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THE FINTECH TIMES

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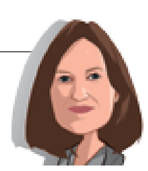


Tech to turn Reg

Regtech is a major catalyst for an efficient and effective finance industry. Regulators need to keep up with the technological progress to make compliance less complex and capacity-demanding.

Regulatory landscape has drastically changed within the post-financial crisis decade. According to a recent study of Thompson Reuters the volume of regulatory change between 2008 and 2015 consisted 492%(!). Organisations all over the world are expecting to spend an increasing amount of money and time on compliance activities.

The whole new industry of Regtechs - companies offering solutions that use any disruptive technology to solve compliance and regulatory issues - promise to easier the regulation and compliance processes for businesses and Regulators.

Continued on page 3.

The Exscudo Channels App allows to make transactions within messages

● The Exscudo Ecosystem team released the Exscudo Channels mobile app which unites the functions of a mobile multicurrency wallet and a secure messenger.

The product will be of interest for users that need a tool for secure business communication, as well as for those who seek absolute privacy and anonymity in everyday chats.

Exscudo Channels is the most convenient and secure tool for sending money and information from mobile devices. One of the most useful features of the product is the possibility to make transactions within messages. You just need to make a couple of clicks to send money to your friends or relatives. The money will be available at the recipient's bank account immediately.

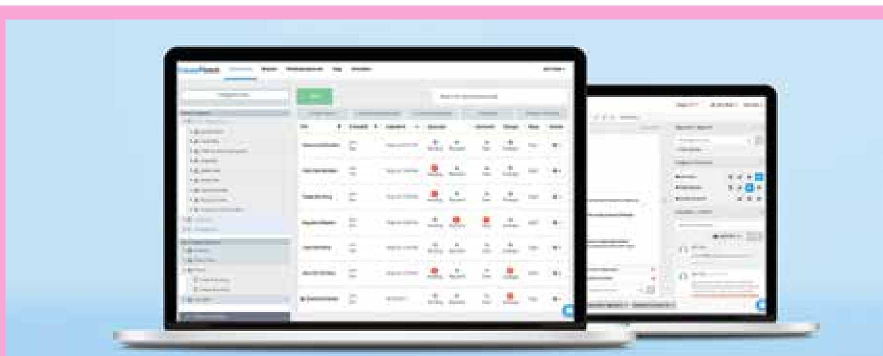
The Exscudo Team has taken the best practices of blockchain solutions to provide for ultimate reliability of the app. Despite the two-factor-authentication and other common security measures, the team has implemented more advanced features to protect the users. The multicurrency wallet is connected to the user's account on the Exscudo Exchange. It allows people to store, send, receive and exchange currencies in real-time with a minimum spread.

The Bank of England confirms regtech firm Enforcd can help best practice and compliance

●The Bank of England has published its third round of Proofs of Concept (POCs) completed by its FinTech Accelerator, which includes the innovative regtech firm Enforcd.

The FinTech Accelerator was set up a year ago to deploy innovative technologies on issues relevant to the Bank's mission and operations. Working in partnership with FinTech firms the Bank is seeking to develop new approaches, build its understanding of these new technologies and support development of the sector.

"We worked with Enforcd, giving a group of staff from our Regulatory Action Division (RAD) access to a cloud-based database of regulatory enforcement actions with supporting commentary and trend analysis. Having easy access to relevant published regulatory enforcement decisions can be an important input to financial firms' overall compliance programmes," The Bank of England writes. Jane Walshe, CEO and Co Founder of Enforcd said: "Our roadmap for the next few months contains significant growth plans, which will see us bringing in new jurisdictions, functionality and converting the numerous proofs of concept we are engaged in to long term client relationships."



ClauseMatch raises £1.25m in seed round to scale its next-gen document management platform globally

● ClauseMatch, a London-based financial and regulatory technology startup, a successful graduate of Techstars Barclays accelerator programme in 2014, plans to use this sum for scaling its disruptive product globally in the regtech space.

The funding received from Speedinvest, the most active early-stage investor in the FinTech space in Europe in 2016 (according to The Global FinTech Report: 2016 In Review, CB Insights), is the first large VC investment in ClauseMatch on its way to Series A. SparkLabs Global Ventures and TechStars have already invested in ClauseMatch, as have the likes of high-profile angels Tom Glocer (former CEO of Thomson Reuters) and Cristobal Conde (former CEO SunGard).

Oliver Holle, CEO and Founder at Speedinvest comments: "ClauseMatch is one of the exciting regtech companies which have a great product and a vivid potential to replace the outdated practices by bringing compliance ecosystem to a completely new level of efficiency." "Having Speedinvest involved in our business is a really important step forward for us as we continue to advance our product to better meet the demands of financial institutions and scale it globally," says Evgeny Likhoded, CEO and Co-Founder at ClauseMatch.

The World's First Blockchain Phone was introduced at London Fintech Week

● The BitVault is developed by Embedded Downloads limited, an Anglo-Irish company with development offices in Limerick Ireland and production facilities in Dehli India.

According to Hein Marais, CEO of Embedded Downloads, the company has identified the integration of blockchain technology, cryptography and physical devices as a niche area of development creating a safe and secure digital environment of the future, thus the development of the BitVault, the world's first crypto communicator. According to the company, the crypto communicator is not only a smartphone, but a secure banking device, secure media storage device, and identification system. The BitVault is currently in beta production and some of the capabilities were demonstrated by the company during the London FinTech Week. Commercial production of the BitVault will commence in September 2017 with the first orders being shipped by November.

THE FINTECH TIMES

- To identify Social, Economic, Political, and Cultural problems
- To explore potential tech enabled solutions
- To bring stakeholders together to develop those solutions

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A LITTLE BROTHER OF FINTECH

Regtech is often referred to as a 'little brother of fintech'. Regtech is not just about cost efficiency, regtech is automating manual tasks for compliance, and contributes hugely to overall operational efficiency as well as customer service.

Kate
GOLDFINCH

Editor of The Fintech Times

It is a fact that the number of regtech startups grows every month, and each and every one of them promises some radically advanced solutions to existing problems or even brand-new value propositions. "The task now is to find those solutions that offer true added value and will pass the test of time," as the recently released **Deloitte's research 'The regtech universe on the rise'** mentions.

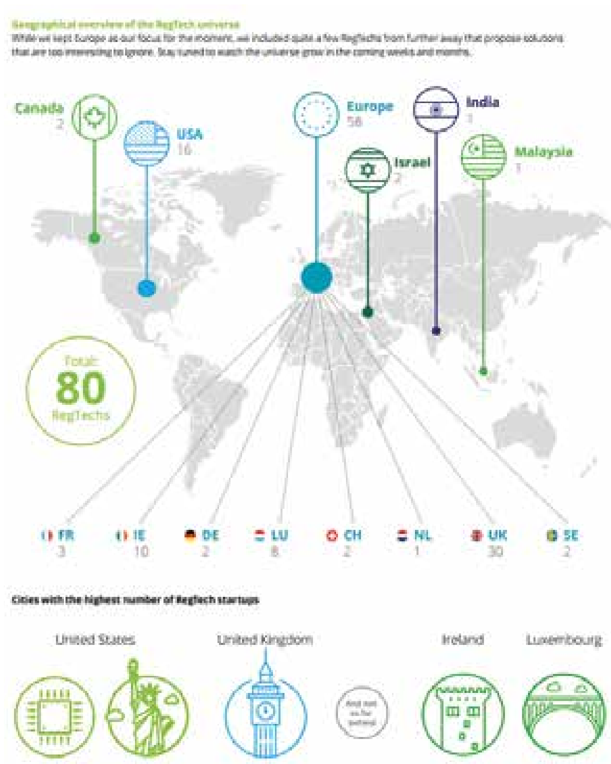
Europe (with roughly 60 regtechs, including around 30 from the UK) and the USA (with roughly 20 regtechs) are the global centres of the rising regtech industry. Cities with the highest number of regtech startups include New York, London, and Silicon Valley, with Dublin and Luxembourg not so far behind.
"We are going to explore an emerging trend in the finance ecosystem: regtech. First, regtech is a reality, much more than just a new buzzword but a real topic that we need to carefully look at and integrate into our business models. Regtech improves the way of regulation for the business. We can see 5 categories of regtech: reporting solutions, transaction monitoring, risk management, identity management and controls, and compliance solutions," **François-Kim Hugé, Partner of Deloitte**, says.

Big challenge for a Regulator

The digitalisation is growing across nations. However, firms and governments are still failing to keep up with the technological progress.

As European regulators believe tech is linked to society, **Luxembourg Prime Minister Xavier Bettel** notes that tech now represents a big challenge for any regulator. "We need to be active in the future, and as a country, we shouldn't be afraid of tomorrow. We are working on developing the digital area, and we know the importance of digital skills to prepare the future and to bring the digitalisation to the next level. All our political decisions are integrated with a digital reflex."
Asian regulators also keep their fingers on the pulse. **Naser Hakimi, Director General, IT of Central Bank of I.R. Iran-CBI**, during his speech at ICO Spring Luxembourg, highlighted that Iran has made a lot of advancements in technology and regulation.
"Our challenges and innovation are based on open-banking, peer-to-peer solutions and a strategy towards blockchain."

Spotlighting how to "tech your reg burden" into a competitive advantage with 2Gears, **Bert Boerman, Co-founder and CEO, Governance.io**, says: "People think that there is too much regulation, that regulation brings them nightmares. Our approach is to see the bigger picture but there are so many areas to control. The paradox? More data brings more need for control. But the aim of regulation is the investor's protection. And tech can turn reg into an asset thanks to new insights into clients' real-time collaboration, thanks to the access to structured data or documents, or thanks to the reduction of the costs".
As it is mentioned in a report entitled 'Future of regtech for Regulators' by **Innovate Finance's Transatlantic Policy Working Group (TPWG)** and their Strategic Partner **Hogan Lovells**, it is very important for regulators to become the leaders of digital changes. That means to create an ecosystem, digital financial infrastructure, and to implement new rules and processes to encourage businesses and other stakeholders to get involved in regulation and compliance processes.



Source: Deloitte's research 'The regtech universe on the rise'

What is regtech about?

"Regtech can be explained as a symbiotic approach based on efficient collaboration between compliance teams and IT teams", **Luc Maquil, co-founder of KYC Tech**, explains. Some experts such as **Philip Treleaven, Professor and Director of the UK Financial Computing Centre at University College London**, consider regtech a major catalyst for an efficient and effective finance industry.

Mash Patel, CEO of Kurtosys, focuses on the close links between the new digital experience and regtech. "The next twenty years will be based on data. For example, the data produced and copied in one year reached 21 zettabytes. Data redefines entire sales, marketing and client servicing ecosystems. Data and content are currencies to firms. Digital is about to change the way we do things. And compliance is the guardian of the reputation of your firm because the reputation's damage is incalculable and uncontrollable. The digital regtech is an opportunity to transform how you think about compliance".

Nadia Manzari, Head of Innovation, Payments, Markets Infrastructures and Governance at CSSF explains that regtech makes online payments solutions easier, it changes the financial area and monitors the risks.

The potential benefits of regtech by far outweigh simply reducing costs for businesses, **Hussayn Kassai, CEO and Co-Founder of Onfido**, believes. "Certainly, that's one part of it: regtech such as our Identity Verification Platform, which automates KYC and AML processes, is proven to reduce the costs of compliance and manual review, increase conversion rates and reduce the risk of fraud. But, beyond that, regtech could be incredibly powerful in bridging the gap between regulators and businesses, while protecting the best interests of consumers. Regtech enables regulators to successfully implement and audit their compliance requirements and offers businesses a cost-effective way of meeting them. Most importantly, regtech makes these services available to those who, until now, have been excluded from our economy - the two billion unbanked people worldwide." As a summary - regtech could be classified in the following three ways:

- Verification and compliance – inconsistencies, standards, verifying the right data (data collection)
- Enablement and efficiency – processing data in an automated way where possible (data processing)
- Analysis – use of data (data analysis)

Experts underline some key regtech features. The key differentiator of regtech is agility, **Evgeny Likhoded, ClauseMatch CEO and Founder**, says. He believes regtech allows the use of advanced technologies to extract, transfer and load data sets that are cluttered and tangled, to create consumable information. This is done quickly and efficiently, giving businesses the agility to solve real-world problems and to stay ahead of the competition. "The cost of compliance in financial services has risen sharply over recent years. However, regtech brings more value than simply saving money. Companies using regulatory technology are adapting to new technologies and sophisticated data analytics to glean the information they need to make calculated decisions. This is critically important for senior managers in financial institutions who may be held personally liable for some cases of non-compliance. Regtech unleashes a much-needed resource: human capacity. Regtech is about automating manual tasks, by releasing compliance officers from administrative duties and developing their skills so they can feel a renewed sense of value and satisfaction in their roles. Regtech also brings extra convenience and visibility to the regulators, as they want the market to function in the best possible way. That is why the FCA encourages the adoption of new technologies."

> **Regtech unleashes a much-needed resource: human capacity.**

Cost reduction is clearly a significant driver of regtech, and one of the major benefits that regtech can offer. However, the benefits of regtech are much more than reducing costs. "At its best, regtech deploys technology to reduce risk, flag up matters before they crystallise into problems and enables firms to reach conclusions that can aid their compliance programme, via sophisticated analysis of large datasets, or by monitoring of trader behaviour. Regtech solutions can also perform more mundane compliance tasks, thus freeing up human resource to focus on subtlety and nuance," **Jane Walshe, CEO and Co-Founder of Enforcd**, explains.

A year of regtech

Most experts believe that 2017 year is the year of regtech. Very powerful factors speak in favour of this fact – from numerous reports by Big Four companies to the upcoming drastic regulatory changes. "We're living through a unique and unprecedented period of rapid regulatory change. For instance, Brexit in the UK and the new president of the US, Donald Trump, both challenge the legal systems of the two countries, tending to rewrite them. Moreover, there is a global trend. The number of regulatory changes a bank has to deal with daily has increased from 10 in 2004, to 185 this year (figures by TR). It becomes impossible to deal with this scale and pace of change without taking radical measures and embracing regulatory technology," Evgeny **Likhoded of ClauseMatch**, explains.

On one hand, adoption of regtech is still provoking suspicions about the risks of new technology, and the fear of regtech being a threat to jobs of compliance officers and lawyers. The main regulatory barriers to innovation, as indicated by 54% of participants in a survey conducted by PwC, are data storage, privacy and protection.

On the other hand, big new regulatory packages such as MiFID, GDPR and SFTR are coming into play over the next several months and many businesses are struggling to adjust to them.

