



WAVESTONE

RegTech Radar 2020



**RegTechs become a reality in transforming
the Compliance function**



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Introduction

In this booklet, you will discover the second edition of Wavestone's RegTech Radar.

If the first edition was around discovering the RegTech ecosystem, this edition is around **confirmation: RegTechs will play a key role in the transformation of the compliance functions of financial institutions.**

There are several clues that led us to predict an optimistic future for this ecosystem. Firstly, the 2019 financial year was a record year for RegTech fundraising and 2020 confirms this trend, indicating a growing interest from investors.

Secondly, the ecosystem remains dynamic. As new companies keep emerging, historical players seek to innovate, often by acquiring RegTechs. Even the tech giants are taking an interest in compliance and looking to develop use cases.

Thirdly, recent regulatory developments (5th Directive, ACPR position statements) seem to favor the use of new technologies to strengthen compliance monitoring and surveillance systems.

Finally, and probably most importantly, financial institutions are increasingly relying on RegTechs to transform their compliance function and report initial common successes.

Let's be realistic, RegTechs are not a magical solution to recurring compliance problems (in bulk: identification of the effective beneficiaries, simplification of the relationship-entry process, reduction of false positives in the fight against money laundering, time-consuming risk mapping, etc.), but we believe that RegTechs can be a lever for the transformation of compliance functions, as long as the right needs are identified and the right actors are involved.

Based on our experience, here are a few **principles for a successful partnership with a RegTech:**

- › Define your needs: technological solutions cannot transform an entire process; it is important to clearly divide macro-processes into "use-cases". For example, for the relationship-entry process, remote identity verification is a potential use case;
- › For each of the use-cases, ask yourself what the best technological response is: make it in-house, buy from a traditional editor or buy from a RegTech. We are convinced that it is interesting to use RegTech especially when they provide differentiating technological solutions (see the 2020 favorites);
- › Finally, the complexity of a project with a RegTech should not be underestimated by the IT department (especially if it is not very digital: APIisation, SaaS), both around contractualization, especially when the RegTech is considered as a PSEE (essential outsourced service provider), and around the terms and conditions of the partnership that is established between the two players (finding the right balance in co-construction, without doing anything specific in order not to interfere with the RegTech's independence).

In this new edition, we present you with the updated RegTech radar, share our 2020 favorites and provide you with one focus on Face Matching players and one on AI platforms to fight money laundering. Finally, we will tell you about the cross-feedback from Bpifrance, Flaminem and Ubble on KYC digitization.

Romain Louzier

Partner at Wavestone

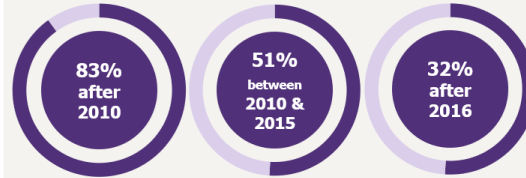


THE 2020 REGTECH PANORAMA

81 vs 70 in 2019

Number of Regtech identified in the 2020 study

DATE OF FOUNDATION OF THE REGTECH



A CONSTANT INCREASE EACH YEAR IN FUNDRAISING EFFORTS

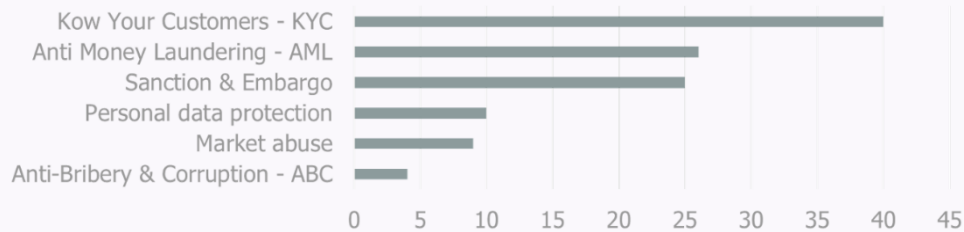
Year	Nbr of RegTech	Amount (in \$ millions)
2017	22	212 M\$
2018	18	64 M\$*
2019	18	781 M\$
2020	5	201 M\$

