digital data collection is the first step to unlocking the benefits of data-driven transformation. When customer data is collected digitally, it can be easily and quickly shared across departments and applications, making it possible to get a 360-degree view of the customer.

Digital data collection also makes it possible to automate processes, decisions, and actions. This can result in faster decision-making, improved customer experiences, and increased operational efficiency.

Digital data collection also makes it possible to more easily scale operations. This is because digital data can be easily distributed across multiple systems.

Digital data collection is the key to unlocking the full potential of data-driven transformation because it enables organizations to:


- Get a complete view of their customers. When data is collected manually, it is often siloed in different departments or software applications. This makes it difficult to get a complete view of the customer. With digital data collection, you can easily integrate data from multiple sources into all your internal systems to get a 360-degree view of the customer.
- Make real-time decisions. With digital data collection, you can quickly and easily process large amounts of data. This allows you to make decisions in real-time, rather than waiting for someone to manually input data into a system.
- Scale quickly and easily. With digital data collection, you can quickly and easily add new customers or new data points. This allows you to quickly and easily scale your operations as your business grows.
- Improve customer experience. The way organizations collect data and signatures from customers is often a clunky experience with a lot of friction. This can result in customers abandoning the process altogether. With digital data collection, you can create a seamless customer experience that leads to higher customer satisfaction and loyalty.
- Increase operational efficiency. With digital data collection, you can automate processes that are currently manual. This leads to increased efficiency and reduced costs.
- Improve data accuracy. When data is collected manually, it is often inaccurate. With digital data collection, you can reduce errors and improve the accuracy of your data by taking advantage of advanced real-time validation, autofill functionality, and two-way integrations with your internal systems.
- Reap the benefits of automation: In order to take advantage of the benefits of automation, businesses must first automate the process of data collection. This is the only way to ensure that data is accurate, up-to-date, and available in real-time.
- Enable end-to-end digital journey: In order to provide a seamless customer experience, businesses must be able to see the complete journey of the customer, not just individual transactions. Digital data collection enables businesses to stitch together data from multiple sources into a single digital journey.


Why digital data collection is the prerequisite of a successful digital transformation


Digital data collection enables the flow of digital information into all areas of a business, resulting in fundamental changes to how businesses operate and how they create value for their customers. Digital data collection is the prerequisite of a successful digital transformation because it provides the foundation for all other automation. All subsequent automation depends on having accurate, up-to-date, and complete data.


In short, automation can only be as good as the data that feeds it. In short, digital data collection and automation are crucial for accelerating digital transformation. It provides the foundation for all other automation and enables businesses to provide a better experience to their customers.



 Founded 2008

 Employees: 251-500


 Segments of Financial Services: Banking


 Regions of operations: Global

Featurespace exists to protect people and organizations from the rising threats of fraud and financial crime. To accomplish this, Featurespace leverages its proprietary technologies, Automated Deep Behavioral Networks and Adaptive Behavior Analytics - which power its award winning ARIC™ Risk Hub, to help financial institutions act on threats in real time. The technology offers multiple solutions for fraud and Anti-Money Laundering analysts to spot suspicious activity and prioritize alerts with explainable anomaly detection. Compared to traditional rules-based fraud prevention practices that often let fraudsters and other bad actors slip through the cracks, this explainable AI works as an ever-evolving tool to ensure fair and accurate predictions in real-time. As a result of leveraging Featurespace, companies have seen near-immediate financial benefits across their organization. To date, Featurespace has also strategically raised \$107 million in funding to help build and scale their advanced AI, helping combat the rise in financial crime.



 Founded 2016


 Employees: 11-50

 Segments of Financial Services: Banking, Compliance, Fraud detection, Onboarding


 Regions of operations: Clients spanning from USA to Dubai, Mauritius, Russia, South Africa, UK and all over Europe


Finopz is a FinTech and RegTech company based in London, set up to focus on automating operations within the financial industries. Finopz is backed by expert leaders within the compliance and regulatory digitisation framework. The team behind Finopz has been delivering solutions to banks, law firms and financial institutions since 2016, successfully addressing challenges in KYC, due diligence and AML. The team consists of technical experts, business analysts and compliance/ regulatory professionals. Their flagship product is KYC Portal (KYCP) – the industry's most advanced, award winning, CDD and AML data collection and collation platform that, automates, centralises and simplifies the customer due diligence process. KYCP is a real-time, risk driven Client Lifecycle Management platform with full ownership of policy automation - increasing operational efficiencies and redefining business relationship outreach.



 Founded 2016

 Employees: 11-50

 Segments of Financial Services: Banking, Insurance, Customer Experience, Compliance and Fraud Protection, Lending

 Regions of operations: Global

The digital transformation has led to a rapid shift toward “faceless” digital interactions and forced financial service companies to provide seamless, personalised experiences, make quicker decisions, and underwrite more policies/ applications with limited user data and no understanding of intent. ForMotiv solves this problem using a proprietary Behavioral Data Science solution that collects and analyzes users’ digital body language while they engage with forms/ applications and predicts the users’ intent instantly and accurately. With a real-time understanding of genuine, high-risk, fraudulent, confused, or frustrated customers, companies leverage ForMotiv data/scores to provide dynamic customer experiences personalized to the individual end-user. ForMotiv is the only solution in the world built from the ground up for real-time dynamic financial service experiences ushering in a new era of digital experiences that add or remove friction on an end-user basis. Currently working with leading companies in Insurance, FinTech, Banking, and more.



**COMPANY
RESEARCH
PROFILE**



PRODUCT NAME:

Hyper-personalized Insights and Next Best Actions for wealth, asset management and insurance, powered by the ForwardLane Atlas AI Insights platform

- Founded 2015
- New York, United States
- www.forwardlane.com
- info@forwardlane.com
- Employees: 11-50
- Regions of operation: United States, EMEA (with strategic partners)

KEY EMPLOYEES:



Nathan Stevenson
CEO, Founder



Dylan Distasio
CTO



Browning Mank
Business Development

Segments of Financial Services: **Data & Analytics, Wealth and Asset Management, Insurance**

OFFERING

ForwardLane provides hyper-personalized insights for wealth and asset managers to deepen client engagement, proactively identify growth opportunities and enhance client retention.

In a fast-changing world, vast amounts of data are in flux – client engagement, market dynamics, news, research, and the unseen and unknown data found in unstructured data.

ForwardLane's Atlas AI engine provides a competitive advantage and differentiation to our clients, by deciphering the rich goldmine of insights in this unstructured data, and marrying this together with all of the traditional enterprise data in wealth and asset management today.

ForwardLane's vertically integrated Wealthtech solution achieves business results thanks to our commitment to our clients and our strong team with over 100 years of investment management experience, and 5 years of R&D with leading AI researchers at New York University and our industry partners.

This has enabled us to engineer an innovative platform that meets wealth and asset management expectations for a hyper-personalized client journey.

PROBLEM BEING SOLVED

Humans don't scale very well. This results in unmet client needs, dissatisfaction, & ultimately client & advisor attrition.

According to Cap Gemini, 75% of HNWI clients in 2022 want personalized, interactions, and 79% find it frustrating when they do not receive it.

Benefits

ForwardLane solves this problem with a Hyper-Personalized, AI solution, delivered intuitively in your existing workflow:

- Big data processing & analysis run for each client daily on more than 20 billion data points.
- The advisor and her team can save time, with more Client Engagement and less Work - Reduce meeting prep time from 45 mins to seconds
- 650% Faster Time-to-Insight than the average human – automated package of insights and talking points
- Get Next Best Action recommendations
- Engage the right client with a package of hyper-personalized insights at the right time.

TECHNOLOGY

An AI-powered Insight Engine and Hyper-personalization solution that proactively identifies client engagement opportunities to supercharge growth and client retention. The patented Atlas AI Insights engine is differentiated by surfacing data-driven insights with next best actions from unstructured data using GoalMiner™ technology, as well as traditional enterprise data from life events, CRM, portfolio and custody data, financial plans, goals, web interactions and advanced predictive models.

No work is required by the user to search for or find insights, they are proactively and automatically surfaced and refreshed.

The user experience is simple, intuitive and available inside of your CRM workflow including native Salesforce, Microsoft Dynamics, Wealthbox and Redtail.

Technology

The ForwardLane Atlas AI Insight platform creates advisor capacity & improves the client experience with an award-winning design.

The configurable API Platform with No-Code Signal Engine gathers analytics from usage behaviour to enhance the signal scores and personalize the output.

i PRODUCT DESCRIPTION

How do you create a client-centric, data-driven experience and differentiate in the market?

For Wealth and Asset Managers

Taking the leap into an insight-first culture means connecting and activating your existing data, analytics and CRM investments. Consider the ForwardLane platform to:

- Accelerate your speed-to-market, with data-driven insights.
- Contextual, personalized insights activated from a wide range of data, prioritized and filtered for use cases.
- A platform that learns automatically & reprioritizes insights based on user feedback.

Activate your data with Next Best Actions & Workflows

- Actionable suggestions & best practices for advisors to consider based on the insights triggered for an individual client.
- These can also be workflows that support recommended solutions.

For Broker Dealers / Insurance:

The holistic financial wellness client picture is central to modern, goals-based wealth management.

It is critical to understand and predicting client life events, the curation of a financial plan, and a personalized portfolio as well as a wide range of products and services to protect their family's well-being, longevity and estate to provide a personalized client experience.

ForwardLane's Atlas AI Insights platform is cloud-native technology that can be deployed on private, public or hybrid cloud infrastructure. It enables firms to find cross-sell, up-sell and retention signals and generate data-driven next best recommendations across channels, by leveraging your existing data and analytics investments, maximizing the data in your CRM platform and the rich data available from marketing.

For Registered Investment Advisors:

The power of AI is no longer a technical hurdle. ForwardLane provides an off-the-shelf, cloud-based offering that is designed for RIAs to use today, and get up and running in 30 days. Benefit from Signals that come from the minds of RIAs and Broker Dealers to meet the everyday needs to help identify opportunities, reduce client attrition risk and help you be more productive.

\$ TOTAL FUNDING - \$8.5M

ForwardLane has raised \$8.5m in their last funding round. Investors include: SEI Ventures, Refinitiv, SixThirty, Techstars and FOSUN Group.

▲ TRACTION/GROWTH

- ForwardLane partner with major global companies to provide their most optimal service, these partners include:



OnRamp & Provenance Foundation

- Clients that utilise ForwardLane's ground-breaking services include: Invesco, BNY Mellon/Pershing and Sequoia Financial Group, FLX Networks and Tata Consulting Group.

👤 MANAGEMENT BIO

The ForwardLane management team has over 100 years of investment management expertise, industry-leading data, analytics and data science talent grounded in enterprise IT for wealth and asset management from CQS, BNP Paribas, Fidelity, Lehman Brothers, Barclays and more. The ForwardLane team have developed a number of international patents together and have won awards and recognition for great design, world-class technology and AI advancement.

CEO and founder, Nathan Stevenson has been featured internationally as a speaker on the application of AI in financial services for Finovate, Forbes, Institutional Investor, CFA Institute, World Economic Forum, Yale SOM, MIT Sloan, Wealth Management.com amongst others.

How ForwardLane's AI enables wealth, asset managers and insurers to provide a hyper-personalised client experience

The last financial crisis reshaped the investor expectations of millions of people. Client needs skyrocketed, while human advisors could not easily scale. Since then, a new category of "Augmented Data & Analytics" startups have emerged to solve this huge industry-wide problem.



ForwardLane

One company to rise from the ashes of the crash is ForwardLane, an asset and wealth management platform that specialises in providing data-driven insights, hyper-personalisation and next best actions to deepen and improve client relationships. The original idea for the platform came from a trip across America by its founder and serial entrepreneur Nathan Stevenson during the financial crash.

How do we prevent pain and loss for millions of people?

"I met lots and lots of people that had lost their jobs and heard tragic stories of millennials and retirees having 30% to 40% of their retirement savings just evaporate. As a hedge fund quant with access to the best research globally, we could see this coming. I thought - if only everyone could know this, at the right time. It was at that point in time that I realised why personalisation is so important. Because if we had mass personalisation, that advice would be getting to millions of people and we could have collectively prevented so much loss, pain and hardship."

Stevenson has spent his whole career leveraging computing power to collating large amounts of data and synthesising that into software that delivers signals and insights for hedge funds, stock exchanges, and investment banks to

provide real-time recommendations. Typically, personalised wealth advice has been reserved for the ultra-rich and hyper personalisation at scale is not possible for any human. ForwardLane was founded in 2015 to solve this vast problem and give everyone access to the best advice. His goal – build an elite "Navy SEALs" team that can deliver world-class software on a white-label basis, to empower as much of the financial services industry as possible, to reach and positively impact the widest number of investors.

When setting out to build the platform the team tried to understand what the core parts of a personalised portfolio were. The first was that a personalised portfolio is about curating the portfolio, sharing this with the client, and staying on top of the market dynamics, rather than a 'one and done' approach of simply allocating to a set portfolio and doing nothing more than periodic rebalancing. The next important factor is managing the customer relationship. "So many requests get lost, follow ups get missed and clients just fall down that priority list and don't get the advice that they want. So, they get unsatisfied and leave."

With this in mind, ForwardLane went out to create an API platform that could collate all the portfolio data and all the structured data advisors deal with on a daily basis. It then built a natural language processing technology stack that could pull out financial goals, life events and a whole host of other financial events and interests. But linking these together was one of the hardest things to do, Stevenson exclaimed.

Activating the goldmine of unstructured data

The reason it was so tough is because 80% of an organisation's data is unstructured. "Today wealth and asset managers are activating a small fraction of the data that is available for their clients. Synthesizing this unstructured data, accurately linking it with enterprise data and deriving relevant data-driven insights is the biggest challenge." However, ForwardLane was able to implement its AI and extract what was needed, IP that is now patented.

ForwardLane has grown to offer a next-generation AI insights engine that processes billions of data points to find signals in data so companies can provide personalised insights to clients. ForwardLane has a user-centric approach and works with users to tailor a solution to each firm. It then

takes automated and human feedback onboard to learn and make constant improvements and ensure the system works exactly the way they want it. Strikingly, its API can plug into a CRM and be fully functional within 30 days.

What is the Connected Client Experience?

Stevenson explained that ForwardLane is focused on the holistic, connected financial picture and is uniquely differentiated in the market by its vertical industry focus, and the power to intelligently mesh together and process existing enterprise data and the deep and rich goldmine of unstructured data. This gives ForwardLane and their clients a unique competitive advantage to truly understand the financial clients, including their behavioural patterns, life events, goals, relationships, financial plans, insurance and annuity investments and portfolios. Impressively, its signal engine defines patterns in the data, with thousands and thousands of insights processed every day on each client; however, the ForwardLane AI system surfaces the most relevant insights for client engagement to the advisor.

Benefits of automated data-driven insights

By giving this power to advisors, they can reclaim so much of their day to focus on deepening and enriching the client relationship. Stevenson stated that according to Cerulli Research, half of an advisor's time is wasted processing data. ForwardLane can process data 650% faster than a human, cutting down meeting preparation time from 45 minutes to just one.

How to drive growth

With this kind of capability, it is unsurprising that ForwardLane has happy customers. Stevenson explained that clients love the ability to identify which clients need to be given more attention and which clients are involved with segments that are going through major shifts. Another loved feature is the ability to filter through the client base based on growth opportunities and retention issues. The platform can automatically process time series data and the whole client relationship over the past five years to uncover any changes, such as new opportunities for an increased wallet share or signs a client might be looking to leave.

Getting ahead of client attrition

Being able to predict when a client is thinking about leaving is very powerful. ForwardLane is able to achieve this power of foresight by comparing customer interactions over time and if there are declines in activity, engagement or other factors. "That's something that's very difficult to detect if you're human, because in your mind, you're thinking, 'I know that client and they know me. We spoke recently.' But maybe it's not about that. Maybe it's about you not being up to date on what's happening in their lives."

To ensure clients are staying ahead of the innovation curve, ForwardLane researches the industry, partners with best-of-breed firms, and looks to create powerful new capabilities that benefit their wider ecosystem of partners and clients. One new capability that has received a lot of demand and interest in, from \$1 trillion+ large enterprises to SMEs, is the ability to enable business users to create their own insights and signals. Thanks to this interest, ForwardLane is now developing a no-code signal designer that will empower clients to create their own insights from their own filters.

"We think that this will be a really fantastic way to democratise data-driven insights and also to surface the collective intelligence from the firm, from the users, from all of their own professional experience and their best insights."

Why AI is important to the financial sector

AI has been a buzzword for many years, which makes it easy for firms to just think of it as a fad or something they'll eventually implement years down the line. However, Stevenson believes it is crucial.

"The world, as you are experiencing, is changing faster than ever before. People are fearful of threats to their health, safety of their children, their social unrest, and injustice. People don't want to be put in buckets; they want to be understood. And it's very difficult for a financial advisor to do this in a truly deep way that meets their client's needs, with such a fast, changing world with so much data." This is why humans have a critical need for an AI platform, like ForwardLane, to automate data processing on the vast amounts of data, and sort, organise and prioritise it into useful relevant insights for clients.

Don't get left behind

Digital leaders are enjoying first mover advantages of AI such as double digit increases in revenue, productivity and client retention. Digital laggards are getting left behind by opting for insufficient, piecemeal tools for search, analytics and dashboards that require just as much work as before. According to Gartner (Dec'21), just 13% of wealth managers are using advanced analytics and AI, but 90% of those that do find it highly effective. Stevenson said, "A lot of firms including incumbents and analytics start-ups in the market have built solutions which are really business intelligence solutions or improved search with some built-in machine-learning. Now that's all fine and well having a dashboard, and better search capabilities - now standard in open-source search software - but how different is it to spreadsheets, and what you have today? How much time is it going to really save you? You still have to do the data processing yourself and try to figure out what your talking points are, what to say to clients and why its relevant for them. How do you activate that data, and decide what the next best actions are?" That's why real artificial intelligence is absolutely essential.

Stevenson stated that the holistic financial wellness picture is becoming increasingly important. This means truly connecting the 80% of unknown, unstructured data, with enterprise data. This will be able to help to mitigate the risks of longevity and health for the next generation, with personalised recommendations and products. Many firms are investing into these types of solutions and those that don't, will be left behind.

Stevenson concluded, "ForwardLane is that smart brain that understands and connects all of that data and has an AI system, that can help make sense of all of it and sift and surface the right recommendations and the right insights for the right person at the right time and provide the best set of products and services that are tailored to that one individual person. It's all about that hyper-personalised client experience and providing products and services that can empower and enrich their lives. Truly deepening the advisor-client connection with the decision support of AI." ●



Founded 2019



Employees: 1-10



Segments of Financial Services: Banking, Consumer/Personal Finance, Lending, Credit Scoring



Regions of operations: Norway, Sweden

Goscore is a fair human credit scoring company. They deliver accurate, reliable, real-time, and human-centric credit score, actionable risk insights, and financial forecasts. The company helps with banks, debt collection, insurance, and other industries to make better decisions, to improve product matchmaking, and to bring a personalised experience to consumers and, later on, to enterprises.



Founded 2018



Employees: 11-50



Segments of Financial Services: Banking, Payment, FinTech, AML/CFT Compliance & Fraud detection



Regions of operations: Europe

Hawk AI develops and operates a cloud-based software solution for automated detection of financial crime. With Hawk AI, financial institutions can improve the efficiency of their transaction and customer monitoring and ensure regulatory compliance in money laundering prevention. Hawk AI's software uses a combination of traditional rules and artificial intelligence to detect suspicious behavior and passes relevant alerts to financial crime specialists for investigation. In this context, the use of machine learning drastically reduces the false-positive rate compared to conventional AML/CFT solutions and makes the investigation process not only transparent, but also auditable at any time. The solution is designed from the ground up to be a platform for secure and privacy-compliant information sharing between multiple financial institutions. Ultimately, Hawk AI aims at becoming the new "gold standard" in AML world-wide, contributing to not just significant cost savings for financial institutions but also to actually fighting financial crime effectively.



Founded 2016



Employees: 51-100



Segments of Financial Services: Compliance & Fraud Detection



Regions of operations: United States, Europe, Africa

Hummingbird is a purpose-built compliance CRM with one distinct mission: fight financial crime. They accomplish this by helping financial institutions better understand their customers and collaborating with law enforcement. Their case management product delivers a new way to organize, manage, and work through compliance cases. The company organizes customer cases into different types, giving easy control of timelines, assignments, and visibility. This translates to easier team coordination, stronger timeline management, more efficient search and handling, case type grouping and the ability to scale up without hiring. Hummingbird gives organizations, for the first time, a platform that allows them to organize the data, processes, and insights needed to fight financial crime more effectively. Hummingbird helps drive down costs, improves accuracy (by 70-90%), automates financial compliance programs, and facilitates collaboration and technological advancements.



COMPANY RESEARCH PROFILE



PRODUCT NAME:
Enerfy Risk Tracker

- Founded 2014
- Stockholm, Sweden
- www.greaterthan.eu
- info@greaterthan.eu
- Employees: 51-100
- Regions of operation: Globally

KEY EMPLOYEES:



Sten Forseke
Founder



Anders Lindelöf
Co-Founder



Liselott Johansson
CEO

Segments of Financial Services: **Insurance; underwriting, pricing, management and risk mitigation for fleets, mobility services and consumers**

OFFERING

Greater Than is an InsurTech and AI data analytics company that provides an AI-based real-time solution that predicts the probability and cost of car crashes and CO2 emissions impact per driver in real-time. This enables auto insurers to predict and prevent loss cost, provide individualised pricing and flexible and actionable insurance solutions for consumers, mobility, fleet and the automotive industry.

