THE FINTECH TIMES

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FinTech CONNECT Live!

Special Edition!

Spotcap: mind the funding gap

The customer-centric culture of VIPR

ICOh!

The good, the bad and the ugly

Many people within the fintech industry have heard of ICOs, but how many can honestly say they understand how they work? Our guess – not many.

One of the fastest growing markets within fintech in the last couple of years has been blockchain and cryptocurrencies. Trying to understand how any of it works, let alone attempting to take part in the so-called 'blockchain revolution', has so far been reserved for those in the know. However, the winds of change have started to blow with the emergence of a new way of raising funds - initial coin offerings (ICO). While the particulars behind ICOs are just as difficult to get your head around, developments in this field have the potential to create a more accessible and inclusive global financial market and help blockchain change how all of us live our lives.

See page 3

News & Updates

MONEY 20/20: NEW WAYS TO BUY, BORROW AND SELL

Tech's makeover of money is well underway, and how we get loans, buy houses, or lend money is going to be dramatically different in the nearest time. This imminent future is what both financial services and tech companies discussed and represented at the fifth annual Money 20/20 conference in Las Vegas in October this year. We have collected a few updates spotlighted at Money20/20 Las Vegas this year.

Mastercard to unveil new AR experience and KAI chatbot

Mastercard unveiled an augmented reality shopping experience that for the first time incorporates Masterpass and Identity Check Mobile with iris authentication for safe and seamless payments.

Augmented reality has the potential to reshape the retail environment, making it more immersive and efficient. This new AR experience will let shoppers view digital representations of products and learn about what they are buying to get instant recommendations or other information relevant to their unique experience. When done shopping, users can pay for items using Masterpass.

"At Mastercard, we are seeing major shifts in how commerce is conducted, as people lead increasingly connected, digital lifestyles," said Sherri Haymond, executive vice president, Digital Partnerships, Mastercard.

Mastercard also unveiled a new chatbot for banks and merchants to help them deliver better mobile experiences. The bot — which launches first in the U.S. next year — is nicknamed "Mastercard KAI." Banks can customise Mastercard's bot — which will use artificial intelligence to communicate with customers through text messaging and speech — or integrate it with their own bots.

Users connect their cards within the Messenger app and can then ask questions about accounts, check purchases and monitor spending. When customers make a purchase, the bot will remind them of cardholder benefits, like purchase protection. It will also send offers based on a user's location and guide them to educational content to help them make better financial decisions.

Blockchain technology will significantly reduce the cost of buying a home, getting a mortgage or transferring currency

"The area is going to make a very big impact [on financial services]," said David Blumberg, founder and managing partner of Blumberg Capital at Money 20/20. Blockchain technology will significantly reduce the cost of buying a home, getting a mortgage or transferring currency, said Blumberg

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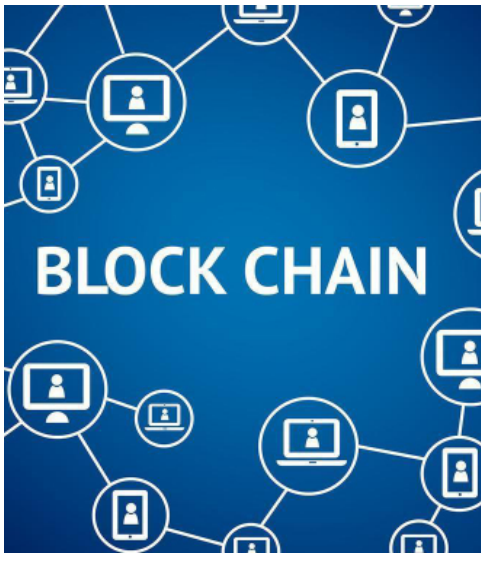
Major financial services firms — from American Express to Goldman Sachs — are playing an increasingly important role in financing blockchain and bitcoin start-ups, CB Insights found.

Blockchain is the technology that underlies bitcoin and other cryptocurrencies. It's a public ledger of all transactions through a distributed database which maintains a continuously growing list of records or "blocks." Each block contains a time stamp and link to a previous block, securing the system from tampering and revision.



UBER INTRODUCES A CREDIT CARD

Uber is getting into the credit card business. Announced at the Money20/20 conference in Las Vegas, in partnership with Barclays and Visa, the new card gives Uber yet another point of access to incredibly valuable customer information and marks another front in its campaign to assume a larger role in online and offline commerce.

Not content with just having a record of some of the comings and goings of the at least 10 million people that use the company's ride-hailing service every day, Uber will now get a record of some of those folks' daily purchases through the new card.

Applying for the card is easy. Starting November 2, Uber gives users the option to get the card right in its app, and will populate all of the information they have on file for their customers into the application.

After a few minutes, an applicant can get a verdict on their creditworthiness and then the card is automatically available for use for Uber rides and UberEats purchases, and a physical card will show up in the mail within a week or so.

The no-fee card offers a bonus of $100 after spending $500 on purchases within the first 90 days, and has other perks, like 4 percent back on restaurants, take-out and bar purchases; 3 percent back on airfare, hotels and Airbnb or other short-stay rentals; 2 percent back on online purchases; and 1 percent back on everything else.

Zelle, a new P2P money transfer service, to compete with PayPal's Venmo

Zelle, the PayPal rival backed by more than 30 U.S. banks, is preparing to launch its standalone mobile app. The move is meant to give the U.S. banking industry a foothold in the person-to-person payments business, where they're losing ground to services like PayPal, Venmo, Square Cash and, very soon, Apple's iMessage, powered by Apple Pay.

While banks have always offered the ability to do instant transfers, the process to date has been more cumbersome. Users would need to have details like a friend's account number and routing information, for example. That led to the birth of alternative means of sending money, like today's payment apps where you only need to know information like a username, phone number or email.

Similarly, Zelle's new app will allow users to send and request money to and from their contacts, using only their phone number or email. It will also work with U.S. Visa and MasterCard bank debit cards, even if the user's bank is not yet participating in Zelle's payment network.

That network has been in the works since 2011, when Bank of America, Wells Fargo and JPMorgan Chase first teamed up to work on a digital payments solution that would allow their customers to send money to each other through a joint venture, then called clearXchange. The consortium dragged its feet, but last year picked up momentum and rebranded to the consumer-friendly "Zelle."

In the new app, Zelle users will be able to send instant funds to one another for free, provided both are signed up for Zelle.

If the recipient doesn't have access to Zelle through their bank or credit union, however, transactions will take between 1 and 3 days to complete. But unlike PayPal and Venmo, the transfers hit the other person's bank account more immediately — there's no final "transfer to bank" step the recipient has to take to have access to the funds.

THE FINTECH TIMES

PRINCIPLES

- To deliver fintech opportunities and solutions to mainstream audiences
- 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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ICOhhh

Continued from page 1

Ronny LAVIE

Managing Editor of The Fintech Times

According to research by Stellar and LHoFT, organisations have raised over $1.8 billion through ICOs since January 2017. Findings in the research suggest "The ICO has skyrocketed in popularity as a fundraising model for new businesses, particularly those in the blockchain industry. The success in fundraising through ICOs is driving more and more organisations and initiatives to use the model as a means to achieve their funding objectives; many ICO campaigns have raised tens or even hundreds of millions of dollars."

> **...an ICO raised $40,000 in three days, which may not sound like a lot, until you realised that UET stands for Useless Ethereum Token.**

What are ICOs?

Stellar and LHoFT define an initial coin offering as an event in which an organisation sells digital tokens for the purpose of obtaining public capital to fund software development, business operations, business development, community management, or other initiatives. A token is a cryptographically secured digital representation of a set of rights. Depending on the token, this could include the right to access and use a network or software application, the right to redeem the token for a unit of currency or a good, the right to receive a share of future earnings, the right to vote on decisions made by the organisation, or more. However, most ICO tokens currently do not offer voting rights, ownership rights, or rights to a share of future earnings. Instead, they have utility: they convey rights to access, use, and/or consume the organsation's service or product.

ICOs provide an alternative, accelerated option to raising funds for a business. While the usual A-B-C-D fundraising rounds can take years to complete, some ICOs, have raised millions in a matter of weeks.

Success stories

While Filecoin and Tezos have seen the most money raised in the shortest amount of time, they are far from being the only ICOs who have benefitted hugely from this innovative method of fundraising.

In June 2017, the Bancor Foundation raised $153 million in less than three hours, which, at the time, made it the largest token sale ever. Bancor aim to revolutionise the way cryptocurrencies are currently traded by cutting out the middleman who usually matches buyers and sellers, and using instead smart contracts coded into the token to do the matching automatically.
In the same month, Status (a decentralised interface for accessing ethereum crypto-assets) raised $99 million in a matter of hours.

Ethereum itself was one of the first big ICO success stories. Back in 2014, the blockchain-based computing platform raised $18 million in 42 days.

The beauty of the blockchain and cryptocurrency technology is that it opens up the market to players from outside of the world's strongest financial strongholds. The decentralised nature of the tokens and the global interest in investing has meant some unlikely stats have emerged from the space.

So, what's the catch?

The downside of quick funding is the risk involved. The lack of regulation in this rapidly growing market has led to it being dubbed the 'Wild West' and the presence of more than a few 'cowboys' operating in the space, which has caused some investors to lose out.

One of the most outrageous of the Wild West stories is UET. This ICO raised $40,000 in three days, which may not sound like a lot, until you realised that UET stands for Useless Ethereum Token. That's right, it is a 'joke coin'. Such is the hype surrounding cryptocurrencies and ICOs that buyers were not deterred by (or perhaps didn't even bother to read) UET's sales pitch: "UET is a standard ERC20 token, so you can hold it and transfer it. Other than that... nothing. Absolutely nothing."

While UET could be considered a success story (depending on who you ask), the reality is that 99% of all ICOs will fail. Investors who are not cautious with their money, are almost guaranteed to lose out. This was the case for another joke coin, which became a very serious proposition, before failing shortly after. Dogecoin started out as a joke in 2014, but quickly amassed a passionate community around it, which became known for using the currency in charitable acts. After coming out of two hard forks stronger than even, it all came crashing down when the founder of Dogecoin exchange Moolah shut down the service and disappeared with everyone's money. The coin crashed and has not recovered since.

Dogecoin is only one of many examples of scammers taking advantage of the excitement surrounding cryptocurrency and the lack of regulation.

One of the most notorious cases of this is PayCoin. Launched to great promise in 2014 by Josh Garza and GAW miners, the coin's white paper called for new variations of blockchain technology that would produce a new breed of cryptocurrency. However, Garza ended up converting PayCoin into a generic altcoin clone to allow him to push it into the market faster. While the launch of the coin went without a hitch and it quickly became one of the largest cryptocurrencies in the world, it was not to last. GAW repeatedly failed to fulfil its promises to buyers and the currency began to sink as people lost faith in its merit. The bitter end came in 2015, with the shutting down of GAW, a federal investigation launching and Garza fleeing the US. While the coin's community have made valiant attempts to restore its value by redesigning it to meet its original specifications, they have not been successful thus far.

