

# *Just in Time*

## EBA Analysis of RegTech in the EU Financial Sector

EBA/REP/2021/17

Sep 2021

# Executive Summary 1/2

In line with the financial industry trends, the European Banking Authority (EBA) has been **focused on the technological innovations** and how their applications can either foster or harm market participants and Supervisory organizations.

Since the *Article 31 of the European Banking Authority (EBA) Founding Regulation (EU) No 1093/2010*, EBA has aimed to contribute to the **establishment of a common European approach towards technological innovation** which can facilitate the adoption of new technologies by the Financial Institutions and Providers (FinTech), Regulators (RegTech) and Supervisory organizations (SupTech). On the other hand, one of the main concerns of the Authority is to **establish robust oversighting frameworks to control and mitigate possible risks that could arise from new approaches**.

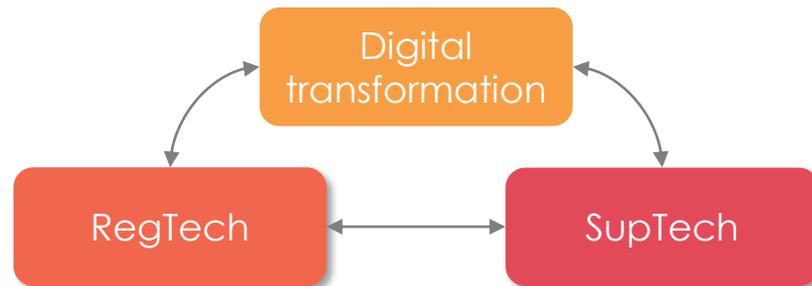
In this regards, **EBA started a monitoring process** on the usage of new technologies and methodologies to analyze their effect, in terms of both benefits and possible risks. The objective is to **set the scene for the future policy** discussions within the wider objectives of facilitation of innovation and aim to **assist the European Commission's objectives included in the Digital Finance Strategy**.



# Executive Summary 2/2

Given this premise, one should acknowledge that to **properly monitor and regulate the introduction of advanced technologies in the financial sector, two main layers of adoption** must be considered:

1. **RegTech**, that mainly deals with covering interaction with financial institutions, data gathering and initial steps of data governance;
2. **SupTech**, which addresses the usage of technologies for supervisory purposes, covering the data analytics and completing the picture of data governance at the supervisory and regulatory side.



In “**EBA analysis of RegTech in the EU financial sector**”, the Authority analyzes the actual RegTech landscape, and which are the benefits and challenges coming from its products. The analysis concludes with some suggested solutions for a wider market adoption and a drill-down for specific market segments<sup>(1)</sup>. Detailed analysis and suggested actions on the SupTech sector are left by EBA as a (near) future step.

*(1) A summary of these drill-downs will follow in dedicated Iason's JITs*



# At a Glance

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# 01

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## Introduction

Purpose

Background

Methodology



# Introduction 1/3

## Purpose

**EBA studied the RegTech developments to highlight the **benefits** that new solutions can bring, develop good **understanding** of any **emerging risks**, and **assess** whether the **regulatory and supervisory frameworks can capture and mitigate those risks.****

This document wants to summarize the **major findings** of the EBA study and, in line with the original paper, will be displayed as follows:



### Actual RegTech Landscape

Analysis of the actual **level of implementation of RegTech solutions**, highlighting which are the barriers for their wider market adoption across the Single Market and which are the possible ways to overcome such barriers.

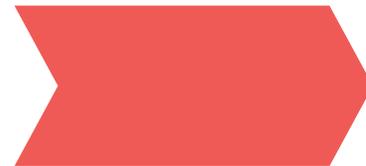


### RegTech Benefits & Challenges

Display of the **benefits and challenges** that:

- FIs have to face to implement these new technologies
- RegTech Providers have to consider to extend their services to the financial industry

This section identifies also the **risks** related to the adoption and use of RegTech solutions.



### Dive into RegTech Segments

Overview of the **main RegTech sections** (Anti Money- Laundering/Countering the Financing of Terrorism (AML/CFT), Fraud Prevention, Prudential Reporting, ICT Security, and Creditworthiness Assessment (CWA)), with focus on the foreseen benefits. A more thorough analysis, showing the level of adoption, challenges and risks will be object of next JITs.



