

Innovation Hub 2023 report

INNOVATION



Jersey
Financial
Services
Commission

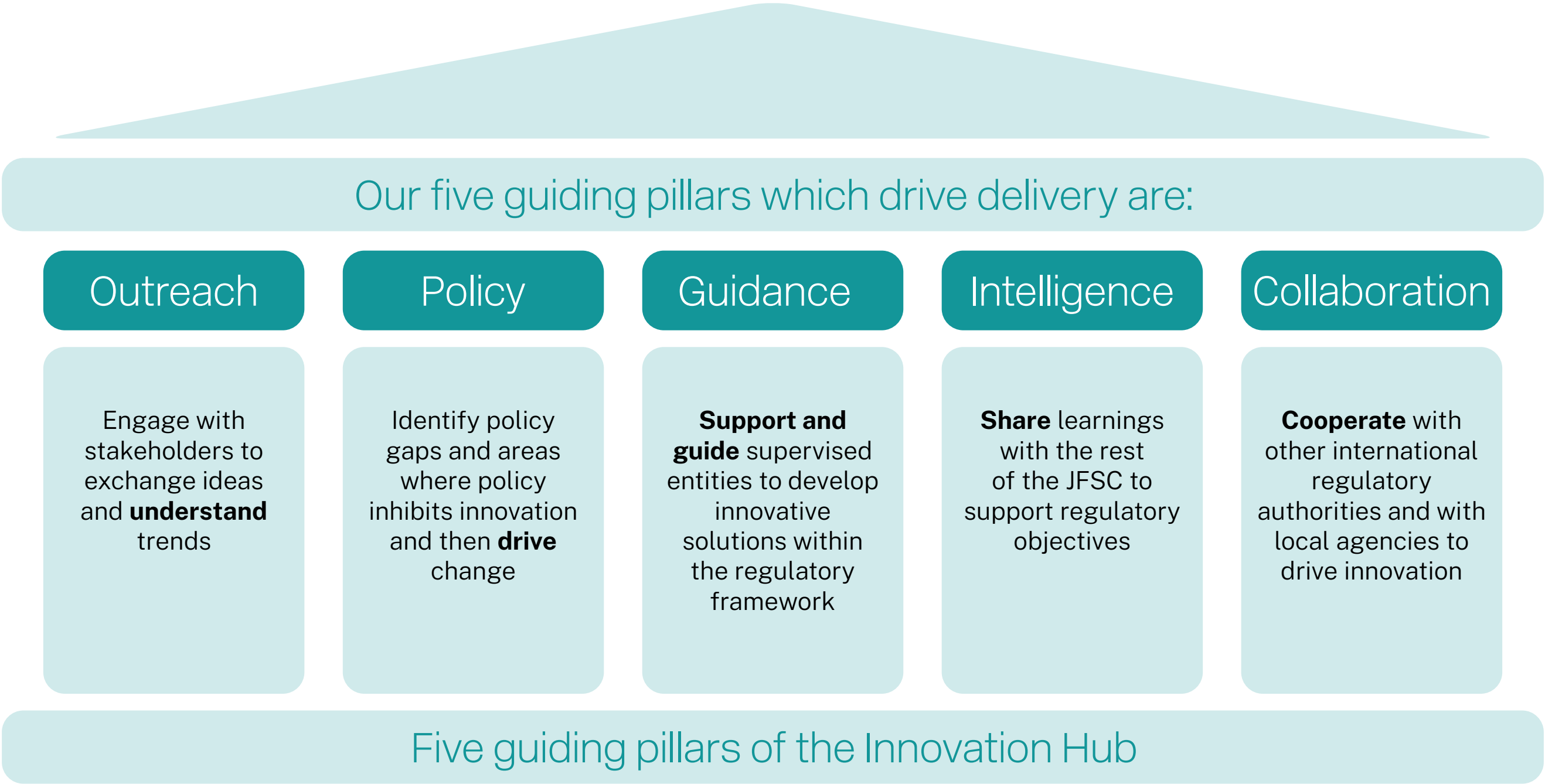
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Introduction

The Innovation Hub is a strategic initiative which supports innovation in financial services. We conduct active and open engagement with industry and serve as a dedicated point of contact for all financial services businesses with questions or ideas about financial innovation in Jersey. We facilitate communication and collaboration between our industry stakeholders and the wider JFSC.





