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RegTech special

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The RegTech revolution

Move over FinTech, there's a new buzzword in town. What is RegTech, how are financial services companies using it to address critical business issues, and are there adoption challenges still to be overcome? Nick Martindale reports

For what is often a largely conservative and traditional sector, the financial industry attracts more than its share of buzzwords. The latest is 'RegTech'; a term used to describe a growing range of technologies designed to help institutions cope with the increasing compliance burden being placed on them and to ensure their back-end systems can provide the information required by regulators.

"The RegTech sector has evolved in response to the compliance and conduct requirements put in place following the global financial crisis of 2008," explains Graham Elliott, CEO of insurance firm Azur. "As many financial groups still use legacy systems set up prior to the crash, most companies lack the integration capabilities that are required to meet the new regulatory landscape. By using RegTech, these outdated systems can be updated and overhauled, bringing the financial services industry into the 21st century."

Increasingly, this is making use of new technologies such as artificial intelligence and robotics, which are designed to help improve compliance processes and detect potential fraud, says Jamie Woodhouse, head of finance and risk at Accenture UK. "We are moving into a world where analytics and machines can learn to spot anomalies and automate a lot of compliance functions, even where those require judgement," he observes. "Regulators encourage firms to use technology not just to survive the stress-tests of compliance, but to make financial firms and their complex systems more secure."

There are already examples of institutions using RegTech to help improve their compliance processes. The Second Payment Services Directive (PSD2) means two-factor authentication will be required for any payments over €30, potentially adding time to the checkout process. Dutch multi-national banking company Rabobank is using RegTech in the form of its digital identity scheme, called Rabo eBusiness, to help verify people are who they claim to be.

"This means a financial service provider can offer a familiar identity experience and a smooth checkout that balances the user experience and security requirements," notes Alexander Zwart, senior product manager, online channels and access, at Rabobank. "The strict regulations are still met, but the RegTech involved means that it's not a pain point for consumer or provider."

In the trading space, Jamie Walton, a lecturer at London Financial Studies and founder of RegTech firm Raidne, identifies the Markets in Financial Instruments Directive II, due to come into force in 2018, as a particular area of focus. "There are many facets to this but the overall goal is to increase transparency across financial markets, particularly in the more opaque world of fixed income markets," he says. "A classic problem here is to prove best execution and greater use of transaction cost analysis to verify that the client has achieved the optimal trading solution. It is hard for a broker to prove independence in this example, so many RegTechs have stepped in to offer independent transaction cost analysis solutions."

Other regulations that will add to the pressure for RegTech solutions include the Market Abuse Directive II, the General Data Protection Regulation and the Fundamental Review of the Trading Book market risk capital rules. "All of these are major projects with billions of dollars of technology investment across the industry," Walton adds.

Solvency II will also have an impact on firms operating in the insurance space. "The new standards require insurers to be prepared for the worst potential outcome in a single year; the riskier the insurer's written business is shown to be, the more precautions it will need to take," says Elliott. "RegTech enables insurers to better measure, manage and quantify their exposures in order to meet reporting standards."

Yet there is still much that needs to be done before RegTech can truly deliver on its potential, including closer cooperation within the industry. PJ Di Giammarino is CEO of the think-tank JWG, which has developed its Regdelta regulatory change management platform to help financial institutions stay on top of the increasing volume of regulation. He is also chair of the committee to establish the RegTech Council, which is currently being set up to help bring different players together.

"There is a big risk of getting something wrong and nobody wants to do that, so first and foremost the journey the council is on is about helping people frame up in a common way how to get up

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the RegTech mountain," he explains. There are currently four main areas of focus – around Know Your Customer (KYC) obligations, how to handle new initiatives and regulations, regulatory reporting including around trading transactions, and a final strand to test the integrity of information being generated.

There are other challenges that need to be overcome, too. Nirvana Farhadi, global head of RegTech, risk compliance and regulatory affairs at Hitachi, highlights the need to ensure the internal business divisions funding any RegTech initiatives work closely with IT teams. "IT can't just take the regulation and decide what to do; they need that guidance and input to be able to look at the synergies between the regulations and to identify where data can be put into those holistic data sources," she points out.