### Conclusions and Way Forward

Final remarks and **the way forward** to facilitate the scale-up of innovation for RegTech in the EU to support the digital transformation of the EU financial sector.

# Introduction 2/3

## Background

The publication of the “*EBA analysis of RegTech in the EU financial sector*” is consistent with the **European Commission's Digital Finance Strategy** and proves **RegTech** to be one **of the priority topics for EBA in its 2020 – 2021 working program**.

The **report findings** and the related **proposed actions** are meant to be **instrumental** for the definition of **future policies** which must regulate the adoption of new technologies while maintaining **technological neutrality**.

### Technological Neutrality ...

- Technological neutrality is about achieving the **right balance** between **facilitating innovation, scalability** and **competition** across the EU Single Market
- Technological neutrality principle means that:
  - the use of a **specific technology** should **neither be preferred nor prejudiced**
  - the use of new technologies should **not be inadvertently prevented** because of the regulatory or supervisory approach

### ...as cornerstone to guarantee:

- Support to the **scaling** of innovative technology **cross-border**
- **Raise awareness** on RegTech within the **regulatory** and **supervisory community**
- Definition of **future policies** which ensure the correct oversight and mitigation of risks, while not preventing, but facilitating the adoption of new technologies
- Use of new technologies also for **supervisory purposes** (SupTech) while helping providing clarity on supervisory expectations

# Introduction 3/3

## Methodology

The EBA report on RegTech benefited from many **information sources** to ensure comprehensive coverage of the current landscape and to identify the potential way forward:



**Desk-based research** to identify five areas with an increasing use of technology enabled innovation



A general **RegTech industry survey** and a further **deep-dive market study** where all relevant stakeholders were invited to share their views and experience on the use of RegTech solutions



A **virtual workshop** on RegTech, attended by RegTech Providers, Financial Institutions and competent Authorities

The aforementioned sources ensured broad feedbacks from a wide range of stakeholders, **providing an essential understanding** of the extent and the impact on the use of RegTech solutions.

# 02

## RegTech Context

Definition & Motivations

Landscape

Adoption Path



# RegTech Context 1/5

## Definition & Motivations

### Definition

The term **RegTech** refers to any range of applications of **technology-enabled innovation** for **regulatory, compliance** and **reporting** requirements implemented by a regulated institution.

### Motivation

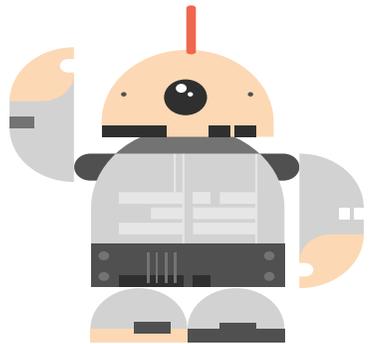
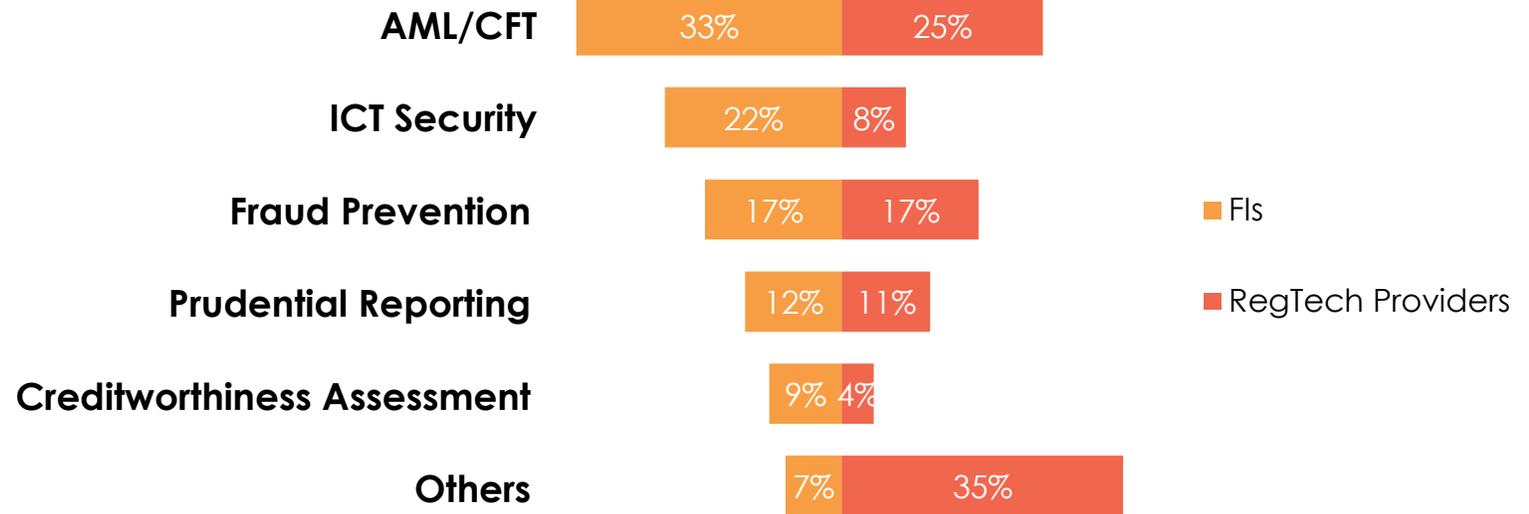
- 1 Necessity of Financial Institutions to be compliant with the EU regulation induced the development of **advanced tools** to **reduce** the **costs** and the **human errors** in reporting. This automatization of reporting is the market area in which RegTech dwells.
- 2 Since **data** is becoming '**the new gold**', activities like effective data gathering, governance and analytics are now an **essential attribute of successful institutions**.
- 3 An **effective, safe, and sustainable market** can be reached by market participants, regulators and supervisors **through new advanced solutions**.

