PLUG AND PLAY

Fintech Megatrends
2024 Report

By Anna Kazmierczak, Salim Laouiti, & fellow investors from Plug and Play, LBBW Venture Capital, BlackFin Tech, Elevator Ventures, Breega, Illuminate Financial, Auxxo, DB1, Fidelity International Strategic Ventures, HV Capital, and Dawn Capital.

Contents

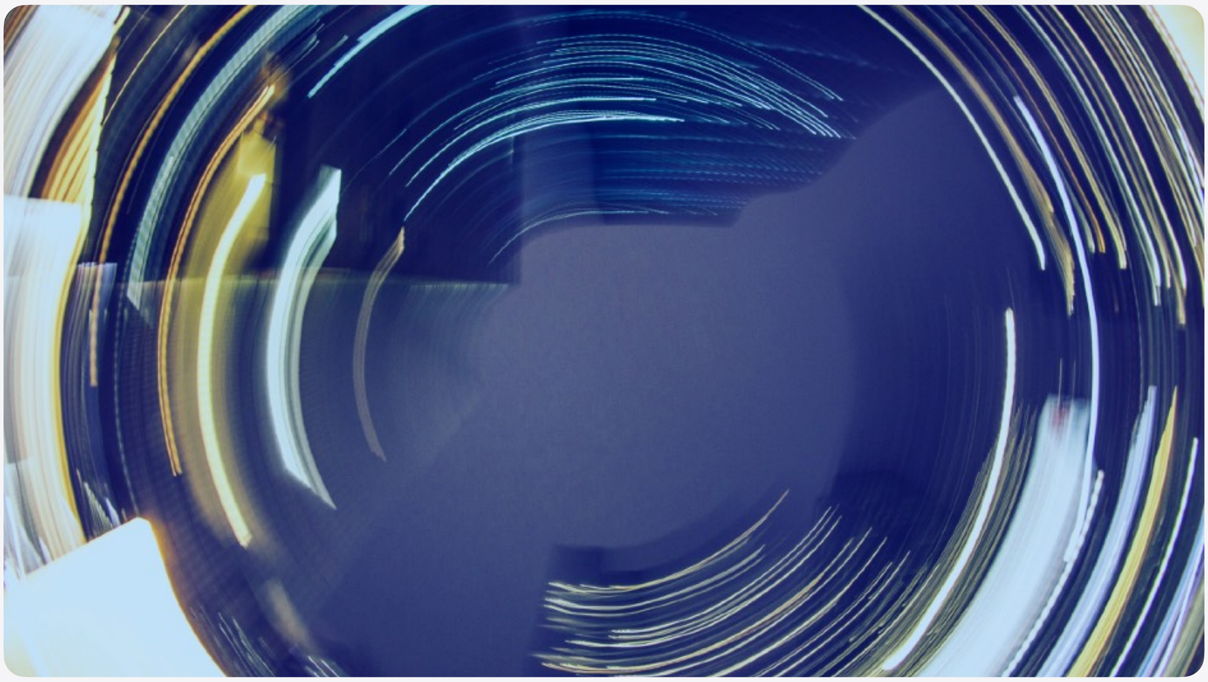
Introduction

Operating in major financial hubs like Silicon Valley, London, Frankfurt, Tokyo, Paris, Milan, and Singapore, Plug and Play teams invest in fintech startups. Additionally, we provide innovation consultancy services to prominent financial institutions, including BNP Paribas, UniCredit, Visa, Raiffeisen Bank International, CaixaBank, Franklin Templeton, Moody's, and John Deere.

By blending our corporate and venture experience, we have crafted a comprehensive trend overview, diving deeper into our predictions of what 2024 will bring in fintech.

The report is divided into **five sections**:

1. **Introduction to Plug and Play**
2. **2023 Status Quo**
   - Examining the fundamental changes from 2023 that will drive trends in 2024 and beyond
3. **Investment Highlights**
   - Taking a look at six success stories of fintech startups Plug and Play invested in or exited in 2023/2024
4. **2024 Investment Ecosystem**
   - Diving into what we can expect in the upcoming year in terms of the investment environment dynamics
5. **Fintech Megatrends in 2024**
   - Sustainable Finance
   - Generative AI and RPA
   - CFO Tech and B2B Stack
   - Wealthtech Innovations
   - Next Generation of KYC/KYB and AML



Our methodology to conduct the report comprised three phases:

Phase 1: Research topics identification based on the internal capabilities
The first phase involved assessing various innovation topics that we have already worked with at Plug and Play. These topics encompassed the main innovation trends identified during the establishment of our investment thesis, which are reflected in our investments, as well as trends identified while working with financial institutions as innovation consultants. Additionally, we interviewed colleagues from Plug and Play to gather their insights on upcoming trends.

Phase 2: Exploration based on the external capabilities
We conducted market research to gather additional insights based on our internal knowledge. This involved examining reports from reputable research agencies and their identified trends, as well as engaging in conversations with corporate partners of Plug and Play to understand the topics they are focusing on in 2024 in terms of innovation. Through these efforts, we obtained a comprehensive overview of the current status quo and the megatrends that will be driving the Fintech market in 2024.

Phase 3: Interviews with fellow VCs and CVCs

We asked fellow VCs and CVCs specializing in Fintech investments to provide their insights on upcoming Fintech trends. The answers provided were included in the report as quotes, representing an external perspective. However, it's important to note that these external perspectives did not influence the original content of the report prepared by Plug and Play. The goal was to compare our internal perspective with the views of other VCs, and the outcome revealed a close alignment in predictions.

Outcome: Report "Fintech Megatrends 2024"

The work of the Plug and Play Fintech team, together with colleagues from top European Fintech VCs and CVCs, resulted in a comprehensive trend overview, which you can read below.

Huge thank you to Maximilian from LBBW Venture Capital, George from Plug and Play, Nathalie from BlackFin Tech, Maximilian from Elevator Ventures, Benjamin from Breega, Hugo from Illuminate Financial, Alena from Auxxo, Stefan from DB1 Ventures, Jingwei from Fidelity International Strategic Ventures, Zuzanna from HV Capital, and Owen from Dawn Capital.

We hope you enjoy the read and engage with us in discussing the upcoming fintech trends.

Greetings from Frankfurt and Paris,

Ania & Salim

Plug and Play: Pioneering Innovation Globally

Plug and Play is a leading venture capital firm headquartered in Silicon Valley, with over 1,600 portfolio companies and 30+ unicorns (N26, PayPal, Rappi, Dropbox, Blockdeamon, and Honey, among others). We are the world's largest global innovation platform and a key driver of technological advancements. With operations spanning over 50 locations worldwide, we are actively involved in driving innovation across 24+ industries and facilitating connections between corporations and the most innovative startups. Our extensive network comprises 550+ world-leading corporations, 75,000+ startups, and numerous venture capital firms, universities, and government agencies operating in multiple industries.