Greater Than's AI predicts crash probability and loss costs per car. Its AI technology is trained with real car crashes based on billions of miles of driving data from over 100 countries. Greater Than has the most complete database of driving risk globally with over 7 billion unique driving patterns, each with a crash probability. This provides insurers with predictive insights such as; loss forecasting from total book to policy, continuous valuation of risk of an entire portfolio, precision underwriting and complete tools to engage with customers at all times effectively.

PROBLEM BEING SOLVED

Road crashes are a leading cause of death and severe injuries across the globe. Road transportation represents close to 15% of total global greenhouse emissions. Still, tech has not delivered on fighting road deaths and CO2 emissions or improved insurance results. Telematics Service Providers (TSPs) have for the past decade tried to present basic driving events as risk indicators, but with little or no correlations to actual crashes- in addition to other barriers to success such as high cost, data uniformity and relevance. Therefore, the current business model is still based on collectivism, where a pool pays the same premium despite the bottom 20% drivers accounting for 80% of the claims cost.

Greater Than's AI services provide insurers with predictive and uniform risk insights that help solve the problems above since a more individualised insurance offering would contribute to at least 10% less road injuries and up to 20% less CO2 emissions.

TECHNOLOGY

Greater Than's proprietary technology is a cloud-based machine learning system with self-learning algorithms. The AI recognises micro patterns in drivers' behaviour, out of huge amounts of data, creating a DriverDNA for each trip. To date, the AI has identified over 7 billion different ways of driving a car. Since the data is trained with real crashes, each DriverDNA has a unique crash probability and related cost.

Another set of technology creates a DriverDNA Eco Profile that determines a driver's impact on CO2 emissions and battery mileage for EVs.

Greater Than has seven patents covering its technology.

PRODUCT DESCRIPTION

Enerfy Risk Tracker is a cloud-based management tool accessible via a single log-in. The tracker provides predictive, harmonised uniform data regardless of vehicle type, driver and geography. This enables insurers to improve underwriting, precision and individualised pricing, continuous valuation of portfolio risk and loss forecasting.

DriverDNA Smart – the global benchmark for eco and safe driving

DriverDNA Risk – crash probability per driver in real-time

DriverDNA Eco – climate impact per driver in real-time

DriverDNA EV – driver's impact on battery mileage in real-time

TOTAL FUNDING - \$30M

Greater Than is backed by investors such as the Founders, Family offices, Funds and VCs. The company raised \$15m in their latest funding round in January 2021 to scale its sales efforts.

TRACTION/GROWTH

- Leading global companies utilise Greater Than's products, including:



- Greater Than partners with ABAX, one of the largest telematics companies in Europe, and Greater Than's role in the long-term partnership is to provide technology and solutions to support ABAX to scale rapidly. The partnership has started by adding over 200,000 vehicles to the Enerfy platform. In partnership with Tryg A/S, Greater Than has tailored Tryg Sidekick auto insurance to include electric vehicles. As Norway is the world's largest market for EVs, the insurance offering addresses an ever-growing need for dynamic, fairer, and more transparent premiums also for drivers of electric vehicles.
- Onto, the UK's largest all-inclusive electric car subscription service, has connected its entire EV fleet to Greater Than's Enerfy Risk Portfolio Tracker to gain unbiased risk insight on its entire EV fleet. The real-time analysis allows both Onto and its insurance provider Zurich to obtain predictive risk data, facilitating their joint mission to improve road safety and enable dynamic insurance solutions.
- Greater Than is listed on Nasdaq First North Growth Market.
- The company has been recognised with numerous prestigious awards including Mission Innovation 100 Global Solutions, Top 25 of the Accenture Innovation Awards and the WWF Climate Solver Award

MANAGEMENT BIO

Liselott Johansson, CEO

Liselott Johansson is the Chief Executive Officer of Greater Than. Before joining Greater Than, Liselott was operating as Senior Executive Project Manager at Stoneridge Electronics and as Development Manager for electronic and information systems for vehicle manufacturers. Liselott has taken Greater Than through a magnitude of growth and safely navigated the business, tech development, and the IPO at Nasdaq First North Growth Markets and significant financing rounds. During Liselott's leadership, Greater Than has grown into a recognised provider of real-time analysis of driving risk for connected car services and auto-insurances. Liselott has evolved as a thought leader for a safer road environment and reduction of CO2 emissions, and Greater Than has been recognised with the WWF Climate Solver Award, CCBJ awards, and as an Insurtech100 Company 2019, 2021.

How Greater Than is revolutionising motor insurance pricing

Founded in 2014, Greater Than is an AI data analytics firm that predicts crash probability and CO2 impact per driver in real-time. The company's pattern-based AI provides insurers, mobility providers and fleets with real-time risk and CO2 insights to help price smarter for more profitable companies.



According to Sten Forseke – founder of Greater Than - the inspiration for the creation of the company came from a very visible gap in the market that he identified in a previous role. He said, "I have spent my whole professional life in the automotive tech segment developing and providing technology to the global automotive industry in Europe, South America, Asia and the US."

In his previous business, the company he ran was developing and supplying telematics systems for the automotive industry. Forseke claims he realised quite early that the perceived way of how to define safe driving was wrong.

He explained, "This path is still prevailing among many telematics providers. You're measuring harsh brakings, accelerations, cornering, over speeding to speed limits. Unfortunately, these metrics don't correlate to car crashes. So, I decided to spend a bit of cash in creating a company that could actually develop technology that should understand the driver's impact on crash probability.

Greater Than has developed an AI that is looking for and finds micropatterns in people's behaviour. This, Forseke claims, leads to that AI making what he calls a 'driver DNA' for each trip. He added, "To give you some substance to that, if you look at event-based profiling, which is still the prevailing way of measuring harsh braking, they may analyse 700 seconds from an hour of driving. With our micropatterned profiling, we analyse each hour of driving 1.6 billion times. Today, we have a database of 7 billion unique ways of driving car, each trained with real crashes, so each of those driver DNAs in our database has a crash probability attached to it. From these micro patterns of people's behaviour, we find certain patterns have a higher inclination and probability of being involved in crashes than others."

AI and pricing

Across a wide range of industries worldwide, AI is proving itself to be a huge change agent in how companies conduct business. In the area of motor insurance pricing, how is AI changing the game?

Forseke said, "From guessing to facts, today, insurance carriers are still very much guessing. However, if you drive with our AI, you can start working on facts. We are changing the industry and enable the industry to look upon customers like individuals rather than as a group. This then allows them to treat and price customers more individually."

Forseke gave the example of Amazon, who he describes as the 'lead star' in profiling individual customers. He added, "If Amazon would go to adopt insurance methodologies, they would say 'Women living in Stockholm between 30-35 have a dog and all read the same book'. What we do is change motor insurance to make it become more individualised. More individualised offerings, pricing and customer management on an individualised basis rather than a biased group level. The time of 'one size fits all' is over – offerings will be more individualised, flexible, and actionable."

Is the impact that AI is having on precision pricing beneficial? Forseke believes that it is so, stating, "The bottom line in all businesses is that pricing is everything. The better you can price a product, the more profitable you'll become. When

pricing risk, it's highly delicate, so the better that you can price this risk, if you are able to improve your pricing, if you can move the needle a millimetre then that has a huge impact on the bottom line.

"So, with our AI, the benefit is that the pricing will then reflect the real risk that is faced and become much more fair and much more transparent.

Changes and trends

The wider insurance industry – like many other industries – has witnessed changing trends since the pandemic has begun to lessen in global impact. With more people conducting their insurance business behind a screen compared to pre-pandemic, the industry has had to readjust, with the changing trends being a reflection of that. Of those that are dominating currently, AI is one of those way out in front.

How will AI change the wider insurance industry? In the area of motor insurance specifically, Forseke hopes that his company will be a contributor to ensure less dangerous and more efficient energy use of vehicles.

He added, "If you look at the industry, look at the mobility of transportation every year, 50 million people get severely injured on the roads at the cost of \$1.2bn a day. So, AI will help with individualised pricing and an individual's pricing will reduce that number by at least 10%. This is how I think AI will help move the industry to become a large contributor to more efficient energy usage and less crashes on the road.

With the sands of insurance shifting with help from AI, the trends that permeate the industry are also shifting. According to Forseke, one trend that appears to be standing out and dominant in the industry is that the wider market is eager for new solutions that strongly have the customer in mind.

He said, "They're asking questions like how can they contribute to the climate fight? How can they be a contributor? On the other side of the coin, now that customers have insurance, they are demanding flexible, transparent and actionable solutions that are suitable to them rather than for a wider group. We can see that, particularly after the pandemic, and the change is coming quite rapidly to the market and hitting the carriers."

The pandemic has upended a lot over the past three years – many businesses who went into the pandemic may not have arisen out of it. At the same time, companies that previously did not spot a gap in the market have now had the ability to find their own. How has Covid-19 changed insurance?

A particular area that the pandemic has shone a light on in motor insurance is that of insurance premiums. Forseke said, "Since car usage has changed quite dramatically during this period – private cars sat on the curb side and in the garage much more than before the pandemic – and people still had to pay the same \$1,000 a year insurance

premium. "On the other end of the scale, last-mile delivery has increased enormously due to the pandemic, and yet they still pay the same premiums, but they run maybe three times as much mileage every year. So this has highlighted the unfairness and counter-productiveness of insurance premiums. That is a clear sign that we see the pandemic has helped the industry to actually realise a problem to address."

What constitutes the next great leap forward in insurance? In this area, Forseke deeply stakes his belief in the power of AI.



"If you look forward 10 years, AI will change the way how industry price varies dramatically. Our vision really is currently that our AI can see four seconds into the future."

"If we can make our technology see ten seconds into the future, we could literally have an avatar driving ten seconds ahead to clear the road for you – that is maybe something we can see happening in the next ten to fifteen years. But you can imagine what impact that would have on insurers on how to price and how to offer to the motor industry."

Plans for 2022 and beyond

As the pandemic continues to fade slightly from view, many companies across a vast plethora of industries are now looking ahead to fresh opportunities and new possibilities. What has Greater Than been up to this year?

Forseke remarked, "We have expanded our team quite dramatically and have focused on hiring big talents – so we have a very highly qualified team across the world. We have opened offices in Tokyo, the US and UK. With the first, we have signed a deal with a large carrier in Japan – and this carrier is one of the first I have seen that is going from talking to actions on providing eco-friendly insurance solutions and is using our technology to provide them.

Beyond 2022, Greater Than will be focused on continuing to build in capacity to meet its vision of having 50 million cars on its platform. In addition, Forseke highlighted that the company is 'relentlessly' training its AI technology to not only determine crash probability but also determine what kind of crash and at what cost ●



Founded 2011



Employees: 101-250



Segments of Financial Services: Banking, Insurance, Payments, Lending



Regions of operations: North America, Latin America, EU, APAC, Africa

IDmission is a pioneer in applying AI in FinTech. We apply Machine Learning (ML) to every aspect of Identity. Our ID capture uses Machine Learning (ML) models for edge detection, document cropping, realness detection, tamper detection, document classification, and data extraction. Our selfie capture uses ML to detect presentation attacks (certified to the ISO30107-3 PAD Level 2 standard) and to capture high quality live selfies. AI is used to ensure liveness at the point of the selfie capture (or capture of other biometrics) and to match the selfie against the picture on the ID. IDmission's biometric deduplication technology ensures that one human cannot present themselves as more than one customer. The IDmission ML factory uses public and private data sources to populate our proprietary Ground Truth Engine. Every image is curated by expert humans to establish ground truth - a set of gold-plated data with 90% of images marked for ML training and 10% for testing. The ML factory then takes the data, trains new ML models, and deploys to production all with the click of a button. Used in financial services, e-commerce, the sharing economy, and regulated industries, IDmission establishes true identity without compromising the user experience.



Founded 2016



Employees: 11-50



Segments of Financial Services: Cybersecurity/Information Security, Compliance & Fraud Detection



Regions of operations: UK, Europe, North America

ID-Pal is an award-winning ISO 27001 certified identity verification solution that enables businesses to verify identities and addresses in real-time. Offering a unique blend of industry-leading biometric, document and database checks to streamline AML and KYC in one GDPR compliant solution, it is available out-of-the-box or as an API/SDK. It is also available on the Salesforce App Exchange. The solution eliminates the complexity, cost, timelines and risk associated with regulatory compliance by delivering an AI-powered identity verification platform that is simple to use, easy to integrate and instantly customisable to the specific needs of any business. ID-Pal incorporates advanced technologies into a highly flexible and agile orchestration layer that also includes all the supporting hardware, infrastructure, decisioning logic and technical controls needed to robustly scale. For more information visit: www.id-pal.com



Founded 1987



Employees: 101-250




Segments of Financial Services: Banking, Digitalization, Compliance & Fraud detection





Regions of operations: Europe, Middle East, and Asia Pacific


IMTF develops best-in-class RegTech solutions in the areas of compliance, fraud detection and counter-terrorism financing, as well as enterprise digitalization tools that help financial institutions stay compliant and digitize their processes and operations to improve customer experience, bottom-line, and reduce regulatory risk. The company's modular and scalable software platform offers a comprehensive portfolio of solutions including client lifecycle management, KYC, anti-fraud and anti-money laundering tools, as well as software and services covering a wide range of other regulatory use cases. These solutions enable financial organizations to quickly adapt to regulatory changes, leverage new technologies and break down old barriers.



 Founded 2015


 Employees: 11-50

 Segments of Financial Services: Insurance


 Regions of operations: South Africa, Zambia, Kenya, Rwanda, Uganda, Cote d'Ivoire

Globally recognised as part of the “Inclusive Fintech 50” —Inclusivity Solutions has leveraged the latest technology to launch digital insurance initiatives across six countries. With 97% of emerging markets operating without insurance protection, traditional insurance models have proven to be inaccessible and expensive. Digital insurance helps address the protection gap through the pervasiveness of mobile phones. Inclusivity Solutions’ cloud based digital insurance platform facilitates the entire insurance value chain, and is complimented by specialist insurance services that serve to ensure a best-fit product for its partners business and their customers. Their solutions are built on ASPin which offers core insurance services via easy APIs. The platform also provides auxiliary services to ensure solid controlling, auditing and management of identities, in compliance with regulatory compliance and governance requirements. Having secured partnerships with some of the biggest brands on the African continent, Inclusivity Solutions is dedicated to lessen the amount of unprotected emerging markets.

inscribe

 Founded 2017

 Employees: 11-50

 Segments of Financial Services: Banking, Lending, Compliance & Fraud Detection, Risk Management, Customer Experience


 Regions of operations: United States, Europe

Inscribe is the leading Fraud Detection & Automation Platform that automates manual document reviews so you can say ‘yes’ to more good-fit customers. Fast-growing fintechs and financial services organizations use Inscribe to automate their manual reviews, reduce fraud losses, and increase decision accuracy. By automating document reviews and improving fraud detection, companies can also increase efficiency and reduce operational costs. Inscribe uses AI models trained on millions of data points to return results in seconds, provide fraud insights that could never be detected with the human eye, and keep sensitive data safe. Founded in 2017, Inscribe is trusted by leading companies like BlueVine, Petal, Fair, and Ramp. Inscribe is backed by Y Combinator, Uncork Capital, Crosslink Capital, and Foundry Group, and has a presence in the US and Europe. Learn more at inscribe.ai.



 Founded 1998

 Employees: 51-100

 Segments of Financial Services: Banking, Insurance

 Regions of operations: United States

Insuritas designs, embeds and manages insurance solutions inside Financial institutions using four fundamental strategies based on one overriding observation: “100% of bank customers purchase the insurance products provided, year in and year out, and 89% of consumers report that they have not visited their insurance agent’s office in at least the last three years.” Recognising that consumers are very comfortable buying and servicing their insurance needs digitally and telephonically, and that they enjoy a high degree of affinity with Insuritas Banks and their brands, Insuritas creates a ‘virtual insurance agency’ for customers. Their marketing machine leverages a virtual assistant, Lily, in making offers to consumers through multiple channels: email, ringless voicemail, SMS/MMS, IVR, chat and the bindonline journeys for renters, homeowners, auto and life insurance.



**COMPANY
RESEARCH
PROFILE**



PRODUCT NAME:



Founded 2014

Chicago, United States

www.kyc2020.com

sales@kyc2020.com

Employees: 11-50

Regions of operation: North America, Europe, Asia, MENA, APAC

KEY EMPLOYEES:



Rajeve Bahri, CFA, CAMS
Founder, CEO and Head of Product



Joseph Iuso, CAMS, CFCS
Co-founder and Head of Business Development

Segments of Financial Services: **Banking, Insurance, Real Estate, Investment & Trading, Payments, Lending, Money Service Business, Foreign exchange, Crypto exchanges**

OFFERING

From global watchlist data to screening and decisioning solutions, KYC2020 makes AML compliance easy, effective, and affordable for firms of all sizes. KYC2020 combines smart data and next-generation technology with human factors engineering to drive innovation and efficiency in Sanctions, PEP, Adverse Media, High-Risk Business Screening, and Ongoing Monitoring. KYC2020's enterprise class solutions are designed for GDPR compliance and are easy to integrate through an extensive API Library.

DecisionIQ, KYC2020's premier product, goes beyond traditional screening to automate and speed up customer onboarding. DecisionIQ uses AI to clear false positives and delivers real-time actionable decisions. Each screening decision is backed by an auditable proof-of-work that is securely stored.

DecisionIQ can be integrated into existing workflows or used as a complete platform with a built in enterprise class case management and ongoing monitoring service.

PROBLEM BEING SOLVED

Despite all the technology, sanction screening continues to be manual and time-consuming. This results in KYC/CDD workflows that are too slow and costly for real-time customer and merchant onboarding. The problem continues beyond onboarding given the latest compliance requirements for ongoing customer monitoring.

A lot of time is wasted dealing with unstructured data and false positives. The use of 'Fuzzy Search' has compounded the problem with too many name variant hits to review and clear to avoid missing a true positive.

A recent Mid-Size Bank Coalition of America survey found that 95% of sanction screening alerts are manually cleared as false positives. This manual workload costs the average middle size bank over \$300,000 per million screens.

Most AI-based tools that attempt to solve this problem are a 'black box'. You know the input and output, but no clue on why the 'intelligent' tool cleared or did not clear a false positive. The edge cases in watchlist screening are high, and humans take longer to review and process decisions from 'black box' AI.

TECHNOLOGY

KYC2020 takes a different approach with AI. DecisionIQ is built on "Collaborative Intelligence" and effectively combines machine intelligence with human insight. The outcome is a 'white-box' screening decision system that auto-clears false positives and produces a 'proof of work' that is easy to read and audit. This approach in AI results in human review processes that are more efficient and effective.

A watchlist screening system is useless without good data. A great deal of AI and technology, from Natural Language Processing (NLP) to sentiment and context analysis to Entity Resolution, is used by KYC2020 to aggregate and structure its Global Sanction, PEP, and Adverse Media data, before it is even ready for screening.

This combined approach of 'Smart Data' and 'Human AI' results in overall cost savings and faster onboarding times. DecisionIQ decreases false positives by 70% and reduces compliance workloads by over 50%.

PRODUCT DESCRIPTION

DecisionIQ screens 1,000s of global news sources and a structured, de-duplicated, and regularly updated watchlist database of over 1,500+ public sources across 193 countries to deliver best-in-class Global Sanction, PEP, and Adverse Media screening solution. DecisionIQ is an API-First software as a service (SaaS) built for the enterprise and easy to integrate.

The AI based service auto-clears false positives and has delivered for customers a **70%+ reduction in false positives, a 50%+ reduction in manual workloads**, and over **35% reduction in total onboarding and ongoing monitoring costs**. DecisionIQ is superior to traditional watchlist screening with following key features:

- **Real-time screening decisions** on over 5m global watchlist data records and negative news.
- **Auditor friendly** 'Proof-of-Decision' file for every screening decision.
- **Extensive API** for easy integration.
- **Name Relevancy Scoring System** that is customizable and superior to Fuzzy!
- **Pattern recognition system** that is continuously learning and highly trainable.
- **Rule-based system** per your risk-based approach to filter on Gender, Nationality, and more.
- **An awesome Rapid Review and Case Management** system to speed up your manual review process and reduce costs.
- **Persistent Monitoring system** to keep you compliant.
- **GDPR Compliant** design for your data privacy needs.

TRACTION/GROWTH

- KYC2020 partners with leading companies including KYC Sitescan, Nexolink and Clearview systems.
- KYC2020 has grown to over 250 global customers, including:



- DecisionIQ yields over 70% Reduction in False Positives to a major US Fortune 500 Payment Processor. Stop wasting time on false positives. Get accurate, and auditable screening decisions with the company's AI-based DecisionIQ API.
- DecisionIQ sped up customer CDD and delivered a 40%+ Reduction in Onboarding costs for CoinChange, a high-yield fintech company. Use the Case Management API with Human AI for faster reviews and lower your manual costs.

FOUNDATION

KYC2020 was founded in 2014 by tech entrepreneurs, seasoned payments industry professionals, and CAMS™ certified AML specialists. The company's mission is to make AML compliance easy, effective, and affordable for enterprises of ALL SIZES.