*Incomplete 2018 amount**

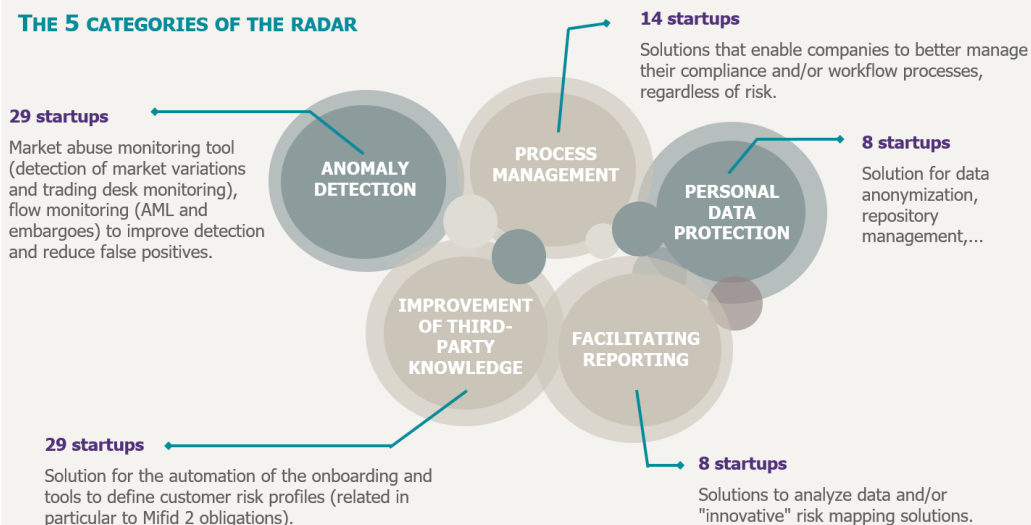
A FEW EXAMPLES OF REGTECHS ACQUISITIONS



TYPE OF REGULATIONS COVERED BY THE REGTECH RADAR :



THE 5 CATEGORIES OF THE RADAR





OUR FAVORITES OF THE YEAR

Key Information

Created in 2008, YSEOP is a publisher of artificial intelligence software specialized in NLG (Natural Language Generation). Its services are based on the association of several types of artificial intelligence: NLG, Natural Language Understanding but also inference engines. Its ambition is to enable smarter and faster work through the automation of business processes, even complex ones. With more than 50,000 daily users, solutions in 7 languages, it is used by several CAC40 and Fortune500 companies.

Services

The first patented artificial intelligence and language generation software, YSEOP is capable of reasoning, dialoguing and writing individualized, structured and non-repetitive texts (letters, emails, recommendations, etc.). This solution allows to increase productivity, solve costs, achieve operational excellence and increase customer satisfaction.



Wavestone's view

YSEOP offers a key technological foundation to facilitate the management of writing tasks. While the mastery of this technology is not at all differentiating for banks, YSEOP has succeeded in developing it and making it an easily integratable product.

They propose a variety of use cases and are aware of the interest that the automatic generation of texts can represent for compliance. This is particularly true for the facilitation of all regulatory reporting, and even for the reliability of certain processes such as the processing of AML alerts.



Wavestone's view

Being a young RegTech, FACEPOINT is nonetheless very innovative, its solution is revolutionizing the way in which identification checks of people on sanction lists are carried out. As real game changers, they can really modify the way banks will deal with the subject in the coming years, by exploiting previously unexploited data: the image from an identity document.

FACEPOINT thus seems to have a bright future, through the assembling of a photographic database of people under sanction and embargo (daily enrichment work, which gradually adds value to their solution), and thanks to their powerful algorithm for comparing photos.

Key Information

Founded in Paris in 2017, FACEPOINT offers disruptive innovation in database, KYC and compliance. They combine an exclusive photographic database of high-risk individuals (more than 3M photos) with state-of-the-art biometric technology to combat financial crime, terrorist financing and corruption.

Services

Combining an exclusive photographic database with state-of-the-art biometric matching technology, their solution allows the identification of high-risk individuals, as well as those who are not registered using video analysis software. Customizable, it is perfectly aligned with international regulatory standards and offers a more practical and immediate experience.

