

Financial crime and regulatory technology guide

INNOVATION



Jersey Financial
Services Commission

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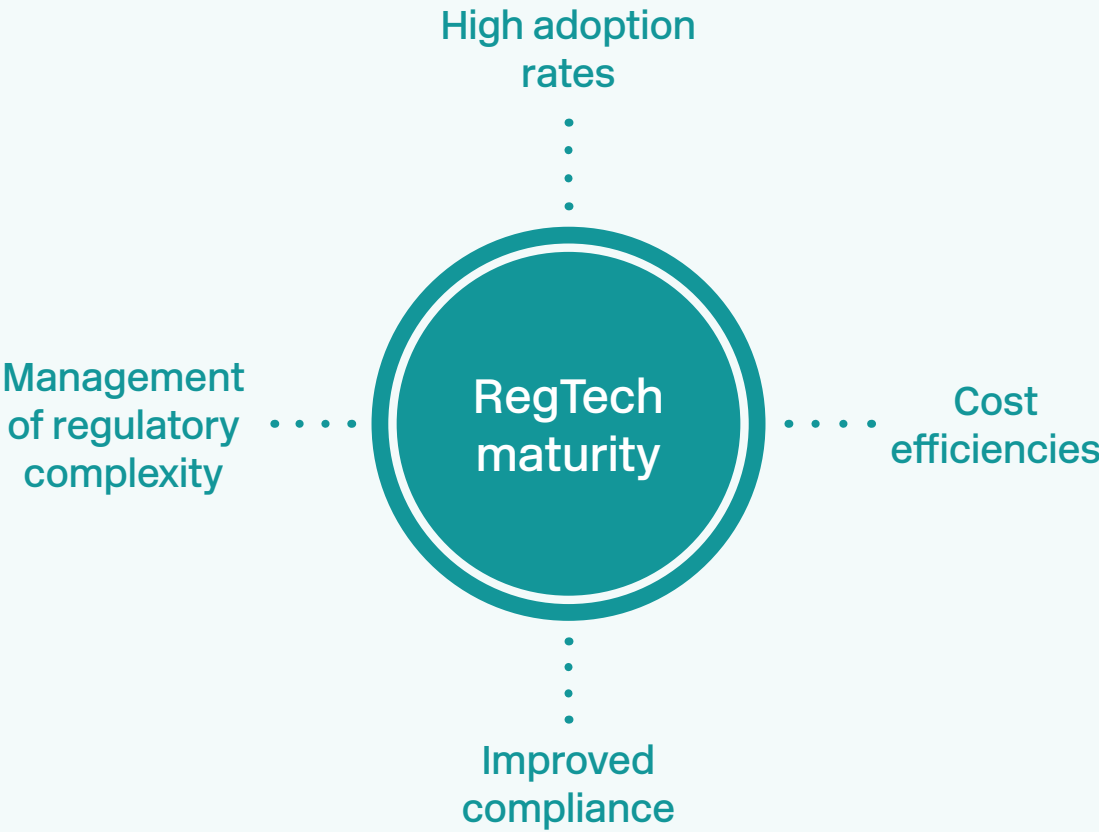
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Introduction

 Regulatory technologies (known as RegTech) help businesses from a range of regulated sectors to achieve compliance, delivering significant business value in the process.

The JFSC’s Innovation Hub encourages the adoption of technology in the financial services industry. Our ambition is for Jersey’s supervised persons (subsequently referred to as firms) to reach a prominent level of RegTech maturity by the end of 2024, evidenced by high adoption rates, cost efficiencies and improved compliance and management of regulatory complexity.

We also believe the adoption of RegTech can facilitate high standards of business integrity.



Adopting RegTech financial crime solutions offers considerable benefits including:

- › reduction in compliance risk
- › increased efficiency through automation of manual processes
- › cost savings
- › better customer insights

In 2021 the JFSC commissioned a third party to produce a report on closing the gap between Jersey’s RegTech ambition and reality. We undertook a further digital ID survey in June 2023 which highlighted a desire for more information about the benefits and use of RegTech.