Rajeev Bahri, CFA, CAMS, the Head of Product and CEO of KYC2020 LLC, is a Ramlin' Wreck from Georgia Tech, with over 30 years of data science experience. He drives the mission and vision of KYC2020 as a Product First Regtech company to help stop financial crime. Rajeev along with his co-founder and partner, Joseph Iuso, CAMS, CFCS, have 50+ years of combined software development and industry experience. They have built enterprise class software systems that have been deployed across Fortune 500 payment processors including Fiserv, FIS, MasterCard, RBC, CIBC, and COOP Financial Services. They are supported by a team of dedicated engineers in the company's New Delhi, India development center.

How KYC2020 revolutionised sanction monitoring

While people were racing to build FinTech companies, the founders of KYC2020 saw this as a rising opportunity for a RegTech solution.



KYC2020 was founded in 2014 by friends and payments processing industry veterans Rajeev Bahri and Joseph Iuso. For a long-time the pair had discussed ideas around payments, wallets and cryptocurrencies to identify an entry point in the hot and burgeoning sector of FinTech. As they explored FinTech solutions, they noticed there were a lot of issues around regulation and compliance matters and technology solutions were not keeping pace with the needs. Bahri explained that existing regulatory technology (RegTech) solutions were slow, high friction, complex, costly and manpower intensive – the polar opposite of the new FinTech solutions.

Rajeev Bahri, CFA, CAMS, CEO and head of product for KYC2020, said, “That is probably my epiphany that we should be in RegTech and not FinTech, and this is how KYC2020 was born with a seed investment from me, and two passionate entrepreneurs coming together to provide the picks and shovels for the gold rush in FinTech and DeFi in a world that was rapidly moving towards – more sanctions and regulatory compliance.”

Reaffirmation of the move to RegTech came after seeing how popular FinTech was becoming, which would cause more companies needing innovative tools to handle compliance burdens. The rise of challenger banks, buy now pay later services, cryptocurrencies, international remittance services, digital payment tools and more, meant more companies were getting involved with finance. As a result, regulators around the world began to increase the scope of

regulations and the price of fines for failures.

“A new class of compliance solutions was needed, and that is exactly the problem we wanted to solve.”

They initially focused on anti-money laundering compliance and improving global watchlist screening and ongoing monitoring. However, the team quickly found out why existing sanction, PEP, and negative news screening solutions were expensive, had high friction and caused many false positives. It was simply because these tools rely on global sanction and PEP data that was outdated, unstructured, prone to false positives and only available from select vendors. KYC2020 knew how to fix this.

Building the platform

KYC2020 was not the first company Bahri had launched, and already had a mature product and software engineering business in India. When starting a new venture, Bahri always follows the same strategy, “Think Big. Start Small. Learn Fast.... Be AGILE!”

The “Think Big” aspect of KYC2020 was to take the harder, more capital-intensive path to build their own structured database composed of data around global sanctions, PEP, RCA, HIO, regulatory authority, criminal, high-risk business, negative news and more. This was the only way to control the price and quality of watchlist screening. They had the scraping and data aggregation technology and in-house expertise, but it would take three years to get the full system ready. Competitors, however, could launch much quicker when licensing the third-party data.

As a result, KYC2020’s “Start Small” approach meant that while they worked on the database as part of a five-year plan, they initially launched to market with a point sanction screening solution in a regional market, with a focus on new entrant FinTechs, cryptos and non-financials. Being startups, they needed a low-cost solution, that was real-time and automated.

“We knew that if we could LEARN FAST and build to meet the technology requirements of this client base, we had a platform that would be a game changer in the financial institution and enterprise world once we had realised our grand data vision,” Bahri added.

The platform

KYC2020 has come a long way since its early beginnings, now boasting clients such as EY, Global Payments, Coinchange, Payment Source and many more.

Bahri explained that onboarding is traditionally a manual process that can take anywhere from 24 hours to 26 days and is plagued by false positives. However, digital payment firms need to shrink the onboarding window to near real-time or they could lose customers. "To revolutionise the onboarding space, one must design systems powered by AI to automate clearing of false positives that are coupled with case and workflow management systems designed to improve human efficiency and effectiveness. This is exactly what our DecisionIQ does."

KYC2020 currently offers two watchlist and adverse media screening solutions. The first is SmartScan, a traditional screening solution that leverages new search technologies and name variant determination algorithms. Its other solution is its flagship product DecisionIQ, which Bahri describes as "a game change and will revolutionise the client onboarding space."

One area the solution is really making a difference is persistent monitoring. Bahri said, "Getting compliant is painful - staying compliant should not be more painful." Unfortunately, that is the situation that many face, relying on slow and periodic rescan tools.

"If onboarding systems are high manual effort. The ongoing monitoring systems are worse. Banks today burn money - and I quote Elon Musk with a different context - today's ongoing monitoring systems for banks are 'gigantic money furnaces.' I am confident we are solving this problem with our latest release of DecisionIQ... it will have a built-in, persistent monitoring service we are calling Sanction Watch." This service will help firms keep up to date with any change on global sanction lists.

The revolution is DecisionIQ

Bahri outlined three major ways DecisionIQ differentiates itself from competitors. The first is the data it leverages, by aggregating and structuring its own global watchlist data. "We call it 'Smart' data because AI and NLP, along with good ol' fashioned human smarts, are used to clean, normalise, and deduplicate the data to reduce the number of false positives at the source. In fact, we have several screening solution providers that licence our structured data, from Acuant to Deep Discovery and more."

The second differentiator is its approach to screening. Bahri explained that unlike other products that produce 'scored' hits with a high number of false positives, DecisionIQ automatically clears the false positives and delivers real-time actionable screening decisions. As with any AI, there are often concerns around transparency, but DecisionIQ provides 'proof-of-work' that is auditor-friendly.

Bahri said, "This is a very important differentiator because at the end of the day, when it comes to AML compliance and avoiding fines, what you must prove to the authorities is that you have a rational decision system that is comprehensible by humans and is easy to audit!"

Its final core differentiator is its API-first approach along with all the features that go into delivering an enterprise class service. The founders have over 50 years of combined software delivery experience. "We have built major systems that have been deployed across Fortune 100 banks and payment processors. We know a thing or two about enterprise requirements, from data privacy, security,

auditability, to controls and customizability." said Bahri. The platform was built for easy integration into third-party workflows and can be fine-tuned to meet the specific needs of a system.

Bahri outlined a success story that showed the power of DecisionIQ. It was a major DeFi company in Canada that does yield farming on crypto assets. Within weeks of launching their platform, they were met with over 50,000 new users that needed to be screened. "With their standard screening solution, even at low fuzzy search they would be dealing with 20% false positives, or over 10,000 hits to clear with only one AML staff. They had to reconcile this with the reality that the new users expected account setup and service within 24 - 48 hrs, which was impossible even if they had 10 staff working full-time."

They approached DecisionIQ and leveraged the rapid clearing system, RABBIT. This is a learning system that can identify patterns and establish clearing rules. It reduced false positives to under 3% and helped the company respond quickly to its new users.

Overcoming challenges

One of the biggest challenges the company faced was around data aggregation for PEPs from emerging countries. Due to poor maintenance of data on public sources, this has required more manual oversight than hoped, but KYC2020 is dedicated to overcoming the challenge.

Another major challenge came during the early development of DecisionIQ, with optimisation around excessive false positives and negatives when dealing with fuzzy search and scoring. AI proved unhelpful because there were too many edge cases and humans were better at handling them, particularly in foreign names.

"We solved this problem by developing our own Name Relevancy Scoring system based on how humans interpret names, developing a hit pattern recognition system, and then incorporating all this into a rule-based clearing system that could be customised and trained to supplement our AI. This is our Decision Oversight and Governance System (aka "DOG"), and joke that 'DOG is an AML officers' best friend.' If you were to use it, you would agree."

Future plans

In August 2022, KYC2020 plans to launch a major update for DecisionIQ, which includes powerful new functions, such as rapid review and case management for high-volume screening. It also plans to make advancements to its persistent monitoring system to reduce false alerts from ongoing monitoring to near zero, improvements to the NLP technology, entity resolution and relevancy analysis in its Adverse Media Check service and much more. KYC2020, which has over 200 customers, believes its journey has only just started and there is much more to come.

As to why a company should work with KYC2020, Bahri said, "I would say because we have a great product that lowers overall cost of watchlist screening and speeds up customer onboarding. But mostly because a) they get to try for FREE before making a buy decision, and b) they are always dealing with CAMS certified and/or VSKILLS certified AML specialists that are fully vested in their success." ●

Kidbrooke®



Founded 2011



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Financial services & Asset management



Regions of operations: Scandinavia/Europe

Kidbrooke helps financial institutions provide engaging, seamless and affordable financial advice allowing EVERYONE to make educated financial decisions for their future. OutRank®, our financial simulation engine, powers seamless financial decision-making provided via cloud-native APIs. By simulating the personal balance sheets and future cash flows of end-customers, it empowers firms to build financial customer and advisor tools covering pension planning, investment advice/guidance, credit, mortgages, insurance and tax, as well as integrate all of these together for a truly holistic experience. These customer journeys enable financial advisors or customers directly to consider all aspects of personal finances developing over a lifetime while making a financial decision.

L7DEFENSE



Founded 2015



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Cybersecurity/Information Security, Consumer/Personal Finance, Investment & Trading, Payments, Lending



Regions of operations: United States, Europe, APAC

L7 Defense helps organisations to protect their infrastructure, applications, customers, employees, and partners against the growing risk of API-borne attacks. APIs have become critical for data sharing and applications integration and are therefore an attractive path for malicious attacks that expose organisations to new, continuously evolving threats. Ammune™, L7 Defense's platform technology, protects services (APIs) from the first request. It is fully automated and extremely accurate. Ammune™ is made of advanced Artificial Intelligence (AI) technology that presents an exceptional level of accuracy for detecting cyber threats targeting APIs, without interfering with the request that is sent by legitimate users. Ammune™ reduces the need for time-consuming and costly manual security processes while enabling faster time-to-market (TTM) without compromising security measures.

LORICA CYBERSECURITY

MARYLAND, USA
TORONTO, CANADA



Founded 2017



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Cybersecurity/Information Security, Compliance & Fraud Detection, Data Analytics



Regions of operations: Canada, United States, United Kingdom

Lorica Cybersecurity has developed patented cloud data security and privacy-enhancing solutions that eliminate serious existing vulnerabilities. Leveraging breakthrough high-performance fully homomorphic encryption (HP-FHETM), data itself never needs to be decrypted thus safeguarding data, IP, machine learning models or sensitive customer information from any potential exposure in the event of a data breach. The company has worked discreetly with Fortune 500 enterprises and national security agencies to deliver cutting-edge solutions where data security and privacy are the highest priority. Lorica software solutions are easy to use by non-cryptographers, cloud and region-agnostic, built on a micro-services architecture and founded on mature lattice-mathematics making their products quantum-resistant. Lorica's HP-FHETM products provide the fastest and most scalable privacy-preserving data security solutions in the world for large workloads that banks would want to run in the cloud. Enterprises now have the tools to confidently leverage all their data and insights in the cloud.

LYDIA.ai



Founded 2015



Employees: 11-50



Segments of Financial Services: Banking, Insurance



Regions of operations: Asia Pacific

Lydia AI is an AI insurtech startup, on a mission to insure the next billion people. Lydia AI provides a risk scoring engine that is trained on global data to generate accurate health predictions on new sources of alternative data. Insurers work with Lydia AI to accelerate underwriting practices, personalize experience, and develop new digital insurance products. Insurance companies struggle to develop competitive insurance products that can be purchased easily. For life and health insurance, people are often offered rigid insurance products that they need to get a medical exam to purchase. Lydia AI helps insurance companies use new sources of alternative data (wearables, government open health data, etc.) to develop new insurance products that can be purchased instantly using digital data to underwrite. With Lydia AI, underwriters have found their models to be more precise, accurate and explainable than competitive models.



Founded 2015



Employees: 11-50



Segments of Financial Services: Advisory



Regions of operations: United Kingdom, Italy

MDOTM is the leading scale-up fintech in developing AI-driven investment strategies. MDOTM provides Portfolio Advisory and Asset Allocation services to its clients - which are only institutional investors - for a total of €1 billion in Assets under Advisory (AuA). In September 2021, MDOTM closed a Series-B round that led total funding from institutional investors and finance professionals to €8.2 million. MDOTM was founded in 2015 and now employs over 50 data scientists and finance experts, split between London and Milan, with a New York office to open by the end of 2022. The company has a unique research environment to bridge the gap between economic theory and real-world practice, which has led to numerous partnerships with universities and the establishment of an international network of academic thought leaders - called MDOTM LAB. MDOTM's strategies share the forward-looking investment views obtained from ALICE®, their award-winning proprietary technology for decision making. ALICE® uses Deep Learning to analyze correlations at asset class, sector and security level to build highly-diversified and efficient portfolios.



Founded 2019



Employees: 1-10



Segments of Financial Services: Banking, AML Compliance & Financial Crime Prevention, Consumer/Personal Finance, Investment & Trading, Payments, Lending, Web3, Crypto



Regions of operations: Canada, United States, Europe, United Kingdom

Frictionless client onboarding, KYC, KYB, enhanced due diligence, periodic review and ongoing monitoring in seconds. MinervaAI is a regtech platform powered by deep learning that satisfies AML regulatory requirements enabling our clients to acquire new customers, launch new products and enter new markets seamlessly. The depth and sophistication of MinervaAI's deep learning understands context, sentiment, and risk, reducing false positives by more than 50%, accelerating AML processes by more than 600% and delivering client documentation with complete data lineage--all in under 30 seconds.

MITRATECH



Founded 1987



Employees: 501-1,000



Segments of Financial Services: Banking, Insurance, Cybersecurity/Information Security, Compliance & Fraud Detection



Regions of operations: EMEA, APAC, North America

Mitratech is a proven global technology partner for corporate legal, GRC, and HR teams seeking to maximize productivity, decrease costs, and mitigate risks by deepening organizational alignment, increasing visibility, and spurring collaboration across their enterprise. By partnering with customers to design, develop, deliver and support the best legal, GRC and HR software solutions on the market; Mitratech enables departments to become hubs of efficiency, innovation and excellence for the entire organization. Mitratech's Alyne solution helps teams to implement mature governance structures, comply with standards, laws and regulations, and enables transparent and efficient management of enterprise risk through leveraging next-generation technology. Combining Alyne's extensive content library, customer generated content along with an advanced AI engine, users are able to easily draw the right conclusions, understand their current levels of compliance and effectively address risk exposure.

modefinance



Founded 2009



Employees: 51-100



Segments of Financial Services: Banking, Insurance, Lending, Credit Rating, Financial Risk Management



Regions of operations: Europe, MENA

Modefinance is a FinTech company characterized by a strong multidisciplinary integration between IT, FinTech and financial analysis, specialized in developing digital solutions for credit risk assessment and management. Being a registered Credit Rating Agency, CRA and ECAI, fuels their ability to produce trustworthy, reliable, transparent and validated financial assessments with a proprietary MORE methodology (Multi Objective Rating Evaluation): thanks to the Fintech core, they're able to evaluate more than 250 million companies, and all the 65,000 banks worldwide. Their product, Tigran, is a modular and customizable cloud platform for managing credit and financial risks. It allows clients to obtain important improvements compared to traditional, paper-based and error-prone methodologies, reducing decision-making time and costs. Tigran's modular structure overturns the traditional approach to credit risk management, offering everyone a flexible and adaptable solution that combines all stages of the decision-making process into a single framework, from pre-feasibility and due diligence to final approval.

muinmos



Founded 2012



Employees: 11-50



Segments of Financial Services: Banking, Compliance & Fraud detection



Regions of operations: Globally, especially Europe, parts of Asia, Middle East, United States, Australia, New Zealand

Muinmos is a client onboarding platform like no other. The award-winning, AI powered platform onboards any client – retail, professional or institutional – globally within 3 minutes. Muinmos' platform is a complete onboarding solution, automatically and instantly performing all parts of the onboarding chain. mPASS™ - for instant, automated Client Categorisation, Suitability and Appropriateness. mCHECK™ - for instant, automated KYC/AML checks (for both individuals and companies) via built-in connectivity to multiple data-sources. mRX™ - for, instant, automated comprehensive client risk assessments. The Muinmos platform is a fully configurable, all-in-one SaaS solution, taking care of all of your onboarding needs. These qualities and more have made it the platform of choice for investment firms, crypto exchanges, payment providers, asset managers and many other financial institutions, seeking to optimize their customer experience without compromising compliance. Muinmos – compliantly onboard more clients, faster, and at lower costs.


NewRetirement


Founded 2015



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Customer Experience, Consumer/Personal Finance, Investment & Trading



Regions of operations: United States

NewRetirement delivers a hybrid financial planning solution to consumer end users and enterprises, with innovative software, educational classes, digital coaching, and human advice. The company is redefining financial planning with a comprehensive AI-based platform and modeling engine that considers thousands of scenarios, enabling individuals to do holistic accumulation and decumulation planning with digital guidance, and at scale for enterprises. Designed for a person's entire life, the platform also provides automated strategic outreach to individual planners based on their specific needs that delivers a financial wellness benefit for employers, and enables financial services organizations to leverage new business models, better retain assets, and drive revenue with more engaged planners. NewRetirement is used by millions of people and deployed with enterprise companies such as MarketWatch and Nationwide.




Founded 1999



Employees: 1,001-5,000



Segments of Financial Services: Financial Crime and Compliance, including Anti-Money Laundering, Enterprise Fraud and Authentication, Market and Conduct Surveillance



Regions of operations: Global

NICE Actimize is the largest and broadest provider of financial crime, risk and compliance solutions for regional and global financial institutions. Consistently ranked as number one in the space, NICE Actimize experts apply innovative technology to protect institutions and safeguard consumers' and investors' assets by identifying financial crime, preventing fraud and providing regulatory compliance. The company provides real-time, cross-channel fraud prevention, anti-money laundering detection, and trading surveillance solutions that address such concerns as payment fraud, cybercrime, sanctions monitoring, market abuse, customer due diligence and insider trading.




Founded 2009



Employees: 101-250



Segments of Financial Services: Insurance



Regions of operations: Over 100 paying customers in 20 countries across the US, UK, EMEA and APAC

Novidea is the creator of the only born-on-the-cloud, data-driven insurance platform that enables brokers, agents, and MGAs to manage the customer insurance journey, end-to-end, and drive growth across the entire insurance distribution lifecycle. Novidea is built to leverage the power of Salesforce's Big Technology, provides a complete ecosystem spanning every aspect of an insurance business. The platform's AI technology provides a 360-degree view of the customer and all stakeholders, an integrated front-, middle-, and back-office, as well as seamless automated workflows that streamline every phase of the insurance journey. Brokers, agencies, and MGAs have instant access to all customer and policy data, with actionable intelligence, from any device, anywhere. Novidea turns data into insight at the point of need, enabling better-informed decisions and delivering greater customer value through products and services tailored to individual needs. Novidea supports more than 100 customers, including agents, brokers, MGAs, and the London Market, managing more than 22 million policies across 20 countries, worldwide. For more information, please go to: www.novideasoft.com

Artificial Intelligence Drives Trusted Customer Experiences

By Yuval Marco, General Manager, Enterprise Fraud Management, NICE Actimize



NICE ACTIMIZE

Innovation is inextricably linked to financial services and payments, with most financial institutions focusing on payments and streamlined customer experience as the primary focus of their strategic direction. However, innovation doesn't come without risk, and financial institutions require financial crime technologies utilizing artificial intelligence (AI) and machine learning (ML) to realize the optimal customer experience. Supporting best-in-class customer experience (safely) and maintaining competitive advantages requires strategic investment and monumental change across your financial crime and compliance programs.

While payments innovation has increased access to banking and facilitated instant P2P payments, which are highly beneficial to the customer, they have also drawn interest from fraudsters looking to exploit the instant movement of money. As a result, customers are being targeted for various scams, and financial institutions are in the middle of balancing risk and customer experience in an instant payment environment and undergoing a liability shift. This shift in liability for fraud loss associated with scams from the consumer to the bank are due to the prevalence and sophistication of such complex scams as social engineering, Authorized Push Payment fraud, and romance scams. Fraud loss associated with these scams continues to grow significantly in 2022, supported by fraudsters' ability to access personally identifiable information on the deep and dark web and weaponize it against their victims. Technology will advance and focus on these themes, particularly on the influence of the compromised PII.

The increased speed of fraud detection is at the nexus of supporting payments innovation and customer experience. Led by the digital acceleration and infrastructure changes over the past two years, the new ISO 20022 standardization will enable safer and faster payments with compliance being adopted by new real-time payment entrants such as FedNow, RTR, Swift Instant, P27 as well as current real-time payment rails. In addition, AI and ML will be necessary for an intelligent fraud prevention strategy that utilizes automation and decreases friction across the payment lifecycle.

The industry will also see fraud strategy and prevention teams shift from simple risk mitigation to forceful business enablers as a smoother frictionless Customer Experience (CX) becomes increasingly improved. CX is no longer a "nice to have" but a key focus for fraud teams at financial institutions and within contact centers — the by-product of digital banking and faster payment. These interactions must be seamless and secure. As a result, we now see fraud and risk mitigation teams placed more directly in the middle of CX conversations.

In other key impact points, identity fraud continues to accelerate and expand to become a core component of payments fraud, money mules, and account takeover. Specific to the US, the Federal Reserve has created a new definition and classifier for Synthetic Identity Fraud (SIF) as they have acknowledged the significant risk these manipulated and fake identities pose as well as the need to fully track fraud losses associated with SIF and build strategies to deter them from being created.