Key Information

Born from an IA research team within ERCOM, specializing in intelligence, BLECKWEN was created in 2018 to specialize in the issues of financial institutions. Since their creation, they have been working with major players in the market. They have raised 9 million euros in 2019. The core of its activity is fraud detection, both payment fraud but also fraud in the subscription of services (credit or account openings for example). Bleckwen thus began its international development at the end of 2019.

Services

BLECKWEN's solution offers a starter kit, which the customer can choose to develop further. Based on behavioral analysis via AI, it provides a solution for fraud threat detection (dynamic and real-time). The solution begins by scoring of the operation. It also has multiple bricks for managing alerts, workflows for managing alerts and the explicability of the results.



Wavestone's view

BLECKWEN has succeeded in creating an anti-fraud platform, intelligently combining AI capabilities with human expertise and control.

Beyond the traditional characteristics of an AI platform detecting anomalies, their solution is differentiated by a very advanced explicability module. It allows to understand the weight of each variable in the final decision. Finally, it offers a module for rule management and an evaluation of the impact of these rules (confusion matrix, detail of impacts and tools for comparing rules on the same data history).



Key Information

Founded in Australia in 2012, ENCOMPASS automates KYC data recovery to meet compliance requirements. ENCOMPASS is positioning itself as a leading RegTech, including being the first to automate KYC search in 2016, thanks to a 3.6 million pound co-investment by SIB and Adcock PE.

Services

ENCOMPASS provides technology that automates Know Your Customer policies, while ensuring that companies comply with AML and CTF regulations. ENCOMPASS allows you to connect to more than 100 data providers, simplifying both data management and integration with providers. This enables KYC checks up to 98% faster than manual processes.

Wavestone's view

As the archetype of a mature solution, ENCOMPASS makes a process both more automatic and more intelligent. They have thus succeeded in positioning themselves between financial institutions and traditional data providers, adding real value.

This solution has two advantages: the first being the strong simplification of the connection with external data providers (no more need to have a link with each provider, ENCOMPASS allows to only have a technical link), and the second being the creation of intelligent business rules allowing to prioritize and purchase data only when necessary.

FOCUS ON TWO TRENDS OF 2020

KYC and Face Matching: a promising combination for the future

In the current context where relationship-entry is a key step in the customer journey, an increasing number of banks are offering to enter into business relationships remotely. Verifying the identity of customers remotely is a crucial step in the process, especially in light of the increasing regulatory obligations and the significant risk of fraud and identity theft.

An ecosystem in full bloom ...

Face Matching is a highly competitive field, with several RegTechs offering face matching solutions for remote relationship-entry. These RegTechs are constantly growing and developing solutions in order to adapt to constant regulatory changes.

Face Matching is a technology that automatically recognizes a person's face by comparing their face with their ID. In practical terms, a facial recognition system uses biometrics to generate a facial print based on characteristic points on the face from a photo of the ID. Using specific algorithms, this facial print is then compared with the customer's face (detected in real time via camera). The customer's identity is validated when the characteristics of his/her face match those detected on the ID.

Besides strengthening identity controls, Face Matching solutions allow for fast and smooth KYC processes, improving the user experience and the operational efficiency. However, Face Matching solutions must comply with the existing regulatory requirements.

... driven by regulatory changes

In Europe, the regulatory requirements for relationship-entry are mainly defined by the