Our innovation platform

CORPORATE INNOVATION

We supercharge the innovation of **over 500** industry-leading corporations by keeping them at the forefront of industry trends, and we do that through **equity-free pilot-focused acceleration programs, events, dealflow sessions**, and more.

VENTURE CAPITAL

We invest in **over 250** companies (from Pre-Seed to Series A) a year alongside the world's best VCs across all industries.

Investment Ecosystem Overview: 2023 Status Quo

Navigating turbulence: startups face fundraising challenges amidst 2023's macroeconomic uncertainty
With the turbulent macroeconomic environment in 2023, startups were struggling to fundraise. Capital has become expensive due to the increased interest rates, and investors have become cautious due to market downturn and recession expectations. Valuations have consequently declined due to the prevailing market outlook, leading to flat or down rounds. The aftermath of these challenges included a notable decrease in IPO activity as venture capitalists hesitated to deploy cash reserves.

The overall exit environment and fundraising have become the most important challenges in VC
A significant shift has been noted, with a staggering 77% of venture capitalists reporting a decline in exit prices in 2023, a substantial increase from the 35% reported in October 2020. This data underscores the growing complexities in navigating exit strategies for investments, highlighting the need for innovative approaches and adaptability to current market conditions. As market dynamics continue to transform, investors are compelled to reassess and strategize their fundraising efforts to navigate the evolving financial landscape effectively (EIF, 2023)[1].

A revival in early and mid-stage funding, while late-stage companies faced a funding squeeze
Investment trends in 2023 witnessed a resurgence in funding for early and mid-stage startups, surpassing levels recorded in 2020. While early and mid-stage companies experienced a boost in funding, the late-stage sector encountered difficulties. Notably,

[1] EIF, 2023: https://www.eif.org/news_centre/publications/EIF_Working_Paper_2023_93.htm

the early-stage ecosystem demonstrated remarkable vitality, with over 35,000 Pre/Seed rounds and over 6,000 Series A rounds, excluding mega-rounds exceeding $100 million. This surge in activity in the early and mid-stages suggests sustained investor interest and confidence in fostering the growth of emerging startups, despite the challenges their later-stage counterparts face in securing funding (Dealroom, 2023)[2].

The preferred business models shifted from rapid hyperscaling to prioritizing fundamental and sustainable unit economics

In a low-interest-rate environment, many businesses have demonstrated resilience and growth. However, reverting to fundamental principles, particularly sustainable unit economics, in times of high-interest rates becomes crucial for ensuring long-term success. As Customer Acquisition Costs (CAC) rise, leveraging B2B partnerships and B2B2C distribution channels emerges as a more effective sales strategy. This approach capitalizes on utilizing the networks of entities like Uber and Block to attract prospects.

The last decade's domination of consumer fintechs will lead to more B2B breakouts

B2C fintechs prove to be lucrative in times of prosperity, benefitting from a low Customer Acquisition Cost (CAC), customers' exploration and experimentation, and accelerated network effect. In times of market slowdown, B2B fintechs emerge as winners, as business clients offer higher Average Contract Value (ACV), lower churns, and enhanced cross-selling opportunities.

"The last wave of consumer-facing fintech companies have really stirred up the retail banking sector. As a result, traditional players (e.g. banks) have stepped up their own product innovation efforts which are determined to pick off all the remaining low-hanging fruit. For this very reason, we expect the next outlier companies to have a defined tech moat."—*Maximilian Naumow, Investment Manager at LBBW Venture Capital*

[2] Dealroom, 2023: https://dealroom.co/reports/venture-wrapped-global-tech-q4-2023

Shifting from Unbundling back to Rebundling

Due to high Customer Acquisition Costs (CAC) and intense competition in customer acquisition, standalone direct-to-consumer (D2C) products will face challenges in scaling and reaching critical mass. Instead, they will increasingly rely on cross-selling capabilities or explore opportunities for consolidation.

Regulators are coming with more scrutiny in response to past and anticipated high-risk events

In response to past and anticipated high-risk events such as the crypto collapse in 2022, hurdles faced by the banking sector in 2023, and the growing threat of cyberattacks, regulators are inclined to impose stricter controls and frameworks on the market. This will result in regulatory changes and a heightened aversion to risk, particularly towards emerging trends like Generative AI.

A decrease in the number of unicorns

In 2023, only 87 startups achieved a $1 billion exit or unicorn valuation for the first time, marking the lowest count of new unicorns since 2014. Furthermore, certain prominent startups experienced challenges, either approaching the conclusion of their financial runway or grappling with market difficulties (Dealroom, 2023)[3].

Other exciting reports we encourage you to have a look at:

- *Dealroom: Venture Wrapped 2023*
- *EIF VC Survey 2023: Market sentiment, scale-up financing and human capital*
- *Carta: State of Private Markets Q4 2023*
- *Atomico: State of European Tech23*
- *CBInsights: State of Venture 2023 Recap*

[3] Dealroom, 2023: https://dealroom.co/reports/venture-wrapped-global-tech-q4-2023

Plug and Play's Investment Highlights

Our commitment to supporting innovation is evident in our track record. With over 250 strategic investments made annually, we proudly hold the spotlight as the top global fintech investor in Q4 2024 by CB Insights[4]. But this is just the beginning; we are dedicated to empowering even more promising tech founders, catalyzing a ripple effect of technological success.

Here are the top fintech investments done or followed up by Plug and Play in 2023:

Portfolio Success Stories in 2023

INVESTMENT

PAXTON LEGAL AI

HQ: USA
Est.: 2023
Funding: $6M

An all-in-one platform designed to assist Chief Compliance Officers at Financial Institutions with regulatory compliance. Paxton provides real-time monitoring and auditing of internal policies and communications to identify if there is any compliance risk.

INVESTMENT

kennek

HQ: UK
Est.: 2021
Funding: $18M

Kennek offers a deep vertical SaaS solution that addresses operational challenges faced by lenders. The platform not only captures, creates, structures, and stores data but also serves as a single point of truth accessible throughout the private debt ecosystem.

ACQUISITION

onfido

HQ: UK
Est.: 2012
Funding: $182M

Onfido provides automated digital identity verification using computer vision, machine learning, and AI technologies. In February 2024, news of Entrust acquiring Onfido was released.

INVESTMENT

tuum

HQ: Estonia
Est.: 2019
Funding: $45M

Tuum is a cloud-native banking platform that enables any business to offer seamless, tailored financial services to their customers. The platform is API-based for quick and easy integration.

[4] 'State of Fintech 2023 Report by CB Insights': https://www.cbinsights.com/research/report/Fintech-trends-2023/

INVESTMENT

MESH

HQ: UK
Est.: 2020
Funding: $18M

Mesh is a modern financial operating system that enables enterprise clients to enable digital asset transfers, crypto payments, account aggregation, and registered securities trading, all within their platform.

ACQUISITION

power.