Within the past few years, many financial institutions grappled with the impact of the pandemic. Concerning fraud, payments related to reimbursements afforded consumers and businesses during this timeframe were the perfect target for fraudsters. Post pandemic, as financial services institutions pivot from storefronts to a dominant online, digital environment, customer satisfaction and frictionless customer experiences has become even more critical to retaining customers and competing in a digital world.

Fraudsters will continue to refocus their efforts in 2022 by attacking a bank's – or other corporates' – assets by perpetrating fraud schemes and flooding traditional payment channels. Increasingly, the industry is seeing well-trained, funded, and equipped fraudsters able to commit fraud at scale using advanced tools and technology, creating a trend of "Industrialized Fraud." This was manifested throughout 2021 in the form of business email compromise along with the uptick of ransomware that continues to become more pronounced throughout 2022.

Payments innovation, such as next-generation payment products that include QR, BNPL, Crypto, and Biometric, will also be focused on improving the customer experience led by advancements in digital acceleration and newly adopted infrastructure put in place over the past two years. As a result, faster payments will become more prevalent – and even faster. For example, the new ISO 20022 standardization will offer a universal messaging language that will allow machines to read messages with better automation and faster resolution.

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"As payments evolve, the methods used to prevent fraud must also evolve."

According to a 2022 Frost & Sullivan "The North American Enterprise Fraud Management Industry Excellence in Best Practices" report, "The need for machine learning and advanced analytics to counter sophisticated attacks is paramount; fraud solutions must maintain a "friction right" customer experience and manage immense volumes of data. FIs must support increased customer interactions across newer digital channels; they must implement appropriate fraud prevention without compromising on customer experience."

Regardless of the trend, artificial intelligence is at the core of advancements that will drive process improvements that ultimately lead to exceptional customer experiences – and a more competitive position in the market for the financial institution that implements them in their technology and infrastructure strategy moving forward.

The Impact of Digital Transformation Drives Future of Risk for Financial Institutions

By Stephen Taylor, General Manager, AML, NICE Actimize

Post-pandemic change and how financial institutions move to digital is meeting new challenges



NICE ACTIMIZE

Financial institutions have seen profound change and rapid digitalization, a trajectory that is likely to continue. The digital revolution is creating new opportunities for financial institutions while criminals look for new ways to exploit them.

To succeed in this environment, FIs must transform parallel to the new standards set across onboarding, service delivery and consumer interactions. Seeking new ways to uncover substantial savings and efficiencies across compliance and risk functions, FIs are also conducting application rationalization to help improve operational agility and the quality of their outcomes. FIs are also examining their current systems to gain a more unified view of risk through the adoption of a holistic platform.

To achieve a unified view of the customer and their risk, a consolidation of technology must occur. This perspective is reinforced on

the fraud side, where the increasing number of transactions, growing complexity of fraud trends and schemes are resulting in new fraud scenarios. Fraud teams are looking to eliminate duplicate functions and processes via consolidation of fraud typologies and fraud systems on a single analytics or investigation solution. This allows for better quality alerts, fewer systems for the technology team to maintain, and fewer points of integration. This further ensures that FIs can coordinate action and enable a streamlined handover between fraud and AML when something is caught in real-time.

While fraudulent activity alerts in real time, most AML programs look at activities over a longer time horizon so FIs must establish communication and collaboration between these two groups. By leveraging a single platform, fraud teams would effectively “tip-off” AML teams on suspicious activities. It’s critical that you know what the other side is doing. If you’re an AML analyst, you should know what fraud data and red flags to look at, and vice versa.

Evolving Tech Drives Change

Though the pandemic accelerated digitalization, the transition to digital has been an ongoing theme as compliance teams struggled to keep up with increasing regulatory scrutiny and expectations. This, along with shifting consumer behaviors, has necessitated the need for a dramatic change from historically manual-intensive processes toward automation.

Due to these concerns, newer advanced technologies are being used with AML and fraud programs, and the most critical of these include:

- **Advanced analytics:** Integral to financial crime and risk management systems, new technologies like artificial intelligence and machine learning offer increased efficiency, greater accuracy at the detection level and facilitate faster outcomes while eliminating customer friction.
- **Cloud:** Cloud provides flexibility and adaptability to help FSOs evolve with changes in risks and operational needs, optimizes analytics and helps organizations benefit from consortium in terms of data collection and sharing while maintaining compliance.
- **Data integration:** With additional transactions and the increasing surge of data, FIs and specifically their fraud teams need to acquire new data sets to augment their fraud controls. They must monitor the data, leverage it to fuel analytics processes, enhance customer experience, and empower fraud triage and investigative teams with additional intelligence to mitigate fraud.
- **Biometrics:** FSOs are doing more with biometrics and enhancing authentication, bringing in the right data to understand if the customer is legitimate without compromising the customer experience.

For additional information on NICE Actimize's AI-infused anti-money laundering and enterprise fraud solutions, please visit

www.niceactimize.com/anti-money-laundering. ●

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“Drivers such as automation, the modernization of payment systems, the increasing growth and availability of data, and the need to empower investigators to make better, faster decisions are shaping the future of the financial services industry.”

Financial institutions are prioritizing the impact of digitalization on their fraud and AML systems, to ensure they have the right technology in place to get ahead of evolving fraud and financial crime.




Founded 2020



Employees: 1-10



Segments of Financial Services: Insurance



Regions of operations: Global

Nuon, founded in 2021, built its AI solution for the global insurance industry. Its co-founders have worked together for 20 years, across three startups and five insurance technology companies. The company's vision is to apply AI across the full Insurance Product Lifecycle. Their current product, Live Price Adjust AI, is focused on optimizing pricing strategy to uncover profit and market growth for insurance product lines, unlocking significant competitive advantage. Connected via an API, Nuon's AI learns fast as it runs millions of pricing experiments and makes discreet pricing adjustments in real-time. Insurers can match market conditions by lowering prices where necessary to gain business, and raising where possible to maximise underwriting profit. This real-time AI product is unique in the market and enables insurers, brokers and MGAs to improve take-up rate, increase average premium and reduce the risk of money being left on the table.




Founded 2018



Employees: 101-250



Segments of Financial Services: Fintech, Banking, Payments, Mobility, Gaming, Client Lifecycle Management, Customer Onboarding, Compliance and Fraud Detection



Regions of operations: CES, Western Europe, North America, LATAM

Ondato is a tech company that streamlines KYC and AML-related processes. Ondato provides technological solutions such as digital identity verification, business customer onboarding, data validation, authentication, and more. These provide the highest standard available of KYC online or offline on-boarding for all business and customer types, orchestrated from a single interface. Ondato is turning compliance into a business benefit for its customers, helping to create a better and safer environment for organizations and individuals.




Founded 2012



Employees: 11-50




Segments of Financial Services: Banking, Insurance, Consumer/Personal Finance, Investment & Trading, Wealth & Asset Management




Regions of operations: North America, United Kingdom, Europe, Japan, India


Founded in 2012, OWL ESG Inc. is focused on providing a comprehensive suite of data, metrics, and tools for evaluating sustainability and applying environmental, social, and governance metrics to the global investment arena. The company's primary mission is to raise the standard of ESG data. OWL ESG want to provide data, indexes, evaluation metrics and other tools that allow investors to make informed choices while helping the planet. OWL Consensus Data utilises Big Data Analytics to offer Company Specific ESG Indicators. OWL AI/Machine Learning Data intertwines human expertise to create the industry's most accurate & verifiable ESG Data. Leading financial institutions that are entrusted with managing billions of dollars for investors across the world turn to OWL for their diverse range of ESG products and customised solutions, to help them meet sustainability mandates that continue to expand and evolve.



 Founded 2020

 Employees: 11-50

 Segments of Financial Services: Investment & Trading

 Regions of operations: United Kingdom, North America, Singapore


Permutable.ai provides high-impact solutions to companies that care about their reputational risk and investment decisions. They standardise how companies report their ethical behaviour and practise using machine learning. Their ESG database features 50,000 of the world's biggest public and private companies. The database which is currently free to search by anyone provides a comprehensive look at commercial activities in every ethical sphere and across every operating function. They provide transparency on all company ethical matters such as climate change, social policies and environmental efforts.




PredictNow.ai

 Founded 2020

 Employees: 1-10

 Segments of Financial Services: Banking, Consumer/Personal Finance, Investment & Trading

 Regions of operations: Global

PredictNow.ai is a Corrective AI company that offers a SaaS platform to correct and optimize the decisions made by humans or other simple algorithms. An early use case is to correct and optimize investment decisions. Their service utilizes a user's past trading record, augmented with big data, to compute the probability of profit for her next trade. The PredictNow.ai software will also identify and rank the important predictors that affect this probability. In addition to risk management, their patent-pending CPO technique is a unique approach to parameter and portfolio optimization using machine learning.

Quant
infinity

 Founded 2017

 Employees: 11-50

 Segments of Financial Services: Investment & Trading

 Regions of operations: Switzerland, Europe, United States

Quant Infinity is a Switzerland-based FinTech company focusing on the research and development of algorithmic trading solutions based on Artificial Intelligence (AI) and Machine Learning (ML), specifically for investment funds and asset management companies. The many factors that influence the price of tradable securities makes analysis incredibly cumbersome. Using proprietary technology, Quant Infinity identifies as many of these factors as possible, and invests in opportunities where there is a high degree of confidence in a positive outcome. They operate under the ART Strategy — a short term, managed futures, algorithmic investment approach. The philosophy of their strategy is based on the confidence that one cannot predict the future, but short-term market inefficiencies can be identified and exploited to produce significant Strategy returns. The Strategy is a continuously monitored and modernized system. As the market evolves so do their systems.



COMPANY RESEARCH PROFILE


PURΣFACTS


Founded 2010

Toronto, Canada

 www.purefacts.com

 info@purefacts.com

 Employees: 101-250

 Regions of operation:
North America, Europe, APAC

KEY EMPLOYEES:



Robert Madej
CEO & Founder



Rajini McRae
President



Gerrard Daniels
CFO

Value Chain: **Financial Services, Insurance, Wealth & Asset Management, Reporting, Risk & Compliance**
Subsectors: **B2C Robo Advisors, Digital Retirement Solutions, Risk Analysis & Management, Financial Planning, Compliance & Regulation, Data & Analytics, Financial Services Software, Calculation of Fees & Commissions**

OFFERING

PureFacts Financial Solutions develops software that helps global financial firms grow revenue and market share. The firm specializes in developing technology that can fit easily into existing tech stacks to calculate fees and commissions, aggregate data, analyze and enrich it. They then use automated intelligence and machine learning to derive usable insights that can drive business growth. Their intuitive and easy to use reports module is both substantial and scalable – it offers in-depth reporting at the enterprise, advisory and client levels. PureFacts invests annually in research and development to continuously improve and add to their solutions.

PROBLEM BEING SOLVED

PureFacts solves some of the most complicated problems using innovative automated intelligence and machine learning algorithms. The company's AI solutions are integrated into its core product such as its Fees and Reporting solutions. The SaaS platform provides investor retention analytics and can help determine the underlying reasons behind client churn. In addition, PureFacts uses natural language processing to classify assets into their corresponding asset classes. With these predictive methods, wealth and asset management firms can proactively identify errors and prevent costly mistakes and regulatory fines. At the retail level PureFacts' solutions enable advisors to offer personalized and differentiated services to their clients.

TECHNOLOGY

PureFacts deploys all its software on Microsoft Azure Cloud. Their scalable, modular micro-services architecture is founded on Microsoft.NET Core technologies. The company leverages Azure Kubernetes Services (AKS) to deploy at scale and meet the elastic capacity needs of its clients. The solutions rely on vast amounts of data that are ingested, transformed, and processed by Azure Data Factory. The data stores include both relational data stores such as Microsoft SQL server, as well as in-memory distributed store such as Redis. PureFacts' ML technologies include TensorFlow, R, Python, Jupyter Lab, and they have built their NLP application on top of the Microsoft Azure LUIS API.

PRODUCT DESCRIPTION

PureFacts develops and delivers accurate, scalable, flexible, secure, best-of-breed wealth management, asset management, and asset servicing solutions that serve the front, mid, and back office needs of global financial services firms, banks, and insurance companies. Delivered using a highly configurable Software-as-a-Service model, PureFacts solutions are centred around fees, billings, commissions, reporting, AI/ML driven insights, and decumulation. Their powerful SaaS platform supports large enterprises and multiple lines of businesses on a single instance with advanced line of sight, permissions and workflow capabilities. Their solutions are modular, and built around an advanced fees, billings, and commissions engine—architected to account for a wide range of fee and commissions structures, and billing models for mass market, mass affluent and high net worth business models. Their solutions include:

- Fees, Billings, and Commissions Solutions
- Reports, Insights, Decumulation Tools
- Digital Onboarding and Goals Based Investing Tools

TRACTION/GROWTH

- PureFacts recently acquired Quartal Financial Solutions giving them a global footprint and extending their business from Canada and to the UK, Europe and APAC region. It broadened the company's market reach from wealth management to asset management and servicing. PureFacts and Quartal now have the world's top wealth management fee solutions and one of the world's top asset management fee solutions.
- PureFacts provides solutions to global financial services firms and banks including National Bank Financial, Scotiabank, Fidelity Clearing Canada, Canaccord, Richardson Wealth, Manulife, iA Financial, and Canada Life.
- PureFacts is building capabilities around an ESG (environmental, social, and governance) Reporting Engine. These products will accelerate the transition to a sustainable economy by making Environmental, Social and Governance data available and easy to use.

This document is being provided for information purposes only. It is not designed to be taken as advice or a recommendation for any specific investment or strategy decisions.

Using AI to retain financial advisors

When it comes to the use of AI in wealth management, PureFacts' outlook is simple: AI will not replace asset managers, it will only replace those that don't use it.



PUREFACTS

Artificial intelligence, and its subset machine learning, are revolutionising almost every aspect of financial services and wealth management is no exception. PureFacts, which provides WealthTech solutions to some of the largest global wealth management firms, has recently developed a machine learning model that allows it to predict asset class classes.

Mehrnaz Shokrollahi, AI team lead at PureFacts, explained that the company realised that asset class classification is a tedious manual task and asset managers waste a lot of time doing it. "This is valuable time that the asset managers could be using to create a better portfolio for their clients." Its machine learning model aims to fix this.

The model has a multitude of benefits to both asset managers and the industry as a whole. Shokrollahi said it can deliver reduced operational costs due to the process automation, and hence also increase revenues thanks to better productivity and enhanced user experiences. It also delivers better compliance and reinforced security.

PureFacts is not a one-trick pony and has built a plethora of AI solutions to help asset managers revolutionise their operations. One AI solution the company is developing is the Investor Retention Model, which predicts whether an advisor's investors are likely to leave in 3, 6, 12, or 24 months, based on more than 200 variables. Advisors see a probability assigned to each possible outcome and insights into the factors driving each one. The idea behind this solution is to help firms understand how much AUM is potentially at risk while providing advisors with actionable insights to strengthen client relationships.

Another model is PureFacts' AI-powered Natural Language Processing Model, which interprets advisors' questions as SQL queries. This helps minimise the time advisors spend on fact-finding and hence makes it easier for them to deliver better quality advice. Where traditionally, advisors may have taken half an hour to extract insights for investors, they can simply type or speak queries into the PureFacts platform and get an answer in seconds.

PureFacts is also leveraging AI to more confidently detect anomalies to prevent costly mistakes. Many banks typically run about four different types of reports on the quality of their data and then look through the reports line by line to find anomalies. PureFacts' Data Anomaly Model can catch the errors as they occur and inform users immediately. In this way, advisors can proactively identify and correct anomalous data patterns faster and with far more confidence versus using traditional manual methods.

Machine learning's role in wealth management

Machine learning in finance is now considered a key aspect of several financial services and applications. "This includes managing assets, evaluating levels of risk, calculating credit scores, and even approving loans in retail banking and in wealth management we have seen easier onboarding, more transparent platforms as well as client segmentation, dynamic portfolio building and compliance automation," Shokrollahi said.

There has been a big surge in the role of machine learning in the WealthTech sector, Shokrollahi continued. AI has helped in areas such as portfolio optimisation, predicting investor churn, and predicting investor long-term value. "We have also seen applications of AI in next best product and next best action. There has also been a great interest in personalised ESG funds for asset managers."

When it comes to the uptake of technologies such as machine learning and AI, Shokrollahi said that initially there was some apprehension and reluctance, as with any significant change. "Statistics about the financial services industry's accelerating reliance on technology may well strike fear into the hearts of its professionals." The world of wealth managers is evolving rapidly, as such, Shokrollahi stressed that we need to adapt and cultivate a data culture. "Moving towards data-driven decision-making forces people to change how they behave, and no one likes to change."

Organisations that are data-driven, Shokrollahi continued, have accountability built into them, more so than the organisations making business strategy based on instinct and hunches alone. Moreover, data-driven organisations are positioned to deliver a faster pace of innovation, "a pace that isn't for everyone." ●

How PureFacts is readying asset and wealth managers for rising importance of ESG

Asset and wealth managers are under increasing pressure to implement environment, social and governance (ESG) principles into their offerings. WealthTech software developer PureFacts is helping firms stay ahead.



PUREFACTS

PureFacts was founded in 2010 by Robert Madej, with the aim of creating a firm that could enable worldwide wealth that helps people live their best lives. Being from a family of modest means, he had first-hand experience of what could be achieved through financial investments and education.

Rajini McRae, president at PureFacts, said, "As a mathematician and software developer, Rob knew that he could create technology and he had a vision that by creating some of the best software available to determine accurately with great flexibility how much wealth advisers earned as well as and selling it to wealth and asset managers, he could improve the service those firms provide to their clients and thereby improve the investment outcomes of individuals saving for their future goals."

As a result, the PureFacts platform was born. It is built around a six-stakeholder model and is focused on always doing the best for its clients, employees, partners, investors, community and the environment.

Based in Canada, PureFacts provides wealth and asset management solutions to companies in Canada, the US, Europe, Asia Pacific, Middle East and Africa. McRae stated that its modular solutions, which fit into existing tech stacks, are market leading in providing flexible, accurate and insightful wealth and asset management offerings the help firms grow and run their business.

To ensure it stays ahead of change, it invests 20% of its revenue into research and development efforts. It also works with its clients to create relevant fees, billing and insight solutions. "We also have products that are unlike anything else in the market. Everything is built to be user centric – intuitive and easy to use."

PureFacts has been on a growth surge following the close of a \$37m funding round in December 2021. The capital was supplied by Canadian Business Growth Fund, Round13 Capital and Scotiabank. With the funds, PureFacts was able to accelerate its investments and growth. This included bolstering its sales and marketing divisions as it kept up with the rising demand for its solution.

"During these uncertain time, we are in a fortunate situation driven by our results as well as the funding to continue to invest in our solutions and people to ensure we continue to be market leading to address our client's needs," McRae added.

The rising importance of ESG in wealth management

ESG has become a major talking point over the past couple of years. Governments are doing more to curb climate change and boost equality in the workspace. As part of this, ESG principles are being placed in more regulations, with EU regulation MiFID II the latest to see ESG requirements implemented. The update requires asset managers to include sustainability factors, risk and preferences into suitability assessments.

This is just one of the many new regulations coming into force as regulators make it clear ESG is not something to ignore. McRae said, "We don't see ESG as a trend. It is here to stay. People, particularly young people, see

environmental, social and governance principles as the most important factors in choosing where to spend or invest their money. Companies that don't pay attention to ESG concerns will not exist in the future."

A recent study from Oxford Risk found that half of retail investors are planning to switch some of their investments, including pensions, into ESG investments this year. It also found that 14% of investors plan to move 60% or more of their funds to ESG investments. This is just one report of many that show the rising appetite for ESG. It is no surprise that Bloomberg recently reported that global ESG assets will exceed \$53trn by 2025, representing more than a third of the \$140trn in projected total assets under management.

Companies have been listening to this market demand and many are looking to launch new services to cater to customers. For example, Asset broker Vantage has just launched a global ESG program that aims to support ESG-related activities of its team, such as fundraising for refugees and providing financial education to emerging companies. Similarly, asset manager Legal & General Group launched a new net zero corporate bond that is focused on UK and EU-based institutional investors and wealth managers.

McRae said, "We believe the cost of capital will go up for companies that are not cognizant of the principles of ESG. That has far-reaching implications for businesses that need to raise capital as well as retain their clients."

ESG is quickly becoming a key metric in how successful an asset and wealth manager will be. It is no wonder that there are numerous FinTech companies cropping up to help asset and wealth managers stay relevant. PureFacts is one of those companies.

"PureFacts is developing ESG products that will assist wealth and asset managers in scoring ESG assets," McRae said. "Also, diversity and inclusion are a large part of ESG and PureFacts is a naturally diverse company – over 70% of our employees, in Canada, come from a minority group. I believe that happened because we look closely at what each individual can bring to our company – not at where they come from. We want the best talent and the best thinkers and that has created a natural diversity that allows us to be incredibly innovative. We don't all think the same – so we come up with great ideas that can help our clients."

While ESG is becoming a major part of the financial ecosystem, there are worries of firms greenwashing. This is the term used when an organisation spends money on marketing itself as environmentally friendly, without taking significant steps to actually become green.