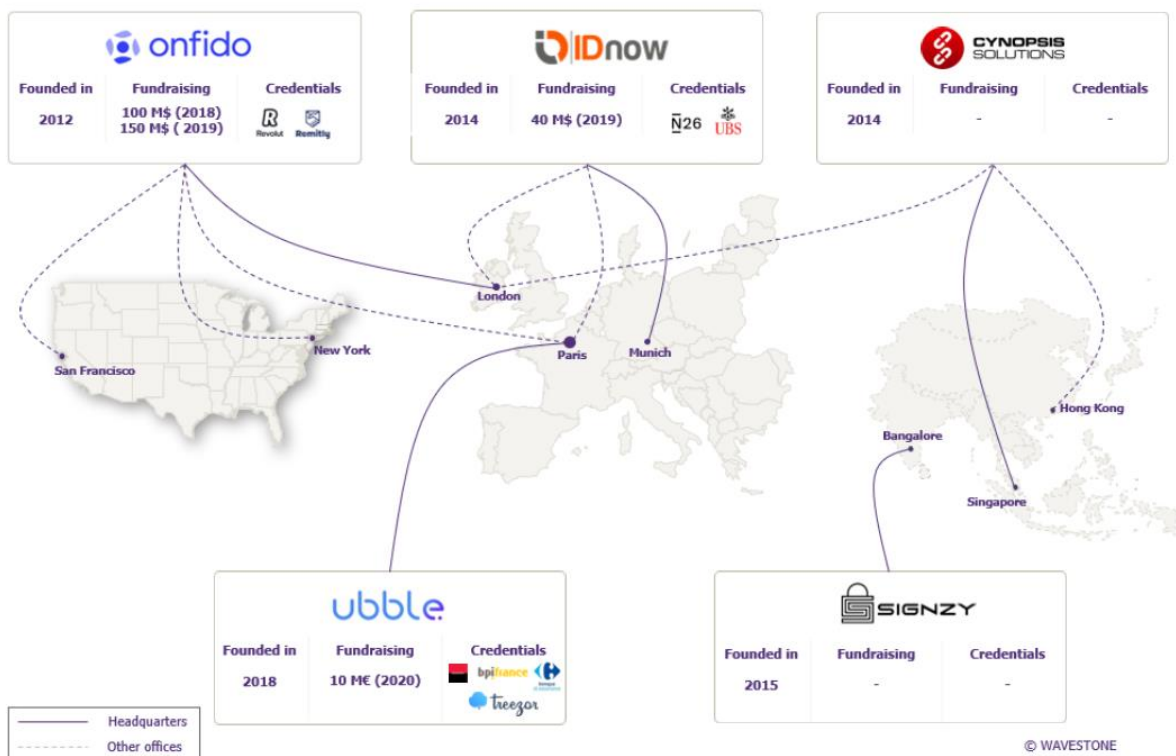
fifth iteration of the EU's anti-money laundering directive, which was transposed into French law by Order 2020-115 on February 12th, 2020. This directive reinforced the French national AML/CFT measures.

In parallel with the transposition of the 5th AML Directive, the ACPR has launched work to develop a favorable framework for RegTechs. As part of this work, the regulator has demonstrated its openness to the use of new private technological solutions in the implementation of complementary surveillance measures, primarily Face Matching solutions. It is in that sense, a conference of the joint division of ACPR and AMF was held on December 4th, 2019, one of the themes of which was "Facilitating innovation: what implementation?".

In addition, the eIDAS regulation specifies the nature of the checks that must be carried out (checking the authenticity of identity documents, comparison of the customer's physical characteristics, etc.) to achieve a level of security in the relationship-entry process, without specifying the technical or organizational means to be used. In France, the National Agency for the Security of Information Systems (ANSSI) must validate the equivalence of the guarantee offered by remote identification methods to that of traditional methods (in-person presence) in terms of reliability.

Therefore, Face Matching solutions can be considered equivalent to face-to-face presence, provided that technical and organizational measures are put in place to combat the risk of fraud.

The main Regtechs offering Face-Matching services



AI Platforms to combat money laundering

Definition of an AI platform:

In order to democratize artificial intelligence within their organization, more and more companies are opting for AI platforms. These are solutions that facilitate the development and execution of customized Machine Learning applications.

One of the aims behind the development of AI platforms is to facilitate data management by end-users and go beyond the technicality of Machine Learning by creating explainable models. In addition, AI platforms help to reduce costs, especially by increasing the speed of the transition from design to production of Machine Learning projects.

There are 3 main categories of AI platforms:

Business-oriented platforms: these platforms focus on the explicability of the modules and the user-friendly aspect of the platform in order to be accessible to all users.

Data-oriented platforms: mainly intended for Data-scientists, these platforms give priority to technical capabilities, sometimes even at the expense of the platform's ergonomics.