Yet there is also potential for RegTech to improve both compliance and efficiencies in other areas too. Adam Jones, head of innovation at Altus Consulting, believes it could play a significant role in the fight against money laundering. "Around £90 billion is laundered through the UK banking system each year. Banks are looking at new ways of managing customer identity, both in terms of upfront KYC checks and ongoing authentication."

To do this successfully will require broadening the range of data that banks draw on, he adds, including pulling in information from social networks and email servers, and authentication data from third parties such as credit reference agencies, and potentially factoring in new technology such as biometric authentication or digital body language.

RegTech will also have to keep pace with other technologies which could help it to fulfil its potential, such as blockchain. "This is one of the new technologies Asian financial services organisations are exploring," says Bas Heijnen, managing director at US firm Synechron Business Consulting. "For example, OCBC Bank recently announced a blockchain pilot in Singapore and Malaysia that would allow currency conversion to happen within minutes with almost instantaneous settlement, without the need for correspondent banks. This should increase transparency and efficiency, and will give all parties involved better information for liquidity, capital and risk management."

The growing scope of RegTech, though, will put pressure on businesses and the industry in general to manage portfolios of technologies, warns Woodhouse. "RegTech alone isn't a silver bullet to increasingly complex regulation," he cautions. "With new technologies like blockchain, smart contracts and more mature AI coming into play, a danger exists that these outpace the capabilities of regulators. Collaboration is going to be critical, which is why banks, regulators and governments will need to work together to foster innovation while managing these evolving risks."

But Tony Reid, CTO in Hitachi's EMEA financial services business unit, is optimistic about the future potential of RegTech on the back of the progress already made. "PSD2 is a really good example of a directive and ultimately regulation which, if the banks treat it well, could lead to a whole raft of innovative services," he argues. "The forward-thinking banks are already thinking about how they can add more data into that common data layer which the API sits on.

"That might be social media data, geospatial data, weather data or hundreds of other different sources, but it means we can start to deliver dramatically different services to our end-users," he says. "Financial services will be dramatically different in five years' time to what we have today."

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RegTech in financial services

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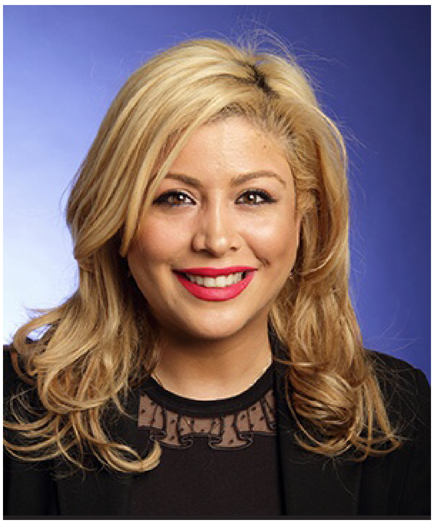

Nirvana Farhadi
Global head of RegTech, risk compliance and regulatory affairs
Hitachi Vantara

Tony Reid
CTO, EMEA financial services business unit
Hitachi Vantara

RegTech seems to mean different things to different people. How would you define it?

Nirvana Farhadi: RegTech is the use of technology to solve a regulatory problem. The way I perceive it is that you look at an industry problem, whether that's Know Your Customer or regulatory reporting, and then at the types of regulation it impacts, whether it's Anti-Money Laundering, the Markets in Financial Instruments Directive or changes to Dodd-Frank, and then the type of technology you can apply, whether that's artificial intelligence, machine learning or blockchain. In the past there has been a tendency to develop technologies and then look for a problem to solve. It needs to be the other way around.

What is the difference between RegTech and FinTech?

Nirvana Farhadi: FinTech was always disruptive. The aim of FinTech was to bring in more competition and make organisations more cutting-edge and effective. RegTech is different, in that as FinTech is developing and innovating there have to be some checks and balances in place. It enables organisations to ensure those are put in place much more efficiently.

Tony Reid: Over the last two years, FinTech has become synonymous with customer experience, and over time RegTech will become synonymous with efficiency, retaining compliance but with efficient cost savings. Those are tied together because banks need to reduce costs so they can fund innovation, and RegTech will be one of the ways they can do that.

Why is RegTech such a hot topic?

Tony Reid: Banks across Europe are under significant cost pressures. They're looking to drive out as much cost as possible to invest in innovation, and compliance is a huge cost. There's no question that banks are good at compliance; the question is whether they are good at efficient compliance.