Last month, prosecutors in Germany raided the headquarters of Deutsche Bank and its subsidiary DWS over allegations of misleading investors regarding green investments. According to a report from Reuters, the prosecutors were following up on news reports and allegations of a whistle-blower at DWS. Regulators are taking a tough line against greenwashing in a bid to stop greenwashing. The Monetary Authority of Singapore

recently released the first use case of the NovAI solution, which is part of the National Artificial Intelligence (AI) Programme in Finance, which aims to combat greenwashing. Similarly, Hong Kong's Securities and Futures Commission revealed it is looking to adopt global ESG standards to prevent greenwashing cases.

McRae said, "Greenwashing is definitely an issue – but as people become more aware, it will be harder to pretend that you are following the best ESG principles and practices. Technology will also help. And the standardisation of ESG measurements – the financial services industry needs standards that can be used to measure ESG investments – that is the biggest need right now."




"Our employees and clients are at the heart of what we deliver in market solutions as well as what we deliver in corporate citizenship to accelerate our vision."


Why work with PureFacts?


McRae described PureFacts' vision as to "help individuals live their life through the financial solutions we provide to the wealth industry. We not only live this vision with our client solutions but also live this vision through the corporate citizen work that we do under PurePossibility."

PurePossibility was created on the idea that when people have a basic need for food, shelter, education and work, then there is a possibility to attain financial wellbeing if they take one step at a time. Through financial wellbeing they can then help others live a better life. "The flywheel impact takes effect to attain worldwide wealth."

McRae concluded, "Our employees and clients are at the heart of what we deliver in market solutions as well as what we deliver in corporate citizenship to accelerate our vision." ●



 Founded 2018

 Employees: 251-500

 Segments of Financial Services: Banking, Insurance, Cybersecurity/Information security, Compliance & Fraud detection


 Regions of operations: United Kingdom, Europe, United States

Quantexa offers variety of data and AI-based solutions to businesses including anti-money laundering, fraud detection, credit risk evaluation, and customer intelligence platforms. The RegTech firm serves a diverse range of global clients, including banks, insurers, communications service providers, and governments. Quantexa solutions help these organisations make millions of decisions every year, saving time, money, and effort for a broad range of clients. Quantexa's solutions have also benefited society as a whole, as they allow more targeted action against the heinous international crime syndicates that benefit from various forms of financial crime.


QUANTIFIND
 Founded 2009

 Employees: 11-50


 Segments of Financial Services: Banking, Compliance & Fraud detection


 Regions of operations: North America, Latin America, Europe, Asia

Quantifind's Graphyte™ is a SaaS platform that leverages AI and data science to drive significant productivity and performance improvements in AML/KYC risk screening and investigations processes. It does so in part by extracting predictive risk signals from tens of millions of public and commercial data records and making them available in leading case management systems via pre-integrated synchronous and batch APIs. Quantifind is unique in its partnership with the US Government, Polaris and United for Wildlife in defining over 60 complex risk types for its AI to review such as Foreign Malign Influence, Human Trafficking and Wildlife trafficking. GraphyteSearch adds a feature-rich, web-based search application used by analysts to make investigations and reporting substantially more efficient and consistent. Graphyte is differentiated first and foremost by its accuracy in assessing risk and relevance, which it achieves by the unique way it brings together comprehensive data coverage, name science, and AI-driven entity resolution and risk typologies. Its patented data management and search techniques optimise search performance for best-in-class speed and scalability.


Red Marker
 Founded 2013

 Employees: 11-50

 Segments of Financial Services: Insurance, Compliance & Fraud Detection, Consumer/Personal Finance, Investment & Trading, Lending

 Regions of operations: North America, United Kingdom, EMEA, APAC

Red Marker focuses on compliance outcomes and cost optimisation to help legal and marketing teams scale the effective review of marketing content for legal and compliance risk. They utilize a patented Legal Tech Software as a Service platform that enables real-time probabilistic risk identification. Through this innovative artificial intelligence and powerful machine learning capabilities, Red Marker annotates risky content just like an expert would - but faster and at scale. They mainly focus on enterprise customers with high marketing volumes in strictly regulated markets around the world.



COMPANY RESEARCH PROFILE



Founded 2013
 Marlborough, MA, United States
 Employees: 1,001-5,000

www.quantiphi.com
appliedai@quantiphi.com
 Regions of operation: United States, Canada, United Kingdom, Netherlands, Singapore, India

KEY EMPLOYEES:



Asif Hasan
Co-Founder



Reghu Hariharan
Co-Founder



Ritesh Patel
Co-Founder



Vivek Khemani
Co-Founder

Segments of Financial Services: **Banking, Insurance, Customer Experience, Investment & Trading, Payments, Lending**

OFFERING

Quantiphi is an award-winning AI-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of business. We are passionate about our customers and obsessed with problem-solving to make products smarter, customer experiences frictionless, processes autonomous and businesses safer.

PROBLEM BEING SOLVED

Quantiphi focuses on designing and delivering AI-first digital engineering solutions for the Financial Services Industry. This primarily includes developing custom AI ML solutions and building cloud-native data platforms to help the company's customers drive business outcomes, improve innovation, drive operational efficiency, enhance customer experience and reduce costs.

TECHNOLOGY

Quantiphi delivers applied AI and data solutions across the digital services lifecycle, from infrastructure modernization and data migration to descriptive, predictive, and prescriptive analytics. Along this lifecycle, the company predominantly uses technologies such as cloud and edge computing, best in class Artificial Intelligence and Machine Learning techniques which include statistical ML and Deep Learning.

PRODUCT DESCRIPTION

Quantiphi offers several differentiated offerings across the value chain for Banking, Insurance, and Wealth Management:

- Dociphi** is an AI-powered document management platform that uses OCR and deep learning models to fast-track your end-to-end document workflows while ensuring regulatory compliance. Automate routine workflows, process 2x more documents accurately, eliminate manual errors, and generate insights for fraud prevention with dociphi. The wide range of available input and output connectors ensure seamless integration with the consumer's current process flow and the vertically specialized parsers provide industry-leading accuracy for financial documents.
- OneCustomer** powered by cutting-edge AI, helps firms evolve into customer-centric organizations rapidly. With a centralized customer data platform, organizations can have 360-view of customers across all digital facets enabling relationship managers and CRM executives to maintain recurring revenue streams and address persistency issues by targeting customer life-cycle and lifetime value enrichment through the philosophy of Understand, Acquire, Engage and Retain.
 - Understand:** customers' needs and sentiments better
 - Acquire:** new customers faster with improved lead generation and conversion
 - Engage:** with the right customers at the right time
 - Retain:** customers better and improve overall customer lifetime value through smarter cross-sell/upsell decisions
- Touchless Claim** enables Insurance carriers to automate each stage of the claims journey through AI and analytics-driven proactive solutions. Specialized virtual agents facilitate 24x7 real-time assistance, FNOL processing, and document collection. Document understanding, Image recognition & damage estimator modules ensure document verification and claim settlement is performed without human intervention.
- Transaction Fraud & Anomaly Detection** models use strong heuristic pattern recognition and advanced artificial intelligence to identify anomalous transactions in real-time to deny fraudulent transactions. The microsecond response time for such models helps businesses identify repair frauds, staged accidents, or inflated damages.

5. **AI-assisted Lending Modernization** lets you re-imagine the traditional lending processes from onboarding and pre-qualification to risk assessments, closing and servicing, provide superior customer experience and reduce operating costs with Quantiphi's AI-enabled lending solutions
6. **ESG Analytics** solutions suite supplements ESG ratings and enhances the due-diligence process for investors, portfolio managers, and business entities by leveraging state of the art NLP and customer Models to identify customer sentiments, risks, greenwashing etc.

TOTAL FUNDING - \$20M

Quantiphi raised a \$20m Series A round from Multiples Alternate Asset Management Private Limited in December 2019 for market expansion and R&D efforts

PARTNERSHIPS



Google: Quantiphi is an award-winning partner within the Google partnership ecosystem. Quantiphi won the Google Cloud 'Machine Learning Partner of the Year' Award for the Second Consecutive Year in 2018 and was awarded the 'Social Impact Partner of the Year' in 2019. Find out more at: [Google Cloud Partnership](#)



Amazon Web Services: Quantiphi is the 'Rising Partner of the Year 2021' and among 'Top 5 AWS AI ML Advanced Consulting Partner' with a deep understanding of cloud-native artificial intelligence, data, analytics project development, and delivery in AWS. Find out more at: [AWS Partnership](#)



TensorFlow: Quantiphi has been named as a TensorFlow Trusted Partner for Machine Learning-led Business Transformation. As one of the early adopters of TensorFlow, Quantiphi has deployed a wide variety of ML-centric business applications for the customers. Find out more at: [TensorFlow Partnership](#)



Nvidia: As an Elite Service Delivery Partner, NVIDIA's strategic partnership has equipped Quantiphi with access to the best tools to build ML solutions that are interoperable on both the edge and the cloud. Find out more at: [Nvidia Partnership](#)



Looker: As an Advanced Consulting Partner, Quantiphi collaborates with Looker to empower customers to interpret data and accelerate their data-to-insights journey through interactive business intelligence and embedded analytics landscape. Find out more at: [Looker Partnership](#)



Snowflake: As a Select Services Partner, Quantiphi collaborates with Snowflake to empower enterprise customers to modernize their data platform by mobilizing data seamlessly using Snowflake and to execute diverse analytic workloads and accelerate data driven decision making

TRACTION/GROWTH

- Quantiphi serves a global customer base and has added over 50 new clients in 2021 alone.
- Over the next 12 months the company is looking to expand to LatAm and EMEA, while investing and building new and extending existing product lines.
- Quantiphi has been named as a leader in IDC MarketScape for AI IT Services and Forrester New Wave computer vision consultancy.

How Quantiphi helps financial institutions to adopt an AI-first digital engineering mindset



As companies accelerate their digital transformation through data and AI, agility and reimagining the business value chain with high-value scalable solutions across the infrastructure, data, intelligence, automation and experience layers of the technology stack will be the key for ultimate business value realisation, according to Bhaskar Kalita (BK), Global Head of FSI at Quantiphi.

Financial institutions have been replacing their legacy technologies for years and it has been a constant cycle. Technology has evolved rapidly over the past three decades, and each evolution requires a firm to replace their existing stack. While these systems might not be broken, they are not equipped to keep up with the current business environment that meets the customer expectations and provides for differentiated competitive positioning. The trouble is, technology upgrades are not quick, nor are they cheap.

BK explained that since the very inception of information systems, financial institutions had archaic legacy systems like mainframes taking care of the majority of the core systems. At the turn of the century, firms started modernising their core platforms that were easy to use and maintain. These were better than the legacy mainframes but were still huge monoliths that required large scale implementations and significant capital investments, BK said. These new systems also took years to fully

implement and by the time a financial institution had finally got them working, they were likely outdated. "After a while you start seeing business benefits but by then you probably would have burned almost a billion dollars, if it's a large bank and the original business case no longer stands true in an altered market condition."

The advent of cloud and AI/ML enabled solutions has completely altered the way large digital transformation programs are executed. These programs are now more adaptable to market dynamics as execution velocity has increased significantly along with the ability to alter outcomes in real-time. It has enabled platforms to become versatile, connected and easily deployable across businesses without the need of a staggered approach resulting in huge efficiency gains.

Founded in 2013, Quantiphi is an AI-first digital engineering company focused on solving transformational problems at the heart of the business. Its AI-first mindset enables financial institutions to look at their entire technology ecosystem through the lens of AI, starting with the core infrastructure and building the data estate on top of it, which empowers them to drive intelligence and automation and offer last mile services through AI-driven customer experience. More importantly these transformations can be initiated at each level without the need of them being sequential, resulting in faster business value realisation. Quantiphi's clients have often seen value realisation within the first 12 weeks, BK said.

The reason AI is such an integral piece of technology is because of its endless possibilities, BK said. For example, financial institutions are still burdened by paper heavy processes, be it during risk evaluation, customer service or other operations like claims processing, KYC and so on. As more companies become digital, these processes are not simply disappearing, they are just moving online. Whether it is digital KYC, scanning copies of documents, PDFs or regulatory reports, paperwork is not going away, and it still needs manpower and processes that are often slow to extract information out of these digital copies. However, with AI it's now possible to extract various information out of various forms with a high degree of accuracy making these processes truly low touch. Additionally, the increased data elements are helping financial institutions get newer insights about their customers and their products. These insights are ultimately driving hyper personalisation and enabling financial institutions to capture the consumer surplus.

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“The speed at which we have seen our AI business grow, is just unprecedented.”

While AI technology can dramatically improve how a company operates, it is not always met with open arms. As Quantiphi has experienced, there is often a misunderstanding of the technology. “The biggest barrier we have seen is C-suite staff not comprehending and being comfortable with the fact that AI will bring something different,” BK said. “The customer thinks it’s AI is just another software solution, and, in their mind, they tend to compare AI solutions to what they had in the past. They might see it as a bit enhanced, but they will try to compare its implementation, results and evaluation, to what has been done in the past.” However, implementing an AI solution is very different to other types of software and system upgrades. It will have different life cycles and value realisations that will not be comparable to previous technology. If companies want to incorporate AI in their business processes, they need to make the conscious effort to unlearn some of the past experiences and embrace change with an open mind.

Standing out from the crowd

AI has dominated conversations for many years. It is one of the most exciting pieces of technology and promises to revolutionise how companies work. The trouble is this means there are thousands of companies out there building their own AI solution. With such high competition, it is hard to make your AI-solutions stand out from the crowd. But BK believes Quantiphi stands out thanks to its “maturity mantra.” This mantra is specialisation, verticalization and productisation (SVP).

Specialisation is about using AI to solve problems and bolster the technology to get business value. Verticalization is the next logical step. This is taking the techniques used in those specific AI solutions and creating industry specific solutions that address problems for that particular industry. Finally, Productisation sees Quantiphi look at the various reusable use cases and then create productised solutions that will enable customers to use these solutions virtually off the shelf with minimal customisations and further reduce the time to market. Quantiphi works with various lighthouse customers who are willing to partner in building such productised solutions and then takes them to a larger addressable market. Meeting the specific needs of a customer is not just down to the type of solution they need, but also the type of support needed to use it.

BK said, “In most cases, half of the users in an organisation do not know the extent of AI solutions possible in their ecosystem or how they will work. They just don’t have the right skills to comprehend the magnitude of these solutions. So, you just can’t throw a particular solution from one from a previous client into the next, because the customers will have very different levels of maturity.” By having a solution that can be customised to a client, it gives better flexibility and ensures all customers can use the technology. This attention to support is how Quantiphi has continued to grow and attract more and more customers, even through a worldwide pandemic.

When the Covid-19 forced many countries around the world to implement lockdown measures, many businesses were met with fear. There were a lot of concerns of how companies would continue to operate. Quantiphi was not different from this. “We were originally nervous when the pandemic started,” BK explained. However, after the initial fears of the pandemic settled, the company experienced a huge uptick in demand. With the pandemic forcing businesses to have staff work remotely and conduct more of their operations online, there was a massive need for new AI-powered infrastructure that was quick to implement. “Everybody wants to create automated processes, and everybody wants to reduce dependencies on manual tasks. So, the speed at which we have seen our AI business grow, is just unprecedented.”

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“The biggest barrier we have seen is C-suite staff not comprehending and being comfortable with the fact that AI will bring something different.”

At the end of 2019, the company had around 1,000 employees, but in just 18 months it has increased to 2,500. Quantiphi is looking to continue this growth momentum and is in the process of expanding its international presence, which will include launching its operations in Singapore and Central Europe. Alongside this, the company is looking to continue its efforts productising its technology, with new features planned for mortgages and retail banking.

BK concluded, “Whenever a customer comes to work with Quantiphi, they should be confident they will have a partner who will bring the best of the breed when it comes to technology and talent. They will also benefit from the best of the breed when it comes to being flexible and helping the customer ecosystem mature, alongside solving a business problem.” ●

RESISTANT.AI



Founded 2019



Employees: 51-100



Segments of Financial Services: Banking, Insurance, Compliance & Fraud Detection, Payments, Lending, BNPL



Regions of operations: Europe, North America

At Resistant AI, they have been using machine learning to hunt cybercriminals for over 15 years and have followed them into the field of financial crime. The company developed state of the art machine-learning techniques they call Identity Forensics to make the AI and automation systems of financial companies resilient to manipulation and attack. By analysing everything from submitted documents to ongoing customer behaviours, Resistant AI uncovers and prevents multiple attack types involving document forgery, serial fraud, synthetic identities, account takeover, money laundering and more. Smooth and instant decisions are key aspects to any modern financial service. They stop the automated systems and AI powering those decisions from being attacked by fraudsters. Resistant AI can even help detect as-yet unseen and scaled fraud methods that may threaten financial services in the future.



Scanbot SDK



Founded 2011



Employees: 51-100



Segments of Financial Services: Banking, insurance, Customer Experience, Tax & Accounting



Regions of operations: USA, Europe

Scanbot offers a B2B product, the Scanbot Software Development Kit (SDK), enabling enterprises to easily integrate data capture capabilities such as barcode scanning, document detection & scanning, and data extraction functionalities into their mobile (iOS / Android) and web applications. The Scanbot SDK is a 100% offline solution that works exclusively on the device. It will never send data to any external server except yours. With additional features like encryption, Scanbot ensures that data is only shared between your users and your server, both at rest and in transit. The SDKs are compatible with almost every app- and web-based development platform and can be easily integrated within a week. Industry-leading firms like AXA, Generali, Deutsche Telekom, and ArcBest already rely on Scanbot SDK.

sentiance



Founded 2015



Employees: 51-100



Segments of Financial Services: Insurance, Banking



Regions of operations: Global

Sentiance is the most complete provider of motion insights. We turn motion data into contextual insights. We use behavioral change techniques to enhance customer experience by creating impactful, sustainable, personalized, and safer solutions. Sentiance empowers the world's leading companies to create personalized engagement solutions, delivering technology for a new human-centric economy where the user is in control of data.



**COMPANY
RESEARCH
PROFILE**



PRODUCT NAME:
Sentient Analytics

Founded 2016

- London, United Kingdom
- www.sentientmachines.tech
- hello@sentientmachines.tech
- Employees: 1-10
- Regions of operation: United Kingdom, Australia, United States, Europe

KEY EMPLOYEES:



Dr Danica Damljanovic
Founder



Nicholas Heitz
Senior Software Engineer



Gary Wood
Chief Intonation Officer

Segments of Financial Services: **Customer Experience, Compliance & Fraud Detection**

OFFERING

Thanks to the company's ground-breaking technology, the Sentient Analytics platform is the only solution on the market that delivers benefits of reduced compliance burden and increased team efficiencies out of the box. This delivers immediate time to value, as customisation is performed on the fly and no AI expertise is required from the client.

PROBLEM BEING SOLVED

Financial compliance is a growing concern. Not only have regulations tightened, the surge in vulnerable customers coupled with an increased number of agents working remotely means companies cannot afford to be apathetic in their approach to monitoring customer communication.

TECHNOLOGY

Designed by a world-class scientist who brought Apple's Siri to life, Sentient Analytics platform comprises over 25 unique real Artificial Intelligence algorithms. The company's cloud-based secure platform seamlessly plugs into your contact centre's telephony system and begins delivering insights out of the box.

PRODUCT DESCRIPTION

Sentient Analytics is an advanced conversational analytics platform that enables 100% monitoring of customer interactions, immediately surfacing and alerting you to high-risk conversations critical to the business. The platform offers full transparency of all contact centre communication, categorising and flagging non-compliance, emerging issues, and agent performance challenges. By reducing manual call reviews, the platform not only increases the efficiency of your QA process by 90%, but can also cut costs by more than 60%.

Sentient QA & Compliance:

- Real-Time Identification of Vulnerable Customers - With the company's unique algorithms capturing both lexical and acoustic sentiment, Sentient Machines offer high quality insights to help you identify vulnerability and prioritise service to those most in need.
- Dynamic Scripting - Identify agent script and procedural adherence to ensure compliance across all interactions. Simply Define what you're looking for within minutes and let the algorithms do the rest.
- Effective Quality Management and Pre-empt Complaints - The platform will give a score to each customer interaction from -1 to 1 to highlight critical conversations that have high probability of converting into complaints. Additionally, the platform directs you to which part of the conversation requires review, saving you thousands of hours.

Sentient Customer Insights:

- Decipher Your NPS - Sentient Insights will leverage your customer interactions to extract the reasons behind your customer behaviour.
- Root Cause Analysis - Sentient Machines' algorithms will extract the reasons for calls, and automate a conversation summary - saving agents time and increasing productivity.
- Emerging Trends In Real-Time - The platform will surface what customers like or dislike about your products/services, giving you the power to keep customer needs at the heart of every decision you make.

TRACTION/GROWTH

- Sentient Machines partners with industry leading companies including: Deloitte, Fujitsu, Artisiam
- Sentient Machines clients include challenger banks and fast-growing fintech companies.
- A top UK bank wanted to effectively identify and manage customer complaints at scale but lacked a unified view across the entire customer journey. The Sentient Analytics platform enabled the bank to process all recorded communication including calls, email, letters and forms, pinpoint the main drivers behind complaints and analyse each interaction, including 1.5% that were identified as vulnerable customers.

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Why firms should be using tools like Sentient Machines for customer monitoring

As customer experience becomes one of the most important differentiators for banks, poor customer monitoring tools mean firms are wasting their valuable data by not using it.