"They're racing to get new compliance procedures into place, and many feel it might get out of control. This brings an understanding that a business can't run successfully without adopting regulatory technology. And perhaps this kind of thinking is going to dominate in 2017," Evgeny Likhoded of ClauseMatch says.

Philip Creed, Director and Head of regtech fscom, explains that the instability of the UK and US markets, with Brexit, and Trump's "deregulation" promise, means that the regulatory environment is changing rapidly. "For financial services firms to keep with the pace of regulatory change they must employ specialists. In the EU, new regulation is coming thick and fast, the Forth Money Laundering Directive (4MLD), MiFID II, IFRS 9, PSD2 and GDPR will all affect financial services. Reflecting this, a recent Thomson Reuters survey revealed organisations plan to spend more time and money on compliance activities. As these companies seek to streamline processes such as Know Your Customer (KYC), we can expect to see a significant investment in regtech."

Regtech is definitely on top of the agenda at the moment, **Nasir Zubairi, CEO of the LHoFT**, believes. "Regulatory related technologies ensure firms are safe and compliant while they innovate to keep up with changing customer behaviours and needs, while also helping to eradicate increasingly penalising overheads. To put it in other words, regtech is a bit like the 'helmet a skier wears when racing down a black run' - it effectively protects financial institutions while they move forward at speed."

Nasir Zubairi identifies the following opportunities and challenges of regtech:

Opportunities: Firstly, regtech solutions reduce the complexity and capacity-demands of compliance while allowing companies to quickly adapt to changes in regulations. Then, regtech helps companies to free up some capital to use to reduce the risks within their systems, and also to improve supervision via enhanced insights. There is quite a substantial demand from financial institutions to reduce regulatory overheads due to the squeeze on margins.

Challenges: Regtech solutions require in-depth knowledge of regulation and bank operations. Therefore, teams operating in this space need to have experienced finance specialists as well as compliance specialists on board. Likewise, firms operating in this space must understand that the sales cycle is typically a minimum of 6-9 months with a financial institution.

Benefits for consumers and companies

Regtech is helping customers to get better service and advice. It advances the protection of customers against many kinds of fraud, **Evgeny Likhoded** suggests. "The benefits that regtech bring to companies include cost savings, time efficiencies, risk reductions and increased opportunity prospects. With the help of regtech, companies can be safe in the knowledge that human errors are minimised. Innovative technologies can support firms to develop advanced data analytic capabilities including scenario analytics, trend and horizon scanning, which regulators deem to be important tools that could improve the quality of information."

Regtech hugely improves the onboarding process. **Wayne Johnson, CEO and Co-Founder of Encompass**, notes, "For some customers this means they can be onboarded almost instantaneously. From the company's perspective, they know exactly who they are onboarding."

Susanne Chishti, CEO and Founder of FINTECHCircle, also considers consumer benefit - for instance the account opening process is faster. "The market overall benefits when market manipulation and insider dealing cases can be prevented via regtech innovation. Companies benefit as they have to fear regulatory sanction and reputational damage less if they have a well-designed compliance and conduct framework implemented in combination with effective automated controls."

Regtech offers extraordinary potential to make compliance teams more effective, giving them insight, data, analysis and transparency on the behaviour, culture and conduct of their institution. Never before have they had such visibility and reporting certainty, **Alex Viall, Head of Regulatory Intelligence, Behavox**, explains. "Regtech liberates incredibly valuable and scarce resources (highly qualified compliance professionals) to be deployed more effectively."

Regtech is fairly broad in coverage. Aside from the obvious reporting and KYC elements, it can also mean innovating the infrastructure, i.e. using technology to take a bigger step and drive tech renewal, **Nasir Zubairi**, concludes. "Indeed, institutions should use the regulatory and technology drivers of change to reassess how their IT-teams work. Rather than taking on large projects that take five to ten years to complete, continuous delivery would deliver value from day one – implementing IT-systems and infrastructure in the frame of knowing they will change again rather than implementing systems with the false belief they will last ten years."

Expert comments

About Regtech domination

HUSSAYN KASSAI

CEO and Co-Founder Onfido

Regtech has been on the rise for some time, and in 2017 it will really begin to dominate the market. By 2020, there will be 300 million pages of regulations, and it's likely that fines for non-compliance will rose accordingly. Regtech can help people to compete.

The name 'Regtech' has only come about recently, but the concept has existed for a while. Adding tech and removing paper processes can offer a competitive advantage, as well as lowering overheads as the costs of increased compliance soar. Where FinTech has exploded over the last few years, regtech is now emerging as its enabler.

There are only around 150 regtech companies at the moment, but I expect to see that number increase significantly in 2017. One potential blocker, however, is that the need for regtech solutions is outstripping awareness and trust within financial services. Much of the law and guidance around financial services predates their automation, meaning businesses are slow to switch to technologies that could be saving them time and money, while providing a better user experience for their customers. As regtech continues to make its presence felt, I'd hope to see that attitude change so its full potential can be realised.

On collaborations

EVGENY LIKHODED

CEO & Founder ClauseMatch

The regtech ecosystem is all about collaborating or losing. That's why advocates of collaboration in the regtech space are becoming more and more prevalent. As JWG's CEO, PJ Di Giammarino commented at a regtech conference in February 2017, "If the regtech industry is a mountain, we are now only at basecamp. Serious cooperation and collaboration between technology companies, regulators and financial institutions is necessary to drive the innovation in the timeframe required."

For instance, ClauseMatch and JWG are partnering to develop a unique regtech solution to simplify and better structure how regulatory changes are driven through internal banking policies. The prototype of this solution was first developed at the FCA tech sprint. Regulators are encouraging the development of innovative solutions as there are few off-the-shelf tools that can ease compliance processes. While financial regulation in the UK and in many other countries continues to change rapidly, the joint solution offered by JWG and ClauseMatch ensures a streamlined response to regulatory updates and performs gap analyses between policies and regulatory obligations on a real-time basis.

On the influence of regtech

JANE WALSHE

CEO & Co-Founder Enforcd

Lots of innovative regtech solutions focus on KYC, client onboarding and the mitigation of client, counterparty and supply chain risk. Ever slicker solutions are being brought to market that can be used by firms to quickly onboard clients in a more frictionless way than has been seen in the past. Firms such as Onfido deploy identification technology that can aid the unbanked to get access to financial services and so regtech can do it's bit to help the vulnerable and disenfranchised. Some of the more cutting edge regtechs are focusing on mapping of behaviours, with a view to providing accurate red flags when a trader or advisor is about to do something unexpected. This technology is starting in financial services but could be used in other industries also. Sybenetix is active in this space – and is a firm that uses behavioural science to monitor investment managers' decisions. My own regtech firm which is focused on global enforcement activity aims to help firms identify and manage conduct risk, and to improve culture. We use regtech to aid qualitative, rather than quantitative, compliance – again, a new direction for regtech.

On the benefits of regtech

ALEX VIALL

Head of Regulatory Intelligence behavox

Regtech is just beginning, its widespread adoption will probably take a decade as institutions recognise the value and efficiency that it lends and the new process/technology is embedded and becomes acceptable market practice in the eyes of the auditors and regulators. First though the institutions need to migrate from their ancient legacy systems and approach and this requires energy, investment and a new approach/competency and there are very divergent appetites for this from one institution to another.

Regtech is having an impact in almost every sector of financial services – it is being adopted in wholesale and retail, across product verticals (banking, insurance, asset management etc) and types of institution (regulator, regulated, exchange, consultant). Regtech can make the investment process much more efficient, clear and painless for the consumer (eg cloud-held ID verification for KYC/AML purposes); it can also create checks and balances in the advisory chain to ensure that consumers are protected and mis-selling is reduced (eg PPI in the UK).

About Regtech in practice

PHILIP CREED

Director, Head of Regtech fscom

Our product KYC-Pro is a regtech use case. We focus on AML onboarding and risk assessment of our client's customers. A classic example I have encountered with my clients who operate in international remittance: migrants who are sending funds back to family or friends in another jurisdiction. The standard method of onboarding remotely in the UK is to use electronic verification, this hits the clients personal details against credit data, electoral and more to decide if this person is who they say they are. Migrants tend to have very low pass rates for electronic verification as they may not have lived in the UK long enough to have built up a solid credit profile, as such if you still wish to automate your onboarding for individual what should you do next, facial recognition, social media screening, both, more, the decisions to be made are endless.

Our solution understands what the financial services client is looking to achieve. How they want to onboard their clients is critical. We match them to the most appropriate solution for their needs, advising on and implementing other regtech solutions we have trialed and tested, and know are fit for purpose. We can funnel these solutions through our API to allow our client one point of integration and add our compliance expertise to our technology. This ensures the process is efficient and their developer's time is spent productively on the product rather than the back-end.

On the role of technology in changing regulatory landscape

WENDY BROOKS

Director, Global Compliance of Western Union

At Western Union, we processes 31 transaction every second, 365 days a year. As you can imagine, to manage such sheer volume and scale it's critical we have a robust compliance programme in place – and to do so efficiently and effectively we have to rely heavily on technology.

More broadly, in the backdrop of an evolving financial system, with new technology and innovation emerging all the time, it's important that the compliance function not only keeps pace with change – but also innovates itself. A collaborative dialogue between business functions will ultimately increase visibility and usefulness of such new technology.

Given the complexities around regulatory compliance – and variances between different jurisdictions around the globe - technology is an important tool to help our teams be accurate, effective and proficient in their roles.

In terms for the specific ways we use technology, there are two sides to the coin. We have customer-facing platforms which continually update. But there's also the back-end compliance side of things, where we apply new technology to existing compliance functions and data processes.

We're seeing vast swathes of new innovation so the question is not necessarily whether the technology is available, rather it's how we should use it. At its core, compliance is human-thought processing – so we shouldn't seek to automate the process entirely. But instead, we can examine ways in which new technology can enhance and support the skills of compliance experts, and help be successful in their jobs. That's really the key.

Regtech becomes the doorkeeper to the growing conversations between machine and humans...

RAJESH CHAKRABARTI, Marketing, Innovation and Strategy Technologist Banking Consultant of World Bank Group

Regtech though growing in prominence from 2015 is seeing a massive focus this year simply because it becomes the doorkeeper to the ever growing conversations between machine and humans. These conversations carry data both private and public and somewhere lines need to be drawn and that's exactly what the primary role of regtech is. Simply put regtech is actually technology that aims to deliver sure footed , configurable, easy to integrate, reliable, secure and cost-effective" regulatory solutions In my views regtech is more about recognising values so far. The right use of it may result is reducing costs but that's more a secondary outcome of the process. In an era where fintech has disrupted the normalcy in the Financial services environment, it is but obvious that regtech will herald in disruptive processes in regulatory practices. That is the only logical conclusion.

As per my understandings the following areas will be directly impacted by regtech and here's how:
1. Agility – Cluttered and intertwined data sets can be de-coupled and organised through ETL (Extract, Transfer Load) technologies.
2. Speed – Reports can be configured and generated quickly.
3. Integration – Short timeframes to get solution up and running
4. Analytics – Regtech uses analytic tools to intelligently mine existing "big data" data sets and unlock their true potential e.g. using the same data for multiple purposes.

I agree that unlike fintech, where there is an element of competition between the players, regtech is an area where everyone could win by cooperating. The benefits of working together far outweigh "going the solo way" like the Fintech Fraternity.

Regtech brings to the consumers and companies the following benefits:

For Companies:
• Enhancing regulatory framework
• Automating the same to negate unwanted human bias
• Enhancing company compliance
• Reducing internal workload by outsourcing
• Easier detection of infractions
• An attempt to eliminate conduct risk

For Consumers:
• Easier and Faster On Boarding
• Enhanced Customer retention and Loyalty
• Over period of time, reduced service costs for customers

Regtech and money transfers

AMIT SHARMA

Senior Vice President, Money Transfer Solution Engineering of Western Union

A lot compliance solutions and regtech companies are focusing around banks and 'account' focused businesses which have a tight relationship with their customers – as is the case on the b2b payments side of Western Union.

However, when it comes to the broader remittance and money transfer side of Western Union, compliance is a very different. For example, a customer may wish to send money to relative in another country who may not have an account with Western Union or have a relationship with a local agent on the ground.

In these instances, it's vital that we do our due diligence and carry out comprehensive consumer matching, identification and verification checks as part of our KYC ("know your customer") process. Given the global nature of money transfer and financial transactions today, this is an increasingly important area and one in which regtech is playing an increasingly important role.

However, KYC is not simply about compliance, but is part of the overall customer experience. New technology can make the verification process simpler, smoother and easier so users can transfer money as quickly as possible.

So in this sense there are two primary benefits of new regtech solutions. The improvements it can make to the end customer journey and the more tangible or functional benefits for compliance professionals and regulators. In some cases regtech is actually replacing manual processes, which in the past required vast amounts of paper work – which naturally helps streamline the process.

In the UK and US, there is already a certain level of maturity when it comes to take up of regtech solutions through the use of digital reports, documents and visual solutions. More and more we're seeing elements of financial services become digitized, and in the years to come this trend is likely to only continue.

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Coinfirm. Regtech for a Reason

A recognised leader in their field and ranked among the most influential blockchain and regtech companies, Coinfirm serves as a foundation for the safe adoption and use of blockchain.

Coinfirm's Blockchain AML & Compliance Platform uses proprietary algorithms and big data analysis to provide structured actionable data that increases efficiency, reduces costs and streamlines compliance to near automation. The blockchain agnostic platform not only benefits companies operating around blockchain but also major financial institutions, asset management companies and BI companies. In addition, Coinfirm develops dedicated blockchain solutions such as their verification platform "trudatum". Currently being piloted for adoption by multiple financial institutions and insurance companies, trudatum is an easy to use and adopt blockchain solution to register and verify the ownership and authenticity of any type of document, file, or data.

Coinfirm was born out of the desire to solve critical issues that were in existence today and, perhaps more importantly, to solve issues that were spotted on the fast approaching horizon.

The bigger picture for them is bridging the gap between cryptocurrencies and the traditional market for true commercial and mass adoption to occur. For this to happen an efficient and effective compliance function must exist that illuminates the wide reaching capabilities of Blockchain technology. Traditional compliance is an extremely cumbersome, clunky and expensive process. Some Coinfirm clients admitted to spending 50-60% of their time on outdated and manual processes and some banks are spending 25% or more. What Coinfirm found was that compliance teams had an enormous amount of data and tools to analyse and turn the data into something that can be used to make well-informed business decisions. Whilst the tools are helping in analysing the data, it is not as efficient and effective as using technology. When it comes to consuming, processing and analysing a corpus of data, machines that do not eat, sleep or go out all night, and this makes this process significantly more in-depth, accurate and efficient.