# RegTech Context 2/5

## Landscape 1/3

The paper considers six<sup>(1)</sup> **segments of RegTech applications** where the proportion of their adoption is shown below. It can be noted that based on the sample of surveyed Financial Institutions (FIs) and RegTech Providers, the **most frequently used** RegTech solutions are related to **AML/CFT**.

Proportion of RegTech adoption by market segments



- The majority of surveyed RegTech Providers went live with their solutions only within the last **six years**
- Most of the RegTech Providers has small number of clients: **39%** of the RegTech Providers in the sample have less than six Financial Institutions as their clients.

(1) Five proper areas of application (Anti Money- Laundering/Countering the Financing of Terrorism (AML/CFT), Fraud Prevention, Prudential Reporting, ICT Security, Creditworthiness Assessment (CWA)) and a general "Others" cluster.

# RegTech Context 3/5

## Landscape 2/3

Given the level of **RegTech adoption** for the different segments, EBA analyzed the following areas:

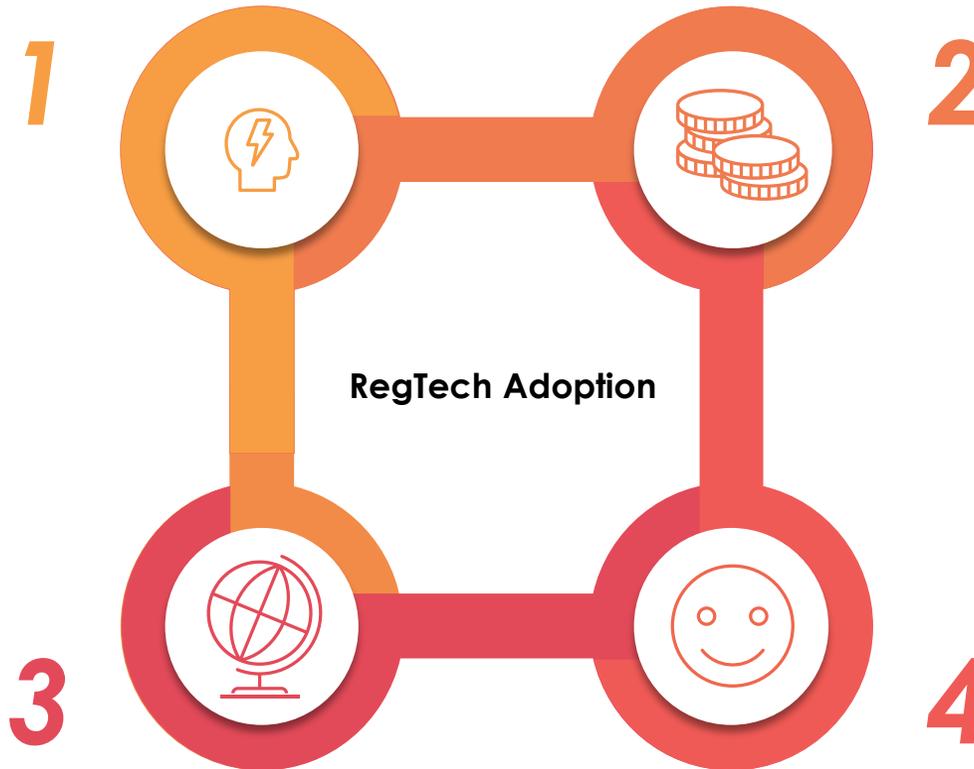
### Adoption rates

- FIs' responses indicate that there are several FIs with **advanced experience** of RegTech solutions and services.