SENTIENT MACHINES

Empowering Smarter Communication

There has always been a need for streamlined customer experiences, but the pandemic has made it even more crucial. People have come to expect a level of simplicity when interacting with a company online and if these expectations are not met, they are likely to move to another provider. According to a report from Applause, 65% of people would abandon a digital service due to a difficult sign-up process.

A recent study from Temenos also highlighted why customer experience is so important. It found that four in five bankers in the UK believe financial institutions will try to differentiate themselves from competition through customer experience, rather than products and services.

Sentient Machines is a company helping firms monitor their customer interactions, to ensure compliance and customers have the best experiences. The idea for Sentient Machines stemmed from a poor customer experience Dr Damljanovic had with a bank. Dr Danica Damljanovic, founder of Sentient Machines, said, "After failing to resolve a query with my bank for over an hour, I realised that they needed transformation

in their customer experience approach. This quickly expanded into quality assurance (QA), and compliance, leveraging the power of true cutting-edge AI analytics for 100% calls in real-time."

There was a need to improve how customers engaged with banks, but Dr Damljanovic noted there was an untapped dataset from millions of daily customer interactions that could shape improvements. "Many companies collect limited customer feedback post interaction, and by the time this feedback is received the customer might have already left," she said.

As a result, Sentient Machines was founded in 2016. When first building the platform, the team decided to focus on the financial industry, simply because they wanted a data rich sector that would help make fully robust algorithms. At the same time, FinTech was starting to take hold of the market, making customer experience-focused tools much more valuable for firms looking to stay relevant.

Sentient Machines is now the only plug and play solution on the market that analyses 100% of customer interactions, both text and speech, with critical insights to drive customer experience and incisive business decisions in real-time. The company leverages more than 25 proprietary real AI algorithms to identify all critical information. Its platform can categorise and flag emerging issues, non-compliance and agent performance.

Through its technology clients have improved agent performance by 70%, QA efficiency by 90%, and reduced churn and increased revenue by up to 60%, while compliance risk has been slashed by 50%.

One of the capabilities of the technology is to identify vulnerable customers. As part of guidance from the UK's Financial Conduct Authority, it found that 24 million adults – just under half of UK adults – presented one or more characteristics related to vulnerability. These include physical/mental health issues, addictions such as gambling, difficulty with decision-making and more. The regulator also stated businesses should do more to ensure vulnerable customers receive fair outcomes.

Sentient Machines' technology can automatically identify vulnerable and potentially vulnerable customers across all channels, in real-time. It can then alert users to high-risk conversations, with each interaction being scored in terms of urgency for review, and agent wellbeing and performance. It then puts signposts at the important/high-risk moments in the interaction to streamline reviews.

When creating the platform, Sentient Machines was met with the challenge of finding data to train and test their algorithms. Dr Damljanovic explained, "We scraped the internet until we were able to validate algorithms with enough real data. We also used different algorithms at different stages to balance sparsity and accuracy and even today we have a suite of different algorithms that are attempting to solve one problem and we can either choose which one to run, or more often use all of them together to maximise the accuracy."

Why customer monitoring is crucial for banks

Customer monitoring is about keeping track of interactions with employees and customers to ensure all needs are met as well as regulatory requirements. The reason this is important is because the right technology can reduce and eliminate compliance risk, while improving the quality of the services and product, Dr Damljanovic stated. Firms can gain critical business insight and protection from unknown unknowns.

Instead of just monitoring between 1% and 4% of customer interactions manually, which is typically the norm, firms can see everything with Sentient Machines. "Instead of being on the back foot, we enable companies to foresee events that will negatively impact their business, e.g., by helping them preempt complaints while at the same time alerting them of any events that require special treatment such as identifying vulnerable customers."

Revolutionising customer monitoring

As mentioned, improving customer experience has become an important topic for most firms. This means there are a lot of technology companies looking to fill this need. With so much choice, it can be overwhelming to find the best product, but Dr Damljanovic believes Sentient Machines is revolutionising the space by empowering 100% monitoring in real-time with cutting-edge AI that works out of the box.

Dr Damljanovic explained that Sentient Machines helps "to find a needle in the haystack and alert you of events that can have negative impact on your business as well as positive and in this way you are pre-empting undesired events while stimulating potential revenue opportunities."

Sentient Machines also stands out from competition by offering a real AI solution that is ready out of the box and can easily plug into a small or large system and transform their customer experience.

The response from customers

Sentient Machines has grown considerably since its early days. With partnerships with industry leading companies, including Deloitte, Fujitsu and Artisiam. It also boasts challenger banks and fast-growing FinTech companies among its customers.




"We've completed transformation of vulnerable customers providing invaluable insights for a challenger bank. Our system not only identified vulnerable customers correctly but also flagged if they haven't been treated fairly. For a FinTech company in London, we reduced compliance risk by 50%, by identifying potential breaches that could lead to fines."


Whenever a company starts working with Sentient Machines, Dr Damljanovic explained that many are met with sheer "Disbelief in the art of the possible. However, after seeing the demo of our platform everyone is keen to try it, and our current clients are extremely happy. As a result our conversion rate from pilots is 90%"

To ensure it stays ahead of the market, the company is also assessing its customer feedback to upgrade systems and implement new features where desired. Currently, it is improving its agent communication metrics to enable enhanced agent development. Additionally, it is looking to add a wellbeing module in the near future. The company also has a major growth initiative for the year. This includes tripling its team size, expanding its roster of clients and entering the US market.


As to why a company should work with Sentient Machines, Dr Damljanovic said, "Our clients value the personal experience with a niche team passionate about AI and humans working together, the synergy of humans and robotics. We are on a mission to educate not sell, and we are genuinely interested to see the transformation using our technology so we will provide unlimited training sessions to enable our clients to fully thrive." ●



 Founded 2012


 Employees: 11-50

 Segments of Financial Services: Investment & Trading


 Regions of operations: Americas, APAC, EMEA


Sentifi is a leading FinTech company in the alternative data provider space. Sentifi transforms traditional and alternative raw data into investment analytics, supporting institutional investors across multiple stages of their decision-making process. They have been recognised by prospects and clients as a leading intelligence provider, having purposely built its AI platform to solve the complex problem of detecting investment signals from large volumes of unstructured data in the form of social media, news, and blogs. Sentifi's AI engine developed over 10 years is listening to over 500 million tweets, over 1 million news, blogs and forums published a day to surface financially relevant content in order to distill alpha-generating opportunities and early warning signals to manage investment risk.



 Founded 2019

 Employees: 51-100

 Segments of Financial Services: Compliance & Fraud detection


 Regions of operations: Global


Sentinels supplies businesses with transaction monitoring capable of real-time identification of suspicious activity using an adaptive ruleset powered by machine learning models. This is combined with post-event transaction monitoring and cross-institutional data to create actionable client profiles for fast and effective investigations to detect and report instances of financial crime. In April 2022, Sentinels was acquired by Fenargo, the leading provider of Customer Lifecycle Management technology solutions for financial institutions. The acquisition enables Sentinels to scale rapidly, increase its global footprint, and strengthen its ability to serve the needs of larger financial institutions.



 Founded 2013

 Employees: 251-500

 Segments of Financial Services: Cybersecurity/Information Security, Compliance & Fraud Detection, User Access Governance and Administration

 Regions of operations: Global

Sequaretek offers end-to-end security in the areas of enterprise threat monitoring and incident response (Percept XDR), device security (Percept EDR), identity & access governance (Percept IGA) through their own AI driven Percept Cloud Security Platform. In 2021, Percept processed over a trillion events and prevented 50000 attacks for its 100+ customers across US, Europe, Africa and Asia Pacific. The platform was featured by Gartner in its recent report on "Tech Innovator report on AI in Attack Detection". Furthermore, Sequaretek was covered by leading analyst firm Avasant in their latest Cybersecurity Radarview™ as a Challenger in cybersecurity. Sequaretek was also a part of the ICBA Accelerator Program (2022), Tampa Bay Wave's CyberTechX Accelerator Program (2022), and was named as the MVP at the FIS FinTech Accelerator Program (2020).



Founded 2016



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Customer Experience



Regions of operations: North America, United Kingdom, Ireland, Western Europe, APAC

ServisBOT helps businesses automate interactions across customer and employee journeys using AI-powered virtual assistants and chatbots. The platform helps businesses orchestrate all bots in their ecosystem, with an eye towards security, compliance, ease of integration and analytics, for better business outcomes. Popular use cases include quote helper, scheduling, onboarding, call deflection, automating live chat and email, collections, complaints, IT help desk and service automation. The platform gives business users and enterprise developers the tools to get digital AI assistant solutions to market faster. ServisBOT's Conversational AI platform allows businesses to build chatbots and virtual assistants that automate key customer and employee interactions. The company's technology makes it easy to build higher performing, more accurate bot experiences that integrate securely with business systems while enabling IT to centralize, manage, maintain, and scale conversational AI solutions across the organization.



Founded 2019



Employees: 11-50



Segments of Financial Services: Compliance & Fraud Detection



Regions of operations: Global

SignD Identity was founded in 2019 after realizing that there was no seamless solution for banks to onboard customers purely online. In 2021, the company launched the SignD Quantum Platform, to deliver tailored KYC, KYB and risk processes within days instead of months. SignD's custom-built, proprietary platform unleashes the combined power of 60+ different onboarding, compliance, signature, and payment functionalities. SignD's focus is maximising conversion while keeping compliant with financial services regulations.



Founded 2001



Employees: 1,001-5,000







Segments of Financial Services: Banking, Insurance, Cybersecurity/Information Security, Compliance & Fraud Detection



Regions of operations: North America, EMEA, APAC




Smarsh enables companies to transform oversight into foresight by surfacing business-critical signals in more than 100+ digital communications channels, including WhatsApp, Zoom, Slack, Microsoft Teams, and many others. The company serves a global client base spanning the top banks in North America, Europe, and Asia, along with leading brokerage firms, insurers, and registered investment advisors and U.S. state and local government agencies. They provide financial firms the means to leverage all of their communications data as a strategic asset so they can uncover hidden risks and opportunities, handle the speed and scale of modern communications, and safely govern sensitive data so they can meet regulatory requirements and better protect their reputations. Additionally, the Smarsh Enterprise Platform is a major step forward for regulated organizations, enabling them to illuminate risk and insights across petabytes of digital communications generated by many different sources.



-  Founded 2017
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, Compliance & Fraud Detection, Lending, Risk
-  Regions of operations: North America, Europe, Asia, South America





Stratyfy, a female-led FinTech, is on a mission to accelerate financial inclusion by providing greater visibility and less bias for critical financial decisions that impact millions of people. Stratyfy delivers a growing suite of proprietary machine learning products that enable financial institutions to optimise credit risk assessment and fraud detection while minimising risk and bias. Their SaaS solutions are easy to implement and understand with no-code development, core system integration, & live execution via API. With Stratyfy, companies can serve more customers and drive better business outcomes.



-  Founded 2019
-  Employees: 11-50
-  Segments of Financial Services: Banking, Insurance, Compliance & Fraud Detection, Real Estate, Investment & Trading
-  Regions of operations: United Kingdom, Europe, North America

Sust Global is developing data-driven products that enable every financial and business decision to be climate-informed. The company provides an analytics dashboard and APIs for our customers to assess climate risks and opportunities, and integrate these insights directly into organizational workflows. Specifically, Sust Global provides validated geospatial climate risk projections to a high level of granularity across time horizons, locations, and climate hazards. Sust Global's validated geospatial data enables their customers to make the most accurate and relevant decisions about the future of their business.



-  Founded 2011
-  Employees: 51-100
-  Segments of Financial Services: Banking, Insurance, Customer Experience, Cybersecurity/Information Security, Compliance & Fraud Detection, Consumer/Personal Finance, Real Estate, Investment & Trading, Tax & Accounting, Payments Lending
-  Regions of operations: Mostly Europe with presence globally

With over ten years' expertise, six offices, customers in more than 20 countries, and first-class partners, Tecalis helps leading companies in all fields solve their biggest technological challenges, creating innovative business solutions that improve the digital experience and security for millions of users. Tecalis offers a SaaS stack of digital products made to lead that cover six top-demanding fields: Identity Verification (KYC/AML - Digital Onboarding), Voice and Face Biometrics powered by IA and ML, Electronic Signature, Certified Communication (MFA&SCA Strategy, KBA), Anti-Fraud Controls (Prevention, Analysis & Risk Management), Automation (RPA&BPM, Comprehensive Digital Transformation). Tecalis approaches these fields from a comprehensive perspective that allows our clients to grow, develop, and expand while increasing productivity, efficiency, and security. Through digitisation, we help our clients comply with the most demanding regulatory standards.



COMPANY RESEARCH PROFILE



PRODUCT NAME:
SensaAML™

Founded 2008

Palo Alto (CA), United States

www.ayasdi.com

info@ayasdi.com

Employees: 11-50

Regions of operation: United Kingdom, United States, India, Ukraine

KEY EMPLOYEES:



Simon Moss
CEO



Daniel Bastin
Chief Revenue Officer



Warren Zafrin
Chief Technology Officer

Segments of Financial Services: **Compliance & Fraud Detection, Financial Crime**

OFFERING

Symphony AyasdiAI is the world's leading enterprise platform for automated business value discovery and advanced AI-based insights. Financial services organisations rely on Symphony AyasdiAI to revolutionise the discovery of risk and profitability opportunities. The company's AML solution provides unparalleled predictive insight into the exact criminal behaviours that put financial firms most at risk.

PROBLEM BEING SOLVED

Ayasdi provides firms with a complete picture of criminal behaviour through unparalleled, predictive insights to discover crime and other fraudulent activities. Using a powerful combination of artificial intelligence and machine learning, Financial Institutions can definitively pinpoint risk, drastically reduce the time to identify genuine anomalies and achieve operational effectiveness.

TECHNOLOGY

This technology is based on an event-driven architecture where data and analysis are processed as data is ingested and events are constantly changing. Combining Ayasdi's ability to process data when events change with an agile model that grows with the client's data, its AI detection solution extracts and analyses data to baseline normative behaviour while developing a map of risk based on the customer's financial transaction relationships.

PRODUCT DESCRIPTION

SensaAML™ utilises groundbreaking technology to combat financial crime by analysing, discovering and interpreting financial data's shape and structure to identify criminal behaviours and laundering networks. Ayasdi's solution deciphers customer data to reveal more than double the information typically leveraged by other AML systems, leading to a greater discovery of nefarious behaviour and unknown criminal threats. This new application architecture can ingest billions of customer data points and applies an advanced AI to explore the hidden relationships and patterns within the data, thus highlighting criminals' suspicious behaviour.

SensaAML's approach is targeted at the key aspects below:

Anomaly Detection: Unsupervised learning that targets customers displaying unusual activity. Over 500 behavioural features are used to determine groupings of customers who share similar behavioural, transactional and other characteristics. Sensa offers Anomaly Detection powered by a fully explainable unsupervised machine-learning model that targets customers displaying unusual activity. Over 500 behavioural features are used to determine groupings of customers who share similar behavioural, transactional and other characteristics. Entities are scored with respect to other entities within their specific behavioural group, and anomalous behaviour can be used to identify previously uncovered risk. Using a broad set of approaches including unique topological analysis, SensaAML finds anomalous and hidden behaviour in a very sophisticated yet explainable way.

Change in Behaviour: To understand the underlying patterns of all customers and spot when material changes in activity occur.

L3/SAR Similarity: Supervised learning that focuses on the similarity of behaviour to historical L3/SAR investigations.

Tune and Prioritise: SensaAML comes with several out-of-the-box detection models combined to provide enhanced coverage against known and unknown risks. The end result delivers a virtual, risk-based view of a customer, represented in a simple-to-understand and easy-to-use business user environment.

TRACTION/GROWTH

- Ayasdi partners with leading global companies that include American Bankers Association, ACAMS, ACFCs, Sionic and Treliant
- For one specific client, SensaAML realised a 200% increase in risk discovery, which resulted in a 500% increase in operational productivity.
- Ayasdi's applications are responsible for many of the operational deployments of artificial intelligence for leading global institutions in the Fortune 500.

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How Ayasdi is fighting financial crime

In the face of highly sophisticated modern cyber criminals, inefficient legacy systems and an increased reliance on digital channels, Ayasdi is empowering its clients to fight financial crime more successfully.

Symphony AYASDI

Ayasdi was formed in 2008 as a pharmaceutical, oncological and intelligence research company, the focus being on spearheading unsupervised, but fully explainable, machine learning to uncover hidden patterns in data in the discovery of cancer, drug efficacy and other diseases.

Now, the company's sole mission is to "super charge" financial institutions to overcome their financial crime challenges. It does this by providing integrated (Fraud, AML and financial crime) solutions to financial institutions.

According to Ayasdi's CEO Simon Moss, soon after its acquisition by SymphonyAI, an enterprise AI company, the company became the platform for a \$300m multi-industry market leader. "The leadership team had the foresight to know that Ayasdi's ability to discover the 'unknown unknowns' in data could alter the direction of financial crime discovery."

The ultimate weapon

Since that time, Moss said Ayasdi has homed in on helping financial institutions detect money laundering, fraud, cybercrime and internal misconduct. He said the company's results in the discovery of crime that had been completely missed by others has been "extraordinary," and as a result of such an improvement in detection, Ayasdi has also transformed the operational costs of false positive burdens that have previously undermined effective crime fighting at financial institutions.

Moss said the company introduced its "secret weapon," Sensa, in 2021. Unlike existing legacy systems, Sensa identifies the most-complex, opaque and deliberately hidden attacks a financial institution can experience.

"What's extraordinary about Sensa is that it detects criminal activity using exactly the same data used by the banks' current systems, maximising 'information yield' and finding what existing systems miss."

Using Sensa, Moss continued, Ayasdi's clients have contracts demanding at least a 200% increase in material crime detection (SARs). A 60%-plus reduction in false positive alerts, and as much as a 500% increase in operational productivity.

"These are the baseline numbers we contract on. Also, the integration of money laundering and fraud detection has enabled Ayasdi to help our clients discover causality between the two activities. In a nutshell, Sensa is the ultimate weapon financial systems can have in their arsenal to stay ahead of criminals and meet regulatory obligations."

Ayasdi also has its finger on the pulse of future challenges. Moss added that, with an eye on the emerging cryptosphere, Sensa also provides a future-proof solution to empower firms with holistic visibility into their AML, fraud and security programmes.

Overturning legacy systems

One of the most-pressing challenges, according to Moss, is that the legacy systems used by most banks today are "worse than worthless" in the face of growing sophistication of modern cyber criminals, noting that false positives currently run 98%-99%.

"The focus of many financial intelligence units (FIU) as a result, is not on catching criminals, but managing the unnecessary number of false alerts.

"The result is often the institutionalisation of the very risks and attacks we are trying to catch. Bad actors have not been outsmarting banks for more than a decade, they have simply been able to stay in the noise as the tools being used to catch them fail."

This only got worse during the pandemic, as more people were forced to rely on their computers for personal and business transactions. In addition, as virtual currencies have become more mainstream, Moss said cyber criminals are taking advantage of the intrinsic anonymity of crypto transactions.

The role of AI

AI has the potential to completely revamp the way financial crime is detected, increasing transparency, and transforming cost effectiveness in one go. For example, Moss said Ayasdi's Sensa platform processes data as events change and combines it with an agile model that grows as the client's data grows.

This "organic discovery" enables constant evolution of criminal detection because new data, behaviours or asset classes or regions are added. "Just like as a body ages and changes, so does the ecosystem within a bank's data. It is critical that the monitors of that data change and evolve as the body of the bank grows and changes," Moss said.

Moss concluded by saying that Ayasdi is driven by the opportunity to make meaningful contributions to fighting some of the most pressing crimes in society. "Money laundering sustains the most heinous of criminal activities, from terrorism to human trafficking to the narcotics trade.

"None of these would be able to survive if criminals weren't able to funnel their tainted money into the global financial system. Our technology helps stop these activities dead in their tracks and gives all of us the chance to make a difference." ●

Under regulatory pressure, this Tier-1 bank needed to identify significant risk that their legacy TMS couldn't find.

The commercial, retail, corporate and correspondent bank was under considerable pressure to meet regulatory SLAs for investigatory burndown. It was imperative for them to identify risk that their legacy TMS was missing.

OBJECTIVE:



Increase visibility of true risk (SARs) currently undetected.



Reduce false positive burden from current TMS.

The client provided almost two years' of anonymized data for one business line. With the data being an exact replica of that put into its legacy TMS, deployment was reduced to hours instead of months.

THE RESULTS:

Using the same data as the client's legacy TMS, Ayasdi SensaAML™ uncovered a wealth of new, high-risk events and previously unknown or hidden customers.



81x

Risk to alert ratio improvement



+263%

SAR increase vs Legacy TMS



77%

Reduction in False Positives



Architecture

Leverage existing data; Deployment agnostic (cloud, on-prem, SaaS); scalable, secure, future proof



Program Delivery in 6 weeks



FIU confirmed 20+ new risks in addition to the existing SARs. None were previously identified by the bank's existing TMS. All 20+ were recommended for SAR processing.



Founded 2017



Employees: 51-100



Segments of Financial Services: Cybersecurity/Information security, Compliance & Fraud detection



Regions of operations: United States

Theta Lake's multi-award winning product suite provides compliance and security for modern collaboration platforms, utilizing over 40 frictionless partner integrations that include Cisco Webex, Microsoft Teams, RingCentral, Slack, Zoom, and more. Theta Lake can capture, compliantly archive, and act as an archive connector for existing archives of record for video, voice, and chat collaboration systems. In addition to comprehensive capture and archiving, Theta Lake uses patented AI to detect and surface regulatory, privacy, and security risks in an AI assisted review workflow across what is shared, shown, spoken, and typed. Theta Lake enables organizations to safely, compliantly, and cost-effectively expand their use of communication platforms. Visit them at ThetaLake.com; LinkedIn; or Twitter at [@thetalake](https://twitter.com/thetalake).