Hybrid platforms: these platforms fall between the two categories mentioned above. The idea behind these platforms is to find a balance between ergonomics and explicability on the one hand, and technical features on the other.

General-purpose AI platforms opt for explainable and user-friendly modules, while more specialized platforms favor technical richness. However, the current trend is to develop hybrid AI platforms in order to target all types of users (data-scientists, business analysts, salespeople, etc.)

In parallel, the regulatory framework for AI is starting to take shape. Three key themes are already emerging for the regulation of AI in the future: explicability, robustness and governance. In practical terms, the explicability of AI systems implies that the decisions taken by these systems can be explained directly or indirectly. Moreover, AI systems must be reliable and secure, especially with regard to the risks of cybercrime. Finally, the regulator requires the respect of ethical concepts such as the bias

study, non-discrimination and respect of private data.

AI platforms and financial security

From KYC processes to the fight against fraud and money laundering, financial security is one of the sectors favorable to the development of AI platforms. In fact, the traditional tools used in the fight against money laundering and terrorist financing have several limitations. For instance, 90% of the alerts generated by traditional tools are false positives. Moreover, only 30% of the alerts leading to reports of suspicion come from traditional tools. As a result, many RegTechs are increasingly developing artificial intelligence platforms specialized in the fight against fraud and money laundering.

The implementation of Machine Learning modules would improve performance through more relevant alerts and therefore a reduction in false positives. However, replacing existing tools with Machine Learning modules will depend on the degree of explicability of these modules. Consequently, the main challenge is to find a balance between improving operational performance and complying with regulatory requirements.

AI platforms provide two main types of use cases:

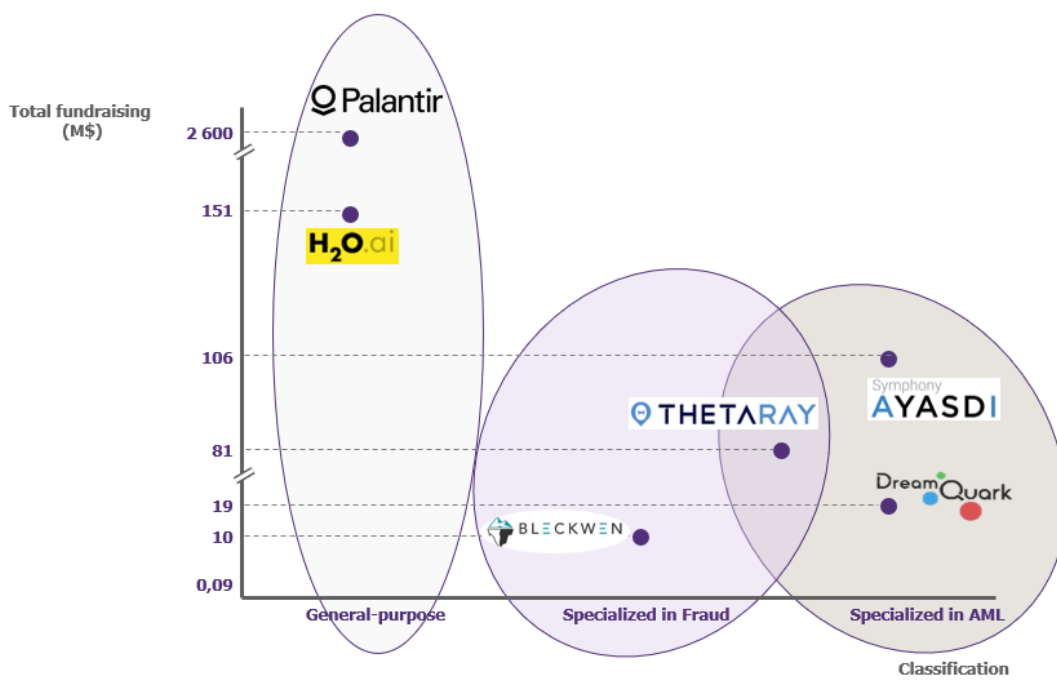
Alert scoring: these AI modules are used to evaluate and predict the relevance of alerts generated by traditional tools in order to classify them. This helps to prioritize the most relevant alerts. However, the final decision remains under the control of a human analyst. These use cases often use supervised AI.