Also, from the beginning of its conception Coinfirm has been addressing one of the core issues that has been long hampering the growth of the ecosystem by helping clients and companies among the hundreds of legitimate businesses who were using cryptocurrencies or Blockchain secure the services of the traditional banking industry such as opening a bank account. The issue here is that financial institutions lack standards and efficient tools to effectively determine the risk profile of these entities, therefore they have been rejecting their business without understanding them. This is less than ideal as these companies are not able conduct their business and banks are losing business. Coinfirm want to provide a solution that solves this issue through the provision of technology that allows financial institutions to accurately determine the risk associated with cryptocurrency or Blockchain-based enterprises and assets so that they can accept their business, thus creating a win-win situation.

What Coinfirm provide is structured, actionable data right from the start as well as scalability and automation through their API.

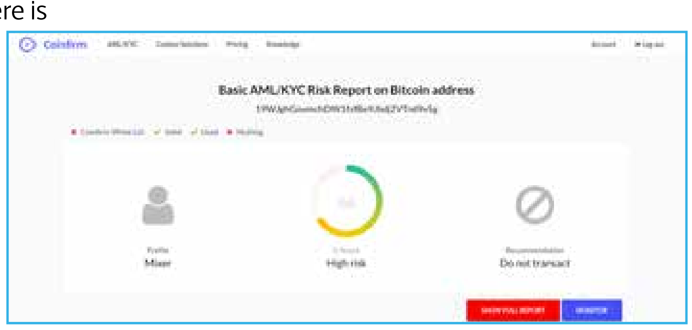
Coinfirm platform is Blockchain agnostic. This means that it does not matter if we are looking at the Bitcoin Blockchain, DASH (a Coinfirm client), Ethereum or private/hybrid Blockchains, which have become somewhat popular amongst a handful of institutions, the platform can be adopted.

Secondly, data is sourced directly from Blockchains, web, Deep web, TOR et al, as well as from their partners and collaborators such as business intelligence companies and exchanges. All the data goes into the Coinfirm database, one of the largest structured Blockchain databases in the world and is subsequently run through around 200 proprietary algorithms and flagging scenarios. This robust analytical process yields valuable actionable data, such as a behavioural profile for example. This is based on extensive behavioural analysis, a C-Score, which is a 0-99 risk rating, a transaction recommendation rating, money laundering or Deep Web trade flags, and many other data points that a client may need to be compliant with.

With this solution, the analytical compliance function goes from being a double-digit percentage of time and money - into a practical utility that can be streamlined and automated enabling organisational resources to be better spent on adding value in key business areas.

Their initial success of bridging the gap between cryptocurrencies and the traditional market has been demonstrated through the strategic engagement with a variety of large organisations such as SEI, ABN AMRO, and Poland's largest bank PKO BP in the financial services world right across to major cryptocurrency DASH.

Coinfirm is showing that through regtech the blockchain and traditional ecosystems can align and integrate to the benefit of everyone involved.



Regtech startups to mention*

- **Auvenir** - a Deloitte venture, cloud-based auditing technologies. It seamlessly integrates advanced technology to enhance the financial audit workflow, improving efficiencies and communications for auditors and their clients.
- **Avalara** - helps businesses of all sizes achieve compliance with transactional taxes, including VAT, sales tax, excise tax, communications tax, and other tax types.
- **Clausematch** - Next-Gen document editing platform for real-time collaborative workflow. Data solution to manage key information documents.
- **Coinfirm** - A recognised leader in their field and ranked among the most influential blockchain and regtech companies, Coinfirm serves as a foundation for the safe adoption and use of blockchain.
- **ComplyAdvantage** – uses machine learning and AI technology to help finance firms do legal checks on clients to make sure they're not breaking any rules by dealing with them. The firm says that its dynamic proprietary database, which covers sanctions and watchlists, politically exposed persons, and global adverse media lets it create structured profiles of high risk individuals and companies and their associates.
- **Encompass** – software, which enables AML /KYC checks and initial client screening to be completed up to 10 times faster and with significantly lower costs. Startup takes international data feeds from 14 information providers including public data such as Companies House and the Land Registry in the UK to global information providers on Politically Exposed Persons (PEPs).
- **Finect** - a compliant communication platform for financial professionals. The company offers a social networking platform for financial advisors, asset managers, individual investors, and other professionals. It enables its users to present and promote business; access real-time product trends, news, and opinions; and engage with clients and prospects by creating private and public groups.
- **FundAmerica** - offers back office financial technology services for the crowdfunding industry. Top crowdfunding software solutions for affordability, security, fast setup and support.
- **Global Debt Registry** - provides compliance and risk management solutions to the account management industry.
- **Gremln Social** - a social media platform specifically for regulated industries. It provides social media marketing and compliance tools for banks and financial institutions.
- **My Virtual Strongbox** - the kind of secure document storage technology that can help FIs better manage customer documentation.
- **OutsideIQ** - enables FIs to uncover regulatory risk using a combination of machine learning and human analysis.
- **QCR, CreditHQ** and **FICO** - credit risk analysis startups.
- **Qumram** - software that helps ensure complaint communication by recording digital interactions from web, social, and mobile channels.
- **Sybenetix** - provides Market Surveillance and Compliance Monitoring software for banks, asset managers, hedge funds, exchanges and regulators.
- **Trustev** - a global provider of digital verification technology. The start-up verifies the identity of online shoppers by generating a digital fingerprint through various social media accounts.
- **VATBox** – a global cloud-based provider of automated VAT recovery and governance solutions.

***The list is not intended to be exhaustive and only aims to provide some examples on how different technologies can be applied to regtech field.**

Source: Finovate Blog, The Fintech Times

Regtech for regulators: re-designing of the regulatory architecture

Consumer-facing fintech has received most of the attention from the public, but behind the scenes regtech has been generating conversation and excitement. Innovate Finance's Transatlantic Policy Working Group (TPWG) and Strategic Partner Hogan Lovells, launched a report titled Future of regtech for Regulators, Adopting a Holistic Approach for the Digital Era Regulator.

This report focuses on the greater potential of regtech for regulators. Representing a broader promise to encourage a 'systems evolution' or re-designing of the regulatory architecture including digital financial infrastructure (DFI), which may encompass anything from payment systems to shared reporting utilities.

Becoming the leaders of digital changes

A recommended regtech framework to help regulators become leaders of digital changes is outlined in the report. It includes three broad approaches, which can be implemented alone or in tandem:

- **Ecosystem** - Government engaging with industry, such as LabCFTC in the U.S. and the Financial Conduct Authority's regulatory accelerator can help identify new technology and market developments, allowing regulators to work closely with technology innovators and understand any process and regulatory infrastructure adjustments that may need to be made.
- **Digital Financial Infrastructure** - Implementing new technologies, such as real time reporting, shared utilities, or application programme interface (API) architecture, can help facilitate the streamlining of banks' submission of applications, payment settlement, and securities clearing.
- **Rule and Process Changes** - Implementing new rules and processes to encourage and allow innovative solutions to regulatory compliance issues, both for the regulator and for industry This could include defining new regulation in a machine-readable format that can be applied automatically; or adjusting a handbook to accommodate the application of new technology such as blockchain compatible data protection or identity rules.
- **Richard Schaberg, Partner and head of Hogan Lovells U.S. Financial Institutions Practice Group, said**: "Fintech, regtech, and innovation, generally, have the potential to radically transform the U.S. and global financial systems. U.S. regulators have, so far, remained more cautious than some of their international counterparts in embracing technological innovation in financial regulation. The Report provides insight into the international efforts to encourage and deploy new ideas and techniques for regulatory compliance and outlines the steps the U.S. can take to fully integrate the evolving and essential features of regtech into our own systems."

The Future of regtech for Regulators, Adopting a Holistic Approach for the Digital Era Regulator was presented in Washington, D.C. at a TPWG gathering, hosted by Innovate Finance and Hogan Lovells. Launched in 2016, the TPWG brings together leading U.S. FinTech companies to help foster an open, collaborative, and inclusive dialogue with respect to FinTech policy approaches and frameworks in the UK, U.S., and around the world.

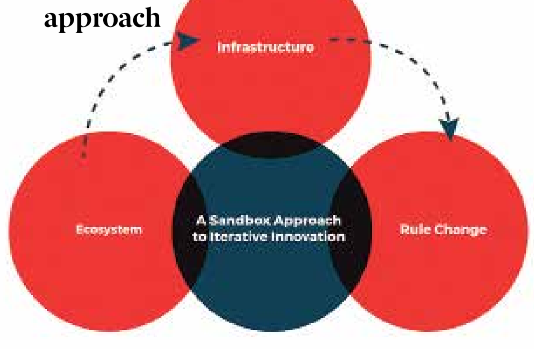
The Sandbox approach

A big part of the research was dedicated to sandbox approach. The uses of sandboxes, industry or regulatory, do not necessarily require rule change (although some jurisdictions have passed new legislation in order to set up a regulatory sandbox). They do however represent a mechanism which may enable regulators to better identify where appropriate rules might need to be adapted, or where regulatory processes may require amendment. As such, the Sandbox approach to Iterative innovation shares elements of the Ecosystem, Infrastructure and Rule Change framework.

a. Regulatory Sandboxes
Regulatory Sandboxes are increasingly being deployed as a means to support the growth of emerging sectors such as FinTech, thereby furthering regulators' owns internal understanding and providing a mechanism for limited regulatory relief to innovative solutions. A Regulatory Sandbox can broadly be described as a unit, which typically sits within a country's conduct regulator, and evaluates the need for FinTechs to conduct controlled market tests under less stringent regulatory requirements. The solution borrows inspiration from the pharmaceutical industry and the tiered process for testing new drugs. Regulatory Sandboxes sit on the border between an ecosystem approach and infrastructural change in regulatory innovation. On the one hand, Regulatory Sandboxes allow regulators to engage entrepreneurs more quickly and at a lower compliance cost, in a controlled setting. On the other hand, Regulatory Sandboxes constitute a process / infrastructural change, on the path towards reforming the authorization procedure. There are 19 such Regulatory Sandboxes in various forms of development globally, with those in the UK and Singapore are considered the most advanced.70 Although these sandboxes vary in scope and maturity, most have the objective to assess the consumer impact of a solution, and to evaluate if the regulatory framework needs to adapt to allow it full market access. The end goal is to create further choice and competition in financial services, balancing the twin aims of promoting innovation while ensuring continued consumer protection.

b. Sandboxes, however, extend beyond a purely regulatory-focused endeavor. In the UK, Innovate Finance (invited by the FCA) sought to further research into this area by chairing a consultation into so-called "Industry Sandboxes." These are collaborative digital platforms that would make it easier for firms testing a product, and those providing an asset (e.g. data, APIs, off-the-shelf technology solutions, etc.) to work alongside one another in order to prove the viability of an innovative solution. Industry Sandboxes, therefore, provide a different solution to their regulatory counterparts. They are typically operated by industry players and would be used for testing in an off-market environment. Furthermore, any regulated solution would still need to secure the appropriate regulatory permissions to go to market, which in turn may involve going through a Regulatory Sandbox. Responses to the consultation also strongly indicate that there is a demand for regulators to play a part in an Industry Sandbox. Five broad areas of participation highlighted by respondents, included: 1. Engaging in curated dialogue with Sandbox participants where there is uncertainty around the regulatory approach to an innovative solution. 2. Reviewing Industry Sandbox tests in applications to Regulatory Sandboxes, authorization or supervisory decisions. 3. Leveraging an Industry Sandbox to test regtech solutions for regulatory use. 4. Considering Industry Sandbox output towards rule change / policy development. 5. Providing a forum for international regulators and developers of innovative solutions to discuss divergences in regulatory approaches and the potential for alignment. As a result, the consultation recommended that regulators participate as observers in Industry Sandboxes via dedicated "Observer Forums." Such engagement should add to the ongoing global regulatory initiatives at an ecosystem or infrastructure level.

The Sandbox approach



The next big thing

Thorsten Terweiden Deputy Head (Fintech) at InvestHK

Regtech to be the next big thing in fintech globally and there are a number of factors supporting this. In addition to technological advancement, which brings more regulatory, compliance and governance software to market, the growth of Regtech is principally driven by increasing regulatory scrutiny, rising compliance costs and blockchain development.

Since the 2008 financial crisis, financial institutions faced increasing regulatory scrutiny both in terms of volume and complexity. In 2015-16, an average of 200 international regulatory changes and announcements were recorded daily (source: Thomson Reuters Regulatory Intelligence). The increasing levels of regulation and the ever-more challenging regulatory expectations have an operational impact throughout financial institutions and call for not only people but also proper process and technology-based solutions.

In terms of compliance costs, the average annual spending on compliance of regulations for financial institutions is estimated to be around US$70 billion (Source: Bloomberg). Similarly, Bain & Co estimated that governance, risk and compliance costs account for 15% to 20% of the total "run the bank" cost base of most major banks. With budgets under pressure, the need to derive business benefit from compliance spending has never been greater. This is further complicated by increased penalties for inappropriate conduct not limited to fierce fine but also senior executives' jail sentences in extreme cases. Regtech solutions are purposely designed to protect financial institutions by mitigating risks.

Accenture says that compliance costs could be reduced by 30% to 50% at the product level with the use of a blockchain database, while London-based blockchain technology company Coinfirm estimates that companies can save as much as 50% by using regulatory and compliance technology.

Growth of regtech is also fuelled by blockchain. While blockchain application may still be nascent, the financial services industry is ready for further blockchain disruption specifically on using the technology to manage compliance and regulation. It is also believed that the underlying application of blockchain as a 'distributed ledger' between trusted parties will see it become an industry standard beyond cryptocurrencies, including as a secure method of exchanging data between organisations.

Regtech solutions that automate regulatory reporting processes will also be in greater demand in 2017. As such, western regtech firms eye huge potential in Asia. Major regtech providers for asset managers in the U.S. and Europe are considering launches into the Asian market, as they believe the region is set to embark on a period of profound regulatory change. Leveraging its well-established financial infrastructure and ecosystem, Hong Kong is the perfect launch pad for western regtech providers to enter the region. For instance, Compliance Solutions Strategies (CSS), which caters to around 600 fund firms in Europe and the U.S., says it plans to open an office in Hong Kong by the end of 2018.

We believe there is huge potential this year for regtech in Asia, particularly in Hong Kong which possesses the pre-requisites to promote regtech development. As such, InvestHK has made regtech one of its key promotional priorities. It is noteworthy that the University of Hong Kong has one of the best research facilities in the world dedicated to regtech.

In the UK, the Financial Conduct Authority recently issued its Business Plan 2017/18 that deals with its fintech and regtech priorities for the year ahead.

While regulators and the private sector continue to embrace fintech and regtech solutions, we will also need to consider putting appropriate risk management controls in place around the use of technology, cybersecurity and data confidentiality in the near-term. One key challenge for regtech is obtaining accurate and timely data from a myriad of legacy systems and interpreting this data appropriately.