This guide serves as an initial step towards raising awareness about technology solutions available in combatting financial crime. It will:

- › explain what RegTech is
- › highlight how RegTech can be successfully applied
- › provide case study examples of good practice including RegTech procurement considerations
- › emphasise the work of the JFSC’s Innovation Hub and how firms can engage with us

Further regulatory information is also available in the JFSC’s [AML/CFT/CPF Handbook](#).¹

Financial crime and regulatory technology guide structure



1. In case of any contradictions between this guidance and the AML/CFT/CPF Handbook, the latter will prevail.

What is RegTech?

 RegTech describes any technology that helps firms to meet their regulatory obligations.

RegTech is embedded in the way many firms operate, including for example:

- › gathering, collating and analysing data to calculate environmental, social and governance (ESG) exposures
- › monitoring the transactions and behaviours of employees aiming to prevent market manipulation
- › tracking the activities of customers to ensure they are fairly treated
- › combatting complex international financial crimes such as money laundering, terrorist financing, proliferation financing, sanctions evasion, tax evasion and fraud



Successfully applying a RegTech solution

 RegTech solutions are diverse in nature. In this guide we discuss what you should consider against the regulatory guidance. A schematic of capabilities, typical functionality and priority ratings can be found in **Appendix A**.

What good looks like and what to consider when procuring RegTech solutions

The JFSC is a principles-based regulator. This means we do not regulate firms on a prescriptive basis in terms of how to meet with the requirements under Jersey's regulatory framework. Instead, firms may choose different methods to reach robust solutions that successfully deliver the desired regulatory outcomes. The below examples of RegTech solutions build on the requirements set out in the AML/CFT/CPF Handbook, and highlight what good may look like.

A general feature is the benefit of firms interrogating, assessing, understanding and documenting any limitations of the RegTech solutions they use, and documenting the mitigative measures that the firm puts in place to effectively manage risk.

Business risk assessment (BRA) and governance aids

As part of a risk-based approach, firms must assess the financial crime risks they are exposed to. They must implement adequate and effective systems and controls to measure and monitor performance and prevent or mitigate financial crime risks. RegTech solutions can aid this process.

The procurement of a RegTech solution also benefits from consideration being given to the features and capabilities of the solution against the firm's processes. Its application may inform the firm's governance process not just when testing efficacy of compliance, but also concerning awareness raising and training, fostering informed strategy building and application.

Financial crime assessment solutions enable firms to measure and profile the financial crime risks specific to their organisation. They provide tools to evaluate and categorise risks based on factors such as customer types, products, services, jurisdictional touchpoints, delivery channels and transactions. This can allow firms to understand their unique risk profile and financial crime exposure, and to implement appropriate mitigation strategies.

A **compliance rule engine** automates the mapping and application of legislative and regulatory requirements and internal policies. It enables the identification of potential compliance violations and alerts the relevant teams for further investigation.

Customer due diligence (CDD) measures: identification and verification (ID&V)

Identification measures are vital as they help to protect the integrity of the financial sector and the firm, reducing the likelihood of becoming the victim of, or inadvertently facilitating, crime such as identity theft. They must be undertaken applying a risk-based approach and, for example, before the establishment of a business relationship or a one-off transaction. Corroborating identity documents must be undertaken using reliable and independent sources. When ID&V is being performed remotely, for example by an online user, enhanced CDD (ECDD) measures are required.

ID&V solutions help to ensure that a person exists, they are who they say they are, and live where they say they live. ID&V technologies may utilise digital identification (D-ID). It can help avoid the need to verify a customer's identity in-person, or to witness physical copies of official documents.

Identification document verification solutions analyse and authenticate identification documents such as passports, drivers' licences, or national identity cards. They are often equipped with technology to detect fraudulent or altered documents. When procuring a document verification solution, a firm will benefit from considering factors such as how frequently and how comprehensively identity document reference libraries are maintained, putting in place a service level agreement (SLA) to manage change requests and the risk of omissions and errors.