Unfortunately, there are many more stories of people who have lost both money and face due to bad ICO investments. However, with new players joining the cryptocurrency game daily, authorities have realised it is time to start regulating activity.

According to Mihai Ivascu, CEO of blockchain-based platform Modex "there's a clear need for regulation in this space, because the top ICOs with the proper teams, who are spending a lot of money to do things properly, are affected by what the cowboys are doing. This is why we are creating a trade organisation now for ICOs and we are joining forces to protect the contributors in this space."

Another issue appears to be that the platform has become too big for its boots. Bancor's record-breaking sale created so much congestion in the ethereum network that some providers reported hours-long queues to complete transactions (ether, the coin of cryptocurrency ethereum, was

the currency used in the sale). Bancor recommended buyers use MyEtherWallet and the service, which was not scaled to deal with that level of traffic, couldn't cope with the demand.

The same happened during Status' ICO, with the ethereum network overloading, causing many transactions by would-be token buyers to freeze, stall or fail, and an avalanche of complaints to flood in.

These blockages have caused many sites and exchanges to distance themselves from ICOs and even remove ether and ERC-20 tokens from their service altogether. Unless a sustainable solution can be found to accommodate large-scale token sales by top ICOs, the practice may be brought to its knees by the lack of available platforms on which to operate.

The future of ICOs

While, up until now, ICO fundraising has mainly been done by small blockchain-based early-stage startups, as the technology and resources around it continue to grow and mature, it is likely more established companies, including those with an already thriving project, will join in.

Mihai Ivascu says - "we're going to see huge loses in this space, but we're going to see a clean-up in the next five or six months. And that will come in two ways – the regulators, and also the maturity of the investors – they will start to see that you need more substances. And what we, and two or three other top ICOs, want to do is raise the bar a lot, raise the barrier of entry – so, you need to be able to spend a minimum of 1 million in three or four months in order to run a proper ICO, you need to have proper staff, proper marketing, proper communications – you need to run your own events and all of that stuff. So, it has to be a big boys' club, not a kids club."

With more companies taking on the technology and more ICOs entering the space on a regular basis, it seems that cryptocurrency propositions are going to become more widespread and available for a wider audience to benefit from. The upcoming regulations will hopefully help to stabilise the market, removing some of the risks which currently plague it.

If you haven't dipped your toe in the ICO pool yet, but are considering it, now might be the time to take the plunge. The Fintech Times is currently developing a framework for a rating system to help you pick the best investment out there, so make sure you stay tuned.

ICOs v. IPOs

Initial coin offerings are sometimes analogized to initial public offerings (IPOs). Both offer mechanisms for organizations to sell a set of rights to a large public audience in exchange for value. However, ICOs and IPOs vary greatly in usage, legal implications, customer base, and risks.

	ICOs	IPOs
Stage	**Generally early stage.** Organizations often choose to ICO at the initial stages of product and business development. The ICO funds are meant to be used to build a team, develop and launch the product, and operate the business.	**Generally late stage.** Organizations choose to IPO after they have already developed a mature product and business strategy using private venture financing. The IPO funds are to be used to access capital to grow the organization.
Asset	**Tokens.** Consumers contribute fiat currency or other cryptocurrencies in exchange for tokens.	**Shares of equity.** Investors contribute fiat currency in exchange for shares of equity.
Legal/Regulatory Environment	**Ambiguous & developing.** Beyond general securities, consumer protection, and AML laws, there are no definitive statements on the legal treatment of tokens and token generation and transactions. There is very limited case law and precedent.	**Complex.** Securities case law has been developed over decades through case law, legislation, and regulatory guidance. Investors can expect a standardized set of rights for the shares of corporations that are incorporated in certain jurisdictions (e.g., shares of a U.S. Delaware C-Corp).
Underlying Rights	**Customized.** The organization issuing the tokens can specify a customized set of rights for the token. The token could grant holders the ability to use the token similar to a license or a gift card, or it could grant the holder other rights (see Token Characteristics section). The tokens rarely grant a share of equity, a share of profit, or voting rights.	**Share of ownership and/or profits.** Shares of stock are generally associated with a right to dividends/profits and the right to vote on significant corporate changes.
Organizations	**Primarily blockchain/distributed ledger organizations.** ICOs are primarily used by organizations who are building decentralized applications on a blockchain or distributed ledger.	**Companies in any industry.** An IPO is appropriate for companies in almost any industry.
Liquidity	**Centralized & decentralized cryptocurrency exchanges.** Tokens are tradable through cryptocurrency exchanges (e.g., Bithumb, Poloniex, Bittrex, Coinone, Bitfinex, Korbit, OKCoin.cn, Stellar[19])	**Securities exchanges.** Stocks are tradable through securities exchanges (e.g., NYSE, NASDAQ, LSE, JEG[20])
Filings	**White paper & blog posts.** ICOs are currently not compelled to file any information with any authority. However, most ICOs do issue white papers and blog posts to provide transparency into their technology, progress, team, and operations.	**Registration statement, annual & quarterly reports, & other disclosures.** In the U.S., in order to IPO a company must file a registration statement that discloses financial data, business information, risk factors, the identity and background of directors and officers, the management's discussion and analysis of financial condition, and other relevant information. After an IPO, a company is required to submit annual and quarterly filings (e.g., 10K and 10Q in the U.S.) and other disclosures.

Source: White Paper by Stellar and LHoFT "Understanding Initial Coin Offerings: Technology, Benefits, Risks and Regulations", September 2017

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ICO CASES

BUILDING THE BLOCK-STORE

Mihai Ivascu - founder and CEO of Moneymailme and Modex – about the future of ICOs and how Modex is using blockchain to revolutionise the industry.

How did you get the idea for Modex?

Modex started with Moneymailme. After the release of the virtual and physical multi-currency cards, it was quite clear for us that the next step was to go into crypto. We decided to build a platform that allows other fintech companies to integrate crypto in their apps, as that would be beneficial for the whole industry. We don't have internal developers that can do all the smart contracts, so we wanted to go to the community and ask the developers to build that for us. And then we realise, there is no community for that. There is no app store where you can go and reach out with a clear request for a blockchain product and the developers can just build it for you. So we decided to build this infrastructure – to build the app store for the blockchain, and Moneymailme, with the crypto included in it, becomes the deployment tool for the crypto.

What sets Modex apart?

We are the only ICO that was selected by Google for a case study. We were accepted in Google Academy, we're one of the top 5 companies selected for Google launch pad, because they saw the opportunity, they saw the potential of a project like this. So we're in Google campus and Google Academy and Google is writing the case study on us. That's massive for us – to have the backing and the credibility added by Google, it shows a lot of substance.
Most of the smart contracts developed in Modex, like money lending, insurance, etc., can be used in Moneymailme. This is a standalone product that is a strong competitor for Monese, Monzo, N26 and Revolut, because it comes with an IBAN associated with it, multi-currency, chat, video calls and international remittances – we can onboard clients from over 130 countries. Moneymailme has the same functionalities as Revolut, Monzo and Monese, but with the social interaction part as well. We wanted to take the next step and include crypto in this, so we have ethereum, bitcoin and also Mdx, which is our coin. Developers on the Modex platform will receive Mdx, which makes it a utility token, because it has a clear utility within a system.

How is the token being a utility token significant in terms of regulation?

We have the company incorporated in Gibraltar, because Gibraltar is very open to cryptocurrencies and similar activities, but now we are structuring the company so that it is 100% based in the UK. This means we fall under the jurisdiction of the UK in terms of ICOs. The main problem with ICOs is that most of them are marketing securities, so they are promising people future profits, and most of them are selling securities without a license. We took a lot of legal advice and opinions that ours is clearly a utility token – we have a clear application within a closed ecosystem. We don't promise future profits, we don't promise listings on exchanges, we don't promise any of that stuff – so, basically, this is a proper ICO.

What makes a proper ICO?

There are 22 points that you need to look at when you look at an ICO. Most ICOs have heard about 8-10 of these points, and they are good at 4. But there are so many aspects that define a healthy ICO. It's a project that can go through due diligence. You need to be able to check out the entity that owns the project – you need to be able to check that they actually have a team, that they have employees, that they have a governance system internally. You look at the governance – how are the funds being consumed and who's the beneficial owner of the funds? If it's a holding company like us, with 14 shareholders and with a proper structure, then ok. If it's Joe from the street and you decide to invest in the company, that's your decision, you can do that if you really believe in the project. But, at the end of the day, they need to disclose. You also need to look at the token dynamics and economics, you need to look at the White Paper, and you need to look at the structuring of their budget, because you see all these ICOs raising 50-60 million and they say 40% marketing, but I don't know who can manage 30 or 40 million on a marketing budget between 2

friends. I mean, it's just wishful thinking – it's misusing the funds.
Another thing is that an ICO should be able to recruit top talent from big organisations – we've got some top guys from Microsoft, Google, BNY Mellon and Trustology coming to work for us. They're leaving those big companies to join the blockchain revolution now.
I think in the next 6 month, we're going to see a shift – ICOs will need to be really close to IPOs in terms of the diligence. You'll need to produce a minimum of 20 strong documents to back your ICO. People are starting to see that, they are starting to get burned, because, again, you're doing an ICO, but you don't have any project. You launched the coin on an exchange, but a year passes and you don't have a product. There is no demand for the coin, so its value is completely destroyed. The problem now is that people don't understand that you're starting your journey with an ICO, you're not ending it.

Who is most likely to benefit from this technology?

We want to think that we are decentralising creativity in this space, because you get a 16-year-old Ukrainian developer with a fantastic idea – somebody that spent the last year studying solidity and smart contracts, just because he's passionate about it. Who's going to hire him? He can't even travel to the UK as a non-EU citizen, for example. He cannot be employed, but he may come with a top idea.

We go and participate in all of these hackathons and we have a deep understanding of what talent means in this space. And they're introverts – they don't go out there with fancy Linkedin profiles and all of this stuff, but at the end of the day you care about the quality of the work. There are 2.5 million applications on the app store, you need millions to push an app and

it's not a one man show – you need a full team. So it's almost impossible to stand out. But here, it's a new segment, it's a trending area, and you might end up being the number one smart contract developer for insurance, for real estate, for healthcare, just because you know your area.

There are 21 million registered senior developers globally. The shift from Java, EHP or C++ to solidity or to smart contracts is one month, so in one month you can convert yourself as a contractor to smart contracts and blockchain development. A very good Java developer is 100 Euros per hour, a Solidity developer is 550 or 600. So they can make six times more money in just one month. The problem is there is no request for their work. Many programmers are entrepreneurs, but entrepreneurship for them means – 'I want to build my own app and generate revenue and live on a beach', not to build companies or things like that – they just want to build something that brings in revenue and live their life. So we're offering them exactly this kind of opportunity – to build smart contracts and post them on a mature infrastructure.