- Analysis of geographical coverage of RegTech Providers' solutions suggests a **greater market share for EEA<sup>(1)</sup>** countries, but the **most successful** examples can be found among **non-EEAs**.

### Overview of national developments related to RegTech

- Public authorities across the EU undertake **several RegTech-related activities** to address inadvertent barriers to the application of these technologies and to the scaling up of innovation in this field.

(1) European Economic Area



### Spending on RegTech

- For half of the surveyed FIs, investment and spending on RegTech solutions, in terms of the overall IT budget, is **below 20%**.

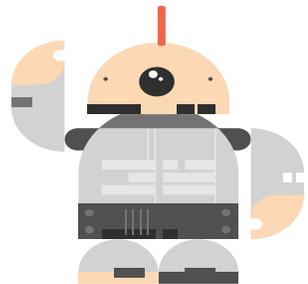
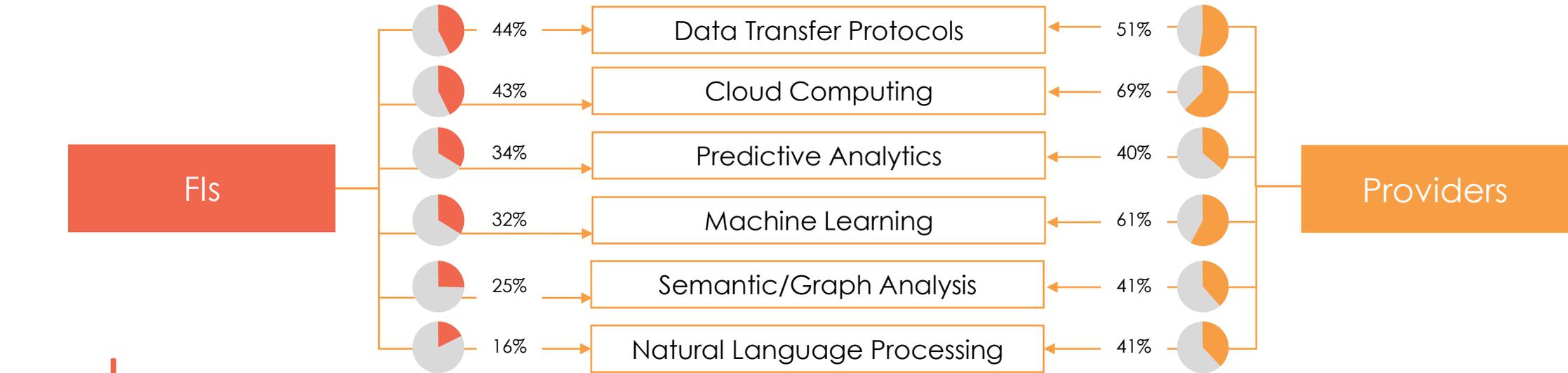
### Level of FIs' satisfaction with RegTech solutions

- The overall **level of satisfaction** with RegTech solutions in terms of their value added **is high**. Approximately 10% of FIs are very satisfied and 60% are satisfied with realized benefits of adopted RegTech solutions.
- The overall satisfaction level with **external solutions** is **slightly higher**.