Solutions which account for biometric factors aim to physically assess individuals and the way they behave - mapping these factors against what is known of the individual.

Facial recognition technology, for example, can be used to match an image or video of a person's face to an image on their identification document, providing an additional layer of verification. When procuring a facial recognition solution, a firm will benefit from considering and understanding the tolerance level set for what constitutes a match between an image or video of a person's face and the identification document and whether this information is transparent and/or adjustable.

When ID&V is being performed remotely, for example by an online user, enhanced CDD (ECDD) measures are required.

The use of **liveness detection features** alone is not robust enough to be used solely to verify a customer's identity and should be used in conjunction with other methods. The feature seeks to prevent misuse of another person's photos and videos. It can check that the person on the video matches another biometric source (for example, a selfie). It may ask the customer to blink or say a few words to validate they are a match.

Some **ultimate beneficial owners/controllers (UBOs) identification solutions** assist in identifying the UBOs of a business. This may involve sourcing relevant information from public UBO registers and deploying algorithms and visualisations to trace the ownership and control of complex corporate structures. Firms should be alive to the limitations of sourcing information from public UBO registers which may not be kept up-to-date and may only include information on ownership over certain thresholds. Many jurisdictions do not maintain public UBO registers as the Court of Justice of the European Union has ruled that unfettered public access to such registers infringes on Articles 7 and 8 of the EU Charter of Fundamental Rights, not being necessary, nor proportionate. Jersey's regulatory framework requires ID&V not just in terms of formal UBOs, but also of those who they may act for and on behalf of, or on direction of. This information is unlikely to be accessible via public UBO registers and will require additional assessments, identification and verification. To comply with the regulatory framework, it is important that the firm understands and documents limitations presented by the RegTech solution and takes appropriate action to mitigate any gaps.

Address verification solutions cross-reference a (prospective) customer's residence address, documented in, for example, a utility bill or bank statement, with information in official government databases, public records, credit bureaus, and commercial data providers' records. It may use **data access and aggregation solutions** combining data from multiple sources, providing a more comprehensive view.

It validates the person's residence address for the event that they need to be reached by, for example, law enforcement. Some solutions employ a method of sending unique codes to the given address, which the user returns to verify the authenticity of their residence. A firm may wish to consider augmentation of validation through combinations of automated digital processes such as geolocation information, and manual steps such as posting a letter to an address with a unique code, or through geolocation services being applied alongside IP address checks against the residential address.

A firm will benefit from considering an ID&V solution's coverage, frequency of updates and data accuracy.

A firm will benefit from considering an ID&V solution's coverage, frequency of updates and data accuracy. To safeguard their unique selling point, service providers may resist requests to share the complete information of their original sources of data. Thorough interrogation and testing of data sets against the ID&V solution, alongside SLAs on the frequency of data updates and coverage mapping, may provide useful solutions.

CDD measures: ongoing monitoring

Some RegTech solutions facilitate ongoing monitoring of customer profiles and periodic reviews to ensure compliance with changing legislation and regulations. They automate triggers for account re-evaluations based on predefined criteria, such as policies, systems and controls, or events. As with any configurable solution, criteria should be mapped to current processes and tested thoroughly.

Digital **onboarding workflows** facilitate efficient and user-friendly onboarding. These workflows can automate certain processes, such as data interpretation, which may lead to automated emails requesting further information.

Data collection is used to facilitate the collection of necessary data from customers during the onboarding process. These solutions often include digital forms or interfaces that capture relevant information, such as personal details, identification documents and proof of address.

Document management allows for the secure storage and organisation of customer-related documents, ensuring that important information is easily accessible when needed. These solutions can automate the retention and disposal policy.

Screening and ECDD are used against PEPs and sanctions lists as well as adverse media screening and other checks necessary for high-risk customers.

