FinTech and RegTech, disruption or more of the same?

By Gillian Faichnie

Introduction

'Peak hype'

> *I think right now there already is a lot of institutional hype in this space and just public hype, so when you have Vladimir Putin having, you know, knowing what blockchain and Ethereum are and when you have Paris Hilton going out promoting ICOs on twitter, you know that's peak hype. But the reason, I think a large part of the reason why a lot of this hasn't materialized into action yet is precisely because of some of these technical obstacles that need blockchains, you know work ok for niche use cases but not really work well for mainstream use.*

Vitalik Buterin, the founder of Ethereum, speaking at TechCrunch Disrupt, September 18 2017

FinTech and RegTech have been part of the business narrative for some time now, and there are many expectations of how sophisticated technology will help to solve many of the current compliance challenges, and at the same time revolutionize the financial sector. As with all new technology, however, there is some degree of hype - while there is an undeniable drive towards increasingly sophisticated technology, will it bring about a revolution or disruption in compliance and financial services, or will it be more of the same? And if we are standing at the cusp of a new technological era, what steps can be taken to prepare?

Anyone working in compliance will understand the hype - the challenge of meeting regulators' expectations has grown exponentially in complexity as well as the size of its remit in recent years. It's been a long time since compliance was back room, tick-box version of itself, and costs have jumped dramatically since the mid-2000s. Around USD 80 billion is spent today in regulatory compliance by the financial industry alone, and this figure is expected to rise by a substantial 50% to USD 120 billion in the next five years[1]. Just staying up-to-date with the stream of regulatory information is a significant task - in 2008, Thomson Reuters' regulatory tracker reported approximately ten updates a day, today it's around 200, and we can expect this number to continue to climb. This single compliance task incurs not only a financial cost, it also strains company resources and can be a constant source of anxiety for senior executives, especially since the public liability aspect of compliance came into force.

[1] How RegTech can transform your regulatory compliance, Thomson Reuters, 15 Aug 2017

Regulatory pressure continues to build - demand for increased transparency pushes compliance departments to deliver ever more detail, documents and hard to source information. It is likely that compliance resources will be stretched even more - while there may be an effort by the U.S. administration to ease some of the more onerous financial regulation by repealing parts of Dodd-Frank for example, many of the leading economies have established their own regulatory controls with extra-territorial reach, thus maintaining the global impetus towards greater transparency.

The quest for increasingly sophisticated technology to help ease much of the burden of work are therefore unsurprising. A couple of recent surveys underlines how senior executives understand the need for compliance technology. One survey that canvassed executives across the globe showed that 52% of senior executives recognized their need for FinTech and RegTech. In the MENA region, a Thomson Reuters annual joint survey with Deloitte on financial crime and risk revealed that 67% of local compliance and senior executives are investing in increasingly sophisticated technology, while 89% said that they expect their compliance technology to become even more sophisticated in the next two years. There is, therefore, an undeniable trend towards the employment of new technology, with an expectation of much future investment in this area, but with so much information on various technologies and not a great deal of guidance, where are people directing their investment?

FinTech vs RegTech: opposite sides of the same coin

There are many buzzwords that are used during discussions of new technology, such as artificial intelligence and machine learning, some of which may not be fully understood.

Terminology

Cryptocurrency - a digital or virtual currency that uses cryptography (the study of encryption methods) for security, cryptocurrency is hard to counterfeit. It is not issued or controlled by a central authority.

Blockchain – also known as "distributed ledger technology," blockchain maintains a number of online registries or ledgers that are updated in real time whenever a change is made to any one of the ledgers. It allows for complete transparency and is supposedly unbreakable. Designed as a financial service, there is a host of applications for which blockchain is being tested, such as land registries.

Bitcoin - probably the best known cryptocurrency, bitcoin is a digital payment system that is verified by blockchain.

Ethereum - the second most popular and valuable cryptocurrency, Ethereum is based on a worldwide network of interconnected computers (nodes) that enforce, execute and validate programs in a decentralized manner without requiring a server, memory, CPU power, or any other computing function. Ethereum differs from bitcoin in that it has a wider scope than currency and also offers smart contracts and the ability to crowdfund on the platform.

Artificial intelligence - refers to a machine taking over a task that a human performs, such as extracting relevant information from documents. AI can, therefore, save time on repetitive functions and can also reduce common processing errors but it cannot replicate common sense in decision making. At this stage therefore it bests augments rather than substitutes human effort.