And more values

Cost savings is undoubtedly one of the key benefits brought by regtech. According to Bain & Co, governance, risk and compliance costs account for 15% to 20% of the total "run the bank" cost base of most major banks. Financial institutions spend a lot of time, human and financial resources in satisfying the increasingly demanding regulatory requirements. With regtech, financial institutions can speed up decision-making process without compromising compliance standards.

However, it is important to note that regtech brings along a new breed of agile regulatory technology that empowers firms to better understand and manage risks, while also streamlining the regulatory compliance process. Past attempts to digitise the compliance and risk process have focused solely on cost reduction and operational efficiency. Yet, regtech has much to offer in terms of mitigating risk at all levels encompassing operational, reputational and financial. The following are a few of such areas:

Information management: regtech utilises advanced technologies to extract, transfer and load data sets, simplifying cluttered data into consumable information, giving businesses the agility to solve real-world problems and stay ahead of the competition. Regtech solutions also enable regulators / financial institutions to monitor, report and analyse large amounts of data quicker and more efficiently. This was impossible to be processed by traditional approach.

Business efficiency: In addition to managing large amounts of data, the data processing from regtech can reassess and refine processes based on machine learning to further improve the solutions over time, and reduces the large amount of false positives to make the overall business more efficient, while allowing financial institutions to focus on their core activities. The regulatory requirements change quite frequently, especially in comparison to other reporting demands, therefore regtech offers the agility and flexibility to successfully respond to changing processes.

Real-time alert: regtech helps improve the overall regulation compliance and reporting, which will lead to a more transparent, systematic and clear regulatory environment that is easy to follow from the regulators and regulated. With the increased emphasis on security and data management, and better capabilities to effectively address new regulations and manage risks, to a large extent it creates a more secure and stable business environment for development. Regtech systems in place will be able to react and alert in real-time in case of risk scenarios, intelligent analysis of data gathered from financial firms and the market will also be able to spot risks such as product mis-selling or fraud.

Spheres of an application

According to EY, regtech has already been applied to areas such as fraud prevention, regulatory compliance automation, conduct and culture, and predictive analytics.

Fraud Prevention: solutions that monitor transactions in real time to identify gaps, issues and trends in financial crime; prevention reduces the risk and associated cost of lost funds due to fraud.

Regulatory Compliance Automation: Future regtech platforms, including a converged regulatory risk and controls management framework, to interpret regulations, including upcoming changes. Use of robotics to perform routine compliance monitoring and testing processes as well as robo-advisors that use sophisticated algorithms to provide automated advice to customers.

Conduct and Culture: Solutions based on behavioural profiling and behaviour-driven risks to indicate potential misconduct and map out company culture.

Predicative Analysis: Forecasting firm-specific operational and regulatory risks, analysing the root causes of previous regulatory breaches and uses this to predict potential risk areas and disruptive events within financial markets.

Deloitte's Financial Services Regulatory Outlook 2017 said that regulators and institutions must become more 'cyber resilient' as the financial services industry becomes more and more data-driven. The concept of 'cyber resilience' will be an important one for regulators, as fintech begins to transfer risk to the unregulated side of the market. At the same time, more stringent requirements within increasingly dense data landscapes and the rapidly evolving fintech sector have led firms, technology providers and regulators to focus on and adopt new technologies to meet regulatory challenges. The objective is to drive down costs, yield efficiencies, enhance transparency, avoid fraud and disrupt the norm of conventional regulatory compliance.

In 2017, therefore, regtech will go beyond protecting core areas of a company's operations and merely reacting to fintech trends. Companies are expected to implement enterprise-wide cybersecurity frameworks beyond IT department, predict potential threat scenarios, routinely test security measures; and if weaknesses are identified, update defense measures.

By Ben Challice, COO, Pirum Systems Ltd

Interoperability - Now is the Time for FinTech Connectivity

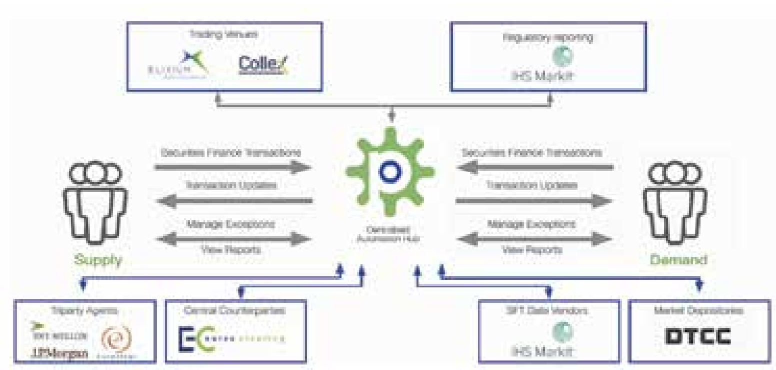
Financial technology, known as FinTech, has been the buzzword of the last few years as an entire industry has been created from companies using new technology and innovation with the goal to compete with, replace or enhance the usage of financial services of incumbent companies.

According to KPMG ("The Pulse of FinTech Q4 2016"), the value of investment and mergers related to FinTech hit $70billion in the past 2 years alone, and new abbreviations such as regtech and InsureTech have been created as FinTech looks to enter specialist areas from its roots in payments and peer to peer retail finance.

Closer to home, in wholesale financial services, much has been made of the conundrum banks are facing with flatlining revenue, margins being squeezed, shrinking financial resources and the increased costs of supporting legacy infrastructure all whilst complying with regulation as it moves from legislation to implementation. Increasingly business owners are realising that, given challenged revenues, cost is a variable that is more directly controllable and under their direct influence.

It's the old adage of "doing more with less", i.e. optimising scarce financial resources to maximize returns whilst reducing cost. This is where there is a clear need to turn to technology as a part of the solution, especially in what is being referred to as the "non-differentiated technology" layer. Financial firms have realised developing proprietary solutions to industry-wide problems is expensive and often unproductive, consequently outsourcing to a service provider makes sense from both an efficiency and cost point of view.

However, given the sheer size and breath of products in financial services, there will never be a 'Magic Bullet', or single technology solution. Instead hundreds of technology providers have developed thousands of products to provide increased automation and efficiency whilst reducing operational risk and overall cost in specific areas of the value chain. Whilst buying a collection of best-of-breed solutions will provide benefits to an individual business line or product, it can actually create significant costs and risks for banks as individual systems and services require internal integration. Furthermore, this integration often needs to be revisited each time one of the relevant systems is upgraded, creating a major burden on internal IT department and limits the time and budget for revenue generating projects.



Pirum's Automated Connectivity Hub

One practical way to minimize risk for both service providers and their clients is to create partnerships that allows the providers to combine the individual strengths of their existing products to solve new processing or regulatory challenges. Integration of functionality from existing systems, as well as combining expertise in complementary areas, is a way for partners to reduce cost, implementation risk and time to market. If a vendor partnership can provide a seamlessly integrated solution to problems that clients face, it means there is one less interface that an IT department needs to worry about. In these cost-conscious times, a holistic solution to a complex but standard set of problems, which can simplify overall infrastructure is an attractive proposition.

Most vendors simply want to provide a better service to their clients and some, including Pirum, are starting to see partnerships as the best ways of doing this. The firms likely to form partnerships will have client bases that have some degree of overlap but are sufficiently diverse to create opportunities for both partners to get direct exposure to potential new clients, markets and/or products. The critical mass of established vendors in securities finance and collateral management makes it possible to find partners that have complementary skills, system functionality and connectivity to clients. The right partner can provide a wide range or benefits, from a detailed understanding of nuances of different markets to the most effective way to design a data model.

At a more strategic level, the increasing convergence between product lines in securities finance and collateral management mean, that in the long term, there will be less scope for pure niche players.

Partnerships are a great way to learn about the bigger picture and become ready for a more convergent world, and for niche vendors to quickly expand their functionality to become more relevant to a broader audience.

Pirum stands by this ethos and leads by example. We already provide a secure, centralized automation and connectivity hub which seamlessly connects market participants, allowing them to electronically verify key transaction details and fully automate the post-trade lifecycle.

The platform provides onward connections to partner infrastructure service providers. Its position, at the heart of the Securities Financing market, allows clients to leverage the Pirum connectivity to access CCP's, Triparty agents, data vendors and regulatory reporting platforms, with more connections being added all the time.

Company Kompli-Global • kompli-global.com • **Interview** with Jane Jee • **by Bird Lovegod** • Monday 3rd July 2017 • **Subjects:** Disruption, Regtech, Brexit,

Kompli-Global

CEO
Jane Jee

Jane Jee talks with Fintnews about regtech...

First off, let's define regtech

"A system for using technology to address regulatory requirements supported by the FCA and other regulators"... and we could add "who are realising that they have piled on regulation and now firms are buckling under the weight of it."

The function of regtech is facilitating and enabling regulatory compliance. Ahh were life so simple.

"It's ten years since the 2007 money laundering regulations came into force, and ten years is a long time. The new money laundering regulations 2017 are now in effect and this, along with many other factors including the actual becoming of fintech as a sector as well as more serious and specific approach to global money laundering, means regtech is now a high growth component of the fintech eco system.

There are 27 regulators in the UK in total. Regulation is a big book. Very big. So let's start on a chapter we can all relate to. Brexit."

Jane, let's talk about Brexit, in terms of regtech. What was the reaction of the sector when Brexit was announced?

"... initial disappointment ...it created uncertainty regarding the financial passporting, whereby if you set up business in the UK you can do business in Europe just by notifying the regulators. Now, some companies will be looking at relocation... although due to the size and significance of London in the global financial markets, most will stay or keep a foot in the UK at minimum."

Will Brexit change regtech as a sector?

"Regulation is not going to lessen because of Brexit. Putting in bluntly, a lot of EU legislation is drafted in the UK and because of that we aren't going to see regulation reducing in volume..."

Is it going to change?

"There will be subtle changes after Brexit until then all EU legislation continues to apply... including GDPR..."

Would it be advantageous for the UK to have our own independent regulatory framework or not, in your opinion?

"With everyone preparing to comply with existing regulation and because of our need to position ourselves on the global stage, we don't want to look lax on regulation, we will always have an eye on what's happening in the EU but it may be an advantage. For example, the UK could choose, by its regulatory framework, to attract Chinese fintech companies, or US ones. In terms of global positioning, London is currently still global fintech capital, certainly in payments the UK leads the world, therefore for fintech and associated regtech there is the opportunity to develop a global blueprint, not just an EU one."

Do you think it would be interesting if the UK could position itself as a kind of translator or hub for cross continental compliance?

"One of our strengths is ability to pick what is good in other markets and make it our own. We have been good at taking the lead in relation to compliance... putting ethical principles behind legislation... as a county we have been better at that than others. Potentially translating global regulations as technology and developing courts that can deal with global disputes on tech and the regulatory framework... would make for an interesting dynamic...based on the established strength of UK laws and regulators. We have a lot of history in creating and being creative within the legal sector."

Regarding the FCA?

"The FCA recognises that if you are trying to launch a business, in order to comply with the regulation it makes sense to outsource to tech companies to obtain the info you need to be compliant. The volume of regulation is almost too much for small startup to handle."

Even too much for humans to handle?

"... on occasions.... it's not too much, but the burden of compliance requires many more people. Manual searches takes longer and cost more. The correct use of regtech leads to cost efficiency...leading to compliance as a service to assist competitiveness."

Can compliance be codified? By this I mean, can it be built into systems, built into the technology platforms themselves?

"Surprisingly much of it can. There will always be an element of human judgement being needed, e.g. risk assessment, could never be carried out by AI. It has to be a human judgement.... the regulations are clear on this. However, how one obtains the info for that judgement to be made on can be automated and technologically facilitated. Indeed, it needs to be due to the sheer volume of information and new information being created and made available."

Are the FCA also looking at codification of regulation?

"Yes, they are, they themselves need to incorporate the use of tech, they are giving licences to operate around the globe so they need to obtain relevant info. It's a rule based system that computers and regulators operate within. There is significant room for regulatory technology by building the rules into the platforms. There is some very strong guidance from the FCA regarding outsourcing. Banks with their legacy systems are not best placed to do it in house and should look within the market for solutions."

Banks and their legacy systems again...

(Speaking of near obsolete tech, at this point something Jane says wakes up Alexa, the Ai bot. "Alexa stop !!" Alexa goes back to silently listening...)

"The interesting thing from a banks point of view is that they have a lot of different systems; they do find it difficult to evaluate new technologies... so they have incubators some of them, to look at the regtech companies and see who has interesting tech."

Banks difficult to interface with... really?

"Meetings with individuals ... committees.... struggling with the tech... compliance costs.... some are failing to properly analyse where technology can help them. We are in dialogue with and have banks as clients, and we do see they are naturally hesitant about adopting any particular technology."

What do you predict the future of regtech will be 5 years from now?

"I think there will be a lot of buy-ups from banks or more likely by consultancies and others who recognise the value in cost savings...the technology will go on developing.... the service we offer is obviously of benefit... as time goes on we will develop more products in conjunction with clients and partners...I can see if you're a regtech company specialising in a particular area which most do... matching regtechs with appropriate partners will become more significant. People talk about and want an end-to-end solution.... in the early stages of the market this is more difficult, as time progresses the components of the sector will join together. I almost think some of the banks will have to re-invent... certainly a change in mindsets to decide to invest in this tech and offer it to others.... PSD2 will create an environment of accelerated change."

Do you think the technology can stop evolving when banks acquire tech companies?

"There's a relationship, independence and innovation, it depends, is the CTO still in place? Are they given a free hand? It's a foolish company that acquires a technology company and does not give that company the freedom to develop itself further... no technology company can afford to stand still."

Do you have a disruptive business model yourselves?

"One of the reasons we are quite disruptive is because suddenly companies need to up their game in terms of the searches they carry out. If their risk assessments are hit and miss the regulators will move. When you take on a new client there is an obligation to check if any adverse info exists, particularly if they are non-UK and may have extra ordinary risks. They have onboarding teams carrying out adverse info checks, sometimes against known databases. What we offer is very specifically a search platform called Kompli-IQ, which consists of about 500 search terms designed to uncover adverse info. Our system searches for the name of the individual and company and uncovers published information, by searching unstructured data as well as indexed data. Searches are carried out across directories, global databases, results are weighted and ranked according to the source. For example, a blog doesn't carry the same weight as a national paper. So the person writing a risk assessment and documenting how they have written that assessment, can make a judgement based on the best info available."