Review of 2023

In line with our strategic objectives, we have continued with our outreach programme throughout 2023. Our goals are to drive the adoption of RegTech solutions by industry and support the development of the island's virtual asset service provider (VASP) sector.

Collaboration with the Government of Jersey, Digital Jersey and Jersey Finance has been central to our ability to deliver against our 2023 objectives. We have actively developed relationships based on shared goals such as the joint JFSC and Government of Jersey E-ID Future Forward RegTech event, alongside work to create a digital sandbox by Digital Jersey and the Government's tax super-deduction scheme for RegTech adoption.

Jersey-based firms seek our guidance and help to navigate the regulatory landscape in the virtual asset and tokenisation space. New business start-ups or relocations to the island are a growing area of activity, with enquiries coming either directly, or through referrals from Digital Jersey and Jersey Finance.

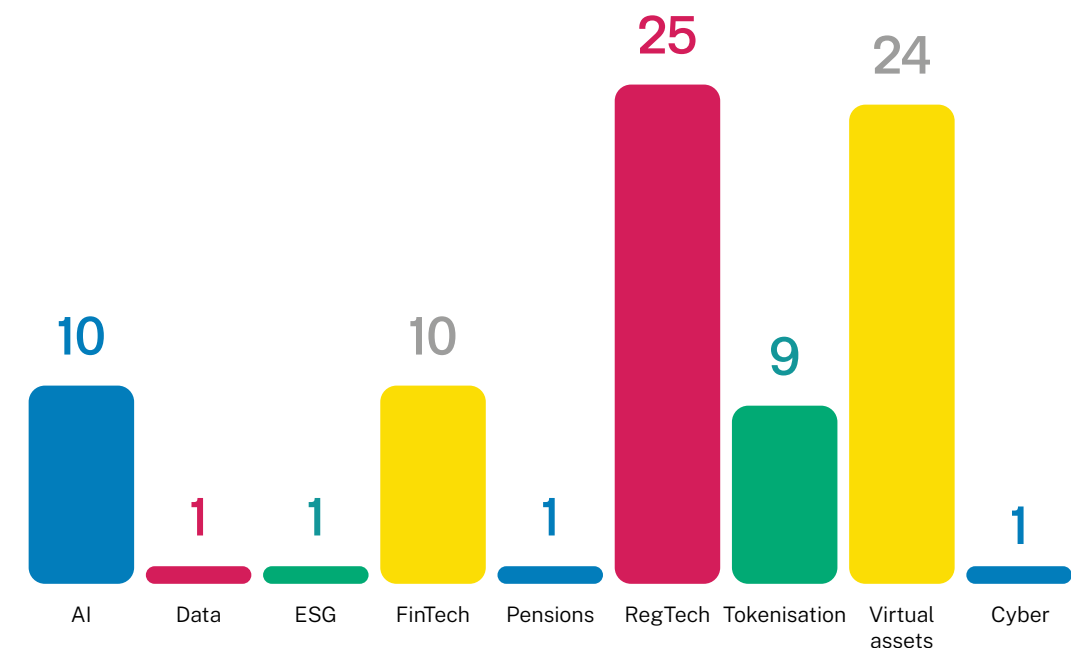
In 2023 we supported the growth of the VASP sector. It has almost doubled in size since 2022 to ten VASPs, with other prospects in the pipeline. Our team was key in supporting the wider JFSC's understanding of the proposed business models and contributed to the risk assessment through the authorisation process.

The increase in locally based RegTech providers on-island is a welcome consequence of the growing interest in technology targeted at compliance teams. The Innovation Hub met with 16 separate RegTech software providers in 2023, which informed our understanding of the key features of the software and highlighted the regulatory considerations when regulated entities implement these solutions.