HQ: USA
Est.: 2021
Acq. by Marqeta

Plug and Play's portfolio company, Power, which provides credit card issuance programs, was acquired by Marqeta for $223 million, making it the first acquisition for a publicly traded company.

INVESTMENT

Triple

HQ: UK
Est.: 2021
Funding: $10M

Triple offers a transaction enrichment API, which has already been involved in processing billions of transactions and servicing banks and fintechs like Pleo or Trade Republic.

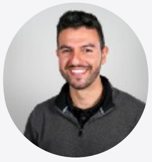
INVESTMENT

FINRES

HQ: France
Est.: 2020
Funding: $4.5M

Finres serves banks through a SaaS platform that evaluates farmers' credit risk, offers investment options, predicts crop adaptation solutions, and facilitates loans.

2024 Investment Ecosystem: Navigating the Future



“2024 will be a pivotal year for fintech incumbents. For the last 5+ years, we've seen a pretty frothy and optimistic outlook for fintechs entering the market. Naturally, the cycle seems to be at a low point in 2024, which will ultimately separate the wheat from the chaff, leaving fintech-focused VCs at an advantage this year. I'm predicting a fairly slow H1 of 2024 with a potential pick-up in Q4 2024 regarding fintech funding. I think this year we will see more mass adoption (and investment) in blockchain and crypto-related companies again, along with AI applications that can help financial institutions become more effective, and an uptick in new cybersecurity companies being founded. 2024 will definitely be an interesting year, and I'm eager to see how it plays out!”—*George Damouny, Partner at Plug and Play Tech Center*

Navigating the investment ecosystem will remain a challenge in 2024
2024 will be a good year for founders to reflect on the learnings from 2023, which served as a 'reset' year in the VC ecosystem. Following the overcharged investment rounds and booming valuations during the COVID-19 pandemic, 2023 witnessed the first significant drop in investments since 2017. This trend extended to the number of new unicorns, declining from 87 in 2023 to 782 in 2021[5]. In 2024, we anticipate a gradual growth in both the number and size of funding rounds compared to 2023.

[5] ‘Venture Wrapped 2023: Global Tech & VC in 13 Charts by Dealroom and Flow Partners’: https://flowpartners.io/insights/report-venture-wrapped-2023

The VC market is set for consolidation
German La Famiglia merging with the General Catalyst, ABN Amro CVC joining forces with UK-based Motive Partners, and FIRST PICK becoming part of Speedinvest are just three out of a few cases exemplifying the trend of consolidations happening in the market. This reflects the increasing concentration observed in the venture market, driven by the investment slowdown and changing dynamics. Concurrently, we witness the consolidation of capabilities within the realm of top-tier global investors, fueled by the growing expectations of 'smart money' value added by founders. This trend leaves smaller, local VCs struggling to compete in this dynamic landscape.

The fintech landscape is maturing and saturating, leading to a surge in consolidation and bundled offerings
Concepts like neobanks, investment apps for retail investors, and digital business banking, born 5-10 years ago, have now matured, making it difficult for new entrants to compete. Established players now dominate, propelling the market into a saturation stage. Rather than engaging in direct, unequal competition, those incumbents are opting to acquire the smaller businesses. We expect to see several fintech innovations pivoting towards more specialized niche sub-sectors, shifting from D2C to B2B and B2B2C, and offering bundled rather than standalone products.

Corporate Venture Capitals (CVCs) will play a crucial role in the investment ecosystem in 2024
For numerous fintech startups, establishing connections with the CVC arms of banks and financial institutions will be a primary strategy for breaking into an industry with high entry barriers. Building on learnings from 2023, such as UniCredit's investment in Banxware, the years ahead present a favorable environment for CVCs to leverage the existing market ecosystem to their advantage. Increased scrutiny and conservatism from traditional VCs create opportunities for CVCs to compete in rounds previously less accessible to them. Additionally, the prevalence of lower valuations opens doors to compelling opportunities for financial investments and strategic acquisitions of startups.

The growing secondary market increases the need for private market visibility
Historically, secondary markets within the VC sector thrived in times of crisis and low appetite for IPOs. These markets served as crucial avenues for providing investors and employees with liquidity options, particularly when faced with limited exit opportunities and heightened pressure from limited partners (LPs). The recent news about Carta exiting the secondary trading business following a credibility scandal

does not imply that the industry itself does not need the secondary sales solution. Instead, it sheds light on the formidable challenges faced by secondary markets within the private sector. The challenge lies in enabling efficient secondary market operations for the non-public market, ensuring compliance and data security while also providing transparency comparable to public markets.

"2024 will be an exciting year for the fintech sector. The shift to profitability over sheer growth will continue, contributing to a healthier and more sustainable environment. Some firms will likely pivot to new avenues, such as BaaS firms, and refrain from leveraging copycat models that were somehow successful in the past. Moreover, we won't be able to circumvent AI applications within the back and middle offices throughout 2024, particularly those with a focus on compliance and Regtech. Winners will be those able to integrate AI as an enhancing tool rather than as a substitute, to support human-driven processes, having adequate risk assessment and monitoring procedures."
—Nathalie Schwarzkopf, Investment Associate at BlackFin Tech

Fintech Megatrends 2024

Diving into the financial future as we unveil the top Fintech trends of 2024.

"From a technology perspective, we are expecting AI to drive the advancements of fintech in 2024. We are keen to see more and improved applications of AI that make financial services easily accessible, more relevant, and scalable. Another supportive trend is related to emerging regulations in the sectors of Crypto assets and ESG. Firstly, 2024 will be the year of the EU's regulation on crypto assets (MiCA) allowing players like Bitpanda to expand even faster across Europe. Secondly, the Corporate Sustainability Reporting Directive (CSRD) requires large EU companies and listed SMEs to report on climate impact. Solutions like SESAMm support their clients to meet these requirements using technology like ML."—*Maximilian Schausberger, Managing Director at Elevator Ventures*

"2024 will be a year of massive opportunities for fintechs. The Paradigm is changing, Infrastructure and tech-first fintechs will now leverage their advantages & pricing power to conquer new grounds while 'distribution' plays will be more at risk. In parallel, we assume that Embedded Finance merged with AI capabilities would start tackling some challenges of our society including Cash Management, Severe Risks, and many more."—*Benjamin Deplus, Partner at Breega*