"So our regtech product, Kompli-IQ, is a search platform for uncovering adverse information. Our extended service is deeper Due Diligence and Enhanced Due Diligence, perhaps on PEPs (Politically Exposed Persons). We even handle translation of terms so that language isn't a barrier to obtaining good results. What we do is just one of the components within regtech, technologically facilitating risk assessments."

Money20/20 in Copenhagen: a Eurocentric Global Catalyst

The biggest in scale, with a great audience, the most engaging fintech event in Europe, Money20/20 delivered many insights this year.

400+ speakers drawn from global industry leaders defined the future of payments and financial services in the context of 'anytime, anywhere' connected commerce. A collaboration between startups and established players was the main topic of various discussions.

The core ideas mentioned in the event in Copenhagen can be summarised by the following:
□ Commerce becomes increasingly connected
λ Immediacy is everything
λ Ideal authentication process must be invisible
λ Data is the oxygen of our financial lives
λ The shifting narrative as startups become more open to work with incumbents
λ Technologies with connection to financial inclusion to drive wealth and the rise of cashless economy.

Payments to be contextual and transparent

Western Union provides consumers and businesses with fast, reliable and convenient ways to send and receive money around the world, to send payments and to purchase money orders. At Money 20/20 Europe in Copenhagen FTT spoke to Kerry Agiasotis, Chief Payments Officer at Western Union about the biggest shifters in financial services and the future of payments

Kate GOLDFINCH
Editor of The Fintech Times

Kerry, let's start from WU's vision...
K.A. Essentially, our vision is to be leaders in cross-border, cross-currency money movement of all types. Whether it is individuals moving money, business to business, or consumers to businesses. Regardless of the use, our vision is to be a facilitator for modern money movers. And we believe when we do that, and do it well, good things happen. It has a positive impact on the overall economy, as well as for individual businesses and the communities they belong to.

Are you mostly oriented to retail or B2B?
K.A. We play largely in two primary markets: money transfer, which enables people to send money to one another on an individual basis either using cash or through digital transfer; and a payments market, involving business transactions on both a B2B and B2C basis, where payments can be made from business to consumer and consumer back to business.

We deal with any type of business or organisation (including banks, non-governmental or governmental organisations) that has a requirement to move money. These entities will be served either directly by brands like Western Union for the movement of money, or indirectly. And those indirect use cases could be through other providers, many of whom are here at Money 2020, that can only do part of the process and therefore use Western Union for the other part. That includes banks as well.

How would you describe the biggest shifts in customers' and businesses' expectations about financial services?

K.A. Cloud technologies and the digitisation of consumer and business interaction - it is just something that we are all going to expect. Today, we expect to be able to interact with businesses much in the same way we communicate with our friends and family. These businesses are therefore equipping themselves with the technology to facilitate that. It is the same in the fintech community, which is why partnerships between incumbents and start-ups is so fundamental.

What do you consider as the biggest shifter in financial services?

K.A. I would say trust is the biggest driver in financial services, especially for the new generation, who are far more open to new and disruptive services. Also old and young generations have very different criteria for good and trusted financial services. Young people don't think when they pay a bill that it should take three days to get paid. They expect immediacy and convenience, and this is shaping the established financial world. Businesses will need to keep pace with this trend, otherwise they will be left behind.

What key differences do you see as for 50 years ago and today in financial transactions?

K.A. You know even 50 years ago the world was digital. You could be in North America sending money to Africa and money moved. Western Union has always had a communications infrastructure, which is at its core. What the world is shifting to now is "we really value what you have, but we want to use it in different ways."

Customers do not want to think about moving money. They just buy something and expect it to be paid. I catch an Uber and the transaction already happens. Western Union can help with such cases. Now we are taking all our technology and opening it up to APIs. What that allows is for any service provider, whether it is a platform-based provider or a traditional financial institution, to take our services and imbed them within their own services. And it's really how we are

▲ **Kerry Agiasotis,** Chief Payments Officer at Western Union

adapting to these changes. We have 150 plus millions customers, and we also work with hundreds of thousands of businesses. So, of course we are going to continue giving them services directly but there is also a huge opportunity to open up our capability to broader eco-systems.

Is it difficult to compete with other payment providers?

K.A. It is a challenging time as there are so many organisations doing the same thing and offering similar services. Everybody wants to be the next Western Union and so they start building capability. However, as they move forward they realise that actually it is hard to achieve such scale. It is hard to be in 200 countries and be well-regulated in each of them. It is hard to have money in places like Africa, Latin America and high-risk places.

What is the solution in this case?

K.A. I think as we move forward what you will find is there will be different types of players in the market place. We'll likely see more consolidation in those platforms that lead, but they'll use other services behind them. At Western Union we won't necessarily do everything ourselves. We may provide services to a customer, but then we might use services and expertise from other companies – card is a good example.

We made a strategic decision that card is not going to be a core for us because there are great companies out there like MasterCard and Visa card. We will plug them into our eco-system for when somebody wants to pay to a card. But what we will be able to say to an organisation, based on our vision, is it does not matter how you want to transfer money, whether it is sending or receiving - Western Union will be able to do it for you and you don't need to worry about how we do it. We are trusted, we are secure and we are a company who are concerned about regulations and compliance.

How do you see payments in the future?

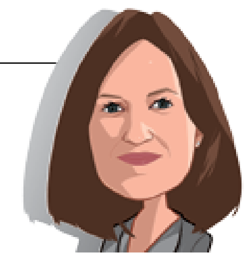
K.A. I see payments as being contextual and transparent. I don't think we talk about payments as being an independent process, but part of the overall user experience. We will continue to interact as part of an eco-system. And the eco-system will be platform-based. As we move forward payments are integrated into the workflow that it originated from, not something separate.

A lot of discussions currently that we would not need banks one day...

K.A. That's a nice dream maybe for some in the room. But the reality is that it is not just a technology issue. This is an economics issue. When you think about currencies, liquidity and finances, they are not governed by tech companies or fintechs, they are governed by governments who care about how they remain competitive in the world. All of these issues are geopolitical. They are not system issues. I think what happens as a consequence is that you are never going to have one payment system globally. You will have more convergence, maybe less friction, but there will always be multiple currencies, there is always going to be different governance around these currencies, and you will need providers to move value.

From Money 20/20 Europe (Copenhagen)

We think cash, cards and mobile payments will coexist for many years…



A big theme of Money 20/20 Europe in Copenhagen this year was an engagement between startups and established players. The Fintech Times spoke to Mastercard's Amy Neale about startups collaborations and about the future of payments

● What are your thoughts on how Money 20/20 Europe was this year?

- I think a big theme of Money 20/20 Europe has been an engagement between startups and established players. I think the narrative has really shifted over the last 12 months where startups perhaps were not so openly working with incumbent companies. And equally the other way round, certainly on the banking side there may have been a little bit of fear around what startups could provide them with.

Definitely I can see in the last 12 months that narrative has completely changed. There is massive openness for working together. I think we are going to see huge amounts of collaboration – 2017 is definitely the year for execution.

● At Money20/20 Europe Mastercard announced the latest wave of startups to join Mastercard Start Path. What is the role of this initiative in Mastercard's strategy?

- Mastercard Start Path is a global effort to support innovative startups developing the next generation of commerce solutions today. Start Path was launched in 2014 with an objective to help startups to grow their businesses faster than they could by themselves. Startups that join the programme can benefit from the knowledge of a global network of Mastercard experts, access to Mastercard customers and partners, and the ability to innovate on top of Mastercard solutions. Mastercard customers that join the program as partners get connected to the best and brightest startups and gain access to innovations from across the globe.

● Is it right to say, that Start Path is a kind of Research and Development initiative?

- Start Path is a part of Mastercard Labs which is an R&D and Innovation arm of Mastercard globally. Over the past four years we have worked with about 150 startups. Start Path is a 6-month programme for slightly later-stage startups.. The companies we have worked with have all taken on seed investment or Series A investment. They already have a product in market and are looking to scale up to the next level... So we work with those companies, we bring them in, they can be from anywhere in the world – our programme is completely virtual. We source them from right across the globe and are now calling for applications.

● What are the startups you have worked with focused on? Is their main focus on payment services?

- It's actually much broader than payments. We try to think in terms of "before, during and after" the payment.

Areas that are interesting to us are fintech broadly, but I would characterise that as retail banking fintech. So anything that is innovating the way consumers engage with their bank.

Startups we work with are focused on bridging the gap between physical and digital retail through a variety of products and

Continued on page 14 ▶

Continue from the previous page

services. Several of those selected within the Start Path programme are harnessing insights from in-store traffic patterns and spending habits to create personalised experiences for customers. Others are helping retailers to accept payments through SMS and bill-paying tools for large expenses that historically could not be paid using a card. We have also a number of companies that I would characterise as being in the financial inclusion space. New technologies that are bringing more people into the financial system and giving them access to financial services.

● How do you work with applicants - from finding to selecting them?

- We put out a call for applications but we also work with network of accelerator programmes and venture capitalists right across the globe. We also do some desk research to find companies. We have large numbers of applications and filter them. This week we have announced six new companies that have been selected for the next 6-month programme.

The latest wave of Start Path participants includes:

- ▶ CardUp manages monthly credit card payments for big ticket items such as rent or insurance, while also accessing credit and earning additional rewards.
- ▶ ftcash enables micro-merchants and entrepreneurs to take collateral-free business loans and accept mobile app and messaging-based payments from their customers.
- ▶ The ModoPayments platform enables new ways to pay, including the use of loyalty points to buy everyday goods in-store.
- ▶ Movvo provides insights on in-store browsing and shopping patterns.
- ▶ ToneTag enables contactless payments on any device using soundwaves instead of NFC.
- ▶ RecommenderX develops cutting-edge data analytics to offer personalised recommendations for enterprise users.

● What added value do you deliver to startups who are selected?

- There are three key areas which startups who are selected fall into. One thing that is really important for us is that we are always adding value to the startups we work with. This is not just sourcing new vendors. We actually want to build relationships with these companies in their journey. So we dive deep with them on what challenges they are facing in terms of scale in order to open doors to Mastercard. Subject matter experts that reside within our organisation educate them on different spaces that might help them craft better business propositions. The second key part of what we do is that we actually work with them collaboratively on projects. We introduce all of the startups that are here today to different business units right across Mastercard to look for opportunities to co-create commercial deals. And the third thing that we are doing with those startups is we are engaging them with our customer base. So Mastercard obviously has a vast network right across the globe. We are bringing startups into our network, making introductions for them and helping them to determine what the right channels to market effectively are.

● Could you share any success stories your programme has resulted in?

- We have had tonnes of projects that have come through the programme. Just last week we launched a project in Nigeria with a startup that came through the programme. It is a Nigerian team providing merchants with alternative to cash on delivery in the eCommerce environment.

There is another company called Kasisto which is based out in the US who has a natural language processing technology that they have used to build virtual assistance. We worked with them to pilot that technology, enabling a natural language interface so that consumers can speak to their bank using messenger services..

● You are talking about virtual assistance like Alexa?

- Correct. It is called KAI. We have a pilot project with that company. So there have been a good few tangible projects we have worked on and I think what we also are starting to see increasingly is that through our facilitation some of those startups are also going to work with our customers on really interesting projects as well. As an example, the above mentioned Kai is already working with banks and is well established in the market.

And the last key piece of the puzzle

for us is we don't take equity in the startups when they come through the programme. In some cases when the programme is completed and we see a really good strategic fit with a startup then we'd also look to potentially invest as well.

● Do you have any cooperation with blockchain-based startups?

- From a blockchain point of view we have worked with the UK based company – Everledger who are using blockchain for the tracking for authentication of high value objects.

● How do you evaluate the obtained results of your collaboration with startups?

- I think we have already seen some new products that have emerged out of that collaboration with startups. That's really fantastic from my point of view. It is a very interesting way for our organisation to look left and right and see what the latest trends are. And what is also interesting for us being a global player - to provide insights for our customers with regards to what is happening in the startup space.

● Your expectation on how the payments will transform within the nearfuture?

We still think cards will be around for a very long time. We think cash, cards and mobile payments will coexist for many years, but over the next few years we'll see more and more payments being made on mobile. We'll also see adoption of new payments technology, such as paying through paying through banking apps or via ChatBots We also see the use of biometrics growing when it comes to authenticating payments.

On a way to invisible authentication

Speaking at Money20/20 Europe to Philippe Vallee, CEO of Gemalto, we were inspired on a connection of PSD2 with behavioral biometrics. The last one is the whole science that brings to customers and corporate clients unbelievable opportunities

● Philippe, please share your thoughts on how PSD2 will influence customer experience?

- The European Commission's revised Payment Service Directive (PSD2), which will come into force next year, makes it mandatory for banks to adopt Strong Customer Authentication (SCA) as the next step to improve security in the industry.

However, beyond the technical complexity of deploying greater security, the challenge here for banks is really about finding a way to secure these online services without diminishing the consumer experience. Financial service providers cannot sacrifice convenience in order to deliver robust security that complies with necessary regulations. If they do, they'll find that their customers are looking for alternate ways to manage their funds. Indeed, a survey conducted by Gemalto last year amongst 11,000 digital and mobile banking users in 14 countries found that almost 40 per cent said they would leave their bank if another provider offered a better service or rates.

By using these mechanisms to create a new set of customer experiences that is not just more secure, but without adversely affecting convenience or customer experience, banks can further differentiate themselves from their competitors. This is where the opportunity for innovation in the sector lies and of course, it goes without saying that fintech start-ups are already making an effort in this vein, offering new transaction options to customers.

● What opportunities and challenges PSD2 brings to corporate sector and financial institutions?

- PSD2 brings plenty of opportunities to financial institutions. Banks choosing to behave as Third Party Providers (TPPs) can gain deeper understanding of their own customers by, for example, accessing their customers' accounts held at different banks (with the customer's consent). Imagine the opportunities this would open: new and innovative services, new revenues streams, and deeper customer ownership.

The main challenge is the need for greater security. A crucial element of PSD2 is the mandatory implementation of Strong Customer Authentication (SCA) and Dynamic Linking of transaction data. Banks or any third party service providers will need to review their security systems to make sure they are compliant.

PSD2 also requires banks to provide dedicated Open API (Application Programing Interface) hubs to allow TPPs to access the account information they need. Such access will also have to be secured, implementing strong authentication to securely access the data as well as encryption technology to ensure that the data itself is protected.

● What is the role of behavioral biometrics in PSD2?

- In a multi-layered security and risk management context, behavioral biometrics bring an extra layer of security to help determine the probability that the user is who he or she claims to be, hence allowing banks to fine-tune their authentication policy and only trigger strong customer authentication when it makes sense, and as far as exemptions are allowed by the Regulatory Technical Specifications. Since behavioral biometric technology is based on invisible security for the end user, it offers a smooth end-user experience – meeting the crucial challenge of balancing greater security with greater convenience.