As referenced in Figure 1, the two areas of innovation we received the most queries on were virtual assets and RegTech, which is a continuation of the themes we saw in 2021 and 2022.

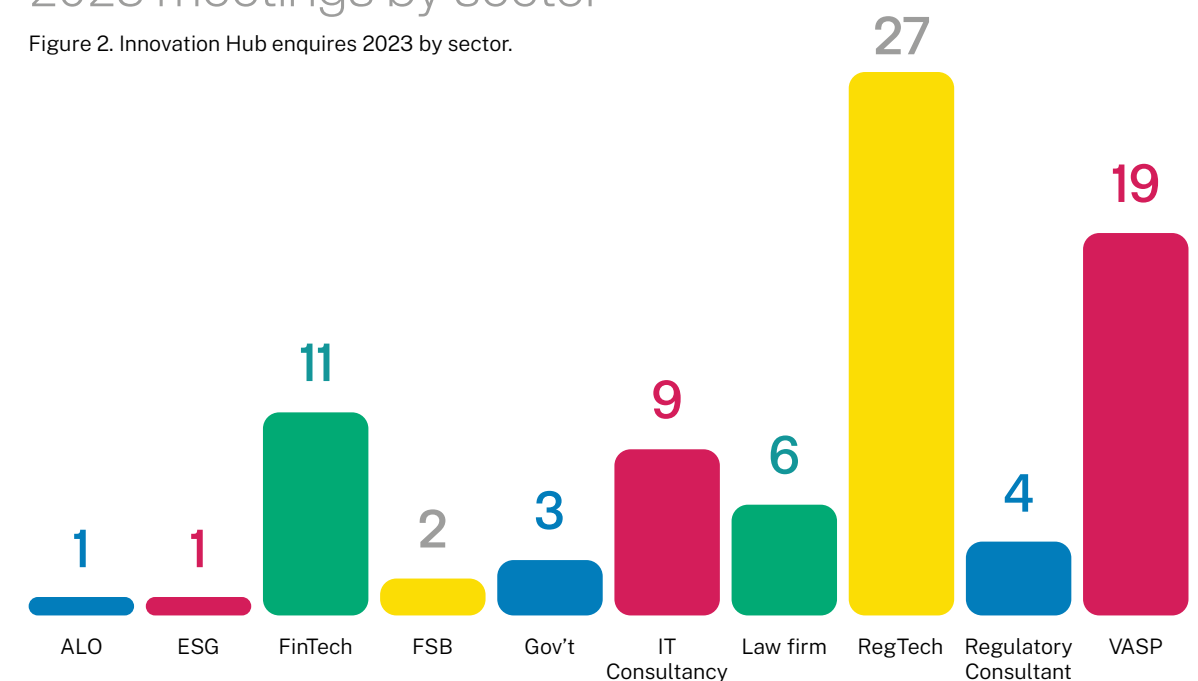
2023 enquiries / meetings by theme

Figure 1. Innovation Hub enquires 2023 by theme.



2023 meetings by sector

Figure 2. Innovation Hub enquires 2023 by sector.



2023 Outreach

Outreach is one of our guiding pillars. In 2023 we:

- › **received 82 enquiries**, which led to meetings with industry stakeholders
- › **attended and participated in 57 events**, including industry working groups, international cooperation, and technology/innovation events
- › **attended 16 meetings** with established VASPs and virtual asset relocation prospects
- › **attended nine meetings** with companies to discuss tokenisation of assets
- › **attended 15 meetings** and product demos with RegTech providers



Events

Collaboration with international regulators and standard-setting bodies provides a better understanding of the technological opportunities and challenges facing financial services. We have continued to engage internationally with the Global Financial Innovation Network (GFIN), the International Organization of Securities Commissions (IOSCO) and the Financial Action Task Force (FATF).