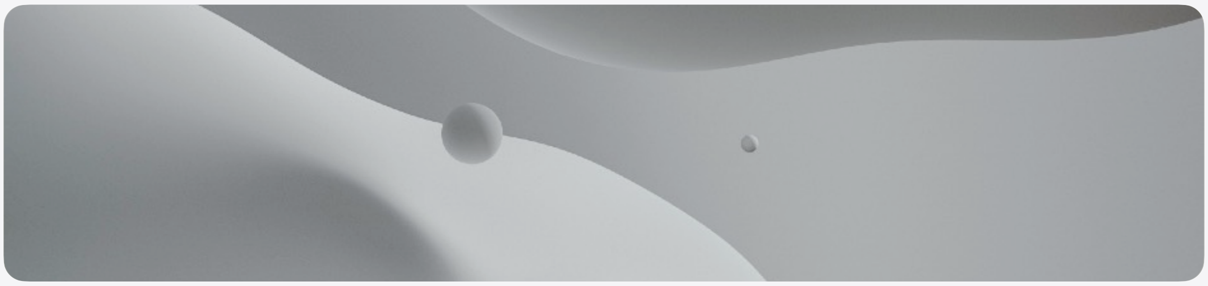
Megatrend #1: Sustainable Finance

#1.1 Path to Net Zero

Despite significant momentum, the world is falling short of achieving the Paris Agreement's goal to limit global warming to below 2°C (United Nations)[6]. Progress towards net-zero emissions has been slow. CO_2 emissions from energy and industry have increased by 60% since the United Nations Framework Convention on Climate Change was signed in 1992 (IEA, 2021)[7]. On top of that, the share of renewable energy in primary energy production is increasing modestly. If current emission trends persist, net zero may not be achieved by the end of the century.

[6] United Nations: https://www.un.org/en/climatechange/paris-agreement

[7] IEA, 2021: https://www.iea.org/reports/net-zero-by-2050



A notable development has emerged on the financial institution side of things, with 142 banks from 44 countries coming together to form the Net-Zero Banking Alliance. This alliance is dedicated to achieving the ambitious net-zero greenhouse gas emissions goal stemming from their lending and investment activities by 2050 (UN Environment Programme)[8]. Notably, these participating banks have not only committed to this long-term target but have also taken the proactive step of disclosing interim goals for the year 2030 or even earlier.

Despite the broader commitment to environmental sustainability, a couple of European banks like Deutsche Bank, HSBC, Barclays, and Crédit Agricole have been found to play a role in supporting fossil fuel companies by facilitating the raising of over €1 trillion through global bond markets (The Guardian, 2023)[9].

This duality in the banking sector underscores the complexity of the transition towards a more sustainable financial landscape.

Incumbents to consider:

1. **Embracing renewable energy sources,** such as solar and wind power, allows organizations to transition to cleaner energy alternatives, reducing their reliance on fossil fuels.
2. **Carbon capture and accounting technologies** are pivotal in capturing and managing emissions and ensuring accurate measurement and reporting.
3. **Circular economy practices** contribute to sustainability by minimizing waste and promoting the efficient use of resources within business operations, creating a more regenerative and less linear approach.
4. **Precision agriculture** utilizes technologies like IoT sensors and data analytics to help farmers optimize resource use, reduce waste, and adapt to changing climate conditions, thereby mitigating climate risks.

[8] UN Environment Programme: https://www.unepfi.org/net-zero-banking/members/

[9] The Guardian, 2023: https://www.theguardian.com/business/2023/sep/26/europes-banks-helped-fossil-fuel-firms-raise-more-than-1tn-from-global-bond-markets

Plug and Play Insight:

The path to net zero involves a deliberate plan organizations must adopt to achieve net-zero carbon emissions, meaning they aim to balance emitted greenhouse gases with equivalent removal or offset measures. It represents a proactive response to the urgent need to address climate change by minimizing the overall impact on the environment. Achieving net zero requires ongoing commitment and adaptation to emerging technologies in alignment with global efforts to limit global warming.

Startups to follow in the space:

Finres offers scientific and AI solutions to financial institutions in the agricultural sector and to farmers. These solutions aim to secure investment decisions and increase crop yields in the face of climate constraints.

Solsign provides a powerful, scalable, and multi-channel location intelligence tool. This tool transforms how land is assessed, valued, and marketed for renewable energy projects.

Sopht is an end-to-end GreenOps platform that enables IT organizations to pilot their environmental impact dynamically and automate their decarbonization processes.

#1.2 Voluntary Carbon Markets

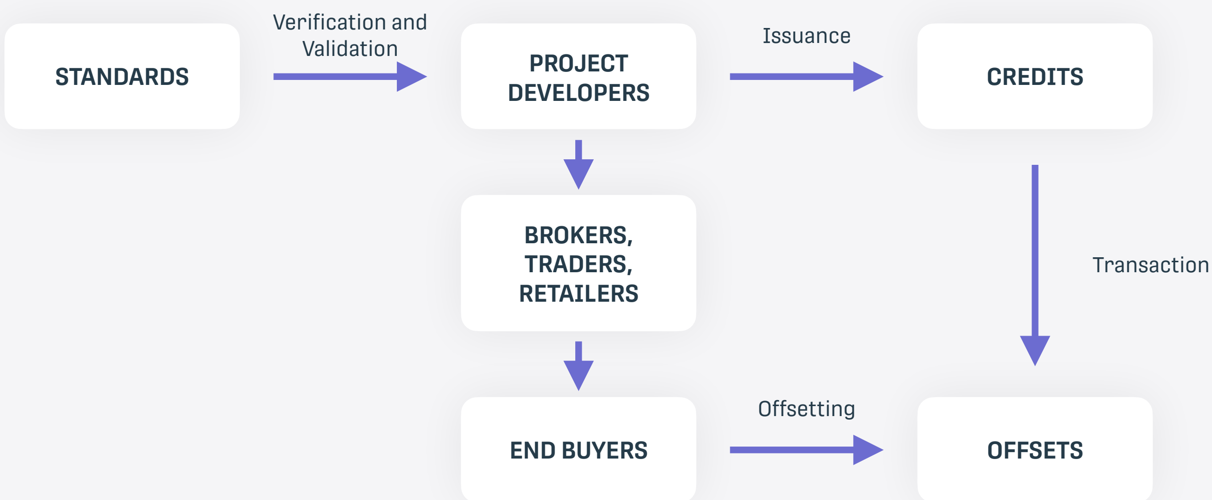
The Voluntary Carbon Market (VCM) is a segment of the carbon market where companies, organizations, and individuals voluntarily purchase carbon credits to offset their greenhouse gas (GHG) emissions. Unlike the compliance carbon market, which operates under government-regulated emission reduction schemes, the voluntary market is driven by entities seeking to take voluntary actions to address climate change and reduce their carbon footprint. The size of this market was valued at $2 Billion in 2021 but is expected to reach up to $40 Billion by 2030 (BCG, 2023)[10]. With the growing interest in the sector and more companies wanting to participate, project developers are struggling to keep up with the pace.

The primary purchasers of offset credits come from various sectors, including banking, oil and gas, and airlines, primarily consisting of multinational companies. Nevertheless, participation extends to individuals, organizations, and governments as well. Offset credits serve various purposes, such as meeting emissions reduction targets, improving public perception, and demonstrating social responsibility.