Adverse media screening can also screen individuals and entities against adverse media sources

PEP and sanctions screening enable the screening of customers, business partners, associated parties and transactions against PEPs lists and sanctions lists. They automate the identification of, for example, assets, natural persons, legal persons, arrangements with potential high-risk associations, designated persons or involvement in illegal activities.

Data integration and watchlist updates integrate with various data sources and watchlist databases, including in some cases the dark web to access the latest information on PEPs, sanctions, and adverse media.

Adverse media screening can also screen individuals and entities against adverse media sources, including news articles, regulatory announcements, and public records. They may deploy sentiment analysis to flag any negative or high-risk information that may impact the customer's risk profile, providing an additional layer of CDD.

Automated risk scoring can employ risk scoring models to assign risk ratings to customers and transactions based on screening results. A common issue with automated screening solutions is the return of high volumes of false positives. It is important that consideration is given to the resourcing of this process to manage them and any other operational risks. The importance of personal responsibility and therefore meaningful human involvement in the decision-making process is an important consideration.

Rules-based detection helps to identify potential instances of money laundering, fraud, or other illicit activities using a rules-based approach.

Transaction monitoring solutions provide the capability to analyse and monitor financial transactions in real-time or through periodic batch processes. These solutions play a crucial role in detecting and preventing financial crimes such as money laundering and fraud and are the basis on which suspicious activity can be detected for the submission of suspicious activity reports (SARs). Straight through processing in identifying suspicious activity and then the subsequent automatic generation of SARs brings

efficiency benefits but one consideration of note would be where meaningful human involvement occurs in the process to ensure personal responsibility is retained.

Real-time monitoring can track and analyse financial transactions in real-time, enabling immediate detection and response to potential illicit activities.

Rules-based detection helps to identify potential instances of money laundering, fraud, or other illicit activities using a rules-based approach. Predefined rules and thresholds are set to flag transactions that meet certain criteria, such as high-value or volume transactions, structuring, or unusual patterns.

Complex anomaly detection employs advanced algorithms and machine learning techniques to detect unusual or anomalous transactional patterns that may indicate fraudulent or suspicious activities, but which are not easily identified with hard-coded rules. Unusual transaction volumes, frequencies, or patterns can trigger alerts for further investigation.

Blockchain analytics aim to provide transparency into blockchain transactions, including tracking them across different blockchains (i.e., across different crypto assets). They can also support the detection of suspicious activities, understanding transaction patterns, and modelling/visualising data. By analysing and visualising the full chain of transactions, these tools enable investigating entities to trace individual transactions back across multiple "hops"² to identify the original source of funds and assess its legitimacy.

2. "hops" refers to the movement of tokens from one account or location to another, which would be recorded as transactions on the blockchain.

End-to-end anti-money laundering

Products in this category address several aspects of the financial crime compliance process, sometimes at a high level (systems and controls such as policies and procedures), or are platforms with a suite of modules that can be combined to provide an end-to-end solution for AML.

Network analysis employs techniques to identify and analyse relationships between individuals, entities, and transactions. This allows for a more comprehensive understanding of transaction patterns and potential risks, enhancing the effectiveness of AML/CFT/CPF efforts.

Predictive analytics identify potential future risks and trends. This allows firms to proactively manage their risk exposure and implement appropriate mitigation strategies in advance.

Behavioural analytics allow customer transactional behaviour patterns to be better understood. This can help identify unusual or suspicious behaviours that may indicate illicit activities, further enhancing the detection capabilities of the solution.

Data visualisation and dashboards enable compliance professionals to gain actionable insights from vast amounts of data, enabling them to make informed decisions and effectively manage their firm's financial crime risks.



Case studies

➤ All the information in the following cases studies has been provided directly by the companies featured. They have been anonymised but are UK and Jersey based.

Case study 1

The challenge

A fund services business, specialising in private equity and venture capital fund administration and accounting, was grappling with the shift to remote working. While their compliance team was accustomed to a hybrid work model, other teams were less familiar. Additionally, they faced challenges in know your customer (KYC) and onboarding processes, especially with identifying ultimate beneficial owners/controllers (UBOs) and understanding corporate ownership structures.