The Innovation Hub was elected to the Coordination Group (the managing committee) of the GFIN in 2023, which will allow us to drive activity, share best practice and explore the impact of innovative technology with a network of international regulators during our four-year tenure.

We also attended the IOSCO (EMEA) seminar on artificial intelligence (AI) in supervisory technology (SupTech), which explored the opportunities open to regulators with the introduction of large language models in SupTech. This technology has the potential to improve the effectiveness of supervisory analysis and increase efficiency.

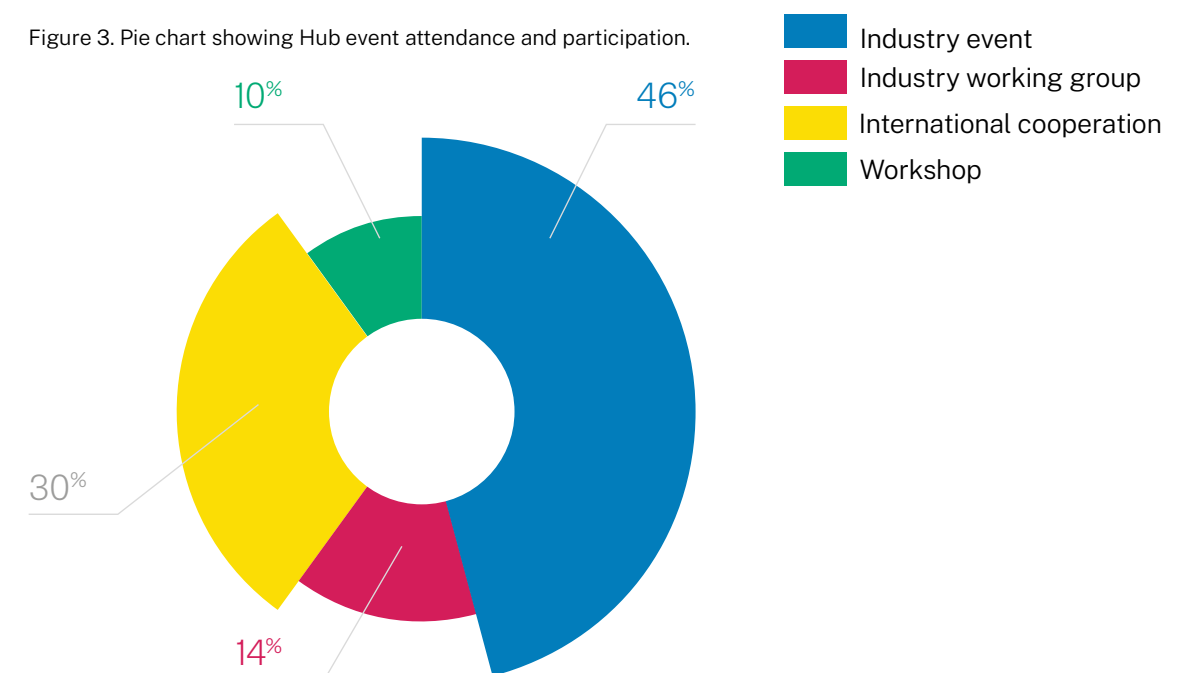
Participation in virtual conferences and webinars, especially in the areas of virtual asset and decentralised finance (DeFi), has increased our knowledge and provided a forum to share our experiences. We have subsequently contributed to regulatory changes within the JFSC, such as the VASP Travel Rule.

On-island, we co-hosted a “Future Forward” event with Government in July, which was an opportunity to explore the impact of technology on financial services locally; from the adoption of RegTech to the benefits of open finance. We contributed to the Digital Jersey sandbox initiative to offer regulatory oversight of RegTech solutions developed for onboarding, identity and verification.

We have participated in events by local RegTech providers exploring the opportunities of AI solutions, including speaking in panel discussions at four events and leading discussions in workshops for the VASP national risk assessment. We also hosted drop-in session and attended industry working groups.

Events by type

Figure 3. Pie chart showing Hub event attendance and participation.