# RegTech Context 4/5

## Landscape 3/3

EBA further studies the **main technologies** applied by FIs and offered by RegTech Providers to develop their RegTech solutions. Top technologies used by FIs and RegTech Providers are the same but in a slightly different order. However, the level of **technology adoption** seems to be **somewhat lower on the FIs' side compared to RegTech Providers**.



- **Cloud computing** across all RegTech segments on the FIs' side is lower than on RegTech Providers'.
- **Machine Learning** and **Cloud Computing** are also much more frequently used by RegTech Providers than by FIs
- The complexity and the number of underlying technologies force FIs and competent Authorities to **continuously educate staff and management** to guarantee the correct usage, monitoring and governance

# RegTech Context 5/5

## Adoption Path

FIs have to follow a precise **path** to ensure a successful adoption of RegTech solutions. The necessary **governance process** components are listed here.



**1 Undertake due diligence and risk assessment**

1

This process can be very complex. FIs need to be aware of the risks they could face when relying on a third party provider.

**2 Evaluate technological readiness**

2

FIs are sometimes not ready to implement RegTech solutions. It may need a period of time to prepare FIs to these changes.

**3 Find RegTech sponsor**

3

A sponsor has the responsibility to oversee the project and make RegTech solutions a concrete added value for the FI.

**4 Determine the most appropriate deployment model**

4

The first choice is about “buy” versus “build” decision. Then FIs have to choose between SaaS<sup>(1)</sup>, RaaS<sup>(2)</sup> and on premise solutions.

**5 Monitor and analyze upcoming changes processes**

5

A continuous and rigorous regulatory screening of the ongoing changes is necessary for a correct implementation.

**6 Keep updated information and data-sharing processes**

6

In a process in which a lot of stakeholders are involved transparency and data accuracy are of fundamental importance.

**7 Be sure the changes are properly embedded in the organization**

7

FIs who wants to correctly integrate RegTech solutions have to constantly keep track of the changes and ensure their implementation.

(1) Software as a Service  
(2) Recovery as a Service

# 03

## Benefits, Challenges and Risks

Benefits

Challenges

Risks



# Benefits, Challenges and Risks 1/4

## Benefits

The main **benefits** of RegTech solutions from FIs and RegTech Providers' perspective have been analyzed by EBA and can be summarized as follows. Note that **cost savings** can be expected for both FIs and RegTech Providers.

### FIs' perspective:

Enhanced risk management, monitoring and sampling capabilities.



Facilitation in predictive analysis and reduction of costs.



Reduction in human errors and stimulus for professionals to foster on higher value tasks.



### RegTech Providers' perspective:

Increased efficiency and ability to reduce the impact of ongoing regulatory changes.



Efficiency and effectivity, cost minimization.



Increased ability to organize complex information and to integrate regulatory data.



# Benefits, Challenges and Risks 2/4

## Challenges

Among the main findings, EBA highlights that...



FIs perceive '**data and data quality issues**' as primary obstacles



**RegTech providers** consider the **lack of regulatory/supervisory guidance and support** an obstacle preventing the roll-out of their solutions across different countries

### ... for FIs

...and found that **most of the challenges** are **internal** to FIs and Providers.

In general, the major the **main challenges** displayed are:



- **Data-related** challenges and **cybersecurity** threats:
  - Data **quality**, data **privacy** and **protection**, lack of data **integration**, data **availability**
  - **Cybersecurity** threats
  - **Legal** and **regulatory** obstacles processing personal data
- **Integration** with the existing **legacy systems**
- Changes to **regulation**
- Perceived **immaturity** of RegTech Providers' solutions
- Lack of necessary **skills** and **training**
- **Costs** and **procurement** process

### ... for RegTech Providers

- **Security**, data **privacy** and **protection** issues: privacy regulation may be one of the key inhibitors for FIs from sharing datasets with RegTech Providers
- **Lack** of fixed, clear and harmonized **legal** and **regulatory requirements**
- Absence of **technological capabilities** on FIs' side
- **Cost** of user acquisition
- Lack of FIs' **understanding of RegTech solutions**

# Benefits, Challenges and Risks 3/4

## Risks 1/2

### Business continuity risk

- Risks for the continuity of services and/or affecting confidentiality, integrity or availability of data