The solution

The firm adopted a software as a service (SaaS) RegTech solution to optimise their onboarding processes. The platform enabled them to:

- › run multiple online identification and verification (ID&V) and anti-money laundering (AML) screening checks rapidly
- › efficiently onboard individual investors, providing prompt ID&V and AML reports
- › unravel complex ownership structures and identify UBOs, representing this data in easily comprehensible charts

Furthermore, the platform's flexibility allowed for office-based and remote access, ensuring continuous service.

The impacts

- › **efficiency:** the firm could swiftly adjust to remote working conditions, ensuring no disruption in meeting client deliverables. Essential onboarding checks that were once manual and administrative became automated and efficient
- › **growth:** the seamless onboarding experience facilitated by the platform positioned the firm to attract and onboard new clients and business, which might have been challenging without such a tool
- › **enhanced client experience:** with the capability to run ID&V alongside AML screening, clients received a comprehensive update on all KYC and AML matters simultaneously. Complex ownership structures were made transparent, enabling clients to make informed decisions

Case study 2

The challenge

A mid-sized European fund administrator, boasting a strong reputation and varied client base of private equity firms, hedge funds, and asset managers encountered significant issues.

They were faced with:

- › navigating the regulatory landscape dominated by KYC and AML regulations
- › keeping pace with rapid technological innovations that presented both opportunities and challenges
- › balancing cost management with maintaining high-quality service
- › overcoming outdated KYC onboarding processes that hindered scalability and led to client dissatisfaction

The solution

The fund administrator turned to a modern RegTech solution which offered:

- › streamlined compliance processes, helping the firm to keep up with KYC and AML regulations in a multi-jurisdictional European environment
- › an intuitive user interface and automation features which eliminated bottlenecks, providing swift decision-making tools
- › standardised onboarding processes, ensuring consistent requirements and reducing potential friction between business development and compliance teams

The impacts

The adoption of RegTech led to tangible, positive outcomes:

- › **efficiency boost:** onboarding time was drastically reduced by approximately 66%, transforming a process that took weeks into one that often took just minutes
- › **compliance precision:** accuracy in compliance saw an increase of over 50% by eliminating manual rekeying errors
- › **operational excellence:** there was a c.600% improvement in operational efficiency. Automation features freed up staff, allowing them to focus on other vital tasks

Lessons learned

Several key insights emerged from this implementation:

- › **data management:** ensuring seamless data flow across various workflows is pivotal, especially when integrating with existing systems
- › **collaboration is vital:** providing a transparent platform for all stakeholders, including clients, promotes trust and efficient communications
- › **employee morale:** adopting RegTech led to a noticeable uplift in staff morale and efficiency. By reducing manual tasks, employees could concentrate on their core roles, leading to enhanced job satisfaction

Case study 3

The challenge

Financial transactions are often time sensitive and customers often look for a solution that quickly meets their needs. Some customers no longer expect, or have time, to go to their local high street lender during working hours to meet with a financial professional. Instead, they need the same personalised experience but online and at a time that suits their schedule.

Therefore, a Jersey based subsidiary of a UK FTSE 250 merchant banking group partnered with a Jersey-based technology company to create an additional delivery channel for their customers, aiming to deliver a seamless and secure end-to-end digital journey.

The solution

The technology company provided a suite of core technologies including data entry, identification, cloud storage for secure document transfers, customer messaging and document signing. Collaborating closely, the two companies built an effective functionality framework with workflows and user journeys to deliver a secure and robust solution.

Through integrating the technology into the bank's customised portal, the platform aims to allow customers to take control of the loan application journey. Enhanced document analysis capabilities significantly reduce the risk of fraudulent documents being accepted and allow customers to share their confidential documents securely, such as proof of address.