The digital ID survey

In June, we carried out an industry survey on the adoption of digital identification solutions in Jersey. The objective was to capture the progress made in adopting these solutions across financial services and to understand the specific barriers to adoption. This led to several initiatives within the JFSC and Government to facilitate adoption.

The survey had 130 respondents, 76 of whom completed the full survey. Key takeaways were:

- › **26%** of respondents have implemented a digital ID solution
- › **46%** of respondents are exploring implementing a digital ID solution
- › **64%** of respondents believe further regulatory clarity is required, with either a vendor accreditation or assurance scheme, or a stronger description of what good looks like

In terms of barriers to adoption the survey highlighted the following:

Ranking	Barrier	Response %	Response Total
1	Costs of onboarding a solution	46.88%	30
2	Organisational priorities	39.06%	25
3	Technical complexity	31.25%	20
4	Lack of available staff with the right skills to support implementation	28.13%	18
5	Lack of interoperability with existing IT stack	23.44%	15
-	Other (not specified)	31.81%	21

The use of digital ID and other RegTech solutions will allow compliance teams to become more effective and create capacity through process efficiency. With an island shortage of skilled and experienced compliance professionals, alongside shortages more broadly across the workforce, investment in technology, particularly RegTech, is key to increasing productivity.

The Innovation Hub has been working with Government, Digital Jersey, and Jersey Finance to promote and enable the uptake of these technologies. The results of the digital ID survey have led to further initiatives by the Innovation Hub, including changes to section 4 of the AML/CFT/CPF Handbook, the authoring of a series of RegTech guides aimed at demonstrating what good looks like, and our participation in Government-led initiatives, such as the tax super-deduction for RegTech.

Global trends and initiatives

The launch of ChatGPT in November 2022 and the subsequent release of alternative generative AI and large language models has dominated the technology conversation in most industries, including financial services.

Like previous disruptive technological advancements, such as blockchain, Web3 and big data, we have witnessed a mixture of hyperbole alongside genuine, innovative solutions that are set to transform the way we work.

2023 was marked by the rapid adoption of generative AI solutions, usually in adjacent business functions rather than core processes, bringing with it exciting possibilities and emerging concerns.

Virtual assets, DeFi and asset tokenisation remain important areas of innovation, as international standard-setting bodies and global financial regulators continue to deliver recommendations, standards and regulation which extend conduct and prudential regimes to this sector.

Locally, we continue to see the digitalisation of the financial services industry, with the launch of several new RegTech solutions, from customer onboarding to compliance management systems. These products not only generate resource capacity, but also create contained systems and processes which can significantly reduce risk.



Artificial intelligence (AI)

Artificial intelligence products have been commercially available for over 20 years. The launch of ChatGPT in November 2022 has had a profound impact on how businesses use the technology.

In its 2023 Financial Services generative AI survey, Ernst & Young reported that 99% of leaders said their organisations were deploying AI in some manner, with generative AI the leading use case.

Anecdotally, we hear that Jersey-based companies who do allow the use of generative AI solutions such as ChatGPT, Gemini (re-branded from Bard) and Claude, tend to adopt them in their support functions' processes, such as in HR or marketing, or as meeting assistants, rather than using them in core business processes. As the risks associated with AI become better understood, and when use cases have been fully developed, we expect to see adoption increasingly extended to core processes.

Research by Sihori (2023) and McKinsey & co (2023) suggests that vendors tailoring AI solutions to end-use applications should be able to monetise them more readily. Simple generative AI solutions will become commoditised with the increase of enterprise competitors to ChatGPT, and as open source large language models improve in quality at a lower price point. This is mirrored in market behaviour as we see tailored business applications create plug-ins with established large language models to increase productivity, or access new features. We expect commercially available RegTech solutions to follow suit and leverage the power of AI in this way.

The quality of AI performance has also showed a marked improvement through 2023 as new iterations of generative AI solutions are released. The Stanford evaluation tool, Holistic Evaluation of Language Models (HELM), has demonstrated significant improvement in generative AI products across a range of qualitative criteria. GPT4 and Alphabet's latest iteration of its generative AI solution, Gemini, are representative of the improvements, which have largely been driven by reinforcement learning from humans (RLFH) and improved prompt engineering.