Founded 2014



Employees: 251-500



Segments of Financial Services: Insurance



Regions of operations: United Kingdom

Tractable is an Applied AI company that uses the speed and accuracy of artificial intelligence to visually assess cars and homes for accident and disaster recovery. The company's solutions aim to help people work faster and smarter, while reducing friction and waste – better for businesses, their customers and the planet. Trained on millions of data points, Tractable's AI-powered solutions process more than \$2 billion in vehicle repairs and purchases annually, and connect everyone involved in insurance, repairs, recycling and sales of cars and properties – helping people work faster and smarter, while reducing friction and waste. Tractable AI is the tool of choice for over 35 of the world's top 100 insurance carriers. Backed by Insight Partners and other top-tier investors, our world-class research and engineering team is based in London, with offices across North America, Asia and Europe.



Founded 2015



Employees: 1-10



Segments of Financial Services: Investment & Trading



Regions of operations: Europe, United States

Tradefora is an innovation driven FinTech provider, operating since 2015, with expertise on best execution and a core mission of making the OTC markets more transparent for all market participants. The company's product architecture is based on its ability to collect an unlimited number of trading data sources, aggregate that data in real-time into benchmark price indices, and provide visual analytical tools and alerts to institutional and retail clients. Tradefora offers 4 unique B2B products (FeedGuard, DataGuard, TradeGuard and TCII) and 2 B2C products (Tradefora Composite Index benchmark and TradeGuard), solving several financial industry problems for brokers and their clients. All of Tradefora's products are built 100% in-house using proprietary technology and carve out its own niche in historic and real-time market data service segments.



COMPANY RESEARCH PROFILE



A Visa Solution

PRODUCT NAME:
Open Banking Platform

Founded 2012

Stockholm, Sweden

www.tink.com

sales@tink-germany.com

Employees: 500+

Regions of operation: Europe

KEY EMPLOYEES:



Michael Sittek

SVP, Commercial Growth Initiatives & Strategic Clients



Martin Schmid

VP, Reg/Tech

Segments of Financial Services: **Banking & Lending, Payments, Connectivity**

OFFERING

Tink is Europe's leading open banking platform that enables banks, fintechs and startups to develop data-driven financial services. Through one API, Tink allows customers to access aggregated financial data, initiate payments, enrich transactions, verify account ownership, and build personal finance management tools.

Tink connects to more than 3,400 banks that reach over 250 million bank customers across Europe.

Founded in 2012 in Stockholm, Tink became a wholly owned subsidiary of Visa in 2022. Tink's 500 employees serve more than 300 banks and fintechs in 18 European markets, out of offices in 13 countries. Tink power the new world of finance. For more information, visit tink.com.

PROBLEM BEING SOLVED

Tink fuels financial institutions and their suppliers with open banking and analytics technology to extend their capabilities to fight both fraud and to follow regulatory obligations in real time within a smooth customer journey.

Thus, Tink provides state of the art bank account data access and analytics for compliance, onboarding, credit risk and fraud management.

Typical use cases are instant verification of account ownership, verifying income in real-time, data access that enables better risk decisioning, integrated low-cost payments, access to standardised transaction data and money management technology.

Or in a nutshell: Tink enables its customers to build seamless, smart services with the company's ready-to-go financial data products – each developed to solve specific problems and bring value to both businesses and consumers.

TECHNOLOGY

Tink is a cloud-based 'platform as-a-service', enabling customers across Europe to grasp the opportunities that open banking presents and build digital tools through a single API.

Tink's REST-API is well documented and easy to integrate in any environment with extensive resources on how to integrate with Tink. Examples include Javascript-Widget for Web Integrations and Tink's mobile SDKs for App Integrations.

PRODUCT DESCRIPTION

The Tink platform exists so customers can build seamless, smart services using financial data. That's why Tink has built a range of ready-to-go products, each developed to solve specific problems and bring value to both businesses and their customers.

Account Check

Instantly verify account ownership using real-time data straight from a user's bank account - creating a quick and simple payment setup. A process that is fully digital, speedy and safe.

Transactions

Raw financial data can be messy and hard to understand, and a lot of work is needed before it can become valuable. But not with Tink. With Tink's Transactions, you can get financial data from over 3,400 banks in 18 European countries – all in the same neat, easy-to-see format.

Payment Initiation

Each online payment solution comes with its own costs and complexity. But with open banking unlocking access to Europe's payment infrastructure, you can now embed direct account-to-account bank payments in any digital journey. This means significantly lower fees, less complexity, and more control over your end-to-end experience.

Income Check

Traditional income verification methods usually take a lot of time and effort – and still provide outdated or incomplete information. Tink's Income Check solves that by letting businesses instantly verify someone's income with secure, real-time data from their bank account. This means better results for your business, and a seamless experience for your customers.

Risk Insights

Having an in-depth understanding of customers' risk profiles has always been a challenge. Most data sources used to evaluate applicants are outdated, costly and fall short in providing a measure close to the true risk value. With open banking and data engineering, Tink's Risk Insights product can give you a full overview of all the (often overlooked) 'risky' patterns.

Money Manager

Personal finance management tools have become a must-have for any digital banking experience. But users want more than just basic information. Tink's Money Manager lets you bring your customers real value by offering personalized financial advice and actionable insights that are relevant and unique to their situation.

 **TRACTION/GROWTH**

Tink clients include: PayPal, SEB, Nordea, American Express, Kivra and many more.

Tink connects to 3,400+ financial institutions across 18 European markets, with the ability to reach more than 250m bank customers. More than 10,000 developers are using the Tink platform.

Through its acquisition of German open banking platform FinTecSystems, Tink enables connectivity to 99% of banks in the DACH region, with three out of every four online credit decisions in Germany involving their technology.

Case Study: aifinyo AG from Dresden has set itself the goal of finding fast and individually suitable financing solutions for freelancers and entrepreneurs. The approximately 90 employees of the technology-oriented financial services provider support customers in all questions concerning finance and give them more time for the essentials so that they can focus on their core business, grow and become more successful.

 **MANAGEMENT BIO****Martin Schmid, VP, Reg/Tech**

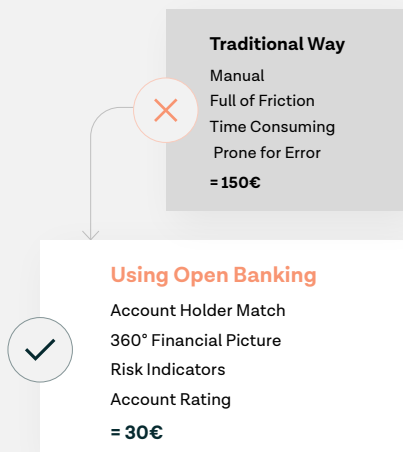
Martin Schmid started his professional career within the core team of Payment Network AG, he successfully built up the Inside Sales Team at SOFORT AG. After merging with Klarna, he held the position of Director Commercial Operations DACH as part of the Management Board at Klarna GmbH. In 2016 he joined the management and founding team of FinTecSystems being responsible for entire market operations. Currently Martin leads the Business Unit "Ident & RegTech" of FinTecSystems after the acquisition with as part of Tink.

Source of Funds Check

Knowing your customers financial origin

Tackling money laundering and complying with regulations

It is key for your success to meet regulatory requirements without sacrificing user experience, even more with increasing digital transactions and KYC/ AML demands. Investigating customers' financial situations however is an expensive task with a lot of friction, manual interaction and costs that easily exceed 150 € per customer.



Seamless & easy customer onboarding

Reducing costs by more than 80%

Complying with regulatory requirements and providing an unique user experience are not mutually exclusive. Costs for checking the source of funds can be reduced by about 80% and the manual customer interaction changes into an automated customer journey by using Open Banking technology.

Validate Financial Sources According to the state treaty on gaming (GlüStV)

The **Source of Funds Check** is a consolidated, state of the art financial overview about any customer's bank transactions. The report is processed in real-time and contains crucial information about your customer's financial background, gaming and gambling activities based on their bank account transactions such as:

- Name, IBAN & Legal age check
- Overview of incomes and spendings
- Proof of income with amount and counterholder
- Gambling and Gaming spendings
- Account rating (A - F)

Your Benefits:

- Bid farewell to cumbersome manual processes thanks to the **simple login into online banking for end customers**
- **Automatic analysis** of transaction data
- **Data processing in real time**
- **Money laundering prevention** monitoring
- The report is available in **different file formats**: PDF, XML, etc

How the Source of Funds Check looks like

Due Dilligence Report

Core Data

Name
MUSTERMANN, HARTMUT

IBAN
DE62888888880012345678

BIC
TESTDE88XXX

Bankname **Country**
Testbank DE

Legal Age Confirmed
Yes

Financial Capability

Average Income
3.459,43 €

Average Spendings
-3.645,06 €

**Income vs. Spendings =
Monthly Disposable Income**
-185,63 €

Spending on Gambling

	Period	Amount
Amount	2022-03	0,00 €
	2022-02	0,00 €
	2022-01	0,00 €
Count		11

Source of Income / Funds

	Period	Amount
Amount	2022-03	3.109,00 €
	2022-02	6.725,43 €
	2022-01	2.500,00 €
Count		3

Account Status

Account	Balance	Drawing Limit	Line of Credit	Requested	Available	Bookings	Ø Bookings/Day	Overdraft	Description	Joint Account
DE62888888880012345678	2.123,00 EUR	3.123,00 EUR	1.000,00 EUR	365	306	341	1.11	12	Girokonto	No
DE2310011001232616779712	-	-	-	-	-	-	-	-	n/a	No
DE14200411550670909100	-	-	-	-	-	-	-	-	n/a	No
5483*****4653	-	-	-	-	-	-	-	-	Visa	No

Income Details

Booking Date	Purpose	Amount	Counter Account
11.03.2022	SEPA-GUTSCHRIFT Felix Nebenkosten Rueckerstattung 2015	100,00 EUR	Felix Mustermann
11.03.2022	SEPA-GEHALTSGUTSCHRIFT Musterfirma GmbH LOHN / GEHALT 03/22 KUNDENREFERENZ 1233456-111	3.009,00 EUR	Musterfirma GmbH
27.02.2022	SEPA-GUTSCHRIFT SPORLER AG Nota Cr. NW-17.1111	79,95 EUR	Sportler AG
27.02.2022	SEPA-GUTSCHRIFT Geschenk KUNDENREFERENZ 11112345679 00000	100,00 EUR	Maria Musterfrau
22.02.2022	SEPA-GUTSCHRIFT ARAG KRANKENVERSICHERUNG-AG 1234 LEISTUGEN A RAG-KV KUNDENREFERENZ 123456 18	518,84 EUR	ARAG Krankenversicherung
21.02.2022	SEPA-GUTSCHRIFT Feuerwerk Danke KUNDEN- REFERENZ E2EC28624802 3370120125422000001	108,00 EUR	Johannes Mustermann

A excellent risk profile
B good risk profile
C average risk profile
D slightly elevated risk profile
E high elevated risk profile
F no risk evaluation is possible

DISCLAIMER - Explanatory Notes B2C Rating & Financial Capability:
 Rating „A“: Experience shows that account statements in this rating class look better than average. Therefore the calculated „Average of all month sum“ may be considered as a gambling limit in this category. Rating „B“ shows that account statements in this rating class look good. Therefore the calculated „Average of all month sum“ may be considered as a gambling limit in this category. Rating „C“: Experience shows that account statements in this rating class look average to low average. Therefore the calculated „Average of all month sum“ may be considered as a gambling limit in this category. Rating „D“: Experience shows that „no“ gambling limit may be considered as a gambling limit in this category. Rating „E“: Experience shows that we consider for most customers in this category „no“ limit as currently no risk evaluation is possible. Single exceptions may be considered if the calculated „Average of all month sum“ is greater than „D“. Please note that the B2C Rating is based on our experience with the gambling industry with upfront payments and that the provided rating is in an isolated „as is“ condition derived from the information from the online banking account that is available to us. The final assessment and decision making is up to the provider and the provider remains responsible for the fulfillment of legal or regulatory requirements imposed to it.

About Tink

Tink is powering a new world of finance with an open banking platform that lets businesses access financial data, initiate payments, enrich transactions, verify account ownership and build personal finance management tools – among other things. Founded in 2012 in Stockholm, and part of Visa since 2022, Tink serves more than 300 banks and fintechs in 18 European markets, out of offices in 13 countries. And we're still growing.

Let's talk

Need more advice on options for your business?
 Get in touch with our team if you'd like to find out how Tink can create a solution tailored just for you.

sales@tink-germany.com

TRAPETS

SURVEILLANCE & COMPLIANCE



Founded 2000



Employees: 51-100



Segments of Financial Services: Banking, Insurance, Investment & Trading, Payments, Lending



Regions of operations: Europe

Trapets is a leading provider of software and services for KYC, customer due diligence, securities trading, anti-money laundering, surveillance, and compliance. Professional services range from assistance in implementing compliance monitoring and advanced analytics programs, to fully outsourced trading surveillance. The company is one of the market leaders in Europe regarding securities market surveillance and in Northern Europe regarding AML, (anti-money laundering surveillance). For almost 20 years, Trapets has developed the surveillance and compliance platform 'InstantWatch', which is one of the most modern, powerful, and user-friendly platforms for automatic surveillance and compliance, enabling automatic transaction analysis, screening, data analysis, case management and investigations.

Turing Technology



Founded 2016



Employees: 11-50



Segments of Financial Services: Insurance, Investment & Trading



Regions of operations: United States

Turing Technology is a technology and intellectual property firm with capabilities that emerge from the intersection of mathematics, Machine Learning, and innovation. Two of their biggest assets that set them apart include their Hercules System(tm) and Ensemble Active Management (EAM). These allow them to generate real-time, daily holdings and portfolio weights of actively managed mutual funds as well as structurally increase the excess return available from active management. The combination of proven Ensemble Methods, 'fed' by a massive and proprietary dataset, and then applied to a novel business application, makes Turing's EAM solutions truly unique, and impactful. It allows the company's clients to build record-breaking products, with life-changing benefits for their end clients.

UMNAI



Founded 2019



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Customer Experience, Cybersecurity/Information Security, Compliance & Fraud Detection, Consumer/Personal Finance, Real Estate, Investment & Trading, Tax & Accounting, Payments, Lending



Regions of operations: Europe, United Kingdom

UMNAI's Hybrid Intelligence Framework is a new and better way to build data driven automated decision systems. UMNAI's FinTech customers replace their classical AI models with its Hybrid Intelligence models that powerfully predict as well as the best black-box models and are fully transparent, explainable, actionable, and auditable. FinTech customers solve bias, compliance, governance, audit, and risk challenges with certainty and confidence. UMNAI's FinTech and vendor customers, enabled by the real-time explainability and actionability, create disruptive new value by leveraging their unique subject and market knowledge to build new value beyond what traditional AI would allow. UMNAI's Hybrid Intelligence Framework is a full, enabling development tool kit that developers use to train, deploy and build on a unique neuro-symbolic architecture that is both backward compatible with most MLops tools and environments and fully integratable with all classical systems and processes.

Case Study: ‘Ensemble Alpha’ Has Arrived

*The active investment industry desperately needs a means of generating a new source of alpha. This mini-Case Study will provide early validation that a **new form of alpha does exist** (termed “Ensemble Alpha”), and is being delivered through an enhanced paradigm for active management known as Ensemble Active Management, or EAM. While the data analysis for a full-scale research paper is underway, two out of the 100 existing EAM Strategies will be used to demonstrate that ‘Ensemble Alpha’ exists, and is actively available for use within the marketplace.*

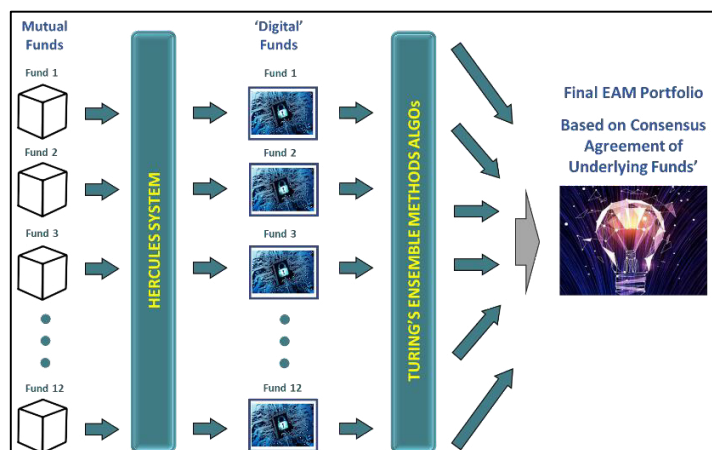
Professional investment management can be reasonably characterized as a century-long struggle to capture persistent alpha and deliver it to clients in a viable risk-managed package. Over the past few decades, there have been pockets of success, but sadly commoditization has overwhelmed the industry’s best intentions and competitive pressures have eroded most forms of alpha to the point where passive investing has emerged dominant.

EAM first emerged nearly five years ago, and is an AI-powered improvement over traditional active management. It is not a gimmick, it does not attempt to claim fame by substituting human insights with algorithms, and it is not an academic exercise. Over the past 3 years more than 100 EAM Portfolios have been built and placed into live production, reflecting the efforts of major money center banks, trillion dollar investment firms, multi-billion dollar wealth firms, and even new boutiques launched specifically to leverage the investment prowess of EAM.

Quick Tutorial on EAM Design (reference flowchart on the right)¹

EAM uses a Machine Learning fund replication platform (**the Hercules System™**) to “look inside mutual funds” and capture on a real-time basis the highest conviction stock selections from a list of 10 – 12 elite managers. It then integrates those selections through the use of mathematical tools (**Ensemble Methods**) that are at the heart of the world’s best practices for major computational challenges, such as self-driving cars, facial recognition, and even hurricane predictions. Explicitly, Ensemble Methods bridges the efficacy gap such that these computational tasks can be achieved.

Because there are an unlimited number of groupings of 10 -12 fund managers, the number of EAM Strategies that can be tailored to individual firm’s needs is extensive.



ENSEMBLE ALPHA

Over multiple years, within all US equity asset classes, and across roughly 100 strategies, EAM has proven to deliver superior performance results vs traditional active managers and versus benchmarks^{2,3}. Obtaining this level of

superior results, *by definition*, requires either a statistically improbable amount of luck, or implies some structural form of added alpha. **Turing Technology has been able to confirm that the outperformance is attributable to EAM’s added alpha versus the Underlying Funds that the EAM portfolio is derived upon.**

Put simply, EAM builds on the highest conviction stock selections from a grouping of top managers, and then by capturing the 25 – 50 stocks that reflect the **highest consensus agreement** across those fund managers, EAM is able to create additional alpha. The results are statistically significant, and the scale of the added alpha is material. This added performance over the Underlying Funds is what we have termed **Ensemble Alpha**.

CALCULATION METHODOLOGY.

Ensemble Alpha is derived by focusing on rolling 3-month relative returns of the EAM portfolio versus the average return of the Underlying Funds used to generate the EAM performance. Only daily returns from live EAM portfolios are used. If an EAM manager changes the list of Underlying Funds, those changes flow through to the EAM portfolio as well as the average daily returns for the Underlying Funds.

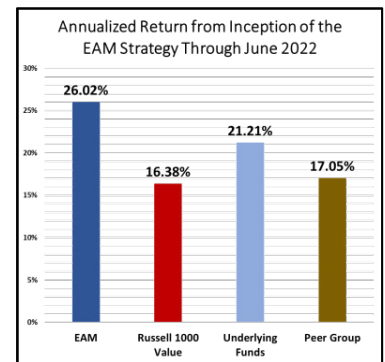
Rolling 3-month data is used to moderate the impact of outlier events, limit the distortions that come from compounding of returns, and improve the persistency of results.

The actual Ensemble Alpha metric is calculated by:

1. Calculate rolling 3-month relative returns for the EAM portfolio versus the average returns of the Underlying Funds. Use a daily step.
2. Take the **average excess return** of the rolling relative performance.
3. Annualize the average excess return.

CASE STUDY EXAMPLE 1 – CLIENT X001. LARGE VALUE PORTFOLIO.

This portfolio was constructed and launched in Q2 2020, with a change to the lineup of Underlying Funds made in Q2 2022. The chart to the right shows the performance of the EAM portfolio versus key reference returns from inception through 6/30/2022. During this volatile market cycle, the Russell 1000 Value still delivered an average return of 16.4%. The average actively managed Large Value mutual fund (“Peer Group”) did slightly better with a 17.0% annualized return.



The EAM Manager did an impressive job of selecting a suite of fund managers that were able to outperform (+483 basis points annually). For clarity, the **21.21% return of the Underlying Funds is exactly what a fund-of-funds portfolio would generate**, since multi-manager portfolios are not able to enhance returns (although effective at managing tail risk).