● How behavioral biometrics can help (assist) in risk management and clients' identification processes?

- Behavioral biometrics monitoring, when combined with other technologies such as geo-localization and device profiling, can become a very powerful tool for risk assessment and clients' identification, and help detect potential fraudsters in real-time.

To optimize the digital banking experience, Gemalto combines those technologies in its Assurance Hub, which is designed to collect and analyse in real-time a broad range of signals coming from both the digital banking user and their device (geo-location, device profiling, IP address as well as behavioural biometrics such as keyboard stroke patterns, mouse movement analysis, etc.). Such data will help define the level of risk and trigger the appropriate security measure.

For example, device profiling technology will help confirm if a customer is using a personal phone or tablet by checking the device fingerprint. It can also check that the device security mechanisms have not been broken and that it hasn't been infected by any malware.

Geo-location features and IP-intelligence can locate where a customer is in the world. The system also knows whether travelling around Europe is pretty normal behavior for them. The meta-data can also attest that a user hasn't changed country in the couple of minutes between different orders.

Behavioral biometric analysis also come into play, since each person has a unique rhythm when interacting with a web page or a mobile device. Nobody can steal your 'moves' because they are largely second-nature behaviors that are impossible to mimic. Behavioral biometrics uses measurable data created by user behavior to verify that the person using an account is the authorized individual. It gathers this data passively during the actions the user is already performing, such as swiping, pressing keys or entering a PIN code, and compares this to previous sessions. Within seven to 10 sessions, the solution builds up a user profile and is able to evaluate consistency.

Based on those combined technologies, if it'd be unusual for someone to be using a credit card in Ho Chi Minh City at midday on a Tuesday, then the Gemalto Assurance Hub might flag up a second or third level authentication check to permit the payment. But if the card had been authenticated to purchase plane tickets to Vietnam and the card was last used at Heathrow airport to buy a coffee, then perhaps it wouldn't require it.

This is an illustration of how machine-learning can help assess the level of risk posed by a transaction by dynamically combining different signals. It can help to eliminate the need for strong authentication when the system is confident that it is dealing with the true user. The beauty of it is that such systems operate by maintaining user privacy, mainly though the anonymization of data.

● How Gemalto's solution can help to improve customers' experience?

- The newly launched Gemalto Assurance Hub is powered by machine learning, processing millions of transactions built from thousands of attributes (such as device profiling, location, behavioral biometric data) to analyze the behavior of digital banking users in real-time and trigger appropriate authentication checks when, and only when, needed.

For example, if someone makes a high-value transfer from an unusual location, then additional biometric authentication – such as fingerprint or facial recognition – will be requested to validate the transaction.

The solution enables banks to distinguish genuine users from potentially fraudulent ones, thereby giving legitimate customers a hassle-free service, since the platform will only activate additional authentication measures when required. Now banks can tailor the authentication to individual users' profiles to provide an optimal customer experience for each digital banking transaction with non-intrusive security.

● What are the key trends up to you in identification and biometric?

- As banks compete for customer acquisition, they need to offer a smooth customer experience. To enable this, the key trend in biometrics is to request authentication that is invisible to the end user – or, at least, a natural gesture that will not turn the user off. Fingerprint recognition is one example: users have become so used to the simple gesture of touching the screen that this is completely non-intrusive. But no single authentication method is 100 per cent secure by itself. This is why we need layered security: a combination of different security measures at different points in the transaction.

With the activation of PSD2 and the introduction of risk management, we expect the trend to evolve further; to gather as much data as possible to enable greater security through multiple layers of authentication, while maintaining a seamless user experience.

This is why we see huge potential for an open hub such as the Gemalto Assurance Hub. We are starting to work with a certain number of technology partners, and will be extending this to include even more inputs to better refine our risk assessment and the results of the hub's machine-learning process.

SOME FIGURES

Gemalto's research confirms that the appeal of biometrics has quickly extended to the banking domain.
According to their 2016 survey, which ran in 14 countries among 11,000 banking end users, **10% of consumers are already using biometrics to authenticate**, with an additional **45%** willing to use it if their bank offered it.
Fingerprint is by far the most widely used biometric factor, and the safest, thanks to deployments of the technology by mobile phone vendors.

By Katerina Krashtapuk

Block-com bubble

Warning: it's the junk token phase of ICOs

An initial coin offering (ICO) is a fundraising process for blockchain-based projects that allows investors to own part of a project through a digital network token. Startups in the blockchain world often find this method of fundraising more attractive than venture capital funding for the speed and amount they can raise - on 12th June a project called Bancor raised the equivalent of about $150 million within two hours. But leading experts warn: it's the time of junk tokens of ICOs. So look before you leap.

Kate GOLDFINCH

Editor of The Fintech Times

What is an ICO?

Numerous media and financial experts explain ICO (Initial Coin Offering) as sort of an IPO, or a Kickstarter campaign, that uses blockchain-based "tokens" (app coins, cryptocurrencies, digital assets) allowing startups to raise money. Is it correct or not?
We arranged a small survey among ICO experts and received slightly different explanations:
"The term ICO (initial coin offering) has gone from an analogy to an IPO and means the pre-sale of someone's own tokens by some startup. Such tokens can have different definitions, but more often they are used to pay for user actions on a platform that the startup is promising to build," explains **Pavel Kravchenko, cryptographer and founder of Distributed Lab**.
"I would not call it ICO, but rather a token offering. In my view, the acronym is misleading, to assume that it is anything similar to an IPO. Rather than shares, token offerings are ways the user community is able to buy into a utility that is inherently part of the underlying product or network. Rather purchasing tokens means that the users have ways to secure "rebates" on the future service," **Philipp Pieper, co-founder Swarm Fund**, argues.
Henrik Hjelte, CEO / co-founder at ChromaWay, defines ICO as a sale of tokens, limited in quantity, that gives certain rights in a computer system.
"ICO is the process which resembles IPO and Kickstarter at the same time. During this process, a project raises different cryptocurrencies," says **Eugene Lobachev, CEO of Suretly**, a company that has created an alternative to investing in p2p-lending and named it "crowdvouching". Speaking about ICO's eco-system, **Eugene Lobachev** explains, that it seems like chaos right now without any kind of global ICO infrastructure.
"There are 3 types of ICO: 1) new blockchains; 2) projects that have found some good use cases; 3) projects that have nothing to do with blockchains at all. That's why the first type of ICO projects is the most important thing for future infrastructure. However, the second one is the most important for the use of technology. The third type allows to attract new type of investors."

Why ICO is so popular?

Startups have collected tens of millions of dollars by conducting ICOs so far. And there are several reasons. "An ICO is a relatively simple way to invest in a startup; people believe that a startup can become another Bitcoin or Ethereum and want to invest early, and historically, ICO tokens have mainly grown up," **Pavel Kravchenko** argues.
"Lots of amateur investors with more cash than they anticipated, want to invest part of their earnings in companies within our ecosystem, acting as a very risk-taking investors," **Henrik Hjelte** adds.
"It is very difficult to raise money from venture capitalists for a project of pre-seed or seed stage. ICO allows a team to raise money on development and marketing," **Eugene Lobachev** believes.
Realising what is happening now, some currency watchers warn of too much enthusiasm for blockchain projects that have yet to show practical application. **William Mougayar**, who organised a Token Summit in New York City in May, has criticised the millions of dollars in fundraising through initial coin offerings last time. "Welcome to the junk tokens phase of ICOs. More dollars raised doesn't mean you can jump-start an ecosystem of developers or a user community," he stresses.
There are always risks in any kind of investments, the **CEO of Surety** mentions. "Even professional venture investors know that not every project will bring him x10 or x50 because there is a probability that a project will die. So, I would recommend to invest in projects just in case, if you really understand what they are offering and doing. Don't invest in projects which are not clear for you."
At the same time **Henrik Hjelte, CEO / co-founder at ChromaWay**, anticipates that some people that are new investors and blinded by the potential of blockchain might lose a lot of money due to the high risks."
Many experts are equally of the opinion that in its current state the ICO is definitely a bubble. **Molly Spiers, Head of Marketing at CoinCorner**, notes, that in the respect of the amount being raised, then quite possibly ICOs are a bubble. She explains, that currently without regulation around these ICOs it's making it very easy for anybody to raise large amounts of money.
"The ICO principle itself will lead to positive changes in venture capital investment, but right now people are buying everything indiscriminately (even a complete scam). Inevitably, people are always looking for faster ways to earn. Those who have earned in Bitcoin, invested in the Ethereum, and who earned on the Ethereum, now invest in ICOs, hoping for the same rapid growth. The pyramid will collapse when: start-ups massively start selling the funds collected in Ether (now they keep them, because rates are only growing); people will understand that startups cannot afford their promises and create products; specific legislation will be developed - now most ICOs are outside of the law)," **Pavel Kravchenko, cryptographer and founder of Distributed Lab**, believes.
Charles Hoskinson, CEO of IOHK, says: "The ICO phenomenon shows there is irrational exuberance and high liquidity in the market. Just like with the dotcom crash, where investors didn't understand new technology and there was a lack of due diligence and the market collapsed, a similar thing will happen here. The Securities and Exchange Commission (SEC) will have to make some sort of statement, about what ICOs are and whether they are securities. There will be a KYC/anti-money laundering component that has to be part of this. There must be global standards so buyers can have confidence in what they invest in."

Legal tools to cut ICO risks

Global hype around ICOs has stimulated established blockchain companies to provide their clients with international marketing support and legal services through signing the contracts with the Big Four auditors. And it is becoming a trend.

As an example, a week ago Deloitte CIS and Waves Platform, a leading developer of blockchain solutions, signed a memorandum on a strategic partnership, that is aimed at providing clients with comprehensive initial coin offering (ICO) services and customised blockchain solutions tailored for specific business tasks. "Deloitte focuses on application of innovative approaches in its operations and realises how important it is to develop the digital economy. Under this memorandum, Deloitte's experts, who possess extensive legal and tax expertise in implementing technology projects, will provide the necessary consulting and methodology assistance to businesses and government bodies alike. We will also communicate long-term advantages and opportunities for the companies implementing digital technologies," **Waves Platform officials** say. "In addition to that, one of our objectives is to develop the legal mechanisms for regulating ICO projects. Currently no such mechanisms exist in the market. This will help the companies to safeguard themselves from project risks and challenges after they complete the initial offering of tokens."

Waves Platform will also assist companies with prioritising during their marketing campaigns to promote new products by selecting channels best suited for a successful project implementation. "The cryptocurrency market is relatively young, and not all the regulatory mechanisms are in place. This is why we are glad to cooperate with Waves Platform and are confident that our joint effort will help create the necessary conditions for putting together the legal framework for blockchain projects both in Russia and the CIS," says **Artem Tolkachev, Director of Legal Services for Technology Projects at Deloitte CIS**.

"Our partnership is a significant step towards mass application of blockchain technology. Presently, blockchain companies are not regulated, as there is no existing legislation as such. Our strategic partnership with Deloitte will allow us to take active part in the formation of this regulatory landscape. It is important to join this process both for us and the entire blockchain industry in Russia and the CIS," **Waves founder and CEO, Sasha Ivanov**, says.

However, the case of Deloitte CIS and Waves Platform is not the only one. Earlier, in April this year, Exscudo - the nextgen financial ecosystem, powered by the EON blockchain - engaged law firm PwC Legal to advise it regarding the compliance procedures for private users as well as for companies and organisations willing to manage fiat currencies. Since different jurisdictions have different requirements concerning the KYC procedure, Exscudo starts with the Estonian legislation and proceeds to general EU specifications. As a consequence, Exscudo will be able to open merchant bank accounts in the EU jurisdiction, which will enable the company to manage fiat currencies as a financial organisation. "We are excited to welcome the law firm PwC Legal as our legal adviser. Our team is absolutely convinced that the vast cross-industry expertise of PwC will help Exscudo provide high quality financial services for our clients all over the world," says **Andrew Zimine, CEO and Founder of Exscudo**.

Turning Shit(coins) Into Gold

European cryptocurrency exchange HitBTC has taken altcoin hype to the next level by adding Useless Ethereum Token (UET). Orders are already live for the token whose only promise is that it has no promise. Since the token debuted July 3, 364.3 UET has sold on HitBTC, while purchase orders amount to 9.658 ETH - over $2,000. (Source: Cointelegraph.com)

The Big Four auditor PwC (China) is also supporting Qtum's efforts to fuel blockchain adoption across the global business world. The Qtum Foundation, developers of the recently revealed Qtum smart contracts blockchain, in March this year announced that PwC is supporting its adoption by the business world. This includes providing comments on a white paper to be prepared by the project team, as well as on their proposed project governance structure.

"PwC sees enormous potential for blockchain to revolutionise business practices as we know them, and the firm has made great efforts in developing strategic and technical capabilities to adapt existing products and services for the new technology. We are excited to get involved in the era of innovation and help companies capture the opportunities and benefits brought by the new technology. Working with the Qtum Foundation aligns with our goal," said **CY Cheung, Fintech and Cybersecurity Partner of PwC China**.

ICO: The issue of regulation

All the leading experts tackling the growing trend of ICOs, look at the issue of regulation so far. **Charles Hoskinson, CEO of IOHK**, while speaking at a recent event in Ukraine (BIP001, organised by Ukrainian blockchain provider Distributed Lab), emphasised the biggest challenge that he sees the cryptocurrency market is facing."We are in a bubble and there will be a collapse. A lot of businesses will wash away; the strong will survive. Moving beyond that we either repeat history and create another Federal Reserve, or we can ask ourselves, 'what can we put into code? That is the ultimate challenge we face as a space. If we are successful, not only do you create something much better, more transparent, and efficient – it will be a global system. That is my hope for what cryptocurrencies can achieve. If we can get there, scams will disappear, and there will be an expectation that things will work the way they ought to, as opposed to today."

Summing up, regulation will be the key part of blockchain and cryptocurrency markets' development. If until now it was mostly self-regulated, then further becoming more and more focused on mass-market investors, it would come under stronger and stronger state and market regulation and standardisation.

EXPERT COMMENT

"I would not call it ICO, rather a token offering…"

PHILIPP PIEPER, CO-FOUNDER SWARM FUND, EXPLAINS WHAT IS ICO, AND REASONS OF THE ICO RUSH GLOBALLY, AND THE RISKS IT BRINGS TO INVESTORS

Philipp PIEPER

Serial Tech Entrepreneur & Angel investor

Anything similar to an IPO

First of all, I would not call it ICO, but rather a token offering. In my view the acronym is misleading to assume that it is the anything similar to an IPO. Rather than shares, token offerings are ways the user community is able to buy into a utility that is inherently part of the underlying product or network. Rather purchasing tokens means that the users are have ways to secure "rebates" on the future service. Tokens can have appreciation or speculative value when the adoption of the service increases, the tokens are necessary for the service's usage and the token supply is limited.