Artificial intelligence (AI) cont.

As quality improves, costs reduce, and solutions become tailored to specific use cases, we expect adoption rates for AI-powered RegTech and FinTech solutions to increase across financial services, bringing with it profound changes to the way we work.

2023 was also an important time for the regulation of AI. While recognising the importance of ethical balance, the inherent risk of data bias, the black-box or 'explainability' issue, and the importance of 'meaningful human involvement', the UK Government is taking an innovation-led approach. In the EU, the AI Act aims to ensure that fundamental rights, democracy, the rule of law and environmental sustainability are protected from high-risk AI and is also more prescriptive. Importantly, the EU AI Act will apply to providers and developers located outside the EU whose AI systems affect individuals that reside in the EU. In November 2023 the OECD, a global policy forum that promotes policies to improve the economic and social wellbeing of people around the world, amended their 2019 AI principles with a call for widespread adoption across global jurisdictions.

Jersey prediction: 3+ years

Based on industry feedback, we expect to see increased adoption of AI across financial services, although initially this may be through the integration of large language models with established applications.

The ability of generative AI to summarise documents through intelligent document processing and extracting key information may lead to productivity gains in document classification and workflow, with onboarding solutions and compliance software benefitting from automation.

Requirement: Understand if a regulatory response is required.

In the UK, the Government has recently decided not to legislate for now but has published its AI principles and asked sector regulators such as OFCOM and the FCA to produce regulatory guidance in line with the AI principles.

Positive impacts: Productivity boost and capacity gains

Enhanced customer experience through chatbots and intuitive workflow solutions.

Open banking and open finance

Although we are just an interested and supportive observer at this stage, we continue to work with Government, Digital Jersey, and Jersey Finance to promote and enable the uptake of open banking on-island. We are starting to see industry move towards open banking in several recently launched initiatives.

The focus on open banking has broadened in 2023 to consider the wider open finance opportunity, which allows customers more immediate access to all their financial information, often consolidated in one place. This initiative has the potential to positively impact the customer onboarding process, with elements of customer due diligence (CDD) improved through open sharing of information where appropriate.

Jersey prediction: 1 - 2 years

Requirement: PSD2-lite requirements for mandatory inclusion.

The Open Banking Directory opened its platform to financial institutions located in the Crown Dependencies in 2022. This allows certain banks and financial institutions in Guernsey, Jersey, and the Isle of Man to participate in – and benefit from – the open banking ecosystem.

Joining it allows participants to voluntarily connect to third party providers, which are already enrolled in the Open Banking Limited (formerly OBIE) directory for PSD2. Businesses can also join the Confirmation of Payee account name-checking service offered by Pay.UK which aims to help combat authorised push payment fraud and protect customer funds.

We are engaging with our partners at Jersey Finance, Government and Digital Jersey to explore opportunities for the rollout of open banking initiatives in Jersey.



Virtual assets, blockchain and asset tokenisation

The virtual asset landscape continues to evolve. Our approach is to support innovation while ensuring Jersey meets international standards in the fight against financial crime.

To help prevent money laundering, terrorist financing and proliferation financing, the FATF has called on jurisdictions to swiftly implement its Travel Rule, which requires transfers of virtual assets to be accompanied by accurate originator and beneficiary information. The Government of Jersey introduced legislation to support the adoption of the Travel Rule in 2023. We recently released guidance to help VASPs implement these changes.

In 2023, international standard-setting bodies and regulators released legislation and recommendations around conduct and prudential rules for crypto assets. The EU also released the Markets in Crypto Assets (MiCA) in June 2023, while IOSCO published its own 18 recommendations. These changes have the potential to impact VASPs on-island and we will work with industry to understand the impact and the island's response.