We are recruiting right now one of the executives of BNY Mellon to be our COO and the person next to me in running the whole project. He's a fantastic guy with 25 years' experience in banking and blockchain. I was with him and some guys from Blackrock recently, and I said to them – let's say Blackrock post a bounty of 20,000 Mdx on the Modex infrastructure, for whoever develops a set of smart contracts for ETFs, and the guys from BNY Mellon are the first ones to participate in that, because they really know what ETFs and blockchain and derivatives mean, and they want to take the funds from Blackrock. You get top developers from a competing company that are actually helping the other company build what they need – completely decentralising the competition between talents. That's the real power of it. Normally, when you work for BNY, you cannot go and work for Blackrock – they have non-competes. But in this space, you can just go on the platform, post a smart contract, then it's approved and deployed and it can be used immediately. It's a real opportunity. We sponsored a Hackathon recently and one of the teams built a lottery in 24 hours. That lottery on a blockchain was basically the end product, ready to be deployed. We're going to these hackathons telling the developers to post their project on the platform. So you may end up with an Indonesian entrepreneur, for example, who sees that project and says – 'nice, a lottery on the blockchain. How much is it? 2,000 Mdx – good, let me buy 2,000 Mdx from the exchange secondary market', and they have a full business. They'll just change the colours or whatever and they are entrepreneurs in blockchain immediately, just because somebody from some small part of Austria posted a smart contract on our platform. So there's a social aspect to it too - it allows entrepreneurs to enter the blockchain and crypto space just by scanning the network, where they might not have had the opportunity otherwise.

This is a long story short. Actually, it's a very complex thing. When you want to build your smart contract, you need a private blockchain, you need security audits, you need a lot of tools that can check and update your smart contract – all of these tools are being offered to you as a developer on our platform. It's not just a pure development - the deployment process and everything is offered by us. So it's way more than a market space, it's clear support.

How do you plan to reach this community?

The platform has an Alpha version – it's not launched yet, it's going to be launched in Q2 next year, but we're already onboarding developers.

What's the future for ICOs?

I think we're going to see a lot of established companies with actual products and teams doing so called reverse ICOs. So, basically, they start from a company, they make an ICO, and then they grow the company further, instead of doing an ICO, creating a company and then starting the growth.

The ICO is a fantastic way of raising capital, it's absolutely great – done is a proper way and with the people using the funds right. We're going to see a clean-up from that point of view. For a period of time, for the next three or four months, we're going to see the amount of money invested in ICOs completely destroyed, because people are starting to realise that most of the tokens don't provide any value, as they are not linked to an existing platform and to a an existing dynamic. So, a lot of people are losing money – the average is 60% in the value of the coin.

If you can show you have a utility token and that the ICO is done not to promise future profits, because that's a security, but to build a platform that will generate more work and more tax going forward, both the investors and the regulators should embrace that.

Right now we are working on forming a trade organisation to create a standard in the industry, to create a clear image for the authorities, so that they know what they need to look at. We are offering our knowledge in the space to help this be created. It's in our interest to see it being cleaned up and regulated properly.

Eventually the projects that receive funding through ICOs will be the projects that have a functioning product, a team, a strategy. Some of them are raising too much money. They explain that they are raising rounds A, B and C in one go via an ICO, upfront. This of course allows us to accelerate the growth, but it needs to be done right.

Blockchain is a very interesting world, every day there's a new challenge that we need to solve or to adapt to. It's a liquid matter, basically, so you can design it however you want. All the friction points in all systems – from the political system, to the social system, to the financial system, can be solved through blockchain. So, for the end user, this is what we're trying to solve now with the Modex infrastructure – the last mile adoption of the blockchain.

COMMENTS

> **"The team is far more important than the project itself"**

Shadi Paterson, CEO, Head of Growth, The 8760

The main 3 factors when rating the quality of an ICO are firstly, the team; then the utility of the token and its fiscal policy/economics and, finally, the Legal behind the project. Arguably, the team is far more important than the project itself, as the project will pivot and change far and above the original whitepaper.

The main opportunity in this space is the upcoming influx of smart money, family offices, hedge funds and corporations moving into tokenisation, ICOs and blockchain as a whole. A double edged sword, this could also be the biggest threat, as we see money flowing into technology that most don't truly understand or at the very least don't understand the implications of.

I invest in a number of ICOs and the main factor I consider is the team - what have they accomplished, who have they surrounded themselves with, can they actually pull it off, can they build the hype? It's all part of a very large puzzle that creates a successful ICO, as well as a successful business post-ICO.

> **"There must be lots of investors seeing great potential for big rewards."**

Henrik Hjelte, CEO / Co-founder at ChromaWay

Investing in early stage companies, some without a product and some with very unproven business models, brings significant risk, compared to most other investments. The legal uncertainty of an ICO and the lack of proven best practices bring even more risks. Some investment agreements don't even regulate the potential to issue more tokens after the ICO. Considerable risk is thus involved. Since I personally believe in some kind of rationality of markets, there must be lots of investors seeing great potential for big rewards.

ICO CASES

The future of Healthcare - is on Blockchain?

We spoke to PRADEEP GOEL – CEO of Solve.Care – about the challenges facing the global healthcare industry, and how the company plans to use blockchain to save both governments and private organisations billions and make the world a healthier, happier place..

Pradeep has held senior positions in several companies featured on INC500 lists of the fastest growing companies, and was included in a countdown of the 100 most promising entrepreneurs worldwide, complied by the CEO of Goldman Sachs.

Can you tell us a bit about your background and why you decided to focus on healthcare?

I got restless in college and started a healthcare IT company. I built the company up, then sold it and became a part of a large public company as a CTO, then went on to start a few more healthcare IT companies – this is my fifth.

I've been very fortunate that I have worked on all dimensions of healthcare. I started out in healthcare insurance – working on the backend of the system, then from there I jumped to the consumer side of things – how you and I use insurance, what tools we need to be engaged. It was very clear that there was this big castle called the insurance company and there was this poor peasant outside trying to get in. So my next company was around connecting the last mile between patients and insurers in a way that works for both, and I got to see that point of view. Then I got pulled into government programmes – working with think tanks and writing the regulations around health savings accounts and also implementing some parts of Obama Care, which brought me into understanding how employers sponsor benefits for their employees. So I learnt the employer side, the consumer side, the insurer side and the government side. Then, in 2011, I got involved in building a health information exchange in North Dakota, connecting all the hospitals and pharmacies in the state to each other. So I got to see how the hospitals operate as well. Through this journey, I have seen every dimension of this multi-faceted problem and came to see some patterns that I could address.

I've also done some work globally, in China, India and Russia, and got a global perspective as well.

How are you going to solve the problem?

Worldwide healthcare spend is 7.6 Trillion each year. The US alone spends $3.2 Trillion on healthcare, of which $100 billion a year is the cost of administrating healthcare. Out of this, about 17 billion gets spent on managing clinical records, but the remaining 80 billion goes on administration. And that's where the horror stories are - I called my insurance company and they denied my request or they didn't pay it, or I couldn't access the care I needed because the physician wasn't available. Administration is very ineffective from a human perspective and from a cost perspective, and that's what we're after.

But there's a second, bigger part. If we use the fabric correctly, we can also improve the care quality and the care outcomes. Care coordination is a very big challenge, because it's very scattered – it's not all in one space. So we want to coordinate care as well.

> **Those are our two goals – administrating care in a more efficient way and delivering care in a manner that is optimal for the consumer.**

Those are our two goals – administrating care in a more efficient way and delivering care in a manner that is optimal for the consumer.

The inspiration for Solve.Care came when my son got diagnosed with a very specific developmental disorder in February and it took my wife and me seven months to find him an appointment with a neurologist. We called over 600 neurologist in our area from the list given to us by the insurance company, but there was no way to check the schedule of every neurologist within 25 kilometres of our house, we had to call them all individually. I thought that if someone like me, with the best insurance policy money can buy and a lot of connections in the healthcare industry, can't get his son an appointment with a neurologist for 7 months, what hope does someone less fortunate have? What if they got diagnosed with something terminal – what will they do then? I had to make things better for everyone. So my vision is that this platform will lead you as a consumer to be able to make an appointment in 7 seconds, not 7 months.

What's the technology behind this?

As a consumer, you will have a mobile app called Care.Wallet – it's your personal care coordinator. Care.Wallet learns everything about you and your family. As you start using it, it remembers things like your prescriptions and previous appointments, so it can give you good advice. It then downloads Care.Cards from the Care.Marketplace. These are personalised to your preferences and personal history and give you actionable information about you and your family. The third thing is that it connects to a blockchain fabric which can access your public data and your ability to book appointments and make payments. So it gives you a central location to do all your healthcare administration, healthcare management and financial transactions. All your personal data is secured and is not stored on the blockchain.

How are you going to push this to the mainstream?

The plan is very clear – this is a B2B sale. The ROI for the insurance companies, for agencies, trusts and employers is instant. Whatever you are spending on administrating, we can cut that in half or more. Even something as simple as sending out ID cards and letters a few times a year can be replaced by the app, and that alone is a huge saving in cost, and a better experience for both the customer and the insurers.

Is the plan to go global with Solve.Care after the US?

We are launching in the US because we understand the market and there is a huge potential there, but I see no reason to limit the value to any one economy. I am looking at solving a global problem, and the mission is to make healthcare more accessible and easy to administer worldwide.

Every single individual is a healthcare consumer – we are born in healthcare and we die in healthcare, very few people escape that cycle. So my plan is to build a global platform and then have a localised community in each country that takes the platform and configures in to the local market.

What are the major challenges for your ICO?

I think ICOs are transformational in how capital is accessed. I believe in them because they bring the three Cs together – Capital, Client and Community. If you can bring those three together in a way where they are aligned, the probability of

adoption of a good idea is much higher. Also, ICOs allow for better liquidity than is normally available to investors. The third thing is that ICOs are lowering the barrier to entry – you don't need 1 million to invest, but along with that comes the downside. How do you regulate it? How do you protect people who are not sophisticated investors from making the wrong choices? And also what are the rights of the token holder? There's a lot of noise in the market and not every ICO is thought out. This is a very early market.

Our challenge with Solve.Care is that we are doing it in a way that we think it should be done to answer all those questions. So we are standing apart from the noise and saying that our Token Sale will be extremely transparent, it's going to have a clear business plans like it would have done if we were raising capital in the traditional way – a clear governance, clear guidelines.

There are not a lot of ICOs doing things this way, but I believe that, seeing as healthcare is such an important field and given that our mission is to build a global company that will change healthcare for the better, this is the right way.

What would be your personal piece of advice for someone starting an ICO project?

That's a tough one, because I think I'm still learning every day myself. My personal experience tells me that the first thing is to make sure you stay within the confines – substance over form is what matters. If you're trying to just game the system, it won't work.

Also, in my mind, a lot of the ICOs are not addressing fundamental questions which everyone needs to ask when they start a company, like what is my path to revenue, profitability and client adoption and what's my competitor advantage? It's no different in an ICO than any other launch. So I would say – don't forget the basics of your business and make sure those are sound, because people's money comes with expectations of performance.

Why should somebody invest in the platform?