A new way of community funding

Certainly there are different motivations of players rushing to do ICOs and - let's also face it - of crypto investors to participate in these token offerings. Underlying all, this is a new wave of apps that are built, operated and used by communities. And tokens are a brilliant way to align the interests and exchange amongst the network participants. This basis allows a new way of community funding, that brings together the users that want a service to exist and find ways how to help get it created. That is revolutionary and introduces a new way of thinking how to build and ramp services with community DNA by design. That said, with the latest rush, not every ICO necessarily fulfills that promise and time will tell which of these justify their value. But as we are so early in this market, it's not surprising that a lot of practices still have to find their way and we are discovering things that work and don't work almost on a daily basis.

Beyond the speculative bubble

We are all together learning at the moment. Beyond the speculative bubble, we need to come to a fundamental understanding what constitutes value and what are things to keep an eye out for - positive as well as negative. We can certainly apply a lot of equivalent considerations that are well understood in the investment landscape, like what is the quality of the teams, the value proposition of the offering, the go-to-market, market size, etc. But we still have to find our way to understand how the community DNA translates into adoption and good product. We've seen great examples, but still time will need to tell.

No proper ICO infrastructure

I wouldn't even speak of a proper ICO infrastructure at this point. From what I've seem there are individual players that have been affiliated with ICOs and that have started to replicate the first process onto other ones. I would still not say that there is a blueprint of good practice yet. Every single ICO had one flaw or the other that have been criticised.

Philipp Pieper - Serial Tech Entrepreneur & Angel investor. Currently builder of start-ups at the intersection of blockchain & data, advising various early and late stage companies.

Chinese business models are something else!

An interview and analysis of Jiedaibao, one of the visiting companies to the "2nd Alternative Finance Forum (second Annual Conference on Alternative Finance)" at Cambridge University Judge Business School. (www.jbs.cam.ac.uk)
During the conference, Stijn Claessens, the assistant director in the Research Department of the International Monetary Fund, points out in his speech that China has become the largest market of alternative finance with online lending reached $99.723billion, followed by the US ($34.374 billion) and the UK ($4.164billion) in 2015 alone. Jiedaibao is one of the biggest fintech platforms in China, a social lending platform that enables users to borrow and lend money based on their own social network. On one hand it's a simple as that. Imagine Facebook offering the service whereby you could post a borrow request and your friends and family could decide to lend to you. It's Peer to Peer lending. (P2P)

Here's where it gets interesting.

With Jiedaibao people can borrow from their friends families and followers. The borrower chooses the amount, the interest, and the time period of the loan. These are typically short term loans, up to a maximum of 200,000 CNY (Chinese Yuan Renminbi) (£22,000) ($30,000). As borrowers can determine amount raised and period of time and rate of interest, this is in itself an inversion of the traditional model whereby lenders determine the criteria.

As the lenders can estimate the risk themselves ... borrowers can set the terms... it's entirely at the lenders discretion to lend or not. This reversed or inverted business model appeals to me, it seem highly logical, fair, and do able. Does this exist in the West...? Certainly some companies are edging towards it. Facebook could, in theory, offer this, and rumour is they are at very least exploring it. One slight fly in their ointment is the quality of the Facebook accounts, and validating them, there's a lot of fake, duplicate, and otherwise unsuitable for financial engagement Facebook accounts out there. There's also the issue that people have 'friended' random people, many if not most of our social networks contain a large percentage of contacts that we actually don't really know. The average number of Facebook friends is 338. The average number of actual friends... who knows. Maybe a tenth of that, on a good day? To be explored further.

China is somewhat different though. In the offline market, peer to peer lending is basically normal. Very common and common sense. Culturally, this is how it's done, and has been done, for centuries. People borrow from one another, far more so than from a bank. The banking system in China is geared towards supporting the Party, State / Party enterprises, and large companies. This is where the money is. The mass of people aren't really a concern for the banks. There's so many of them, and the money is so diluted amongst them, it's not an enticing proposition to lend to them, or even provide accounts if it comes to that. (Chinese Money)

So this creates a huge void in the

market. In the West, P2P and B2C fintechs have to disrupt existing banks and banking services to gain market share. In China, they don't. This is a crucial difference and explains, along with an initially hands off attitude to regulation, how Chinese fintechs have become so massive so quickly. Jiedaibao has 130 million users, twice the UK population already.

They have a uniquely Chinese innovation model supported by traditional model, with culturally appropriate features. One being anonymous lending, for example. The lender can be anonymous, to avoid awkwardness and potential loss of face for the borrower. They know the money is lent from one of their friends, but not necessarily who.

This has both advantages and disadvantages. It opens up the opportunity in a culturally acceptable way, and yet this has also created opportunity for exploitation of the model by unscrupulous / malicious individuals and lenders. Whilst this problem of what amounts to loan extortion from third parties has received a degree of press coverage, it should be taken in context of the volumes of people on the site. Facebook has it's problems of corrupt activity across it's network, as does Twitter, Youtube, Goole, and every other tech company. One of the ongoing pain points for all tech innovators is the illegal or unethical behaviour of small percentages of uses.

With Jiedaibao if the borrower defaults, then they would lose their credit rating, and presumably 'face', and the this can impact many areas of their lives. The ecology of the community system self regulates to a large degree, one would think. This would be especially true if the online social networks mirrored our offline ones. "because the borrower is borrowing from their network , in the end the lender can resort to the law, in that case their credit rating will be degraded and that credit info will be shared and this will impact their life."

Again, the quality of the service is largely dependent on the quality of the people in the network. If a true Peer to Peer network is established the probability for abuse is very much reduced. If the network is really a friends + lot's of randoms + individuals / companies that want to provide the P2P lending as a commercial service = a whole different set of potential problems come into play.

I'm interested in the future of these platforms, what's in the pipeline? Future versions may provide for debt recourse, so defaulted loans may be legally recovered. Again though, this has be actioned sensitively to say the least, a small number of unethical debt recovery agents could colour the picture far more crudely than the intention deserves. There's much more in the pipeline than this though. "We do a lot of innovation for the model..."

Let's look at the potential for integration. The capacity for integration is one of the key measures by which to view disruptive business models. Flow with this: Imagine you want to borrow £300 for a washing machine. You can raise the money on the platform, then with an ecommerce integration, spend the money on the platform. The company that sells you the washing machine can pay their employees on the platform. If the washing machine company wants to expand and needs to raise money, they can raise that money on the platform, including from their own employees, who could, theoretically, borrow at 1% interest from their network and lend it at 2% interest to their own employer. In terms of the potential for integration, which in practice amounts to horizontal expansion, it's not just Peer to Peer, it's Business to Business, People to Business, End 2 End Everyone 2 Everyone and Everything 2 Everything. It's E2E.

Horizontal expansion though third party integration provides additional revenue streams .... "ecommerce in China is very popular.... everybody buys online... shopping platforms want to collaborate with P2P platforms...allows for targeted promotions...by geography and demographic...of course the P2P collect the data and can collaborate with ecommerce...other financial products... insurance maybe...loans for education... **The key of the innovation model is that it reduces information asymmetry and reduces cost....**
(Information) (Information Asymmetry) (Total Data)

That's the **innovation model**. And when it doesn't work for an individual, there's a bolted on **traditional model.** So if our man can't raise the £300 for his washing machine from his network, he can turn to another chance on their platform ... the lending market...where third party affiliates that provide more traditional lending services, with interest rate and duration set by the lenders. There's also a Channel called "Wealth Management Supermarket" ... the financial products in it are provided by other companies but using the Jiedaibao marketplace. It's similar to Amazon, or eBay in that.

Apparently the Chinese Government seems to be very supportive of this P2P model as it serves a genuine need of provision of financial services to a geographically dispersed population of more than a billion people. The freedom provided by the Government to explore the market is offset by a firm response to misfeasance and unlawful activity, an approach which is itself 'designed' for maximum growth to roughly shape out the boundaries of the market whilst enabling very quick expansion and exploration of the potentials. Had the Chinese began with a 'hard regulator' there would have been no traction or momentum of the sectors. The rules become apparent through scaling, and the market is vast and the timeframe is such that this is still, literally, experimental, even with hundreds of millions of users and cross platform transactions in excess of 200Billion CNY. It is understood Jiedaibao takes a percentage of the monies transacted across the platform @ 0.3%. The government is less keen on the development of financial products, perhaps *the potential for fraud, theft, and other criminal / unethical activities is excessive, but seems pleased to permit and facilitate the development of Peer2Peer financial services that facilitate financial inclusion in a decentralised way.*

"In the past two years this P2P lending market grows very rapidly... now only several big platforms survive...The Government is tightening the grip on those kind of (P2P) platforms... they are adjusting policies to the industry, the Gov encourages the development of intermediary (infomediary) platforms rather than financial product platforms... focus on information and data is encouraged by the Government..."

Scaling this concept, it raises the question, what is even a Bank for?

Another interesting offshoot. Face recognition technologies. Jiedaibao ... can recognise fake accounts and block them ... they have 100m Asian faces in their system...a joint venture with FaceTime Technology in Hong Kong.

(Face Recognition) (Biometrics)

"Another innovation... enables each users to give virtual credit cards to his friends... lenders they can issue virtual credit cards ... they offer credit to their friends... like an allowance.... lending agreed in principle and the borrower take it as and when required.... Chinese people too shy to ask for a loan enables the lenders to inform their friends that if you want money you can borrow from me...."
(Virtual Credit)

"... in America is difference ... many financial services... very easy to get credit card... also in UK ... but in China... very different ... very difficult to lend money to private companies or private entrepreneur... very hard to get credit card... if they only lend the money to the big entrepreneurs they already own a lot of money... there's a gap in the Chinese market - our company offers a needed solution to our customers ... in the past our P2P lending was very prevalent but not secure... now they are much more so."

If one had to look at a Globalised business model for money, the most fair, inclusive, non hierarchical system possible, it would probably look a lot like the Jiedaibao business model. People borrowing from and lending to other people, within their social network. Just like it was before Banks.

Apparently the "African market" is very interested in this model. Paul Musoke, the the director of Change Management and Building Services Markets at FSD Africa talked with the Vice President of Jiedaibao about the possibility of introducing its business model into African countries.

Thoughts to consider over coffee.

Will Africa adopt the Chinese P2P systems?
If so will they repeat the same 'mistakes' as the early Chinese market or will they adopt the now more evolved systems? Can they avoid the fraud and corruption the Chinese market experienced in the early days? Could a Globalised P2P financial platform end poverty?

Startups and ideas to change the world

In partnership with London Fintech Week and Global Expansion Summit

Peter
KEENA
co-Founder and CEO of APEXX

● **APEXX is a PaaS connectivity platform which connects merchants with a suite of bespoke acquirer banks in order to optimise their payments acceptance.**

● By introducing transparency and competition to the acquirer market we believe that companies can find savings, and greater efficiency, in an area where there are legitimate savings to be made and consequently the consumers and employees should suffer less of the arbitrary cost cutting that has been too much a part of the recent period of economic hardship.

● One of the major challenges that we have encountered is that some merchants simply don't have the desire to go through what can look from the outside like a very rigorous and potentially disruptive RFP in a part of their business which to all appearances is totally functional. Like anybody attempting to shake up any financial process we have to overcome the traditional langour of some of our prospective clients about their payments options. This challenge is somewhat mitigated by the fact that changes can precipitate some very tangible benefits in cost saving and transaction conversion - if approached the right way.

● Businesses that run inefficiently are in of themselves a social problem. Companies that are penny pinching in the wrong areas have an unfortunate predisposition to make their employees or consumers bare the brunt of any cost saving exercise. By introducing transparency and competition to the acquirer market we believe that companies can find savings, and greater efficiency, in an area where there are legitimate savings to be made and consequently the consumers and employees should suffer less of the arbitrary cost cutting that has been too much a part of the recent period of economic hardship.

1

Evgeny
LIKHODED
CEO and co-founder ClauseMatch

● As an employee of Morgan Stanley, and Gazprom UK ClauseMatch CEO Evgeny Likhoded remembers well what it was like to negotiate contracts. Whenever there was a document involved in large institutions and in legal departments, several stakeholders comment, add changes, or provide approvals on that document. You would send that to 10 or 20 parties, get 20 documents back, then get 10 different copies of that document you would then have to put that back together and as the problem gets more complex the more parties are involved. And in many cases regulators need to see an audit trail to understand how a document was formed.

ClauseMatch simplifyes the process of keeping track of the updates and provides a full audit trail for all documents, giving teams greater visibility into how documents evolve over time, and more control over sensitive information because the platform "remembers" everyone who have made changes.

● ClauseMatch recently went live at Barclays for streamlining policy management. Hundreds of users already onboarded the platform with thousands more to get started this year. ClauseMatch enables teams to manage all of their global policies and standards more efficiently and effectively across the bank while providing the potential to link to other solutions easily through the API. In large complex organisations, document management can be challenging, so we are innovating the industry to make things easier.

● ClauseMatch is the all-encompassing solution that streamlines complex workflows, saves time and resources, removes human errors, uncovers hidden risks and provides better insight for senior management, allowing global teams to skip some of the monotonous routine work. It is a great motivation to develop within the profession.

2

Andrew
ZIMINE
CEO of Exscudo

● **Exscudo is the nextgen financial ecosystem that unites the traditional financial system and the cybercurrency market.**

Our main goal is to create a single gate to cybercurrency market for simple users, professional traders, investors and financial institutions. Exscudo's ecosystem consists of a Stock exchange, as well as a merchant, wallets, trading terminals, cards and a protected communication channel.

● Our company is facing two problems. The first one is inability for decentralised cryptocurrency solutions and tools to work in frames of the current. It causes the next problem – legislators try to regulate cryptocurrencies and blockchain technology under the existing legislation which is a fundamental contradiction to the main idea of crypto. Besides, this model will not be able to work properly – it is necessary to entirely change some aspects of interaction of market participants with the govenment. The second problem is education. The level of education and financial literacy of most world's population leaves much to be desired and therefore the introduction of many innovations in our daily lives takes a long time, I mean we are very inertial and conservative.

In Exscudo we work on both problems. From the one side we interact with leading specialists in the field of law (PWC) who can see the great potential in applications of blockchain technology. From the other side we integrate our solutions like Exscudo Channels in people's daily lives in habitual "packaging".