[10] BCG, 2023: https://www.bcg.com/publications/2023/why-the-voluntary-carbon-market-is-thriving

Specific offset projects go beyond mere carbon reduction, offering additional advantages like community development, job creation, and biodiversity conservation, adding significant value for buyers. Purchasers are often willing to pay a premium for offsets that come with desired co-benefits, enabling them to convey the positive impact of their investments to stakeholders effectively.

The Structure of the Voluntary Carbon Market



Plug and Play Insight:

The Voluntary Carbon Market faces challenges in ensuring transparency, particularly with the complexity of credits from emerging technologies like direct air capture and carbon capture/storage. To address these issues, various technological solutions are being implemented. Automated verification tools streamline the process, reducing the time and costs associated with manual verification—predictive analytics aid businesses in optimizing emissions reduction strategies. Blockchain technology establishes a transparent register for carbon credit transactions, ensuring accessibility and preventing alterations. Smart contracts automate the issuance and trading of carbon credits, eliminating intermediaries and reducing transaction costs. The use of distributed ledger technology enables swift data capture, analysis, and auditing, facilitating the verification and tracking of carbon credits without intermediaries. These tech solutions aim to enhance efficiency, transparency, and equity in the Voluntary Carbon Market.

Startups to follow in the space:

Atem is a platform for sourcing carbon credits with a focus on simplicity, efficiency, and speed. The company is committed to transforming the carbon marketplace with transparency and automation.

BlueLayer is a software stack that aids in the management of carbon projects. It digitizes workflows, increases data integrity, and reduces errors, thereby enabling the production of higher-quality carbon credits for the market.

CarbonX is a platform that offers access to and de-risking the procurement of high-permanent carbon removal credits. It also provides transaction infrastructure and data to facilitate permanent carbon removal processes.

#1.3 Sustainability Scrutiny Drives ESG Providers to Prioritize Accurate Data

With ESG regulations and reporting requirements tightening, the ESG ratings established to date face scrutiny. The main challenges include a lack of transparency, standardization across markets and methodologies, and a deficit of accurate (granular) data to prove that reporting is not just a greenwashing attempt. The topic is vital for the venture capital industry, as public investors, including LPs of VCs, are now compelled to disclose the environmental impact of their investments, pushing the whole value chain into ESG reporting.

Plug and Play Insight:

Financial Institutions and other corporations are looking deeper into the topic, emphasizing data providers capable of gathering scattered data, analyzing it, and delivering the most accurate insights. The focus lies not only on the availability of sustainable data but also on extracting precise outcomes from messy information. This demand for greater accuracy and compliance creates opportunities for new startups to emerge in the space, leading to increased investments.

Startups to follow in the space:

Connect Earth is an environmental data company that democratizes easy access to sustainability data, empowering financial institutions to provide their retail and SMB clients with the most accurate insights.

Clarity AI is a sustainability technology platform that uses machine learning and big data to deliver environmental and social insights to investors and organizations.

ESG Book is a provider of ESG data with a real-time disclosure platform that directly connects corporates with financial institutions.

Megatrend #2: Generative AI and RPA

"In 2024, the integration of financial services into non-financial platforms is booming, driven by e-commerce, social media, and payment facilitators. Generative AI and data analytics are expected to further enhance embedded finance, offering personalized products and industry-specific services. AI and machine learning are transforming fintech, enabling personalized services, improved risk management, and efficient operations. AI-infused chatbots will play a crucial role in real-time assistance and tailored recommendations. (...) Open banking frameworks in the UK and Europe, along with initiatives like the Federal Reserve's FedNow in the US, are driving improvements in payment infrastructure, facilitating international trade for businesses of all sizes. We expect to see an increasing number of businesses addressing the trade finance and cross-payment space in the coming 12 months, challenging WorldRemit and Wise for instance."—*Hugo Hazon, Fintech Investor at Illuminate Financial*

#2.1 Gen AI Peaked in 2023 and Is Set to Maintain Its Prominence in 2024

In 2023, we witnessed the emergence of Generative AI, a type of AI technology capable of producing various forms of content, including text, imagery, audio, and synthetic data. This trend was catalyzed by the introduction of OpenAI's ChatGPT in late 2022, which made Large Language Models (LLMs) accessible to the general public for the first time. This sparked excitement around Generative AI's potential to impact enterprise operations. Teams began receiving mandates from their executives to implement the technology and develop use cases focused on efficiency, decision-making, or innovation.

Challenge 1: Adoption has been slower than expected

Enterprise adoption of AI systems has lagged behind expectations in 2023. A survey from Coatue suggests that while 60% of enterprises are planning to adopt AI, less than 10% have managed to do so (Coatue, 2023)[11]. One of the reasons for this is the complexity of integrating existing enterprise systems with AI. Additionally, challenges such the lack of accuracy, quality data, projects not addressing real business problems, data silos hindering collaboration, and technical challenges, such as prompt engineering have contributed to the slower adoption rate.

Startup Highlight:

composable prompts

Composable Prompts is an application platform for LLMs that aims to revolutionize how applications and users interact with content. It provides a structured, domain-specific approach to integrating generative AI seamlessly into enterprise systems, offering features like Interaction Designer, Prompt Library, API Service, and Content-Aware Cache.

Challenge 2: Aligning AI with industry practices is key

Alignment involves embedding human values and objectives into extensive language models to enhance their usefulness, safety, and dependability. Organizations must align their use of AI and ML with their values and objectives, and relevant regulations. These regulations may include GDPR, the EU AI ACT, or AI RMF for data privacy and risk management, as well as various financial industry standards for transaction monitoring and anti-money laundering.

Startup Highlight:

ALINiA

Alinia is an AI governance & safety platform that allows businesses to align Large Language Models to business-specific use cases, values, and policies.

Challenge 3: Transitioning from an unimodal to a multimodal approach

Multimodal models process diverse sensory inputs simultaneously, mirroring human experience. Unlike unimodal systems, which focus on single data sources, multimodal models integrate and analyze information from various inputs such as text, images, audio, and video. This transition is crucial for enhancing understanding and interaction by incorporating multiple sources of information, leading to more comprehensive and context-aware artificial intelligence systems.

[11] Coatue, 2023: https://www.coatue.com/blog/perspective/ai-the-coming-revolution-2023

Startup Highlight:

Archetype AI is a multimodal AI foundation model that fuses real-time sensor data (video, audio, radar, time series) and natural language to reason about the physical world and discover hidden insights. Their open developer platform makes it possible for developers to rapidly build physical AI applications using this pre-trained AI model.

Challenge 4: Verticalization in fintech

AI verticalization is the process of tailoring Artificial Intelligence solutions to meet the needs of specific sectors in the value chain, emphasizing depth and specialization. By developing finely tuned AI systems for specific areas, startups can gain a competitive edge, delivering more effective and targeted solutions that address unique demands.

Startup Highlight:

Hyperplane is a startup specializing in developing data intelligence platforms for financial institutions, specifically banks. The company focuses on leveraging first-party data for hyper-personalization and machine intelligence to assist banks in predicting customer behavior and creating personalized experiences.