The position is very clear – it's a liquid investment that you can get out of at any time, but the important thing is that you are buying in early, at a fraction of what we think it will be priced once the platform is launched. If the platform takes off, the market will respond and the value will rise. The fundamental value proposition is that you can use these tokens to administer your own care, or the care of people you are responsible for, or to publish content that will change healthcare around the world. We are creating intrinsic value through the platform, then, if the token rises in value, which it will, that's an added bonus. That's how Solve.Care is different.

Finally, is blockchain the future of healthcare?

Blockchain takes out the middleman - the fact that a customer can book a doctor through the app, it automatically shows that the doctor is authorised by the insurance company and that the appointment is authorised. The insurance company does not need to get involved and adjudicate claims. Their administrative cost gets slashed and, more importantly, the patient has a much better experience because they don't need to wait for approval. It turns the whole model of healthcare administration to a self-operating machine.

A single eligibility programme in the US for a single client costs more than we are raising to build a global platform. And there are hundreds of these systems that are build every year. We are saying for the same money we're going to build a global market that can completely change the face of healthcare around the world.

COMMENTS

"Tokens are a brilliant way to align the interests and exchange amongst the network participants."

Philipp Pieper, co-founder Swarm Fund

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 who want a service to exist and find ways 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.

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.

"I think too much is being asked of the ICOs right now..."

Michael Khalsa, CTO of Modex

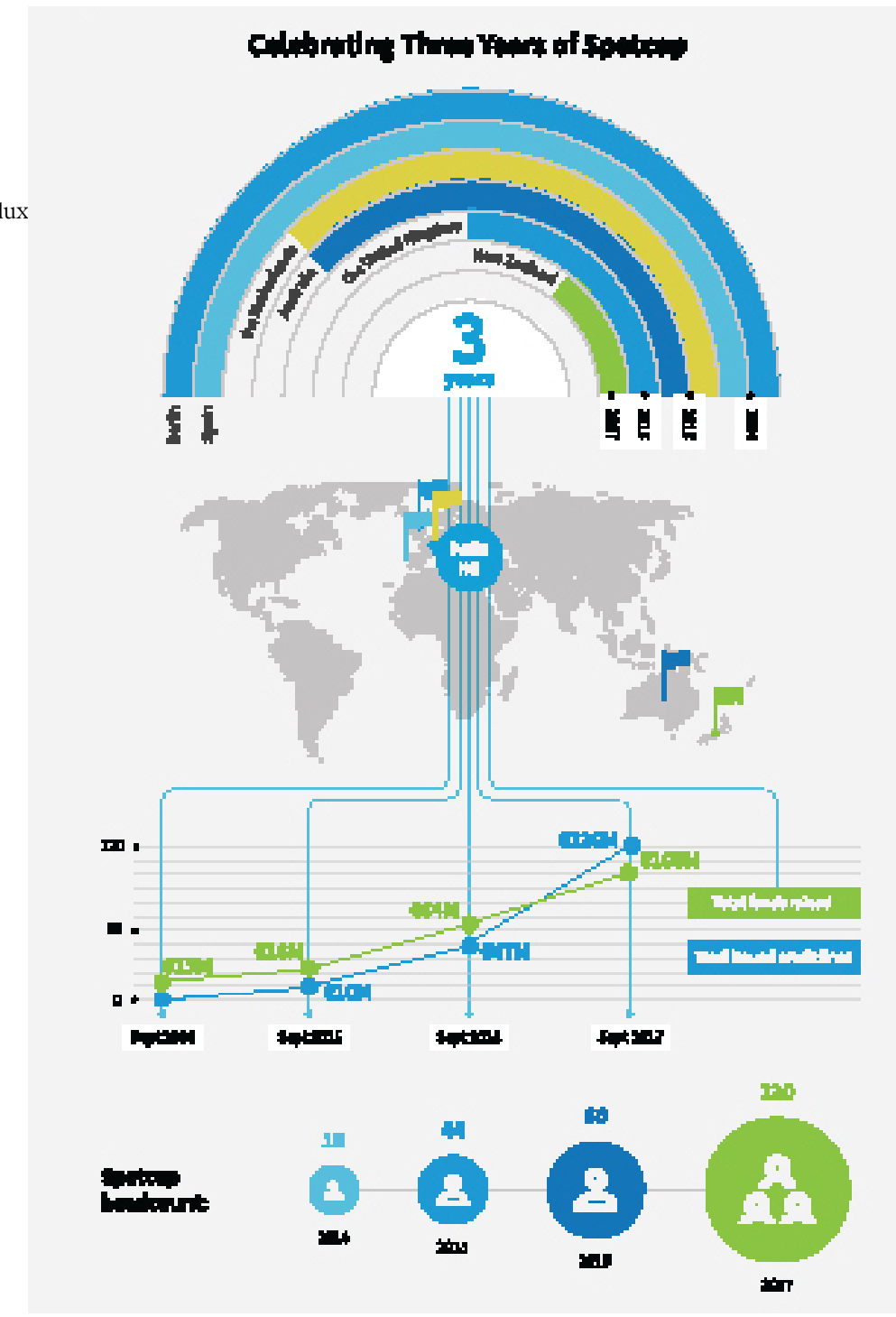
In the future, they'll turn into a blend of IPOs and ICOs – some initial Angel capital will come in, people will reach certain milestones, which many are not reaching at the moment, they will make demonstrable products, then open it up to an ICO for future expansion. Some ICOs might also have some type of equity tie-inns.

I believe that a lot of the drivers in the space of blockchain are going to be industry business infrastructure, who are basically taking an existing centralised database structures and just replacing that component with decentralised structures for their auditing and their immutability advantages. A lot of these businesses won't care so much about gas – they want a business blockchain solution that is a 100% guaranteed, fast customer transaction facing, very scalable. And the last mile into consumer adoption is most likely going to have political drivers – the instability of the primary currency in different countries and cross border currency need. This is probably a couple of years away. In the next 6 months, there is a play for branding, trust, and positioning into this space. Within internal business infrastructure the monetarisation can be almost immediate, while for consumer commerce it could be two or three years away.

The most important thing for consumer adoption is to solve identity – have biometrics tied to identity. You can't ask the average people to be really aware of how private keys work and what happens if they lose them. The identity issue has to be solved before there is even a hope of entering the consumer space on a large scale.

Mind the Funding Gap

Q&A with NIELS TURFBOER, managing director of alternative lender, Spotcap, UK and Benelux



What is Spotcap?

Spotcap is a multinational fintech lender that issues unsecured credit lines and loans to small and medium size businesses. We lend from our balance sheet and use tried and tested principles to asses credit. What sets us apart is our use of new technology. Artificial intelligence and predictive analytics are part of our in-house developed approach. They help give applicants a swift and straightforward user experience, allowing them to focus on what matters — their business.

Spotcap was founded in 2014 by an experienced team with years at leading European financial institutions. Our headquarters are located in Berlin and we operate in the Netherlands, the UK, Spain, Australia and New Zealand.

What problem do you solve?

Let's look at the UK. There are 5.5 million private sector businesses there. More than 99 percent of these are small or medium size. Despite a combined annual turnover of £1.8 trillion these businesses often face difficulties finding financing to meet their needs.

Many of these firms are looking for unsecured financing. The government has tried, in numerous ways, to make it easier for them. Its Enterprise Finance Guarantee (EFG) scheme was set up in 2009 to help businesses which did not have sufficient security to access funds.

Spotcap addresses this need. It offers businesses that have been operational for at least two years access to unsecured funds, from £10k to £300k. There is no cost or commitment to apply and set up our credit line. Repayments start once a drawdown is made.

Who has benefited from a Spotcap loan?

We have helped thousands of businesses with their financing needs. Common uses include: managing cashflows, bridging receivables and buying inventory.

In the Netherlands, we recently helped a business specialising in home decorations to grow from two founders to 35 employees in just one year.

In the UK, we just issued a 300k credit line to a construction company in South Wales. The company was expecting a new investment but due rapid growth there was a funding gap of a few months. Spotcap was able to step in and bridge this gap until the new funds were made available.

How do you work with partners?

Collaboration and partnerships have always been part of our strategy on both a tactical and strategic level.

To date a significant portion of our loan book is attributed to business owners who came to us through their financial advisor, accountant or broker. It's fair to say they have played a strong hand in our success.

Earlier this year, Spotcap announced a partnership with Heartland, New Zealand's only NZX-listed bank. The partnership began with the bank investing £13 million (A$20M) of debt in the business and has evolved into a strategic, mutually beneficial relationship. Finstar Financial Group is another of our strategic investors. All parties bring expertise, experience and contacts to the table.

We're now exploring new ways to provide our technological expertise to established players and to work with them to explore new markets and underserved business communities.

The alternative lending industry hasn't been through a credit downturn, what safeguards do you have in place to ensure Spotcap would make it through one?

While current conditions may be "as good as it gets", a downturn will come eventually. The lenders that will end up ok will be those who have taken a considered and long-term approach to how they are building their business.

Spotcap is run by a team that have decades of experience at traditional financial institutions. We have been through credit cycles and are aware of systematic risks. Together we have built Spotcap to withstand macroeconomic conditions and industry trends. Moreover, as a balance sheet lender, we are incentivised to take responsibility for our credit decisions.

How do you evaluaate the upcoming changes such as GDPR and Open Banking/PSD2?