### Technology-related and personal data protection risk

- Regarding cloud-based RegTech solutions, there is a risk that the FIs may not actually know where the Provider's servers and data storage are located



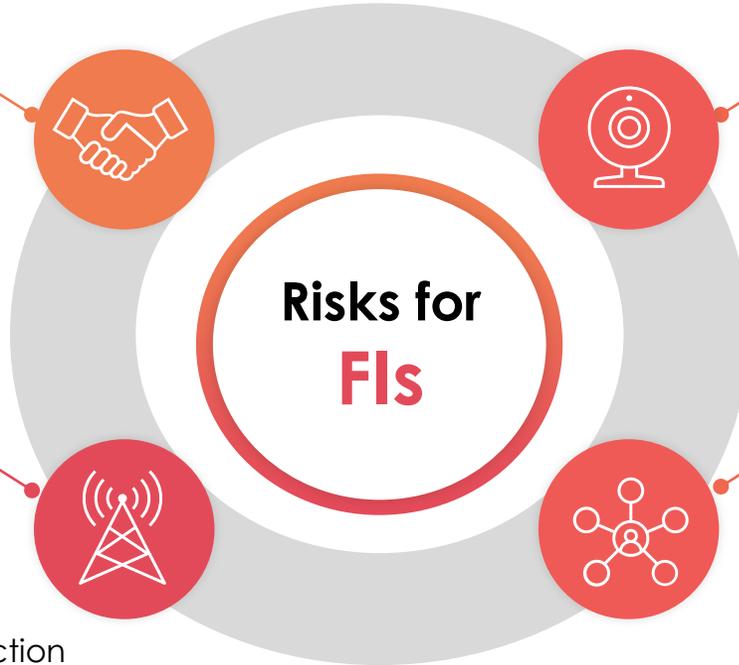
### Operational risk

- ICT and security risk
- Reputational risk
- Internal governance/legal risk
- Conduct and consumer protection risks



### Compliance and concentration risk

- Reliance on RegTech solutions may cause FIs to fail to comply with the applicable legal and regulatory framework
- Reliance on a certain RegTech Provider may lead to the emergence of a systemically important RegTech Provider, whose failure may have system-wide implications



It is important to mention how some of these risk may be addressed by the forthcoming new regulation on digital operational resilience in the financial sector (**Digital Operational Resilience Act**), proposed by the European Commission in September 2020.

# Benefits, Challenges and Risks 4/4

## Risks 2/2

On the other hand, for the **Competent Authorities**, risks that may **derive from the supervision of FIs** that use RegTech solutions can be found in:



1

Potential difficulties in the **assessment of the effectiveness** and **reliability** of the **technological solutions** used by FIs

2

**Lack of the skill** and **tool sets needed to supervise** and **audit** the use of technology enabled by RegTech solutions

# 04

## Main RegTech Segments



# Main RegTech Segments

From the desk-based research, the EBA identified **five areas** with an increasing use of **technology-enabled innovation** to assist financial institutions in meeting their regulatory, compliance and reporting requirements. Here is a brief description of the main segments' goals & benefits:

Segment (description)	Goal	Benefits
<b>AML/CFT</b> (Anti Money-Laundering / Countering the Financing of Terrorism)	Comply with obligations under Directive (EU) 2015/849 (AMLD), with a particular focus on the customer due diligence (CDD) requirements	Increased data quality, process efficiency and effectiveness
<b>Fraud Prevention</b> (Identifying subjects that are likely to be fraudstered)	Uncover fraud trends and patterns in the following areas of activity: <ul style="list-style-type: none"> <li>• Payment transactions</li> <li>• Client application usage</li> <li>• Fraud schemes</li> </ul>	Increased process effectiveness and efficiency, real-time monitoring, cost savings
<b>Prudential Reporting</b> (Producing reports and data analysis)	Assist FIs with their reporting functions and obligations	Correctness of analytics, ease of use, customized report designs, data handling integration, near-real-time production
<b>ICT Security</b> (Protecting FIs from cyber attacks)	Align cyber security policies with regulatory requirements	Enhanced risk management, real-time monitoring, increased effectiveness, support in addressing ongoing regulatory changes
<b>Creditworthiness Assessment</b> (Assess which clients are suitable for lending products)	Manage credit risk and prevent over-indebtedness of consumers	Greater accuracy and speed, fewer human error, shorter time to market, enhanced access to credit, reduction in the risks of false negatives

# 05

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## Conclusions and Way Forward

Findings

Next steps



# Conclusions and Way Forward 1/4

## Findings 1/2

While EBA found that common paths and motivations can be found in FIs and RegTech providers embracing the technological innovation ...