Combined with this, an inbuilt integration with Adobe Sign seeks to provide a fast, online, digital, and paperless end-to-end customer journey which allowed documents that require a customer signature to be signed electronically.

Finally, the identification solution endeavours to verify a customer's identity in minutes with fast, secure, and easy to use ID authentication, facial recognition, and liveness checking using trusted real time remote identity verification technology.

The impacts

The platform was integrated into the bank's existing customer portal without the need to invest in an entirely separate technology. This bolt-on included an intuitive workflow to improve online customer experience and allowed the financial institution to meet its high compliance and regulatory standards alongside delivering improved customer satisfaction.

Close collaboration enabled a tailored solution to be created. The technology company was able to deliver a flexible solution which enhanced the customer experience, reduced manual processes, and complied with the necessary regulatory requirements.

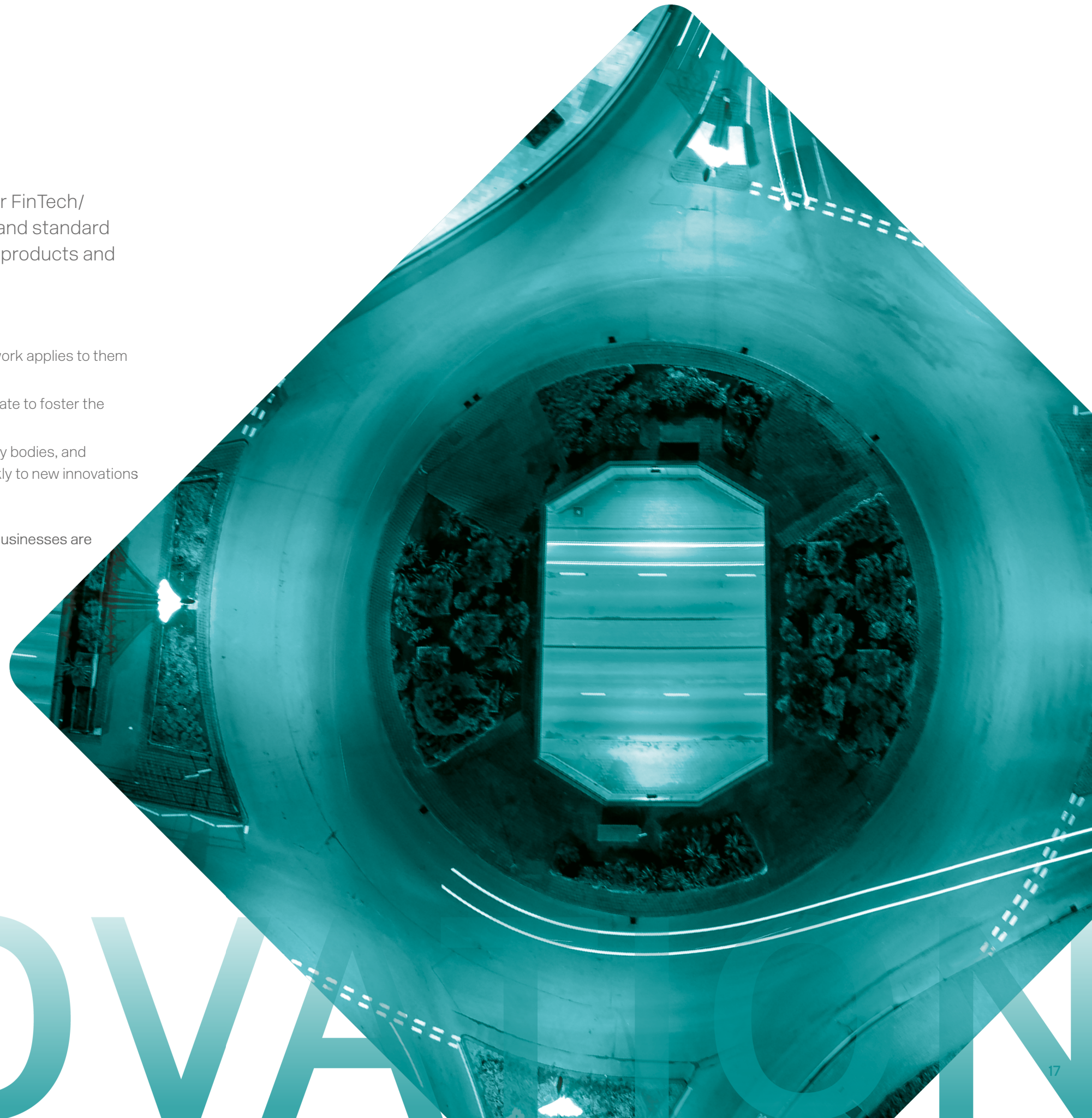
About the JFSC Innovation Hub

➤ Our Innovation Hub provides a collaborative environment for FinTech/RegTech start-ups, supervised persons, global regulators, and standard setting bodies to work together to develop and launch new products and services that meet evolving industry requirements.

The hub encourages financial services industry technology adoption by:

- › providing help for innovative businesses to understand how the regulatory framework applies to them and their proposed products and services
- › listening to and engaging with industry, considering relevant policy where appropriate to foster the development of innovative products or services
- › working closely with key stakeholders, including the Government of Jersey, industry bodies, and international standard setters to ensure that Jersey is well placed to respond quickly to new innovations in financial services

When considering, developing or implementing innovations such as RegTech solutions, businesses are encouraged to reach out to us: innovate@jerseyfsc.org.



Appendices

Appendix A

The table below provides a non-exhaustive high-level overview of capabilities, functionality, and priority levels where RegTech can be successfully applied. It is informed by the JFSC’s comprehensive research and engagements with industry participants. While individual priorities differ, the schedule represents a prioritisation appropriate for the average firm on the island.