Machine learning – a field of computer science that allows computers to learn without being explicitly programmed to do so. It is a method used to devise complex models and algorithms that lend themselves to prediction and therefore helps in decision making. Machine learning will allow computers to amass and process information more efficiently.

Sandboxes and reglabs - Regulatory sandboxes or reglabs are tailored regulatory environments that allow the safe testing of innovative FinTech products and delivery models before they are released.

It can be difficult to choose the best fit, especially with the regulatory environment so dynamic, so it is helpful to establish what FinTech and RegTech are – while they are based on similar technologies but have a very different focus and application.

Andrew Yuille, Head of Risk Business Solutions at Thomson Reuters, summarised the difference between FinTech and RegTech in a recent interview:

> *"FinTech is looking at innovative solutions typically for consumers in the little gaps left by financial services organizations, the bigger banks, the bigger insurance businesses … RegTech is looking at really a very different area, some of the technologies is similar but the solution is different. Here we're looking at how institutions, banks, insurance companies, regulated entities can comply with regulation and do that in a better and more efficient way."*

The past ten years have seen a significant change in the financial sector. Increased access to data is enabling small, agile start-up companies to deliver financial services to a wider range of consumers than ever before through the use of sophisticated financial technology, or 'FinTech'.

RegTech, on the other hand, is the use of new technologies to meet regulatory compliance obligations. The UK Chief Scientific Advisor's 2015 report defines it as "Technology that encompasses any technological innovation that can be applied to, or used in, regulation, typically to improve efficiency and transparency".

Both financial and regulatory solutions may be delivered through applications using a common base such as Ethereum or blockchain, but their focus and outcomes will be different.

Examples of recent popular FinTech solutions include crowdfunding, financial robo-advisers based on algorithmic calculations, and cryptocurrencies.

With RegTech mainly aimed at reducing much of the repetitive work in compliance through automation, solutions rely on artificial intelligence, machine learning and cloud computing.

> *"Technology that encompasses any technological innovation that can be applied to, or used in, regulation, typically to improve efficiency and transparency"*

The future of the financial sector

There are a growing number of governments around the world that support the development of blockchain-based currency[2], including Sweden and Japan.

Japan's central bank is supporting a scheme that would have the country move to a digital currency by 2020[3]. The J Coin, as the virtual currency will be known, is a project by a group of Japanese banks to streamline the existing financial system and move people off of a cash-based system, so that transactions are trackable.

Guidance issued by the Financial Action Task Force (FATF) in 2015[4] noted that Governments would need to consider a range of regulatory issues that are presented by virtual currencies payment products and services (VCPPS) due to money laundering and terrorist financing (ML/TF) risks. While some jurisdictions are being proactive, others are adopting a 'wait and see' approach. FATF is however urging Governments to prioritize the identification and mitigation of ML/TF risks inherent in VCPPS.

It is difficult to predict with certainty what the financial sector will look like in a few years' time – in terms of competitiveness, banks will be held back by regulation and cumbersome IT legacy systems while start-ups have the agility and technical ability to respond quickly to meet customer needs. On the other hand, start-ups may battle to scale up to

[2] Governments are testing their own cryptocurrencies, 25 Sept 2017, Technologyreview.com
[3] Japanese banks are planning to launch J-Coin, 26 Sept 2017, Technologyreview.com
[4] Guidance for a Risk-Based Approach: Virtual Currencies, FATF, June 2015

reach the numbers that are required to be viable. Other major companies are entering the market, like Google and Amazon, and will have a distinct advantage due to their considerable resources, although it is unlikely that they will challenge banks head on and will probably focus on niche services that are profitable and a closer fit to other core services.

This means that most of the change in the financial sector may be the result of integration, partnerships, collaborations, buy-outs and other joint ventures as service providers regroup and join forces to enhance their competitiveness, rather than the replacement of major institutions that currently dominate the market. We may also find that access to finance and transfer mechanisms will no longer be controlled by a handful of gatekeepers.

There is a certain level of uncertainty as financial service providers consider the way forward, and as the market realigns to meet changing consumer preferences and needs, there is also uncertainty about how regulators may or should respond. It seems, however, that there may be a need for them to respond promptly.

Heightened risk

As new technology impacts the financial sector and increases access to communities that were previously underserved, there is a concern that this increased access may also provide cover for those who wish to shift funds beyond the reach of regulators.

A study by the Belgian Financial Intelligence Unit (CTIF-CFI)[5] shows that while FinTech has many benefits, it also heightens the risk of anonymous transactions. The risk that criminals use new technologies to launder money or finance terrorism, according to the study, now ranges from 'high to very high' and this may have a substantial consequence for anti-money laundering and know your customer (AML/KYC) regulation in its current form.