Generative AI applied to Fintech Market Map

RegTech

Legal

- LegalFly
- PAXTON LEGAL AI
- jimini
- lexion
- speal
- TOME

Compliance

- Chart
- Hadrius.
- Lexata
- Parcha

KYC/KYB

- Greenlite
- Accend

CFOTech

- Brex
- Basis
- VIC.AI
- ikigai
- Hypatos
- truewind

Core Banking

Lending

- Ocrolus
- Coris
- hyperplane
- casca

Banking

- Kasisto
- personetics SELF DRIVING FINANCE

Payments

- Flagright

Generative AI applied to Fintech Market Map

WealthTech & Capital Markets

Personal Finance

Parthean · ZipperTax · TAX GPT

Research & DD

(Private Markets)

Hebbia · aiFlow

(Public Markets)

ONNIX. · ACCERN · Stratosphere.io · noetica

AlphaWatch AI · Arcwise · ARKIFi · StockGPT · DAIZY

Portfolio Optimization

Etna Research · Theia Insights · Qdeck

"As in all sectors, AI will exert a significant influence on the way individuals and businesses will operate. I believe that the financial industry will not be an exception to this trend, e.g. generating finance-related LLMs and Chatbots. Alongside that and the rise of fintech solutions and neobanks, security threats are becoming more apparent. Consequently, I anticipate a heightened emphasis on governance and security, necessitating rigorous regulation."
—*Alena Redeker, Investor at Auxxo*

#2.2 Enhancing Workflows with Process Automation

RPA has emerged as a prominent technology in B2B software tech over the past decade. According to a report by Forrester, the market size is projected to reach $22 billion in 2025 (Forrester, 2022)[12]. RPA involves the use of automated "bots" to handle high-volume, low-complexity, and repetitive tasks typically performed by employees. This technology has gained popularity due to its ability to free up human resources for more value-added tasks, reduce overall costs, and operate 24/7 without errors. RPA seamlessly integrates into the back-office functions of banks, facilitating tasks such as transaction processing, data manipulation, query responses, and system communication.

Plug and Play Insight:

RPA in fintech is poised to be a prominent trend this year. In the current landscape, banks are proactively cutting costs and reducing their workforce, driving the need for innovative solutions to streamline operations through automation.

Startups to follow in the space:

automation hero_

Automation Hero is a platform that focuses on intelligently automating document-centric business processes.

INFORMED

Informed is a provider of verification automation for banks and government institutions. The startup's solution uses RPA to automatically process documents in consumer credit applications, verifying their details.

fingate

Fingate is an API-first digital COO platform that streamlines and automates banking operations, enabling financial institutions to deliver enhanced customer experiences, improve efficiency, and reduce costs.

[12] (Forrester, 2022): https://www.forrester.com/report/the-rpa-market-will-grow-to-22-billion-by-2025/RES177085?ref_search=3455725_1681838199407

Megatrend #3: CFO Tech and B2B Stack

Finance teams currently face significant challenges in managing and analyzing data due to their disparate nature and complex interconnections. The process involves collecting and cleaning data from various sources, such as ERPs, HRIS systems, billing tools, customers, and suppliers. This tedious and time-consuming effort detracts from more strategic activities. Normalizing and reconciling data across systems is a common practice, requiring considerable time and effort to understand financial metrics comprehensively. Finance teams spend significant time obtaining model inputs from organizational leaders for both future planning and historical analysis. In larger organizations, budgeting involves soliciting inputs from numerous budget owners, often leading to versioning problems and inefficiencies. The entire process lacks proper permissions and version control, making it highly manual, error-prone, and time-consuming.

The next generation of financial tools will address key trends such as the increasing importance of strategic CFOs and the surge in remote work. These tools will focus on automating workflows and enhancing collaboration to empower finance teams to adopt a more proactive approach across the entire value chain, encompassing ERP, accounting, payroll, FP&A, Spend Management, AP/AR Reconciliation, Cash Forecasting, Compliance, and more.

Plug and Play Insight:

The tech stack for fintech software development in 2024 includes programming languages, frameworks, databases, front-end and back-end tools, and applications connected through APIs. Developing contemporary, secure, and robust financial tools and solutions is essential, particularly with the anticipated increase in the usage of cutting-edge technology, such as blockchain, AI, and IoT, in financial transactions. Choosing the right tech stack is paramount for fintech startups and small businesses.

Startups to follow in the space:

Arkham is a data and AI platform designed to automate the financial operations of large enterprises.

Bilanc is a co-pilot that enables companies to track their Business Metrics, P&L, and Unit Economics and automate their finance workflows.

Flowie is a platform that allows companies to accelerate accounting and finance processes with collaboration, automation, and AI.

Megatrend #4: WealthTech Empowering Financial Prosperity

#4.1 Asset Tokenization

Real-world asset tokenization enhances liquidity by making it easier to trade and divide ownership and opens up investment opportunities to investors. The trend has gained momentum due to increased transparency, reduced transaction costs, and improved security. According to a study conducted by the Frankfurt School of Finance, the European security token market is expected to grow 81% annually over the next five years and is projected to reach €918 billion by 2026[13]. Well-established Financial Institutions follow the trend by developing their infrastructure, empowering the digital economy, e.g., JPMorgan launching a tokenization platform with BlackRock, ABN AMRO partnering with Bitbond and Fireblocks to issue corporate bonds on the blockchain. Those are just a few examples of the trend being slowly adopted by the industry and thriving in the upcoming years.

Startups to follow in the space:

E2E BLOCKCHAIN INFRASTRUCTURE:

TAURUS

Taurus is the next-generation platform to trade, invest, and protect digital assets.

ASSET TOKENIZATION AS A SERVICE:

tokeny SOLUTIONS

Tokeny is a no-code and API-ready tokenization platform to hide blockchain complexity from traditional end-users.

ON-CHAIN PAYMENTS AND SETTLEMENTS:

fluency.

Fluency is a blockchain technology company with a specifically designed platform to enable CBDCs.

[13] https://www.edsx.ch/europe-the-future-of-tokenization/

#4.2 Investments in Alternative Assets

Alternative assets, including PE funds, luxury goods, art, and real estate, offer diversification and provide investors access to assets they previously couldn't invest in. There is a particular emphasis on empowering both institutional and retail investors to allocate a chunk of their funds to these alternative assets. Educating investors about the benefits of alternative investments is crucial for successfully acquiring a critical customer base. These benefits include hedging against inflation, diversifying portfolios, and potentially achieving higher returns.