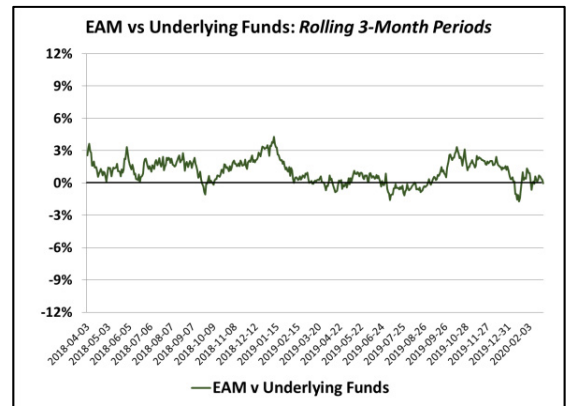
However, the EAM Strategy delivered 26.02% in annual returns, outperforming the Underlying Funds by 481 basis points and the benchmark by 964 basis points annually. The excess return, above and beyond what the Underlying Funds delivered, is **evidence of the Ensemble Alpha**.

As mentioned, Ensemble Alpha is calculated based on rolling 3-month periods to improve stability and remove the impact of compounding. As such, the actual Ensemble Alpha generated by this EAM Portfolio was 424 basis points, as can be seen in the table to the right. The data also

Number of Periods	477
% EAM > Underlying Funds	82.18%
Average Excess Return (R3M)	1.042%
Ensemble Alpha	4.24%

shows that EAM had an 82% success rate versus the Underlying Funds, and on average added more than 1% in incremental return every quarter.

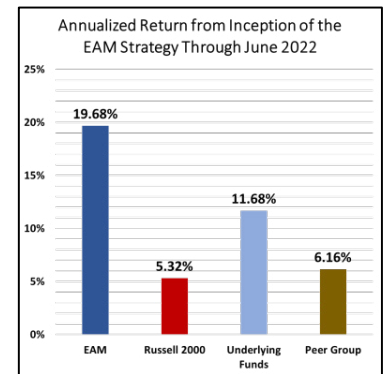
To better visualize the added Ensemble Alpha, the graph to the right shows the relative return of the EAM portfolio versus the average return of the Underlying Funds, over rolling 3-month periods. In this chart, when the green line is above the 0% level the EAM Portfolio outperformed.



As can be seen, in this instance the EAM portfolio was able to consistently add alpha versus the Underlying Funds.

CASE STUDY EXAMPLE 2 – CLIENT X002. SMALL BLEND PORTFOLIO.

This portfolio has a three year track record, having been constructed and launched in Q2 2019, with a change to the lineup of Underlying Funds made in Q2 2020. The chart to the right shows the performance of the EAM portfolio versus key reference returns from inception through 6/30/2022. During this volatile market cycle, the Russell 2000 index struggled and only delivered an average return of 5.3%, while the Peer Group of active fund managers did just slightly better at 6.2%.



The EAM Manager did an impressive job of selecting a suite of fund managers that were able to outperform (+636 basis points annually). Again, for clarity, the **11.68% annual return of the Underlying Funds is exactly what a fund-of-funds portfolio would generate.**

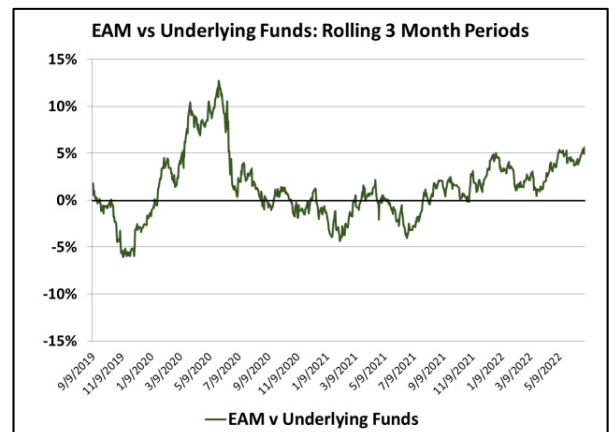
However, the EAM Strategy delivered 19.68% in annual returns, outperforming the Underlying Funds by 800 basis points and the benchmark by 1,436 basis points annually. The excess return, above and beyond what the Underlying Funds delivered, is further **evidence of Ensemble Alpha.**

As mentioned, Ensemble Alpha is calculated based on rolling 3-month periods to improve stability and remove the impact of compounding. In this case, the data smoothing that comes from the rolling periods reduces the Ensemble Alpha value down to (a still impressive) 545 basis points.

Number of Periods	709
% EAM > Underlying Funds	65.30%
Average Excess Return (R3M)	1.336%
Ensemble Alpha	5.45%

To better visualize the added Ensemble Alpha, the graph to the lower right shows the relative return of the EAM portfolio versus the average return of the Underlying Funds, over rolling 3-month periods. In this chart, when the green line is above the 0% level the EAM Portfolio outperformed.

For this EAM Strategy, the delivery of Ensemble Alpha is not as persistent, but periods of weaker EAM returns were followed by significant outperformance. Overall, this small blend EAM portfolio averaged 134 basis points of excess return over the rolling 3 month periods, generating 545 basis



points in Ensemble Alpha, a success rate of 65%, and an average improvement to return by 134 basis points per quarter.

CONCLUSION:

It has been literally decades since a broad-based new source of alpha for long-only investment portfolios has been identified. And as shown through study after study comparing active management to passive, any new source of alpha for active managers is desperately needed.

Multiple performance reports for the EAM Industry have been published, and they all demonstrate the statistical superiority of EAM versus traditional active managers as well as standard index benchmarks. Driving that outperformance, and now highlighted and supported by this mini-Case Study, is the recognition that **Ensemble Alpha is real, it is available, and it has been delivered on a live basis**. Further, the scale of alpha seen in these two EAM portfolios (300 to 500 basis points annually) is greater than the structural underperformance that traditional active managers have suffered versus indexes over the past decade. **Thus, Ensemble Alpha has the potential to successfully rewrite the rules of engagement between active investment management and passive investing.**

For more information on Ensemble Active Management, visit www.turingtechnology.ai.

Footnotes:

¹*There are series of research papers published by the Certified Financial Analyst that add insight to how and why EAM succeeds. They are available at www.turingtechnology.ai.*

²*All EAM performance presented throughout this update is based on an Index Calculation Methodology, which is gross of any fees and does not reflect potential transaction costs.*

³*The EAM Industry Performance Update – Year-End 2021 provides a comprehensive performance overview of the entire EAM industry through year-end 2021. It is available for downloading at www.turingtechnology.ai.*

ushur

Make your work flow™



Founded 2014



Employees: 101-250



Segments of Financial Services: Banking, Insurance, Customer Experience, Consumer/Personal Finance, Lending



Regions of operations: North America, Western Europe, Asia Pacific, Africa

Ushur, founded in 2014, is based in Silicon Valley with a mission to transform every customer journey through cutting-edge technology that brings companies closer to their customers. Ushur is an AI-powered Customer Experience Automation™ platform that has been purpose-built, from the ground up, to intelligently automate customer journeys. Designed to deliver a delightful customer experience through rapid issue resolution and unified, omnichannel engagement, Ushur is the first-of-its-kind system of intelligence. It combines Conversational Automation and Knowledge Work Automation through a no-code, purely SaaS platform to digitally transform every step of the complete enterprise customer experience – from Micro-engagements™ to entire customer journeys. Ushur recently announced the addition of Invisible Portal™ to its platform, offering companies a no-code solution to visually build secure, encrypted portal-like experiences at scale.

VADiS

Technologies



Founded 2018



Employees: 11-50



Segments of Financial Services: Banking, Compliance & Fraud Detection



Regions of operations: Benelux, France, Germany

Vadis Technologies builds third-party risk monitoring (TPRM) & KYB solutions. They transform public and private data to help their clients gain insights about counter-party risks. Through their B2B SaaS platform Flair, clients can assess and score more than 400 millions of companies worldwide on different dimensions. With Flair, they can aggregate all the information and score the supplier in three clicks in a 360 view, allowing consumers to not only understand the information, but to track and trace the actions and decisions in a collaborative tool.

WAVENURE



Founded 2016



Employees: 11-50



Segments of Financial Services: Insurance, Investment & Trading



Regions of operations: Italy, Switzerland, United Kingdom, Turkey

WAVENURE is an AI FinTech, founded by a team of experienced professionals in AI and investing solutions, which opens a new generation of innovative features and higher performances in asset management and trading. Combining AI and Deep Learning, alternative data, Quant Algos and Financial Analysis, WAVENURE offers Predictive AI solutions for investment management and high-performing trading, with a blend of data-driven solutions to support decision-making, enhance funds' performances, and enrich wealth management services. The uniqueness of WAVENURE proposition lies in its ecosystem of value-generating prediction models inside its full-stack WealthTech platform, where more state-of-the-art methodologies and advanced technologies are combined in flexible and adaptive solutions where everything is engineered to analyse deeper, understand broader, invest better.



COMPANY RESEARCH PROFILE



PRODUCT NAME:
VoxSmart Data Insights

Founded 2011

London, United Kingdom

www.voxsmart.com

sales@voxsmart.com

Employees: 101-250

Regions of operation: EMEA, APAC, North America, LATAM

KEY EMPLOYEES:



Oliver Blower
CEO



Adrienne Muir
COO



Oliver Rooney
CTO

Segments of Financial Services: **Compliance & Fraud Detection, Investment & Trading**

OFFERING

The VoxSmart Data Insights NLP solution is world-class in recognising and analysing financial negotiations. VoxSmart are the only provider that delivers a sector-specific, customisable platform, covering multiple financial asset classes, that is deployed on-premise and is trainable by the users themselves.

VoxSmart designs, develops and deploys cloud-based mobile recording and communications surveillance technology for global financial institutions to manage their business risks and regulatory requirements. Its financial voice transcription and real-time instant message capture, supports over 100 clients with regulatory requirements to monitor and reconstruct all trade communications from voice, mobile, email and chat.

PROBLEM BEING SOLVED

Trading floors are a noisy environment, even on today's evermore technologically advanced trading desks. Traders and sales teams have to manually decipher information through many different communication channels in both text and audio formats however, with the vast quantity of data in circulation and the volatility of this information, opportunities are being missed. Furthermore, financial and trading conversations are awash with industry-specific jargon. Traditional speech recognition devices without in-depth and thorough training have a difficult time making sense of sector specific language and often fail to adequately interpret the true meaning of such speech.

TECHNOLOGY

VoxSmart is the only provider to have built Automatic Speech Recognition (ASR) and Deep Learning Artificial Intelligence (A.I) that are tailored to financial markets language and business scenarios, structuring conversational data into actionable metrics and reports for the front office.

VoxSmart's models are trained on terabytes of financial market data to identify and understand inquiries, quotes, trades, market colour, and more as they are discussed in voice, chat, and email conversations. The technology directly ingests your audio files, Bloomberg XML dumps of chat and email in real-time and uses data segmentation and speech recognition models to normalise and structure your data.

PRODUCT DESCRIPTION

VoxSmart's Data Insights, which utilises Natural Language Processing (NLP) technology, enables financial institutions to process, analyse and index data from a range of sources including audio and text. These functionalities allow for the following use cases.

- Ensure prices and quotes are captured thereby reducing the risk of missed trading opportunities.
- Track market trends and directions by capturing mentions of specific assets and price changes.
- Automate workflows by using the system to populate order entry or pricing systems. This can take the form of "dictation as a service" to book trade tickets or by utilising a chatbot to respond to a request for quote (RFQ) .
- Counterparty insight reports. Generate reports to highlight missed trading opportunities, evaluate client relationships and sales teams effectiveness.
- Streamline research and analysis by highlighting specific data within company reports.
- Enhance data required for Trade Reconstruction.

TRACTION/GROWTH

- VoxSmart partners with leading companies including: Twilio, AWS, Nuance, Google, Eventus, Blackberry.
- VoxSmart raised \$25m in their most recent venture funding round, bringing the company's total funding to \$39m.
- VoxSmart currently services over 100 live global institutions and more than 7,000 users.
- In September 2021, the company announced the acquisition of GreenKey Technologies Inc., the industry-leading automated speech recognition ("ASR") and natural language processing ("NLP") provider, to further bolster its communications surveillance offering to global financial institutions.

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How VoxSmart is helping to revolutionise corporate communications

Founded in 2011, VoxSmart helps companies see their communications data in a clear and compliant way to mitigate business risks by delivering critical insights and business intelligence in close to real-time, as well as designing, developing and deploying capture and surveillance solutions to collect all communications sources from calls, emails and messages all in one platform.



The inspiration for the concept of VoxSmart came for Oliver Blower on the trading floor. Previously employed with companies like Bank of America Merrill Lynch and Barclays, it struck him that while he could have instant access to global markets and see what was going on in the outside world, he was 'completely blind' to what was going on inside his own company.

With regulations such as MiFID and SMCR coming through at the time, he saw that he was potentially going to be personally liable both civilly and criminally for his direct reports, risk management and conduct behaviour – and there were no tools that could help him with that visibility and risk management. Blower recognised that without the technology required, many firms didn't have chance of meeting the new regulatory requirements.

He remarked, "For VoxSmart, we started off by building a globally distributed cloud offering for mobile enablement and mobile compliance. This means a platform where a

bank like Bank of America can operate in dozens, if not hundreds of different countries can have one platform to enable the sales and trading staff within global markets to operate across mobile voice, SMS, WhatsApp, WeChat etc. It was all about enabling communication.

"That is the first pillar. The second is around communication surveillance, trade and data or event reconstruction. It is about matching reconciling communications data with trade data – basically unstructured data with structured data – as well as monitoring that data for instances of potential market abuse or collusion. Building on this, the third pillar is around AI – particularly machine learning and natural language processing – to machine transcribe and machine translate, but then understand the intent and sentiment of a conversation as well as the direction and the counterparty. We are able to strip this all out of the conversation."

Pain points and USP

What are the pain points that VoxSmart is looking to solve? According to Blower, the company straddles the areas of RegTech and FinTech to help companies find money making opportunities.

He remarked, "RegTech solves a regulatory problem with the aim of mitigating future fines or indeed fine inflation. On the other side of the coin, I would describe FinTech as helping you gain efficiencies, maximise revenues, etc. We straddle these two in some much as our products and services help the company achieve regulatory compliance.

"Especially with some of the natural language processing and machine learning assets, these are assets that actually help the company make money. What is going on in their business? How do they leverage missed opportunities? How do they quickly spot patterns to then trade off of? How do they capture risk in real-time to mitigate error and the accrual of the cost of those errors? VoxSmart is unique in that it straddles both RegTech and FinTech."

In what sets VoxSmart apart from its competitors, Blower referenced the importance of market experience. He said,

"I think what sets us apart is that most technologies that try to solve this problem comes at it from a narrative of big global banks being bad. They have hundreds of thousands of employees in dozens of different locations, and you have lots of people trying to collude, manipulate, spoof markets etc.

"We don't see it that way. We believe that because we have actually worked in the markets, unlike many of the other competitors, that many of these companies are populated with good, well intentioned, moral, ethical and professional actors who occasionally make mistakes or bad decisions under intense pressure. We believe that our technology shouldn't be used as a fishing net to catch bad actors but as a protection mechanism, so that there is always technology supporting companies spot errors they have made and enable them to manage that risk accordingly."

RegTech trends

When it comes to key trends not just across RegTech, but global industries far and wide, data is continuously raised as a huge area of focus. Data – the 'gold of the 21st century' as it has been previously referred to – is also in the mind of the VoxSmart CEO.

"I heard this phrase over a decade ago, which is that banks don't manage money, they manage data – and I think this is truer today than ever. These companies that we work with have so much data cross their business that it is becoming its own risk. What VoxSmart is increasingly attempting to do is to help these companies understand where the risk in that data is, but also where the opportunity lies in this data."

Blower continued, "Through leveraging technology like AI – specifically natural language processing and machine learning – you can actually take an enormous data set. We took terabytes of data from a global bank, going back seven years, and we were able to uncover some really interesting insights and opportunities from that data.

"Therefore, I think one of the key trends for this year and indeed in subsequent years, is the ability to really understand what is happening with your data. These banks are data warehouses, sat on the most unimaginable amount of data, with a fear of deleting that data because they don't know what is in it."

Pandemic impact

The pandemic took a hammer to many established norms in a vast range of industries over the past few years. Industries that had never had home working at the top of their list instantly found they were required to learn new tricks.

For the RegTech sector, the pandemic has changed a lot – particularly in areas around compliance. Blower commented, "When I worked on the trading desk in my past career, my desk environment was compliant, but the minute I left my desk I was deemed to be non-compliant. After March 2020, everyone left the desk and all of a sudden the banks were faced with not just a paradigm shift

but a complete conundrum on how they take that desk infrastructure and replicate it in people's home offices."

According to Blower, this is when mobile devices become the 'centre of the universe'. "This is when cloud and software becomes important. What the pandemic has done is accelerated the transition to a much more globally distributed mobile capability. I personally believe this change needed to happen anyway, because its ridiculously archaic that you have to come into an office – which is basically a warehouse of people – and call that environment compliant. What if I want to work in airport lobby and be on the phone with a client as I am getting on a plane? Why does it have to be an office?"

Succeeding in RegTech

The RegTech sector is more cutthroat today than it has ever been. With more companies vying for market share than before, many businesses are looking for new ways to stand out. In such a saturated market, how can this be achieved?

To Blower, the answer is simple – understand the problem and understand the use case. He added, "You've probably heard the term product market fit, where on the one hand you've got a product and on the other hand, you have a market that you want to fit that product into. Too often, fledging RegTechs completely underestimate the market problem, the use case, and they over-engineer the solution.

"What they find is that the appetite is 'Oh that's really interesting, but we don't really have that problem' or the industry doesn't feel that problem as acutely as perhaps you think they do. At our company, we have 150 people in seven countries, but at least a quarter of our staff have worked in financial services for these big banks and brokers and dealers and have managed risk and managed compliance. We understand the use case and the problem. So this is what RegTech's need to think about before they even think about coding or engineering a solution."

Plans going forward

Going forward, the future looks bright for VoxSmart. Over a year ago, the company secured \$25m from a growth equity financing round. Blower claims this has allowed VoxSmart to scale 'dramatically', with the firm posting triple digit growth for the last five years.

He continued, "Our headcount has also obviously exploded and we continue to believe that we will double that, again – so likely reaching around 300 people, doubling down on those global offices where our customers are.

"However, we are increasingly thinking about how we can support our customers in this challenging macro-trading environment. Interest rates are suddenly going up, and there is many people in this market that have never seen that in their career, and that comes with a huge number of challenges that completely change behaviours and operating models. So we want to make sure that our technology is there to continue to support and to help organise manage risks, make money and gain efficiencies." ●



Founded 2009



Employees: 51-100



Segments of Financial Services: Banking, Customer Experience, Compliance & Fraud Detection, Consumer/Personal Finance, Investment & Trading



Regions of operations: United Kingdom

Wealth Wizards (WW) was founded in 2009 to take on the challenge of automating financial advice for the digital age. Wealth Wizards' founding purpose is to make financial advice affordable and accessible to everyone, and this mission and ethos still drives the business forward. Today Wealth Wizards is one of the UK's leading financial advice technology providers with a growing B2B customer base including leading life assurers, tier one banks, wealth firms, EBC's and one of the largest advice networks in the market. Wealth Wizards also operates its own digital IFA (MyEva), which is pioneering a 'chatbot' regulated financial adviser and operates in the increasingly competitive workplace market for financial wellbeing services, with over 50 employers now subscribing to the service, this gives Wealth Wizards great insight into the needs of a diverse population of over 80,000 employees enabling it to continually develop its digital engagement solutions for a diverse population, age groups and demographics.



Founded 2021



Employees: 11-50



Segments of Financial Services: Banking, Insurance, Customer Experience, Compliance & Fraud Detection, Consumer/Personal Finance, Real Estate



Regions of operations: Asia, Europe, United States

Ydentity Organization aims to redefine democracy through digital means. They aim to do this by ensuring authorization of value transfers, and deterring frauds. Ydentity ID is the first and only PII free self sovereign decentralised identity built on dApp for the web3. It cannot be bought, sold, copied, forged, and only it's owner can open and operate it. The company differentiates itself through its' Tokenised 3D identity based on self profiling using HCI for web3 operations by dApp.



Founded 2008



Employees: 11-50



Segments of Financial Services: Law Firm, Compliance & Fraud detection, RegTech / Legal Tech service provider



Regions of operations: Global

Zeidler Group is a technology-driven law firm that revolutionises legal and compliance services for the asset management industry. Zeidler streamlines the process of opening new investment funds, provides local counsel service of international funds, facilitates cross-border registrations, and takes care of ongoing fund governance, amongst other legal and regulatory compliance services offerings. Zeidler is a geo-neutral company and promises to deliver effective legal and compliance services globally, with over 50+ jurisdictions covered from one centralised hub. Zeidler Group combines innovative technology, automated workflows via a digital platform and legal and operational oversight from its dedicated team of multi-disciplined lawyers, data, and regulatory experts to provide a truly comprehensive end-to-end solution. Zeidler's clients include some of the largest, most respected names in the investment funds industry, as well as boutique operators. Zeidler Group champions fresh ways to work efficiently with their clients and redefine legal value. The company services more than 200 clients with aggregate assets under management above USD 1 Trillion.



ABOUT US

FinTech Global is the world's leading provider of FinTech information services, B2B media products and industry events.

We inform, promote and connect FinTech buyers, sellers, investors and innovators worldwide.

We serve a network of over 300,000 FinTech professionals from market-leading organizations – financial institutions, technology innovators, corporate investors, venture firms and expert advisory firms. We enable them to get the information they need to make better business decisions and to connect and engage with the people and organisations they want to do business with.

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