<b>Drivers</b> 	<ul style="list-style-type: none"><li>➤ <b>Efficiency and effectiveness</b></li><li>➤ Tools to <b>comply</b> with (FIs) or <b>monitor and assess</b> (RegTech providers) the <b>regulatory requirements</b></li></ul>	<b>Benefits</b> 	<ul style="list-style-type: none"><li>➤ <b>Risk management</b></li><li>➤ <b>Monitoring &amp; Governance</b></li><li>➤ Reduction of <b>human error</b></li></ul>	<b>Challenges</b> 	<ul style="list-style-type: none"><li>❑ <b>Internal:</b> costs, lack of skills, ICT systems capabilities, security issues</li><li>❑ <b>External:</b> lack of common/harmonized regulatory and supervisory frameworks</li></ul>
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... the Authority recognized how a **further and better understanding of technological developments is needed** from both sides (FIs and RegTechs) for the **scale-up of innovation**, suggesting how is crucial to

**Increase the understanding** of technological developments ...



# Conclusions and Way Forward 2/4

## Findings 2/2

Under this light, to **guarantee a robust oversight**, FIs, Providers, Regulators and Supervisors must than take **further actions**



### FIs and RegTech Providers

- Ensuring data quality
- Guaranteeing technological readiness and ICT systems capabilities
- Monitoring internal governance processes
- Improving FIs' skills and knowledge of RegTech solutions