Detection of new laundering/fraud schemes: these modules analyze raw data so as to understand the behaviors of fraudsters. Then, thanks to unsupervised AI, new deterministic rules can be created, tested, validated (by a human) and integrated into the existing tool.

The AI platform players

The majority of the traditional players in the field of AI platforms are offering general-purpose platforms. These players have raised significant funds. In parallel, we are witnessing the emergence of new players offering platforms specialized in fraud and anti-money laundering. These new players have increasingly ambitious fundraising plans.

The main Regtechs offering Artificial Intelligence platforms



SUCCESS STORY

A cross-view of successful PARTNERSHIPS between Bpifrance and two RegTechs

Nowadays, the identity verification process and the maintenance of KYC processes are major challenges for banks and insurance companies. Recent regulatory changes have accentuated the diligence work to be carried out on legal entities and have tightened the requirements when entering into a relationship remotely. Faced with these challenges, Bpifrance made the bet to use RegTechs such as Flaminem and Ubble. These two different stories provide a wealth of information on the input of RegTechs and the management of projects involving RegTechs.

Flaminem

The solution

Historically, Flaminem offers an investigative solution, especially for military intelligence. Nowadays, it revolutionizes the way KYC stagecoaches are carried out by putting a graphical vision of relationships at the tool's center. This process is fully in line with the KYC assessment practices of operational staff, who can therefore act directly on the graph in order to complete the information. Moreover, KYC scoring is done in real time, which makes it possible to immediately indicate the need for additional data or documents.

While this approach is a strong differentiator for the treatment of KYC of legal persons, it may also be useful for the analysis of natural persons, as it enables the link between natural persons and other persons and products to be made. This is for example very useful for managing the KYC of life insurance contracts, where several people are involved in the contract.

Terms of the partnership

The partnership led to the co-construction of the solution: 20% of it existed from the start (graphene engine), 80% was developed with the expertise of Bpifrance. The product is 100% generic, only the configuration is specific to each customer.

ubble

The solution

Founded in 2018, Ubble offers a digital identity verification solution based on video for the collection and analysis of identity documents and faces. This solution enables the improvement of the tool's performance (very low rejection rate) as well as a higher security (the video analysis allows to control more elements like security holograms). The video makes the user's journey smoother and faster, as the tool can give indications in real time and capture the necessary informations faster.

Terms of the partnership

As Ubble was already working with major banking groups before the launch of the project with Bpifrance, the solution was already mature. The partnership was designed for the long term, a number of projects have been identified and will be carried out over the next few years with Bpifrance.

1. Working with RegTechs, a successful decision by Bpifrance

Faced with two different problems, RegTechs have been able to prove themselves as relevant solutions to the challenges of KYC.

Regarding Flaminem, the need for Bpifrance stemmed from irritants shared by the operational staff around the use of the KYC management tool. The tool developed in-house was criticized for not being suitable to easily carry out KYC stagecoaches, for example many tasks were carried out manually (such as the drawing of shareholder trees). Bpifrance therefore sought an alternative. As it soon became apparent that the editing tools did not meet the needs, the meeting between Flaminem and Bpifrance happened almost by mere coincidence (at the time, Flaminem offered a solution far from KYC requirements). From the beginning of the project, Bpifrance's business teams made and took on the Flaminem bet. Through their knowledge of the directives, the regulator's expectations and the profession's irritants around KYC, they have helped to develop the right functionality for the operators and to strive as much as possible towards better compliance with the regulatory requirements.

With Ubble, the meeting was more classic, as Bpifrance has already clearly identified the need to create relationship entries from afar. Forecasting the first necessary bricks as well as the launch of the first works to identify a Face Marching solution – a decisive process, especially for reducing the risk of fraud – Bpifrance made use of an existing solution in the market. The aim was to launch a study comparing two solutions, one of which was Ubble's.

LESSONS FROM A SUCCESSFUL PROOF OF CONCEPT

A POC is essential in order to start working with a RegTech. In order for a POC to be successful, it is necessary to clearly define the objectives.