Much of the problem seems to center on virtual currencies. Although they leave a trackable digital trail, it is possible to hide this trail if the use of the cryptocurrency is layered with other new technologies, for example, crowdfunding. While transactions can be traced in the blockchain, it was not possible to identify the originator nor the beneficial owner.

Regulators ready for a refit – the push for RegTech

> *Regulators are realizing they're going to have to develop new tools. They can't keep up. Old ways of regulating are completely mismatched with the challenges emerging in this fast-changing environment. They are going to have to create new models of regulation and regulatory collaboration or they're going to have huge failures."* [6]

Jo Ann Barefoot, CEO Barefoot Innovation Group

Recent actions show that regulators are aware of a widening gap between policy and the changing reality of the financial services industry. Much of the tone of the current regulation was shaped in the aftermath of 2008 financial crisis, and the focus has been on supporting banks seen as 'too big to fail', and ensuring that they stay healthy and solvent. It was also a time when data was expensive and processing was slow, but costs have dropped dramatically in recent years while computational power has grown significantly, and the pace of doing business has changed accordingly.

Some actively welcome and encourage the growth of the FinTech sector and understand the need for a different

[5] Belgian FIU flags FinTech AML risks, Regulatory Intelligence, Thomson Reuters, Sep 05 2017

[6] RegTech: the seeds of revolution are sewn, March 15 2017

Thomson Reuters/Yuya Shino

approach, and this is where RegTech becomes a key actor, as a useful counter balance to the risk that rises with the growth of FinTech solutions, hopefully without hampering progress.

There seems to be a growing sense of urgency as governments worldwide understand that they are facing a transformation in the financial services sector. Regulators around the world are holding meetings with stakeholders on a weekly basis as official bodies debate the way forward - the first RegTech council was held in May 2017 and was attended by The Bank of England, the European Central Bank and the UK Financial Conduct Authority (FCA). The European Commission, the Australian Securities and Investments Commission and the U.S. Office of Financial Research participated by contributing in advance.

In other parts of the world, governments are doing what they can to encourage innovation. The FCA pioneered the concept of a regulatory sandbox in 2015 - which provides start ups a safe space to test the viability and integrity of their products - and since then, nearly 20 countries around the world have followed their lead, including Abu Dhabi, Bahrain and Dubai[7].

The challenge that regulators face is how to regulate to protect the financial system without stifling the potential of FinTech. Despite the growing number of sandboxes and reglabs, as well as various incubators and accelerator initiatives, there is still a lack of a clear way forward.

In this environment, it can be challenging to make decisions about how to invest in solutions, but even in a period of uncertainty there are steps that can be taken so that the department and organization are ready to embrace change.

How to futureproof in uncertain times – upskilling

We may not know what kind of technology that will be required in the long term, what technology will eventually dominate and what will be most useful in each organization's context, but we do know what skills are required to help ensure best practice compliance. Indeed, best practice has always been a function of well-managed interaction between human intelligence and sophisticated technology and there are certain skills that will be important to the health of the organization regardless of what technology is dominant.

[7] Modernizing Digital Financial Regulation: The Evolving Role of Reglabs in the Regulatory Stack, The Aspen Institute

Essential skills and insights include:

- An up-to-date knowledge of international and local regulation
- The ability to sustain robust, clean corporate governance
- The key elements required for transparent reporting
- The knowledge of how to create an ethical corporate culture

The FATF-endorsed risk based approach recognizes that it is impossible to police every action within an organization, therefore building an appropriate corporate culture that supports employees in their decision making is essential. The most sophisticated technology will not be able to create the right 'tone at the top', not for a while at least. An understanding of the basic requirements of good corporate behavior will always be cornerstone of a successful compliance program.

There's no doubt that FinTech and RegTech will produce a need for a different kind of financial and compliance professional, and there will likely be a growing need for IT skills at all levels of the organization. It is highly likely that executives conversant in technology will become sought after commodities in the future regulatory environment.

Conclusion

It can be challenging to make decisions about the future in a time of transition and often people can be paralyzed with so many choices but little guidance on a clear path forward. We know, however, the kind of skills that are important in compliance, regardless of the future impact of FinTech and RegTech – employees at all levels of the organization should know the requirements of a strong ethical corporate culture.

While up-to-date technology skills can be taught or bought in to match whatever systems are required, a good grounding in the logic and theory behind compliance will always be key to a successful compliance program, and can also help to evaluate solutions to find the best fit for an organization.

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