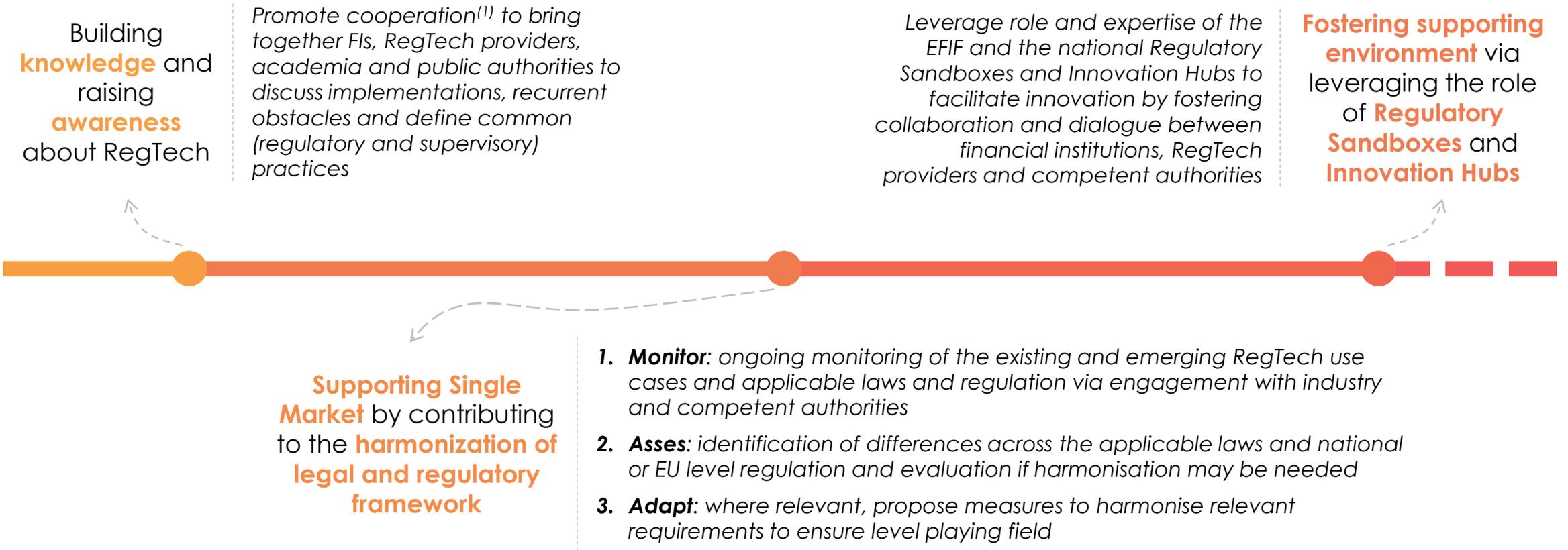
### Regulators and Supervisors

- Tackling the absence of skills and understanding of RegTech solutions among regulators
- Targeting lack of regulatory standards for technical requirements and data-related standards
- Dealing with the missing of harmonization of regulatory requirements across the Member States
- Implementing clarity and guidance

# Conclusions and Way Forward 3/4

## Next Steps: Short Term

EBA identified actions to be taken to support a correct adoption of RegTech solutions in the **short term**...

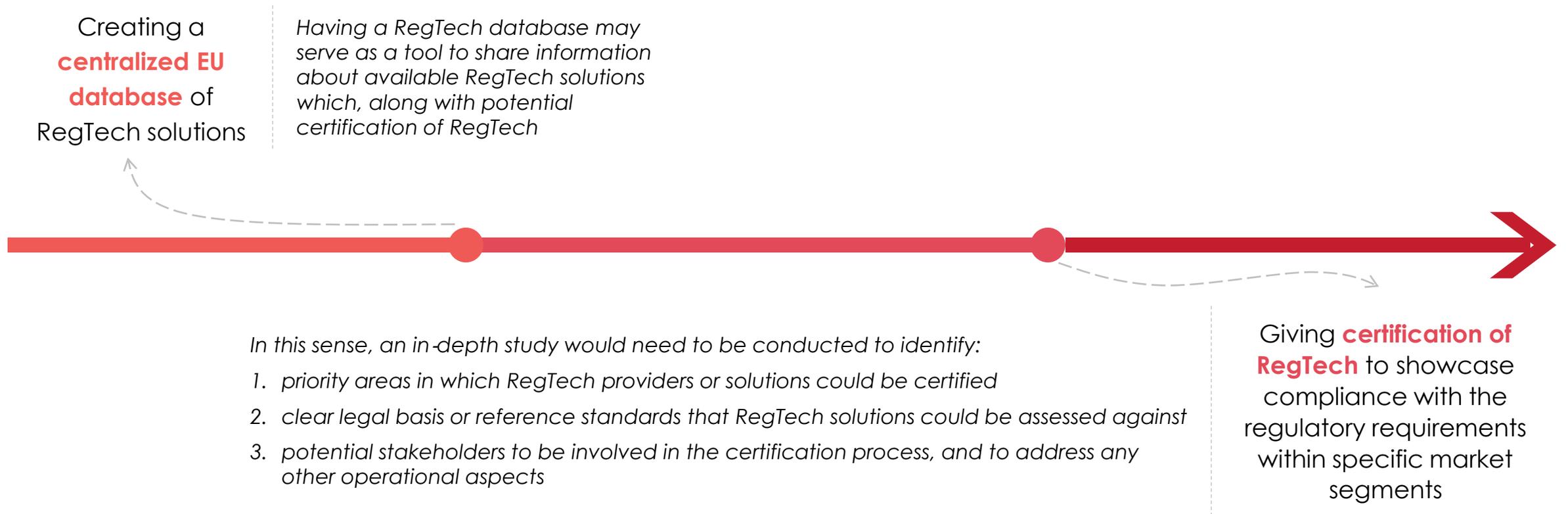


(1) Through existing platforms for cooperation, e.g. the EBA FinTech Knowledge Hub and the European Forum for Innovation Facilitators (EFIF)

# Conclusions and Way Forward 4/4

## Next Steps: Long Term

... and suggested further actions in the **long term**, although these are **not in the current EBA's mandate and focus**.



# Company Profile

**Iason** is an international firm that consults Financial Institutions on Risk Management. Iason integrates deep industry knowledge with specialised expertise in Market, Liquidity, Funding, Credit and Counterparty Risk, in Organisational Set-Up and in Strategic Planning.

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*This document was prepared in collaboration with Luca Pinna, who at the time was working for Iason Consulting.*

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