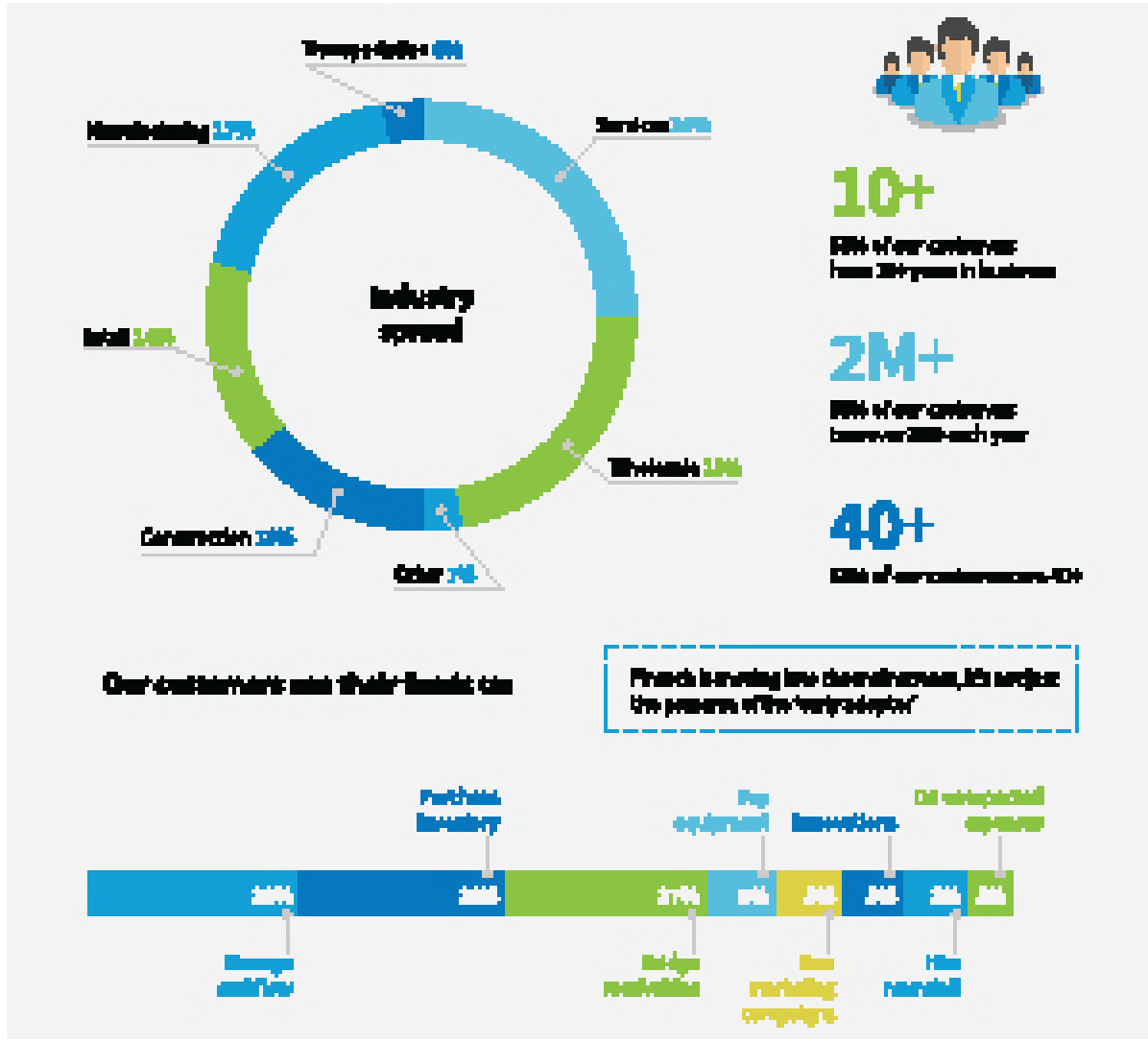
These changes make an important statement about data ownership — placing it firmly within the hands of the consumer.

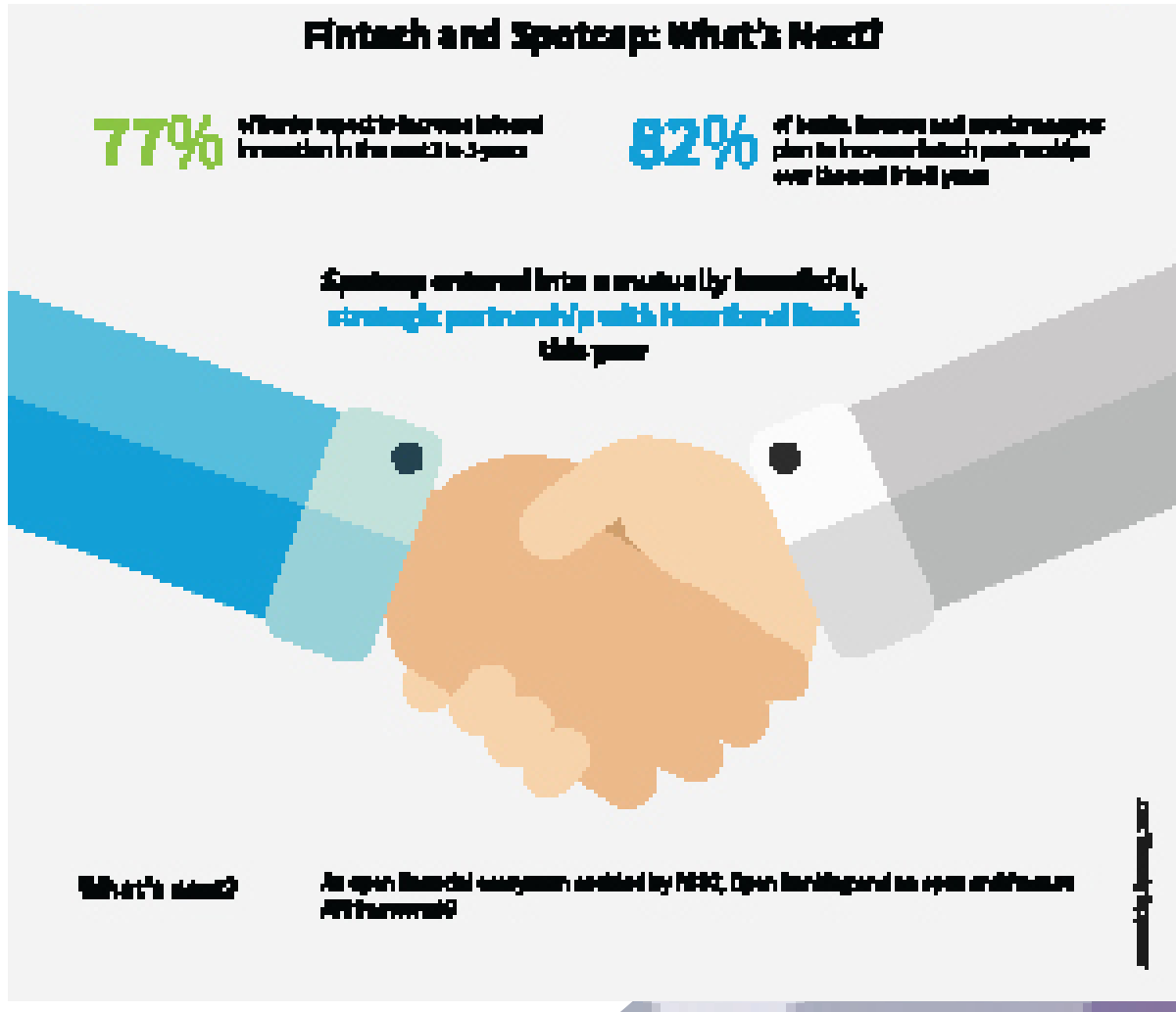
PSD2 will enable trusted third parties, with permission from consumers, to leverage banking data to provide an enhanced consumer experience. It will also make it easier for fintech businesses to enter the market, increasing innovation and competition.

The global data protection regulations will also push businesses to ensure data is secure. The 'Privacy by Design' requirements laid out in new global data protection regulation (GDPR) set an obligation for businesses to consider data protection as they begin to build products, creating a win-win situation for consumers and businesses.

Where to next?

In the next 12 months, we will continue to work with our intermediary partner network to increase our market share in each of our five countries. We will also continue to build strategic relationships and lend directly to small business companies — all with a focus on responsible lending based on sound financial assessment. We believe good things will come of it.





Biometrics Decrypted Report

zwipe

At Fintech Connect Live! Zwipe is launching the Biometrics Decrypted Report, an industry report shedding light on how biometric technology is being used to win the payments race, providing consumers with greater security and convenience. See more at www.zwipe.com

FinTech CONNECT Live!

The Customer-Centric culture

with Bob Brown, CEO, VIPR

Could you explain how your business model is disruptive?

Our business model is centered around our customers - they are what drives our innovation and opportunities for product development in order for us to be disruptive. Although we offer 'out of the box' solutions, our software systems are tailored for each client based on their needs. We listen to them and forge strong relationships from the very first meeting. We get to know what they do, their processes, their struggles and build solutions based around this information. Even after product implementation we maintain our relationships and invite our clients to regular user group meetings so that insights can be shared - it is often the case that these meetings determine new future innovations.

Although our products are the very best, made to simplify processes, manage data efficiently, and to ultimately boost profitability, without our customers and their insights product disruption is hindered. We recently worked with new Managing General Agent, MGAM to deliver a core systems package of three products; bordereaux, data and coverholder management and reporting.

Our client also wanted us to create a completely bespoke Insurance Broking Accounts platform that was faster, more intuitive and user-friendly than anything else currently on the market. They also wanted all systems to be integrated and avoid any mishandling of information through the software. Working with them and IBA experts we developed an innovative system shaped by our customer to get the best of the best on the market.

In addition, our customer-centric culture extends to the digital realm. We recognise opportunities to connect with them by offering helpful information on our website and through the use of social media (an area that is slowly being adopted by the insurance industry). Tapping into the customer at every given opportunity is pivotal in creating and sustaining growth and increasing our business advantage amongst the competition.

What do you predict will be the future impact from technology on your sector?

The insurance industry depends heavily on technology adoption to modernise, although some of the market is investing in new technology, others are slow to make the change from age-old manual methods. As we are witnessing, increasing regulations, such as Solvency II, mean the industry is forced to make changes and introduce new processes through technology in order to comply. We foresee that this pressure will continue.

Technology is growing and sitting back and waiting for long-term change isn't an option. New technology innovations will provide far greater visibility and accuracy of data in a fast and efficient way allowing the industry to understand its business and keep up-to-date with industry regulations.

Data is an ongoing challenge as the amount of data received is vast and ever increasing. Thousands of spreadsheets are being presented each month, containing information on premiums written, premiums paid and claims made. Each spreadsheet can contain thousands of rows of data with multiple columns, so a single document could contain millions of individual cells of data. Technology can and will therefore have a profound effect on the industry.

What would your advice be to other companies about how to survive disruptive periods?

As new technology innovations come to the market new disruptive trends will become apparent in the insurance industry - it's happening and will continue to do so. These changes shouldn't be avoided otherwise there is a good chance of failure.

To survive, see innovations as catalysts, adopt new technology and change in order to spur growth and create better business practices. If you don't do it then your competitor will gain the edge they need to get ahead.