In the case of Flaminem, Bpifrance made the bet to start with them, in a supervised way in order to test their ability to meet their needs (via co-construction), but also their ability to develop and deliver. Once the validation of this first step was completed, the objective was to test the solution under operational conditions via a pilot: the deployment of the solution on a Bpifrance identity. This test was a success: the solution was widely acclaimed by users as being more ergonomic and as being more effective in handling files. For example, there was a significant reduction in the amount of time spent determining beneficial owners through the visualization of ownership in the form of a graph.

To test the performance of the solution on a large scale, a pilot phase (deployment under operational conditions) was carried out in one region. The solution was then gradually generalized to the whole of Bpifrance.

For Ubble, the maturity of the solution being greater and less specific to the needs of Bpifrance, the objective of the POC was different: it was about validating the use and the routes, as well as ensuring the technological promise (detecting the living and the fake). In order to simplify the contractualization, it was decided to mobilize Bpifrance employees to test the solution and conduct tests to try and trap the solution.

2. Obstacles encountered during the projects

In these two partnerships, Bpifrance and the RegTechs faced some challenges that they were able to overcome.

The first was related to the maturity of the IT. As most of the solution was SaaS and operated through APIs, an evolution of the IT was necessary. It was important to get the IT teams on board very quickly, right from the POC phase and even more so during the pilot phase. Nevertheless, it was necessary to ensure that IT does not take full control of the project.

The other obstacle was the contractualization and risk management. This is the longest and most complex obstacle to overcome: contracting for an industrialization can take much longer than contracting for a POC. Even if this step is always complicated, it is all the more complicated with RegTechs since it may be a new exercise for them, all the more so since they are often Outsourced Essential Service Providers. Thus, on these two partnerships, the project teams spent a lot of time on contractualization and risk management, in coordination with the Bpifrance teams (lawyers, IT, ...) in order to bring the projects to a successful conclusion.

FLAMINEM'S VISION

The main difficulty was also experienced as an opportunity. The fact that it has never been treated as an exception to the Bpifrance requirements, whether contractual or otherwise, was seen as an accelerator for Flaminem. Faced with this situation, Flaminem showed its ability to become a solution and an industrial company, capable of managing the volumes and requirements of a big bank by setting up robust internal processes as well as the expected penalties and security requirements.

UBBLE'S VISION

Thanks to its work experience with other banking groups, the contractualization process was not a discovery for Ubble. However, the work had to be completed in record time and without exception on legal and security expectations. This required a lot of agility on the part of Ubble since the framework was fluctuating. Nevertheless, this healthy emulation has enabled Ubble to improve its processes.

3. Why bet on RegTechs ?

These two partnerships highlight the benefits for a financial institution to call upon a RegTech.

First of all, it enables you to have a solution that fully meets your needs. The Flaminem tool, completely satisfies the expectations of the users and also enables to gain in efficiency (for example, an important reduction of the costs of purchase of proof of address has been noted). In the case of Ubble, this allows you to get one of the best solutions on the market quickly.

Moreover, calling on RegTechs also enables you to benefit from the agility of solutions such as those provided by companies. In the case of Flaminem, Bpifrance's willingness to make open innovation is to be welcomed since they have managed to detect all the potential of a technological solution far from the initial use case and co-construct an innovative, high-performance and compliant solution.

Finally, it also allows you to take advantage of continuous product improvement and good parametrization practices. As the solutions are not specific, RegTechs continue to improve their products, benefiting in particular from the experience and good practices of other customers.

THE IMPLEMENTATION OF THE REBOUND LOAN

At the heart of the Covid-19 crisis, Bpifrance was mandated to distribute standby loans. They were rebound loans that were distributed via a fully digitalized process.



The offer and the first version of the platform were designed in just 3 weeks, relying in particular on the Flaminem and Ubble solutions. This was made possible by the fact that the solutions are in SaaS, that the RegTechs are very agile and that all the work could be done remotely.