Nirvana Farhadi: It's not a silver bullet but it certainly helps to make processes more efficient and more cost-effective and to take away resourcing burdens. Since the financial collapse we have been hit by a wave of regulation which banks have had to embed within their infrastructure and their systems. RegTech helps to make those processes more efficient.

What are the main technologies in terms of RegTech?

Tony Reid: We talk a lot about artificial intelligence, machine learning or blockchain but in the context of RegTech it's about providing orchestration, automation and efficiency to both existing processes and new requirements, and at the heart of that is data. All those technologies are about identifying data sources, moving data to a different place, transforming it, blending it and ultimately getting different insight.

Where do you see the banks focusing their RegTech efforts and investments?

Nirvana Farhadi: There are so many regulations in the pipeline. The most imminent one is the Markets in Financial Instruments Directive which goes live in 2018, where the cost for each UK firm is

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around £2 million just on the reporting. Then we have the General Data Protection Regulation which is coming out in 2018, the Securities Financing Transactions Regulation, the second Payment Services Directive (PSD2) and the speculation about Dodd-Frank being repealed.

How are banks using RegTech to prepare for these regulations?

Tony Reid: In the past there hasn't been enough effort to align projects where the data sources and outputs might be similar, but we're now seeing some banks trying to rationalise that project pipeline and consolidate where they can. They're looking to build a more holistic data repository that can be used to satisfy multiple regulatory requirements, which in the future could maybe provide them with some customer experience capability.

How will PSD2 impact organisations?

Tony Reid: We're doing quite a bit of work on PSD2 and Open Banking generally. A lot of banks are thinking northbound of the API – so towards the third party or the customer – about how to securely expose the API and what effect it will have on their business, because ultimately it's there to enable competition. Where we have done a lot of work is south of the API, so around what the impact is of exposing the API on the bank's current core systems. Often they have been built over many years and can be fragile in places, and once IT teams expose the API there is a very unpredictable workload that could hit them. Most of our work is around how we can protect them from that exposure and that risk.

> One of the main challenges RegTech faces is legacy systems in organisations

What is Hitachi Vantara's approach to RegTech?

Tony Reid: We're a data company and have been for 40 years. Until a couple of years ago that meant we were focused on how we protect the data but now it's all about how we find, access, copy or move it to a place where it's more productive, whether that's for compliance or for improved services. So if one of the requirements of the compliance team is to recreate the sequence of events leading up to a trade, we can provide a mechanism that routinely captures all of the data associated with that. The other area is this concept of building a holistic repository for compliance purposes. That sounds relatively easy but the tricky bit is how we transform and blend it with other sources as we move the data from traditional into new systems, and how we tag it so it becomes useful.

Nirvana Farhadi: One of the areas in which we try to differentiate ourselves is that with a lot of these data lakes it's a case of garbage in, garbage out. Our technology uses machine learning technology and intelligent programmes to make sure that we're picking it up and that the right kind of rules engines are being used for those technologies.

What is your involvement with the RegTech Council?

Nirvana Farhadi: Hitachi is one of the founding members of the RegTech Council, which has around 10 regulators on it as well as representatives from the whole financial services ecosystem. We use this to identify and solve the issues in the industry, so we're taking a leading role in terms of how RegTech is shaped and used. On a practical level, it's looking at what comes out of the Commission and replying to working papers from the regulators.

> RegTech will become synonymous with efficiency, retaining compliance but with efficient cost savings

What are the key challenges for RegTech at the moment?

Nirvana Farhadi: One of the main challenges RegTech faces is legacy systems in organisations. A lot of systems were built in the Thatcher or Reagan era and to this day they still run the whole infrastructure of banks or organisations. They have been covered by a patchwork of different and expensive management tools for them to do something else other than what they were initially built for, and it's becoming very onerous. Organisations need to start thinking about making strategic investments, because currently they are just not good enough.

Tony Reid: Another barrier is the legacy thinking within some of these organisations. Banks now face huge competition from the young startups, and they have to react and change much quicker than they have in the past. A lot of the processes and workflow in place today is about slowing things down, and that's got to change. That's probably the biggest factor; we can help address the issues around the technology but the culture and thinking is something the banks have to change.