Ensure your business strategy is looking forward rather than focusing on the 'here and now' and plan accordingly before new innovations take over in the blink of an eye and you miss out.

www.viprsolutions.com

A third of all regtech companies focused on ID and Cybersecurity-related solutions

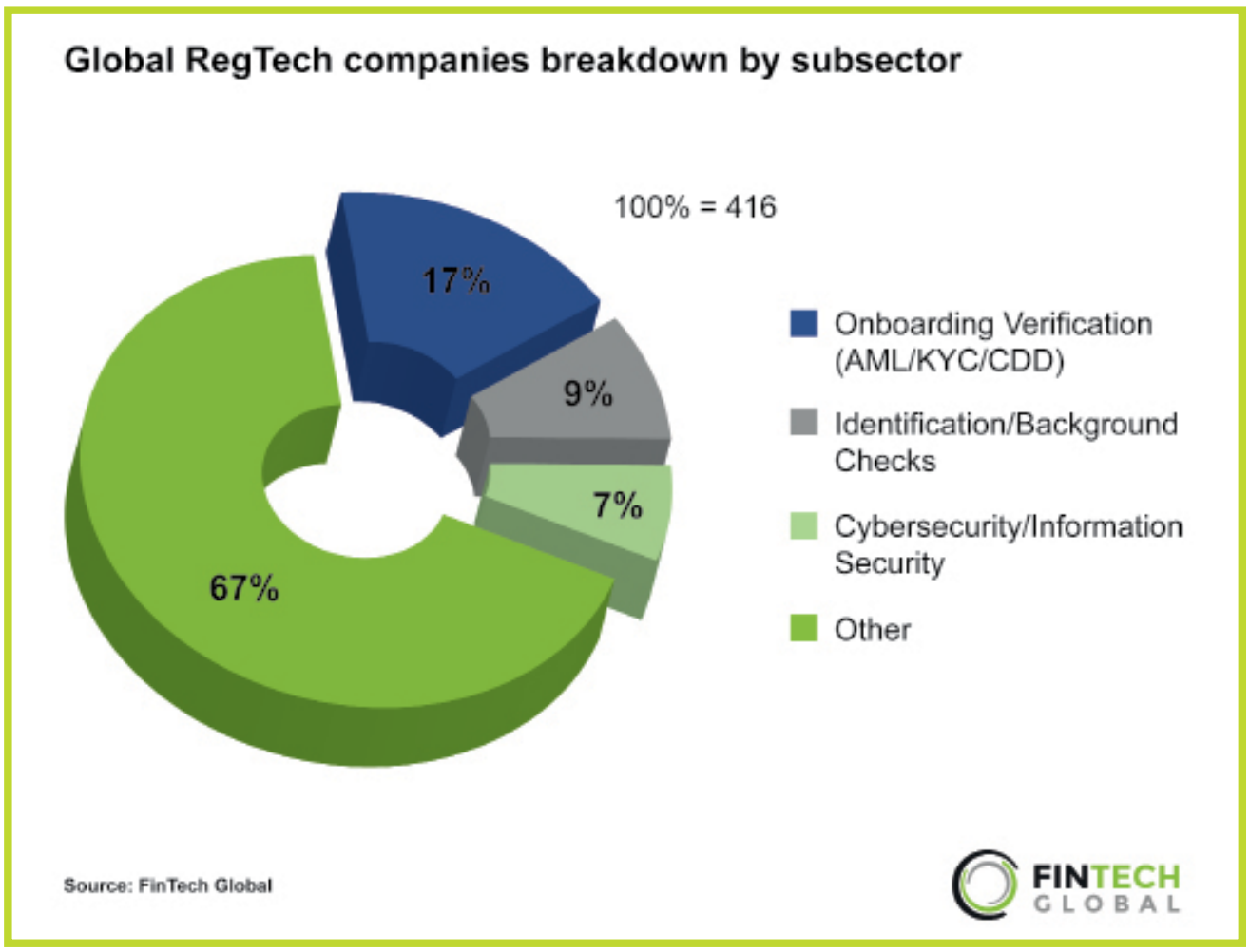
According to research from fintech Global, 35% of regtech companies are offering solutions based on identification verification, cybersecurity and information security.

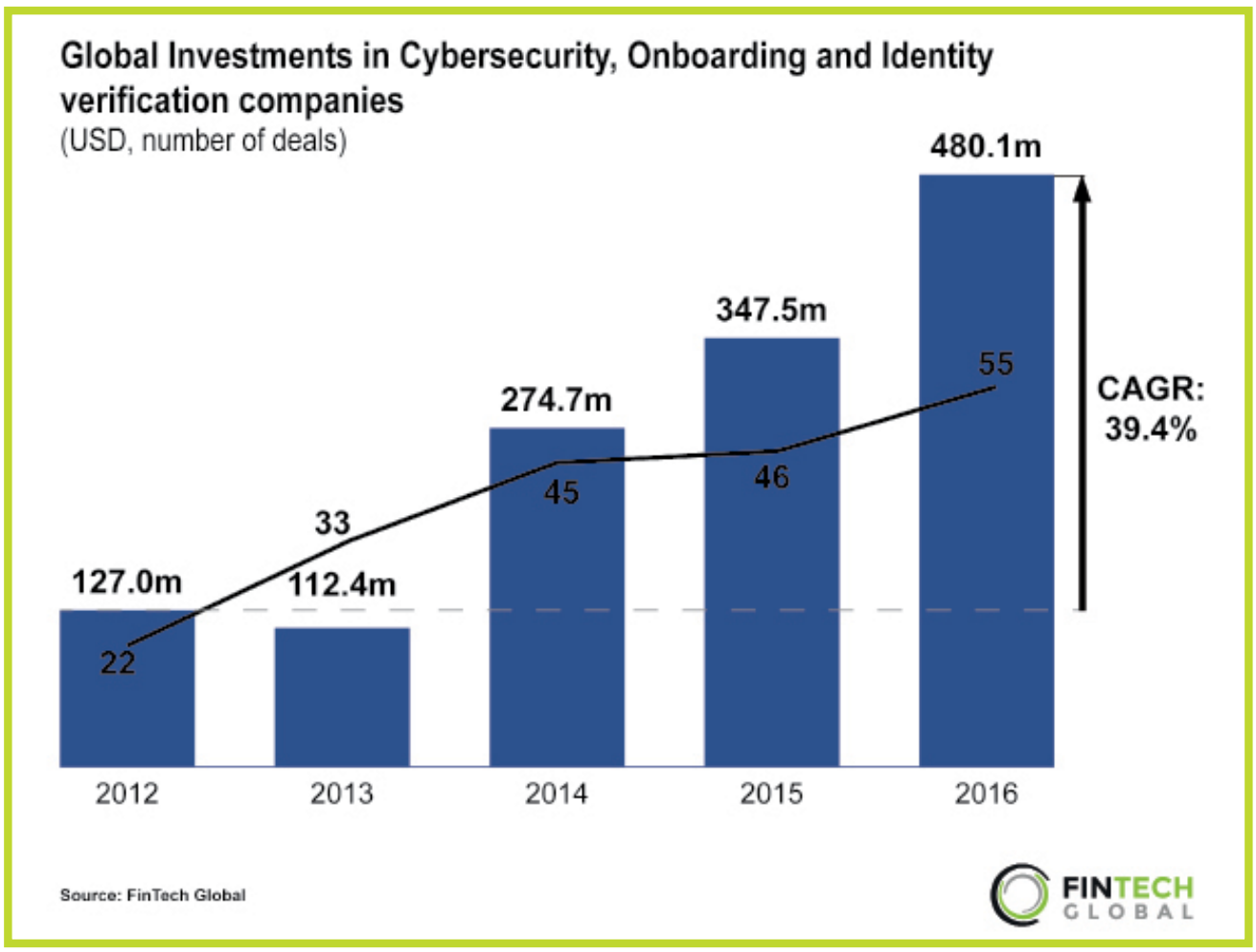
The importance of data security and integrity to financial institutions is clearly evidenced in the number of regtech companies around the world that are serving clients with technology solutions that address these issues.

An Analysis of 416 regtech companies, that are profiled on the FinTech Global database, shows that 17% are focused on onboarding verification, which includes AML (Anti-Money Laundering), KYC (Know Your Customer) and CDD (Customer Due Diligence). Another 9% are focused on identification and/or background checks and 7% are focused on cybersecurity and information security processes within the regtech value-chain.
Increasing regulatory demands have helped fuel investments in regtech companies focused on these three sub-sectors. Global investment has increased by CAGR 39.4% over the last five years, from $127m in 22 deals in 2012, to $480m in 55 deals in 2016.

It looks likely that this year will see a drop in aggregate investment as H1, 2017 saw $162m invested in 23 deals, which is only 34% of last year's annual total. However, the level of startup activity in this area, facilitated by many of the new sandboxes set up by various regulatory bodies around the world, indicates that we may see another surge in 2018.

The data for this analysis comes from our research partner, FinTech Global, (www.fintech.global). The company has just released an unparalleled, in-depth analysis of the global regtech market in a 200-page report which is available to FinTech Global subscribers.





GDPR + FINTECH = CHALLENGE AND OPPORTUNITY

by Nathan Snyder, Partner, Brickendon

Data and fintech are both hot topics in the financial services sector and are themes not to be ignored. The growing concerns around the safety of personal data from identity theft, cyberattacks, hacking or unethical usage are magnified by the proliferation of third-party fintechs and other vendors providing services to banks.

Where previously it was the responsibility of third-party service providers to ensure compliance with data privacy laws, the new EU General Data Protection Regulation (GDPR), due to come into force in May 2018, shifts the responsibility for compliance to the banks themselves. Failure to implement the appropriate checks and balances to ensure compliance of partners and vendors, could lead to substantial fines – as much as 4 per cent of global turnover or €20 million (whichever is greater) - and significant reputational damage for the bank in question.

For financial institutions, GDPR, whose main aim is to standardise data privacy laws and empower EU citizens to manage their own personal data, has been described as the "Mother of all Regulations". Given the amount of data being exchanged on a daily basis and the increasing number of smaller FinTech firms and associated individuals involved in these exchanges, the description is not surprising.

So, what does the introduction of GDPR mean for financial institutions? Here we take a look at five key areas of the GDPR legislation:

Client Consent: Under the terms of GDPR, personal data refers to anything that could be used to identify an individual. By explicitly mandating all firms to gain consent (no automatic opt-in option) from customers about the personal data that is gathered, individuals know what information organisations are holding and for what purpose it will be used.

Right to data erasure and right to be forgotten: GDPR empowers every EU citizen with the right to data privacy. Individuals can request access to, or the removal of, their own personal data from banks without the need for any outside authorisation. This is known as data portability.

Consequences of a breach: GDPR requires firms to appoint a Data Protection Officer (DPO) who must report any data breach to the supervisory authority of personal data within 72 hours. The notification should contain details regarding the nature of breach, the categories and approximate number of individuals impacted, and contact information of the DPO. Details of the breach, including any required remediation activity, must also be sent to the impacted customer 'without undue delay'.

Vendor management: IT systems form the backbone of every financial firm, with client data continually passing through multiple applications. The increased trend towards outsourcing development and support functions to smaller FinTech and other firms, means that personal client data is often accessed by external vendors, thus significantly increasing the data's net exposure. Under GDPR, vendors cannot disassociate themselves from obligations towards data access.

Pseudonymisation: GDPR applies to all potential client data wherever it is found, meaning that all data, in both live and non-production environments, must be pseudonymised into artificial identifiers to ensure data access stays within the realms of the 'need-to-know' obligations.

Given the wide reach of the GDPR legislation, there is no doubt that compliance poses significant challenges for financial organisations. However, the path to compliance also offers opportunities to improve internal data processing systems as the advances being made in semantic modelling and data science, particularly by some FinTech companies, provide a better understanding than ever before of the data within an organisation, where it is held and what it is used for. Seizing this opportunity for change now, can only be a positive for the future. In short, GDPR should not only be about the May 2018 deadline.

THE FINTECH TIMES

Digital Identity and the Future of Money

ManagingDirector,
The Bunker,
PHIL BINDLEY

Biometrics and behavioural biometrics are undoubtedly going to become the most common forms of identifying users. Access to devices and applications will be critical to secure the enterprise and the continuation of simple single factor password authentication will eventually be superseded, as the risks posed by employing single factor authentication will be seen as too great. However, Information Security professionals and risk and compliance managers will need to have in place clear strategies to deal with protecting these new kinds of personally identifiable data in line with legislation and compliance regimes.