Capability	Typical functionality	Priority
Identification and verification	› document verification › biometric matching › liveness detection › address verification	Immediate: critical for ensuring the integrity of remote onboarding
Customer due diligence and enhanced CDD	› data access and aggregation › ultimate beneficial owner and controller identification, as well as identification of those who they may act for and on behalf of, or on direction of › automated document analysis › risk profiling and scoring › identification measures and ongoing monitoring	Immediate: significantly enhances the accuracy and rigour of checks on a global customer base.
Customer onboarding and lifestyle management	› onboarding workflows › data collection › document management › ongoing monitoring and reviews	Next step: valuable efficiency enhancing steps streamlining critical identification measures and on-going monitoring processes.
Business risk assessment	› risk measurement and profiling › compliance rule engine	Next step: steps to enrich or augment human assessments and expand awareness of risk beyond known compliance challenges
Screening	› Politically exposed person (PEP) screening, sanctions screening and on-going transaction monitoring › data integration and watchlist updates › adverse media screening › automated risk scoring	Immediate: ongoing monitoring process requirements under Jersey’s regulatory framework
Transaction monitoring	› real-time monitoring › rules-based detection › complex anomaly detection › blockchain analytics	Next step: downstream from onboarding, these techniques are important in maintaining an ongoing view of risks and to spot anomalies
End-to-end anti-money laundering, countering terrorist financing and combatting of proliferation financing	› network analysis › predictive analytics › behavioural analytics › data visualisation and dashboards	Strategic: techniques that could unlock significant value for Firms which have a good grip on their data and system architecture.

Meaning of priority ratings

Immediate: technologies that need to be considered right away due to pressing regulatory requirements or significant compliance challenges.

Next step: technologies that should be on the near-term horizon, offering clear advantages for firms slightly further along their journey of technological maturity.

Strategic: technologies that, while not immediately pressing, align with long-term compliance trends and strategic planning.