3

Alex
WEBER
Head of International Markets at N26 Group

● **N26 has redesigned banking for the smartphone, making it simple, fast and contemporary.**

While it has become easy to order a taxi or listen to music via your favourite apps, the financial services industry was lagging behind this development. N26 is setting new standards in banking, being Europe's first mobile bank. We serve more than 300.000 customers from 17 markets, employ more than 200 staff from over 30 nationalities, and our vision is to solve all our customer's financial needs on one platform

● N26 is Europe's first pan-European bank. This is empowered by EU wide regulation, e.g. SEPA harmonization and cross-border passporting. When entering into new markets, N26 is confronted with the circumstance that EU regulation is not fully implemented by all market participants to the disadvantage of the customer. For instance, utility providers insisting on customers signing up with a local IBAN despite the discrimination against foreign IBANs being prohibited since February 2016.

● N26 is simple and easy to understand, the app is intuitive and has been designed in a way so it can be used by anyone, without explanation, regardless of their technical savviness. We make everything transparent and provide all information in a very comprehensive manner within the app. We work hard to design our app and our products in such a way that customers receive an in-app overview of their account which is easy to use and understand.

● N26 was founded by Valentin Stalf and Maximilian Tayenthal, two customers, not bankers, who were unhappy with the services they received from their traditional banks The founders had a pure client-centric view of their product from the beginning. This is one main reason why N26 has made banking better for over 300K users and is still growing day by day.

4

Startups and ideas to change the world

In partnership with London Fintech Week and Global Expansion Summit

Martin
SWEENEY
CEO of Ravelin

● **We help online businesses deal with the issues of payment fraud, chargebacks, fake accounts and account takeover.** It's a $23bn annual problem which undermines confidence in online commerce. At scale the only practical way to tackle the issue is with machine learning using a merchant's historical experience of fraud. We supplement ML with other techniques that help us to see suspicious connections in data which help a merchant spot and stop collusion, fake accounts and takeovers.

● We still have work to do to convince a lot of the market that our approach is the right one and to take a leap to trust a technology that they might not yet be familiar with. We're lucky that we have customers like Deliveroo, MyTaxi, TimeOut and others that are proving our case and getting compelling results. Companies that process and use data with the most efficiency will be the ones that succeed first and in the long term. That is what we do in relation to fraud detection - we just need to keep banging that drum.

● There are secondary social benefits to what we do. Engaging in fraud itself - i.e. using stolen credit cards or buying fake accounts is becoming a fairly acceptable activity for a fairly large number of people around the world. Part of this is because it is so easy to do; card details are cheap and many merchants are poorly defended. Our goal is to make it difficult to defraud merchants; so difficult in fact that the effort itself is not worth the prize. The social impact is to steer people away from what is criminal activity and into something more productive.

5

David
NEVECERAL
CEO & Co-Founder of Spendee

● In a world where an average EU consumer has 2,8 bank accounts and contactless payments are on the rise, it is very easy to lose control of your exact spendings. That is where Spendee comes in. It connects all your bank accounts, synchronises and automatically categorises your transactions and gives you **a single place where you can properly check your overall financial situation.**

We want to help people understand their finances. By comparison to user's peers we can help him set some goals and budgets in the most important categories to get his cash-flow under control.

● Financial situation is, beside health, one of the most sensitive issues for most people. Sp we have to work very carefully towards gaining users' trust that they can fully rely on our app, tips we give them and the quality of our advice. Currently another big challenge is cooperation with banks which are opening themselves under the PSD2 regulation. A lot of them are afraid of the market change and finding a way to cooperate in the most meaningful way is not very easy.

● We want to disrupt the way banks show users to analyze their data. Some of the banks have already started to introduce features from personal finance management tools in their banking apps, but it is still only about their accounts (not those from other banks, not cash transactions, not ewallets...) and that is, in our opinion, not enough.

● I believe that our impact will grow bigger with the growing number of our users. By showing people their true overall financial situation in a completely transparent way we will help them manage their money better, increase their savings, hopefully reduce their stress level and so in the end we will hopefully make their life a little better.

6

Markus
RUPPRECHT
Founder and CEO of Traxpay

● **Traxpay helps banks make use of data,** a valuable and often scarce resource, and helps corporates large and small to optimise their financial supply chain management and working capital. Furthermore we enable banks to defend their position against B2B networks that are intent on disintermediating them from their customers.

A small corporate, for example, doesn't particularly care about what type of financial product they are offered to refinance short term assets. Be it factoring, reverse factoring, dynamic discounting or a bank credit line, they simply want to obtain the lowest price for refinancing. A large corporate, on the other hand, wants the flexibility to optimise excess cash and earn a higher interest than an overnight investment their bank might offer.

● The greatest challenge is to make banks understand the critical situation they face in B2B. Luckily many of them have learned their lesson from what happened 19 years ago in B2C with the advent of PayPal. This time around they are trying earlier to defend their position with their B2B customers.

● The major social impact is providing support to SME's in obtaining low-cost refinancing and so enhancing their liquidity. On top of that we give them visibility into their accounts receivables that they never had before, which makes planning much more accurate and far easier. To provide such sophisticated tools to SME's while also serving the needs of large corporates has been a core objective of ours.

7

Philippe
REGNIERS
Vice President Digital Banking, Gemalto

● Today banks are facing not only a dramatic increase in the number of cyber-attacks but also sophistication and complexity of those attacks. Fraudsters and hackers are constantly challenging the security measures put in place by banks to protect their customers' sensitive data. In parallel, online and mobile usages have been growing a lot and are expected to continue growing in the next coming years. Today end users especially millennials want to bank online on multi devices, switching from their smartphone, laptop, tablet, and smart watches. This variety of devices brings incremental difficulty for banks to stay ahead of the cyber-criminals while maintaining a smooth user experience.

At Gemalto we help banks cope with increased number of connections, creativity of fraudsters as well as new regulations by providing them with a wide portfolio of secure digital banking solutions that best support their cyber security strategy and answer the growing need for automated authentication policies.

● Our digital banking software suite of security solutions are already used by more than 40 financial institutions across the world to secure their financial services in such areas as mobile banking, mobile wallet and payments, online banking, e-commerce, card management, P2P money transfers and cardless ATMs to name a few. Over 100 million regular online banking end users can securely and conveniently run eTransactions using our solutions and are guaranteed an ideal balance between a user-friendly, and secure online experience.

8

Interviewed: Wednesday 28th June 2017 • By Bird Lovegod • **Interview** with Ranvir Saggu and Jay Carey. • Insurance / Blockchain / IOT /

Blocksure CEO **Ranvir Saggu** and Chief Architect **Jay Carey**

Blocksure is an innovative insurtech company developing a system that could change, or be part of the change, in the multi trillion pound insurance sector. Their developed technology allows the flow of information across the blockchain "when customer buys a policy or makes a claim everybody in the information pipeline , (i.e. the insurance company, and the brokers, and the customer) updates in real time..."

Blocksure: " I'm feeling the aim is to create a 'non stop' process for both buying and claiming on insurance. Purchasing it is going to take a click or two, and claims should be almost instantaneous. Then we built on top that a smart policy, smart contract ... everybody gets their own data, everybody gets their own view of the data. If you have a data base, and someone changes it, everyone in the chain knows. (Distributed Ledger Technology.) (DLT).

BL: I ask about Disruption. Do they see the system as disruptive? Are they consciously endeavouring to achieve disruption? They appear to have given this considerable thought.

Blocksure: "...We are not a disruptor ... we are a technology business acting as an enabler. The tech is disruptive to old tech, but the application is in itself not disruptive... we are creating systems that give others a competitive advantage. Existing players can layer on top of this technology platform to out perform their competitors."

BL: Ah, so here we see a subtlety of definition. They are not themselves entering a market as a competitor or competitive alternative. They are entering an established market with a new technology and offering it to the existing players in that market. As an analogy, imagine Uber selling their technology platform to Minicab firms rather than entering the market as a killer competitor.

In effect this is 'Diffused Disruption' rather than 'Direct Disruption.' The competitive advantage the technology delivers is spread across the companies who (choose) to adopt it, rather than being centralised by a single Uberesque winner takes all competitor.

One could ask why the likes of Blocksure don't go for the kill and launch their own insurance company using their own technology. (A US insurer called Lemonade has this approach). Speaking with them, I feel it's because they are more inclined to facilitate than compete. And perhaps the funds and regulatory burden of launching a new insurance company from scratch are fundamentally prohibitive, at least in the UK where the tens of millions required to even approach such a venture are far harder (almost impossible) to attract, compared to the ever cash sunshine of Silicon Valley. So what competitive advantage is delivered, indirectly, by Blocksure?

Blocksure: " The costs are much lower. For example, a £40 policy for travel has a 60% commission on it, just to administrate the product. By adopting a different (fully automated) process for the administration of the policy, the costs could be halved, and still allow for a profit margin."

BL: Ultimately time is money. Human time that is. If human activity is removed from the process, the time taken to transfer information and deliver the service is essentially reduced to the processing time of the computers doing the work. Less than seconds. It's all about the concept of integration. If one technology system in integrated with another, and another and another, an end to end seamless flow can be achieved. In practice, what does, or could, this look like?

Blocksure: "...why is insurance a separate process? (from the thing being insured.) Everything is heading towards integrated insurance. Let's use a simple example: If someone needs insurance for work, e.g. a public liability insurance for a wellbeing therapist. They have to buy insurance for a year, even if they only work a few months a year, and part time at that. A smart insurance for the therapist would be one that begins when someone books an appointment with them and ends when the appointment is finished. It's the period of the actual work they do that is being insured, not a year.

We can build that on demand, they book an appointment, to deliver their service, and with one click, they insure the delivery of that service.

Micro insurance is an economically viable model, and technology takes care of it once integrated into the phone, or ordering process."

BL: And we start to see a bigger picture emerging. Not just the integration of computer systems, but the integration of essentials into non-essentials, and services into other services and products. "...technology takes care of it once..."

Another user case "...washing machine warranty insurance kicks in when the machine switch on, it's insured for use, not for existing...

Of course, then we start thinking, OK, what if it malfunctions when off and starts flooding the kitchen? And here further integration kicks in. The Internet of Things, IOT, smart devices. The washing machine 'knows' it's flooding, and tells the smart water meter to cut its supply before any damage is done. It also tells the integrated insurance application a minor fault has occurred and to activate the warranty... which automatically requests the washing machine service person to contact the house holder to come and fix the problem. And the washing repair person will be insured for the duration of their visit as an integrated process.

Insured for use, not for existing. Integration of other technologies. Insurance + IOT + Ai ... total integration. A total replacement of the old 'one thing at a time methodology' with a new 'everything at one time' systemology.

Now apply this principle across the 'sharing economy' which is really an 'on demand' economy and the opportunity for developing new products and services becomes apparently limitless. Indeed, the new products and services may ultimately 'auto create' when conditions are favourable, and auto market themselves within the network. It's entirely possible humans are rendered 'obsolete' through this massive integration drive which we are all a part of. Is there an insurance for that?

September
11-14

Finovate Fall @ NYC

Finovate organizes four annual events around the globe showcasing the most important new financial and banking technology.

Finovate attracts more than 5,000 financial and technology execs annually to watch 250+ companies launch new products and technology. The audience consists of senior financial and banking executives, venture capitalists, press, industry analysts, bloggers, regulators, and entrepreneurs.

Finovate is curated, fast-paced, and gets right to the point:

- **Fast-paced live demos of new financial technology** - Each of the 70+ handpicked fintech companies gets just 7 minutes to show their latest and greatest innovations with no PowerPoint safety net!
- **Meet the company founders** - In addition to watching the demos live, during the networking sessions you can speak directly to the founders and senior executives from the demoing companies.
- **Neural networking** - Connect with like-minded fintech execs through the community section of our mobile app, at the hot-topic round tables, and during happy hour.
- **NEW for 2017: The conversation continues** - Don't head home after the last demo Tuesday. Stick around for two days of business-altering dialogue, discussion and decision-making about the new technology showcased at Finovate. And it's all included at no extra cost.

fall2017.finovate.com

October
9-10

LendIt Europe 2017 @ Londont

LendIt Europe is an excellent marketing and business development platform for companies looking to increase brand awareness, generate leads or launch a new product. Network with 1,200+ decision-makers from over 50 countries for two action-packed days at LendIt Europe.

www.lendit.com/europe

November
7-8

Finovate Asia @ Hong Kong

36+ companies will demo over two days. Competitive application process means only truly innovative companies will be on stage. Meet your favorite founders one on one, and go back to the office both inspired and up-to-date on the latest digital developments across the entire financial services landscape.

http://asia2017.finovate.com/

November
7-8

The future of General Insurance @ London

Over the past 17 years The Future of General Insurance has established itself as a must-attend event for insurance executives and their partners. But this year it looks a little different.

The Future of General Insurance conference was held for the first time in 2001 as an event where decision makers in insurance could discuss critical industry developments and form new relationships. In 2017 it will have a broader collection of speakers and delegates than ever before, drawing on leaders in insurance innovation from across the whole of Europe. This year's event promises so much growth that it is located in the QEII Centre – a new larger venue that will host more delegates, more sponsors and more stages. You can also hear from 20+ insurtech start-ups on a Pitch Stage.

The carefully constructed agenda includes a wide array of topics and perspectives to broaden your knowledge and give a fully comprehensive experience; from the impact of the Fourth Industrial Revolution to envisioning a driverless future! Pick and mix your sessions to tailor your agenda with the choice of 5 stages: INNOVATION, MOTOR, PITCH, MARKETING & CLAIMS.

Enjoy the chance to delve deeper into these hot topics with insights from traditional leaders such as Zurich, Allianz and ERGO. You will also have the opportunity to be challenged by insurtech heavyweights including Scott Walchek, Chief Executive Officer, Trōv and Steven Mendel, Chief Executive Officer and Co-founder, Bought By Many!

www.marketforce.eu.com/events/insurance/general-insurance

November
29-30

Wealth 2/0 @ Londont

Wealth 2.0 will discuss how the industry can embrace digital disruption in order to retain current customers and attract new ones. The conference will focus on the following main themes: data analytics, cyber security, robo-tech, blockchain, AI and many others.

www.terrapinn.com/conference/Wealth2/

December
6-7
London

Fintech Connect Live

Combining the hustle and bustle of an exhibition featuring over 3000 visitors, and 200 exhibitors and partners from over 50 countries, FinTech Connect Live is the UK's largest fintech event. Playing host to 4 strategic conference sessions with inspirational case studies from around the world, a technology buyers theatre with 50 product demos, 12 educational workshops tackling practical fast growth challenges, and two full days of dedicated mentoring clinics for start up leaders, all brought to you from over 300 of the industries finest speakers, FinTech Connect Live is the 'must have ticket' for stakeholders from across the full fintech eco-system.

FinTech Connect Live provides a platform for all those attending to collaborate, differentiate, form connections, source solution, conduct and generate business with new, existing and upcoming fintech players in the market.

Get involved and find out more by visiting www.
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