Behavioural biometric and identity process

Behavioural biometrics are a potential solution to the long standing issue of persuading organisations and end users to drop the single factor password authentication that is still the most prevalent methodology of gaining access to a system. The unique nature of the way each of us interacts with our keyboard, mouse or touchscreen can provide an early warning that someone has had their credentials compromised and prompt for further identification or simply cut access to the user. As this is passive and does not require additional technology at the user interface, unlike IRIS scan, fingerprint readers or facial recognition, it would facilitate a transparent and highly accurate way of determining identification and reducing risk.

Voice recognition and identity process

Voice recognition has already established itself as a technology that can be adopted to deal with verifying identity. However, there is an overarching risk that presents itself when we delve into the murky world of those that would seek to profit from circumnavigating these controls. If we have our passwords stolen we can change them, if we lose our 2 Factor Authentication token they can be revoked. But we cannot change our voice patterns and, once that "identity" has been forged, then we cannot change it.

The upcoming changes in Identity regulation (GDPR and PSD2)

PSD is very prescriptive about what the expectation is in terms of when strong authentication is required, however is less so in terms of the definition of "strong". What is clear is that single factor password authentication for the following scenarios would be not acceptable: when a customer either accesses their payment account online, initiates an electronic payment transaction or carries out any action through a remote channel which may imply a risk of payment fraud.
There are a huge number of column inches, seminars and events surrounding the close approaching deadline for GDPR compliance. There is nothing that is seminally or intrinsically linked to Digital Identity, in terms of increasing the robustness of the authentication process. However, when we think about some of the key tenants of the legislation, it is abundantly clear that organisations will have to have in place controls not only to protect key identity data that they hold on behalf of an individual, but also to ensure they have the Technical and Organisational Measures in place to prevent the exposure of any personally identifiable information through weak identity management to their systems and data.

The use of Biometric data has gained popularity over the years, but traditionally there has been limited or no legislation to safeguard the processing of this data. We are starting to see fingerprint, voice and face recognition becoming standard ways to access our mobile devices, office buildings, secure areas, even our bank accounts. With Biometrics data becoming so widely used, how are we ensuring our personal data is protected? In June 2017, Washington and other US states passed a biometric privacy law, but what about the EU and its member states?

It will come as no surprise that with the new EU regulation (GDPR) coming into force next year, biometric data has come into sharp focus. GDPR defines biometric data as "personal data resulting from specific technical processing relating to the physical, physiological or behavioural characteristics of a natural person, which allow or confirm the unique identification of that natural person, such as facial images or dactyloscopic data".

Biometric data and genetic data under the EU regulation have been added to the special categories of personal data. So, what does this mean to those businesses who are thinking of processing this type of data? GDPR is quite clear that the processing of special categories of personal data is prohibited. However, there are provisions in the Regulation that can help those who wish to process this type of data.
Firstly, you need to ensure at least one of the Article 6 conditions is met. These are:

- Data subject gives consent for one of more specific purposes
- Processing is necessary to meet contractual obligations
- Processing is necessary to meet legal obligations
- Processing is necessaryto protect the vital interests of the data subject
- Processing is necessary for tasks in the public interest
- Processing is for the purpose of legitimate interests pursued by the controller

Once you have satisfied these conditions, then you will need to ensure one of the conditions of article 9 has been met. You will notice that there is some overlap with Article 6, but it is still a prerequisite to processing this type of data. These are the Article 9 exclusions:

- The data subject has given explicit consent
- It is necessary to fulfil the obligations of the controller
- Processing is necessary to protect the vital interests of the data subject
- Processing is carried out by a non-profit organisation
- The personal data has manifestly been made public by the data subject
- Establishment, exercise or defence of legal claims
- Reasons of public interests in the area of public health
- Achieving purposes in the public interest
- A member state has varied the definition of a special category

In order for you or your business to comply with GDPR to process biometric data, clear consent is generally the key factor. The rules around consent need to be observed closely, because a lot of businesses feel that their data subject may have at some point given them consent to process their data. However, we need to be clear that processing special categories of personal data is strictly prohibited by EU law. Consent under GDPR is defined as any freely given, specific, informed and unambiguous indication of the data subject's wishes, by which he or she by a statement or by clear affirmative action signifies agreement to the processing of personal data relating to him or her.

Trust is a key factor for the adopting of technology and cloud based services. As organisations and individuals adopt new enabling technologies in the world of all things financial, businesses operating in this space will need to demonstrate they have robust and secure ways of not only identifying individuals, but in securing that personal data under their control.

Facial Recognition for Fintech

BY TOBY BROWN, Head of Engagement for Occam DM, Response One & Amaze One (part of the St Ives Group)

Amidst the shiny, bezel-free, Super HD glow of Apple's product launch event, one image danced from the darkness, a harbinger of the world to come.

That image, of course, was the gently jiggling Animoji poop.

It was disturbing for two key reasons.

One – a grown man launching a £1,000 bit of bleeding-edge technology by making a poo wink.

Two – it relied on Face ID, Apple's facial recognition software and a technology that the iPhone X will bring to the mass market (although facial recognition technology is already booming business, due to be worth $2.7b by 2022).

Is the move from a fingerprint scanner to a facial recognition feature really such a big deal?

Well, maybe not immediately – it didn't work for a start.

However, it's undeniable that eventually the technology will be commonplace on our handsets, whether we like it or not – and it could be the gateway to a whole new set of ethical, legal and practical problems.

Edward Snowden was quick to Tweet: #FaceID Normalizes facial scanning, a tech certain to be abused

So how does Face ID work?

The technology has been available on other handsets for a while, but in typical Apple style, they've refined it to make it palatable for mainstream consumers, just as it's started to raise complex ethical questions.

Face ID uses a new camera feature, True Depth, to create a 3D map of the users' face from 30,000 dots, which is pushed through the iPhone's neural networks to improve its accuracy with each use.

Face ID won't work if you're looking away, asleep or just showing it a picture of Ant & Dec. However, there's more to facial recognition than simply unlocking your phone.

Many police forces already use facial recognition to scan crowds for troublemakers - Russian police use an app called FindFace to identify suspects from their social profiles.

Meanwhile, The Telegraph recently reported on an AI which uses facial recognition to determine if people are straight or gay, with a hit rate of 81% for men and 74% for woman.

Michal Kosinski, the scientist behind the algorithm goes even further, and quickly dives headlong into controversy.

Using AI to examine people's features, he says, can tell us almost anything about a person – from their IQ level to whether they're predisposed to criminal behaviour; details that could have huge social consequences for those being labelled – for instance in countries where LGBT people are routinely murdered by the government.

Kosinki also questions what will happen when AI can tell which children are genetically more intelligent than others - automated streaming? Your University be pre-allocated from your "first day of school" photo? Or will your child just be sent straight to work in the canteen?

At what point does the conversation stray into predeterminism and even eugenics?

Of course, wherever difficult questions arise, Marketers are rapturously ignoring them.

Sometimes the results are great - like the Women's Aid outdoor ad which logged how many people looked at it and faded the model's bruising accordingly – bringing to life the message of "If you see it, we can stop it".

Sometimes they're a bit creepier - for instance P&G using GumGum to identify all pictures of their athletes shared on social media – and serve relevant ads alongside.

It's when you layer AI's apparent ability to intuit political, social and financial factors alongside this technology that things turn weird.

Imagine a store that instructs staff to treat you differently because of your angular cheekbones, or a casino which identifies you as probably driving a 14-year old Renault and treats you accordingly.

Soon high-end boutiques won't even open their doors if your hairstyle is a bit last-season.

The possibilities are limitless, and the technology will prove a battleground between consumers eager to protect their privacy and companies desperate to make their marketing as predictive and personalised as possible.

Where does it end? A glorious future of bespoke content and frictionless decisions?

Or everyone covering their heads in binbags to escape the constant squawk of unasked-for judgement and Minority Report-style offers?

I don't have the answers - but I am going to buy some shares in a balaclava company.

"The future of identity is going to be far more pragmatic than people might think..."

NIGEL VERDON, CEO and founder of Railsbank

Ensuring identity safely and securely is a key topic for our sector, and there are going to be many changes over the next five years. But, when people ask how I see identity processes changing over the coming years, it's really the wrong question.

The question should really be re phrased 'what technologies are the financial regulators happy with' or, more precisely, 'what technologies are banks and financial services firms happy with, that they feel they will comply with the regulator.' This is the more pragmatic question and is based more on the realities of the environment in which we operate, as opposed to a possible wish list.

As for which identity processes show the most promise, I would say that behavioural biometric technology has great promise for both authentication and also fraud detection, so it's much more useful than others.

And that includes voice recognition technology, which I'm not convinced that people like, to use unless they are alone.

Which leads me to suggest that if I was given a choice between the different types of identification currently available (for example, IRIS scanning, finger prints, voice recognition, or behavioural methods), I would say that finger prints and behavioural are the best solutions which match how most people behave. Others are too intrusive and are simply not sensible in a public environment.

And how this will be helped in emerging markets depends on the devices, in other words the smart phones, that are available at the moment.

Moving on, when we're asked how we are going to evaluate the upcoming changes in identity regulation (GDPR and PSD2) and what they mean for your business, we're quite clear about our answer: "no comment." We're not being evasive, it's just that the key issue for us is that the regulator is still issuing 'consultation papers' on the issues and has not yet given clear guidelines. Until we have clear guidelines, our answer will remain the same.

If we switch for a moment on the top five trends that are driving the future of payments, I would say that they are, in this order:

- instant bank transfer (e.g. SEPAinstant) and migration of e-commerce to this (e.g. via PSPI);
- free payment business models in exchange for the transaction data;
- compliance data payloads embedded in payments (e.g. to comply with wire transfer regulations);
- regulators opening up payment schemes to non-banks;
- SWIFT network adopting blockchain.

As a final word, the future of identity is going to be far more pragmatic than people might think. Fanciful solutions are out there and will continue to be developed, but at the end of day, it's the solution that works across the mass market that will become finally adopted.

The future of insurance

NIKOLAI CHUMAK,
CEO of IDNT

In November, Munich hosted the world's largest dedicated conference about innovation in the insurance industry – DIA Munich (Digital Insurance Agenda). This is already the third DIA event to be held, after the conferences in Barcelona and Amsterdam. This time, the Munich DIA event gathered more than 1000 insurance industry experts from 40 different countries. Approximately half came from 'classic' insurance corporations - with the other half from technology companies, startups, and representatives from the worlds of fintech and insurtech. The format of the conference featured presentations from outstanding speakers, and pitches from 60 startups. At each DIA event, the organisers manage a tricky achievement – finding new companies in the insurtech field. Of the sixty companies represented, from Argentina to Japan, forty of those exhibiting in Munich were appearing for the first time. The organisers imposed particular criteria on their selection of startups - of which the most significant was formulated as the company having 'strategic impact'. It all meant that delegates at DIA Munich were able to enjoy presentations which were primarily aimed at the future of the insurance industry, instead of being focussed on technical issues.