Appendix B

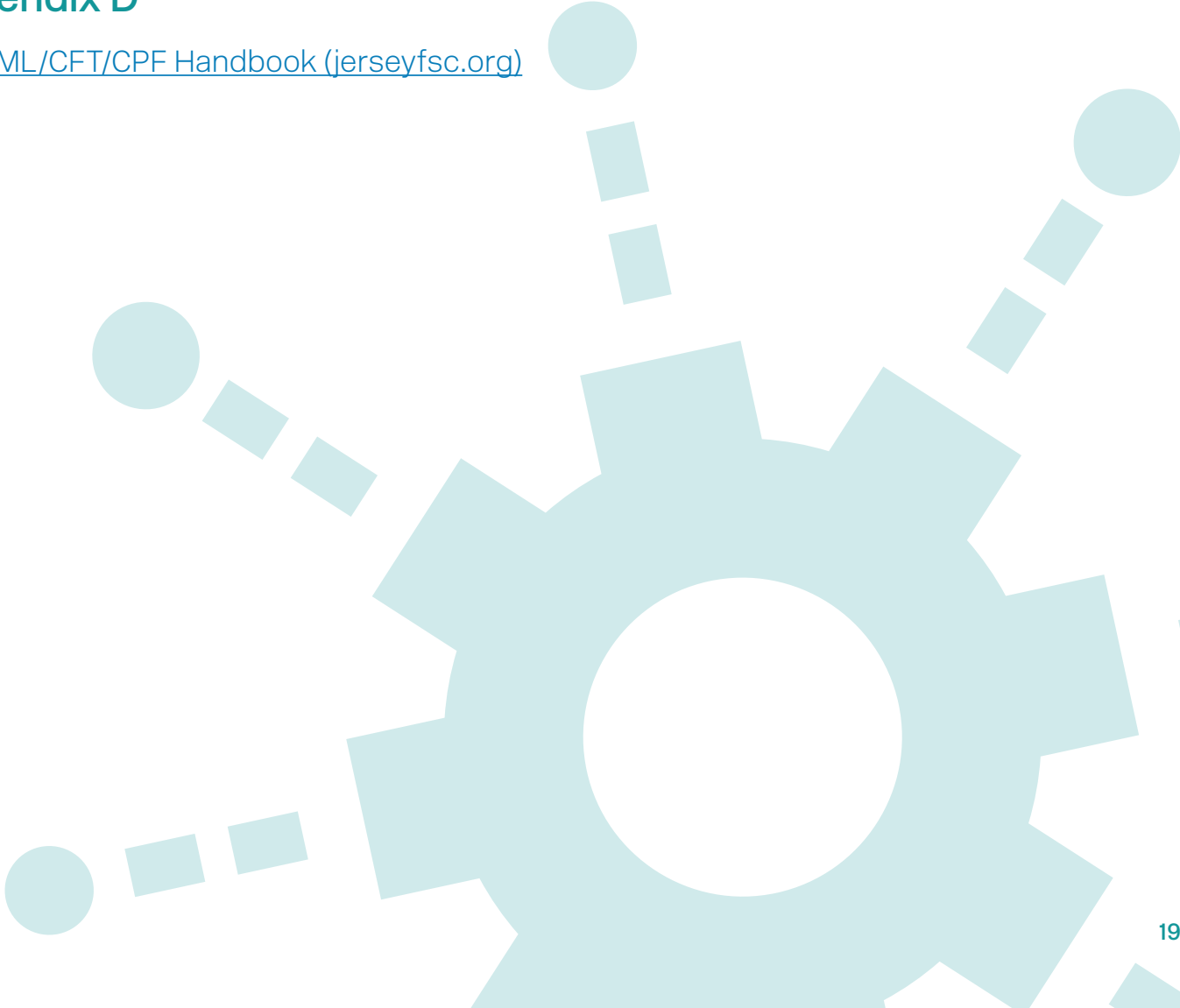
[RegTech in Jersey: Closing the gap between ambition and reality \(jerseyfsc.org\)](#)

Appendix C

[The Innovation Hub \(jerseyfsc.org\)](#)

Appendix D

[The AML/CFT/CPF Handbook \(jerseyfsc.org\)](#)





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