As of 10 January 2024, the Securities and Exchange Commission approved applications to launch spot Bitcoin exchange-traded funds (ETFs). The approval of a Bitcoin spot ETF helps provide regulatory clarity in the US, allowing a broader, more professional investor base to access Bitcoin. It will enable individual and institutional investor access to Bitcoin without having to manage the risk of custody themselves; custody of these ETFs will be done by large institutions, in most cases Coinbase. While it is hard to predict the impact of the ETF approval for Jersey now that regulated products are available in the US, it may open the doors to more traditional financial institutions (for example banks) who may be more seriously considering exposure to Bitcoin as part of their suite of client services.

Jersey prediction: 2 years

The EU's Markets in Crypto-assets Regulations (MiCA) will come in to force at the end of 2024 and may provide regulatory arbitrage opportunities for VASPs either looking for higher or lower levels of regulation. We will review the potential for a local conduct and prudential regime for virtual assets.

There are currently several challenges to the practical implementation of the Travel Rule. Firstly, many jurisdictions are not yet following FATF's recommendation in this space, meaning that information sharing cannot be completed unless both VASPs are willing and technically able to participate.

Secondly, unlike in the traditional finance world where we have a universally accepted information sharing protocol in the form of SWIFT, there is no standardised protocol for information sharing between VASPs. The Innovation Hub will be working closely with each of the local VASPs, the solution providers and regulators in other jurisdictions to meet these challenges throughout 2024.

An updated version of the JFSC's Information Commissioners Office (ICO) guidance will be released by the Innovation Hub in early 2024.

Tokenisation of real-world assets

Asset tokenisation is the process where an issuer creates tokens representing real world assets (RWAs) on a blockchain. Tokens can represent assets 1:1, a basket of underlying assets, or even fractionalise a larger asset. Tokenising RWAs can reduce costs and increase transferability of these assets.

Throughout 2023, we saw an increasing number of both enquiries and applications for tokenised RWAs, with areas of interest being the tokenisation of real-world equities such as Tesla and Amazon, tokenised bonds and tokenised funds.

It is important to recognise that, from a regulatory perspective, tokenised RWAs are treated differently to virtual assets. Virtual assets have their own definition and their service providers are covered under Schedule 2. Tokenised RWAs are also distinct from non-fungible tokens (NFTs). Tokenised RWAs are more likely to be fungible and a replication of an existing financial asset, rather than an altogether new asset class.

We are currently treating applications with exposure to tokenised RWAs on a case-by-case basis and typically taking a substance over form approach. There are currently no plans to roll out a specific regime for tokenised assets. We prefer to understand how these assets map against our existing regulatory framework while acknowledging the specific nuances of assets held on blockchains, and the mechanics of smart contracts.

Jersey prediction

According to a paper commissioned by Jersey Finance, with research from Boston Consulting Group (BCG) and investments platform ADDX, the global tokenised asset market is set to see a 50-fold increase from 2023 to 2030, making this a business opportunity of between \$16.1 trillion and \$69 trillion.

We are currently researching and preparing a guidance note to assist those businesses that are interested in filing an application for the issuance of tokenised RWAs.

2024 and beyond

We will continue working with the Government of Jersey, Jersey Finance and Digital Jersey to help deliver on our commitment to support the adoption of RegTech on-island. Internally, we will continue to improve our own digital capability and how we use technology to better focus our finite resources on the highest risks, with a focus on SupTech and its relationship with the development and adoption of RegTech.

2024 deliverables:

- › **continued outreach and engagement** with technology-focused businesses and entrepreneurs
- › **amendments to Section 4** of the AML/CFT handbook in respect of digital ID
- › **review the data** collected through the VASP registration process and the subsequent exploration of enhancements to the regime
- › **review and update** the initial coin offering guidance and asset tokenisation guidance
- › **internal work reviewing** the regulatory impact of the Artificial Intelligence Report
- › **deployment of our AI regulatory chatbot** to improve user experience and process efficiency – this will focus on the AML/CFT/CPF Handbook initially, with plans to expand content and functionality