*Thanks to **Julien BELHASSEN** (Digital Compliance Pilot at Bpifrance), **Antoine RIZK** (CEO of Flaminem), **Mikaël Boulon** (Head of Services of Ubble) et **Arthur Magnes** (Sales Manager of Ubble) for their time and the quality of the exchanges that have enabled us to write this feedback.*

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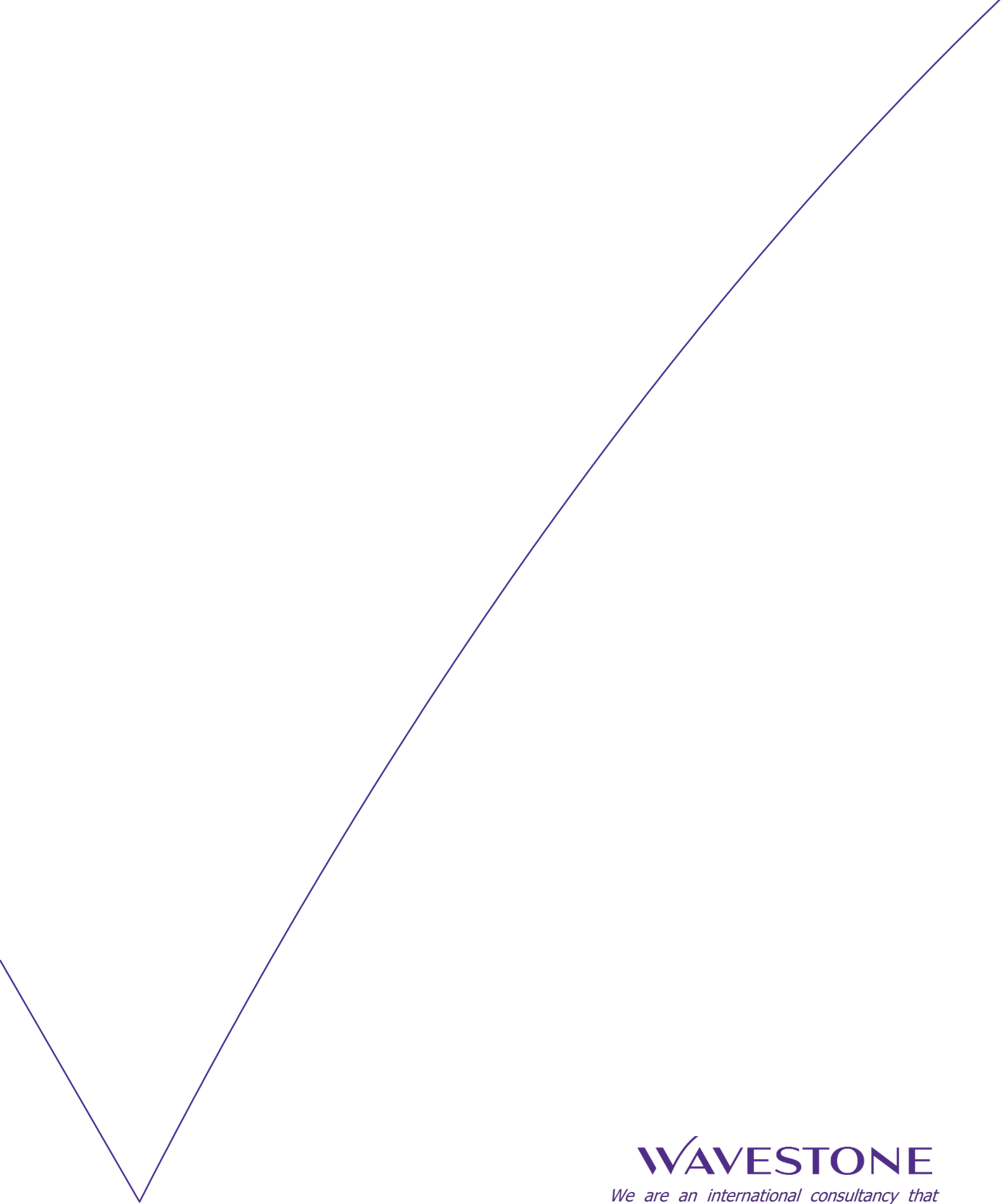
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