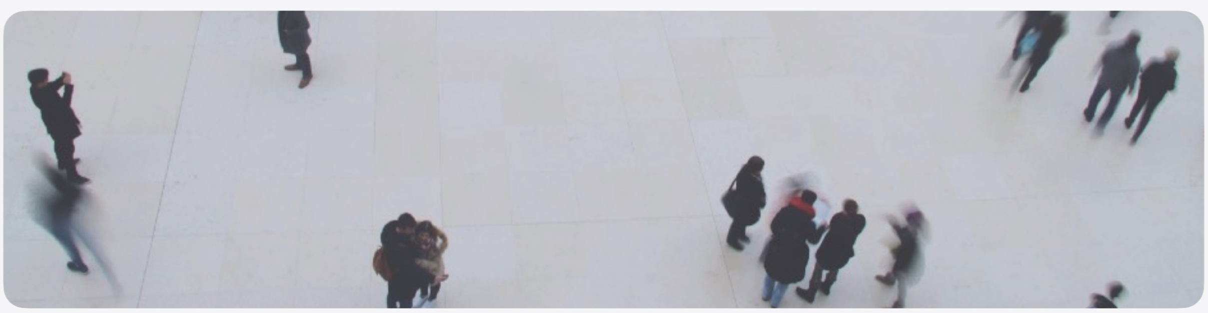
Startups to follow in the space:

Moonfare is a digital platform leading a new era of private equity investing, enabling access to expertise and chunk-size allocations in PE investments.

Aqua is a platform that empowers financial advisors to invest beyond conventional asset classes and access opportunities traditionally only available to large institutions and HNWIs.

Vega is a platform that strives to unite the private and institutional sectors with a platform that streamlines wealth creation for HNWIs and their advisors.

"The democratization of alternative assets, and larger portfolio allocations for institutional investors, particularly within private equity, is one of the major trends to look out for in 2024 and beyond. The recent SEC approval of Bitcoin ETFs highlights the institutionalization of crypto as an asset class, with institutional allocations to digital assets also expected to increase. Furthermore, blockchain technology, and in particular asset tokenization, has immense transformative power for the entire capital markets industry."
—*Stefan Djuknic, Investment Manager at DB1 Ventures*



#4.3 Private Banking Democratization

Historically, private banking services were solely targeted at the HNWIs and elites, but the shift in the market is enabling those services to a broader user base. This phenomenon namely private banking democratization reflects a transformation the industry is facing. Fintech platforms emerging in the space created a way for more efficient and inclusive private banking empowering personalized wealth management services to masses.

Startups to follow in the space:

Fortu Wealth

Fortu is a platform that enables asset managers to offer the next generation of private banking services to their clients and empowers them to invest alongside institutional investors.

Sidekick

Sidekick is an investment platform that is democratizing access to private banking for a broader range of investors.

The two following predictions were provided by Jingwei Li, an Investor at Fidelity International Strategic Ventures:

#4.4 Digital Wallet Infrastructure: The Next Frontier in Digital Assets Custody

Fuelled by the initial crypto bull run, early crypto custody winners such as **Fireblocks** and Gemini played a crucial role in providing secure storage solutions for early crypto adopters. The trust deficit created by the various scandals in 2022-2023 has prompted traditional Financial incumbents to step up to address the growing demand for secure and reliable custody solutions. For instance, Tier-1 banks like Zodiac by Standard Chartered and Forge by Societe Generale have started offering custody services, leveraging technology from entities like **Metaco**. Beyond the conventional boundaries of regulated financial institutions, there lies a significant yet largely untapped opportunity, centered around the use of digital wallet technologies to enhance customer engagement, retention, and acquisition. For example, Lufthansa has launched an NFT-based loyalty program in partnership with Polygon, and Nike has introduced its web3 marketplace, SWOOSH, in collaboration with **BitGo**[14]. Looking ahead, we anticipate more digital wallet providers like **DFNS**, **Magic**, and **Turnkey** to emerge and expand their influence in this space over the coming year.

[14] https://medium.com/@cryptonavigator.net/lufthansas-uptrip-loyalty-program-takes-flight-in-the-web3-world-aad2a096cb68#:~:text=Lufthansa%20Group%2C%20renowned%20for%20its,tangible%20rewards%20for%20frequent%20fliers

Startups to follow in the space:

DFNS is the wallet-as-a-service platform for web3. Startups, enterprises, and financial institutions use DFNS to create, embed, and manage programmable wallets.

Turnkey provides a simple API to securely manage personal private keys.

Venly is a blockchain technology provider helping businesses integrate Web3 technology & onboard users seamlessly.

#4.5 Innovative Indexing Solutions: The Future Growth Driver in the ETF Markets

As of 2022, the total size of the US and Europe ETF market has reached approximately $6.7 trillion AUM, experiencing significant growth in segments such as Pure Active, Thematic funds, and Smart Beta Funds[15]. A major driver for this growth has been the advent of custom indices, which have enabled more targeted investment strategies. These indices allow for real-time, dynamic rebalancing to better reflect prevailing market conditions. Despite the growth and innovation in this sector, many asset managers find themselves lacking the sophisticated in-house capabilities required to develop, back-test, and benchmark these indices, especially when it comes to adapting to rapidly evolving market themes. In the coming year, we can anticipate the emergence of companies like Foxberry and Merqube as key players in this space. They will provide necessary infrastructure for designing and maintaining indices, serving as the cornerstone for various investment strategies, especially within thematic ETFs.

Startups to follow in the space:

Foxberry is a provider of financial indices and front-office technology for the financial sector.

Merqube is an innovative Fintech firm, leading the development of cutting-edge technology for rules-based investing.

[15] THE RENAISSANCE OF ETFS by Oliver Wyman: https://www.oliverwyman.com/our-expertise/insights/2023/may/exchange-traded-funds-are-fueling-market-opportunities.html#:~:text=As%20of%20the%20end%20of,rate%20(CAGR)%20since%202010

Megatrend #5: Next generation of the KYB/KYC and AML

"As we enter 2024, the fintech sector will be increasingly confronted with complex AI-driven fraud, particularly in the realms of banking and payments. The advancement of generative AI technologies has escalated the complexity of fraud, posing new challenges for financial services. The increasing shift towards instant payments and digital banking, while convenient, has opened up avenues for faster and more elusive fraudulent schemes. The use of deepfake technology in creating credible false identities for loan applications or opening bank accounts is at an all-time high. Moreover, the production of synthetic data, advanced language translations, and the use of AI-driven bots for systematic fraud further complicate detection and prevention efforts. I believe we will see banks and financial institutions rapidly adapt and employ advanced measures to combat the emerging tide of AI-augmented cybercrime."—*Zuzanna Czapinska, Investment Manager at HV Capital*

Financial crimes and fraudulent transactions pose a persistent challenge that requires proactive measures. In fact, the number of sophisticated fraud techniques is increasing, resulting in new threads to the financial system and global economies. The annual cost of financial crimes and tax evasion is up to $3.5 trillion annually[16]. FTX alone defrauded over $14 billion through high-risk transactions[17]. Initial attempts to address this kind of thread emerged over a decade ago by introducing digital AML solutions. Early iterations were mobile versions driven by heavy manual processes, first as the early mobile versions. By 2018, computer vision technology was introduced as a pivotal development, empowering automation in capturing data. Subsequently, in 2020, we saw a first generation of automated, AI-backed solutions capable of conducting automated document screening and liveness checks. Still, these solutions had limitations in detecting false positives. By 2022, a new generation of technologies emerged, enabling a 360-degree view of users and their behavior, powered by generative AI and modular architecture. These advancements facilitated real-time decision-making while minimizing false positives. Looking ahead to 2024, advanced generative AI models will catalyze a positive shift in advancing KYC/KYB/AML frameworks. Nonetheless, the industry must remain vigilant for emerging challenges that may arise.

[16] 'Nasdaq CEO: Financial crime is now a multi-trillion-dollar epidemic': https://www.aol.com/finance/nasdaq-ceo-financial-crime-now-100545916.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAI2fXZBKExnprSTQBY2UMXzALL3UQSH2eUKSA_tXoLiVjry1ytAi5j48oFKeQtg5JwFBv9PO4iOYV7yfaexEyOrjYOG1sFUlLzjRaMoMvqx--visGopakKIVZuQekrM-juemWOLnpFL9ofRd7Pw4gXW3VKuLaIZs86WwjgANbmjP

[17] 'Financial crimes steal more than $3 trillion from the global economy' El Pais 2024: https://english.elpais.com/economy-and-business/2024-01-24/financial-crimes-steal-more-than-3-trillion-from-the-global-economy.html#

Plug and Play Insight:

Emerging startups in the industry are spearheading the Compliance 2.0 wave, focusing on bringing KYC, KYB, and AML capabilities within one platform. They not only facilitate continuous customer monitoring but also streamline the onboarding process and ensure ongoing anti-fraud controls. These players bring a new level of complexity by leveraging gen AI empowering their models to discern even the most intricate fraudulent schemes. There is a strong emphasis put on the KYB angle, providing essential insights into the business clients and partners, along with an assessment of the associated risks.

Startups to follow in the space:

Authologic

Authologic is an orchestration and aggregation layer for local KYC & AML methods, allowing businesses to check the identity of their clients online using video/biometrics, banking data, and government-issued digital IDs.

Bits Technology

Bits is the powerhouse for customer and business identity needs. With a single API, Bits easily connects the best service providers and data sources for KYC/KYB processes.

Strise®

Strise is a platform that unveils hidden risks in the customers' network by utilizing advanced AI and graph models, making the Customer DD easy by automatically monitoring essential customer profile changes.

“I’m very excited by the next generation of KYB platforms emerging in 2024 and beyond. KYC feels largely “solved”, with its software automation embedded in the modern compliance stack. KYB, on the other hand, remains messy and manual and often outsourced to managed services. Yet, the problem space is only growing from ever-more sophisticated fraud, like synthetic identities, to geopolitical turbulence expanding sanctions lists. This matters for financial services businesses but also beyond, for example, marketplaces onboarding merchants. Software can reduce a lot of this pain, and act as a co-pilot for compliance analysts. It will have to be both highly usable but also configurable to adjust to companies’ distinct processes, risk frameworks, and customer sets.”
—Owen Brooks, Associate at Dawn Capital

Credits

Anna Kazmierczak
Investor & Innovation Expert at Plug and Play
Frankfurt Team

Salim Laouti
Fintech Associate at Plug and Play
Paris Team

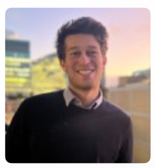
George Damouny
Partner at Plug and Play Tech Center
Silicon Valley Team

Maximilian Naumow
Investment Manager at LBBW Venture Capital

Nathalie Schwarzkopf
Investment Associate at BlackFin Tech

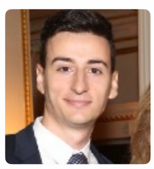
Maximilian Schausberger
Managing Director at Elevator Ventures

Benjamin Deplus
Partner at Breega



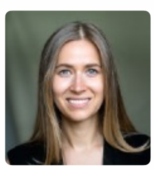
Hugo Hazon
Fintech Investor at Illuminate Financial

Alena Redeker
Investor at Auxxo

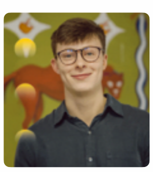


Stefan Djuknic
Investment Manager at DB1 Ventures

Jingwei Li
VC Investor at Fidelity International Strategic Ventures



Zuzanna Czapinska
Investment Manager at HV Capital



Owen Brooks
Associate at Dawn Capital

Sources

- **McKinsey & Company: A new era for fintech**, https://www.mckinsey.com/featured-insights/themes/a%20new%20era%20for%20Fintech?cid=other-eml-alt-mip-mck&hlkid=faf478c0eb8740cfb614d6e1ada57c60&hctky=14894043&hdpid=71c80892-f043-4433-8e99-bdff74f28499
- **Medium, Dawn Capital: The Business in Knowing Businesses - the emerging European KYB landscape**, https://medium.com/@dawncapitalteam/the-business-in-knowing-businesses-the-emerging-european-kyb-landscape-0ef026963497
- **Plug and Play: Climate Risk & Why Climate Change Startups Are Vital For Its Mitigation,** https://www.plugandplaytechcenter.com/resources/climate-change-startups/
- **Plug and Play: Key Insurance Industry Trends in EMEA Regions in 2023,** https://www.plugandplaytechcenter.com/resources/insurance-industry-trends-in-emea-regions-2023/
- **El País: Financial crimes steal more than $3 trillion from the global economy,** https://english.elpais.com/economy-and-business/2024-01-24/financial-crimes-steal-more-than-3-trillion-from-the-global-economy.html#
- **UNEP FI: List of NZBA member banks and their targets**, https://www.unepfi.org/net-zero-banking/members/
- **BCG: The Voluntary Carbon Market Is Thriving,** https://www.bcg.com/publications/2023/why-the-voluntary-carbon-market-is-thriving#:~:text=In%202021%2C%20the%20voluntary%20carbon,%2410%20billion%20and%20%2440%20billion
- **CNBC: Big banks are quietly cutting thousands of employees, and more layoffs are coming**, https://www.cnbc.com/2023/10/19/big-banks-cut-thousands-of-jobs-more-layoffs-coming.html
- **Medium, Redpoint Ventures: The Finance Tech Stack: Opportunities for Innovation (Part II),** https://medium.com/redpoint-ventures/the-finance-tech-stack-opportunities-for-innovation-part-ii-58e89a0d7c67
- **COATUE: AI: The Coming Revolution,** https://www.coatue.com/blog/perspective/ai-the-coming-revolution-2023
- **Forrester, The RPA Market Will Grow To $22 Billion By 2025:** https://www.forrester.com/report/the-rpa-market-will-grow-to-22-billion-by-2025/RES177085?ref_search=3455725_1681838199407

PLUG AND PLAY

pnptc.com