The welcome address at the event was given by the authors of the Financial Times bestseller "Reinventing Financial Services", Roger Peverelli and Reggy de Feniks. They presented three megatrends for the financial and insurance industries:

1. A part of life

Industry players and insurance companies need to think not just about their own products, but also how to build-in the lives of their consumers, in the most worthwhile ways. Activity in multiple different spheres; care and support; engaging customers in creating products; care of personal life – these and other areas will be the centre of attention for insurers in the coming future.

2. Contextual ecosystem

To achieve the aims set out in the previous point, companies will either have to establish ecosystems of projects, or take part in such ecosystems as partners. Wheeling out new technology is not enough. Customers don't find innovation a mere value by itself. Before Alibaba rolled out its new Alipay payment system, it had carried out research among retail traders. Not a single one of the retailers polled expressed the slightest interest in "yet another payment system". Alibaba found out that it wasn't the payment system that retailers needed – but the customers who came with it. So next, Alibaba set up Alipay so that retailers which used it got a stream of new shoppers in their stores through it, and juicy profits by way of their partnership with Alipay. Ecosystems set up around the consumer can offer insurance corporations a mass of information that those insurance companies would find impossible to obtain in any other way. The lifestyles their customers prefer, their consumer preferences, information about their spending habits, quality of diet, and so much more that is of critical value when assessing insurance risks and designing individualised and personalised insurance products. Partnership with companies in different spheres is particularly valuable, since such companies already possess extensive information about consumers, and have their own segmented client groupings.

3. Simply human

Talking with customers in everyday language; using understandable human vocabulary; creating insurance products based on recommendations – these are what insurance experts have yet to master. Technology can help. Face-recognition, biometrics, and robots which can almost talk like humans are all already available. But this is all far from being enough. The further Artificial Intelligence and technologies that replicate humans develop, the greater is our desire for real-life interaction, and the urge users have for sniffing-out clones from real humans. Companies adore technology – in the belief that it saves them money. But people prefer to talk with real, live people.

All three of these trends relate to engaging with customers, and caring for them. The main takeaway from these trends is that the industry needs to set up its operational and day-to-day business models along these principles. Invited conference speakers spoke extensively about this, as did the startups. It's hard to describe a number of the startups as truly novice companies, however. One example would be the company which sold its business to the Japanese government. Another launched an experimental blockchain platform by organising partnerships with 14 leading insurance companies in France.

If we analyse the entire conference content, we can form a number of theses.

Structuring data, and artificial intelligence

Particular attention was given to the use of artificial intelligence in a large variety of different insurance products and operations. Businesses are continually having to cope with massive volumes of unstructured data in every possible format and content. These can include photographs and comments from social media, analytical reports, data received from satellites or weather-stations and medical diagnoses. Technology enables us, as one example, to place a multi-page pdf document in the middle of a program window, and extract a short digest of the information in it – all in just a few seconds. Startups can literally prise-out forecasts, insights, and all the vital info from even enormous archives. Technology was showcased using examples of flood damage evaluations in the Denver region, over spring of 2017. Weather data and satellite photography were correlated with house designs, which took into account the technical peculiarities, age and material of the walls, roof, and windows when evaluating possible damage. The use of computer simulations enables insurance companies to optimise their costs by up to 40%.

In auto insurance, a huge number of photos from incident locations can be analysed and sorted - and turned in just seconds into calculations for repair specs for cars. These can factor-in the make of car, the price and availability of the necessary parts, decision-making on whether to repair or replace, along with the costs and complexity of the repair-work. Experts confirm that 80% of the processes can be completed using AI.

Auto insurance

Insurance corporations expect an upcoming drop in car sales - and thus a related drop in their profits from car insurance products. This means that insurers are looking around for new business models, and ways of cutting their costs. Many, in particular, are looking towards the car-sharing market - a model that's similar to AirBnB in the accommodation business. The system uses geolocation as a way to find vehicles available to rent and an insurance component is integrated into the product. Both sides in the contract – the renter, and the hirer – can select partners on the basis of their ratings. A wide variety of factors go into these ratings, without considering subjective assessment – such as telemetric data, time spent immobile when parked, time spent in traffic jams, statistics on accelerating and braking, night driving, speed limit observance, and other data. Regular rule-breakers will not find it pricier to rent cars.

A great deal was said about the use of telemetric data. Insurance companies insist that cars are fitted with devices which operate rather like black boxes in an aircraft. This puts data in the hands of insurance companies for giving individual drivers scores. One startup has developed a system which monitors driving habits - in relation to the situations around them, and to other drivers. If an insurance-related incident arises, this leaves the company able to replicate the most-complete possible picture of the incident.

Several startups presented solutions for processing claim applications and optimising payouts. Video-conferencing technology can smooth out work for claims managers over damage-repair estimates and costs for repairs in real time. Sending out a drone to an incident location can speed the process of making a swift repair estimate.

There were also demonstrations of solutions which encourage good driving by using games technology. These apps for drivers require only a few standard smartphone sensors, and help to optimise driving time and time lost in traffic congestion, as well as finding parking spaces. Drivers can even opt to take a 'challenge', earning token coins that can later be exchanged for services from the insurance company or its partners. These apps can also help during car servicing, and to remind drivers of the technical reglaments. Minimising risk losses arising from fraudulent car theft claims is already in testing, and could cut insurance company costs by 70% on this particular kind of claim. Attention is given to the stats about the payment discipline of the driver in question, and his driving habits and manner of driving. In case of reported theft, the program automatically analyses data from CCTV cameras and sites where used cars are sold, as well as marketplaces in 25 different languages.

Medical insurance startups based on Big Data analysis

Companies are striving to use technology in prophylactic battles with every possible kind of ailment, including cancer and stroke. To give one example, users can take photographs of skin areas with their smartphones and upload them to the system. They then receive a recommendation and risk evaluation, and relevant health information – along with the

opportunity to make an appointment to see a doctor, if a need is determined. The system factors in demographic data and regional peculiarities. The greater the number of users and photos available for comparison in the system, the better the diagnoses can be. It's worth noting that compared to the way things were just 2-3 years ago, startups are no longer suggesting the use of any kind of complex sensors – it can all be done with a conventional smartphone.

Apps can be helpful not only for people in risk groups, but also to their relatives too. It's in everyone's interests to support clients for as long as possible, and educate clients about avoiding illness, rather than spend money on expensive clinical treatments or drugs. Several apps focussed on promoting healthy lifestyles. Rather like the Pokemon Go game, users can opt to carry out various tasks - gain bonuses on healthy diet items, perform physical exercise or take a healthy sleep program. This is where virtual reality interacts with fitness apps, and the 'coins' you win can be spent at partner internet stores. It's more cost-effective to look after the healthy, than treat the sick.

There was interesting technology on view from ambulance service radio-controllers in the United Arab Emirates. Artificial intelligence analyses emergency calls, including the patient's voice and medical data, and determines the level of life-threatening risk at the time of the call. The accuracy rate is 80%.

There were also demonstrations of computer applications for insurance brokers, and niche-market products including a special insurance policy for freelancers, along with many other products. One company has compiled a complete library of insurance products, which enables anyone to brand and sell insurance policies.

'The Wikipedia Moment'

One speaker coined the term 'Wikipedia Moment', when talking about the likelihood that 'classic' insurance companies will lose their market. This mirrors the case of Encyclopaedia Britannica – which had been printed for 242 consecutive years, until closing down in 2010. The reason? Users had begun using the more-accessible Wikipedia almost exclusively. Will insurance companies be able to adapt to their contemporary users? In order to achieve this, the organisers recommended consulting the new book from Roger Peverelli and Reggy de Feniks, Reinventing Customer Engagement, which was launched at the event.

A great deal of innovation is being developed on the basis of processing Big Data – which can help in calculating risk factors, predict adverse consequences, and assist in preventing insurance-based incidents altogether. But when insurance must step in, conclusions extrapolated from Big Data can assist in minimising loss and fraud. It's only information from clients that can enable insurance companies to create the truly personalised products that customers actually want. Yet this information is compiled with active client participation, and most usually requires their consent. Although every client enjoys the secure feeling that comes from being insured and safe, this feeling may often be something very personal. Ill-health, or irregular meals, harmful habits, stress at work, psychological problems, or even a preference for driving with the wind in your hair can end-up pushing up the price of your insurance contracts. Where is the red line, beyond which information should be private?

Let's imagine an absolutely real picture – one for which the technology already exists:

You arrive at Amazon Go store, and fill your shopping cart with food items. But when you head towards the checkout, you receive a message on your smartphone app – the same one which you use to care for your health – that you ought to remove the chocolate from your cart. The reason is that chocolate is particularly bad for you. But it doesn't end there. Now at the checkout you get a beep on your Messenger from your Insurance Company. They're letting you know that your premiums have just gone up – because you are eating unhealthily.

But it's too late now to even take the chocolate out of your basket – because everything's been recorded in blockhain.

Welcome to the future!

Interview with SIMON GILBERT

Founder and Managing Director at Elmore Insurance Brokers Limited, specialists in FinTech Insurance

Hi Simon, thank you for your time in this busy part of the year. We have learned a lot about PSD2 & GDPR in the last months, what impact does that have on the Insurance a FinTech needs?

My pleasure, I am very passionate about this topic. The beauty of the FinTech industry is that they develop solutions in a matter of weeks, which used to take firms decades to develop. Many FinTech companies rely on networks, systems, data, cloud technology, and outsourced service providers to scale and build their incredible technology. This exposes a FinTech to different types of risks, which the insurance industry has addressed with FinTech Insurance.

Well, that's interesting, what's different about FINTECH INSURANCE?

Providing or facilitating any type of financial services means professional indemnity insurance (PII) is a regulatory required insurance (as per PSD2), whilst directors' and officers' insurance is key for attracting and retaining management and ensuring their personal assets are protected.

Directors & Officers Liability	Professional & Tech Liability	Cyber & Crime Insurance	Office & Employee Insurance
Claims by regulators	Claims by customers	Event management	Property and equipment
Claims by shareholders	Claims for failure of service	Reputation management	Employers liability
Claims by em-ployees	Claims for failure of tech-nology	Financial loss incl. fines	Public liability
Claims by other stakeholders	Mitigation costs to put right	Cyber liability	Travel insurance

Source – Financial Lines Department, Elmore Insurance Brokers Limited

The difference vs traditional companies comes into play as the majority of FinTechs will be pushing the boundaries of innovation and will have a combination of technology, money, crypto currency and personal data at their core, protection against cyber risks and cyber-crime risks is an essential part of FinTech Insurance.

What would you recommend to any FinTech in regards to managing their insurance policy?

High growth fintech companies are typically short of resources, therefore the speed and efficiency with which claims are handled and settled is critical, so that, in case of a claim, the FinTech can focus on growing their business.

Three important considerations should be made before purchasing a fintech insurance policy:

1. Understand the policy exclusions and what is not covered by the policy
2. Find out which experts are provided by the policy to assist at the time of a claim
3. Ensure that the broker and insurer you are dealing with understands your business

What's the benefit of risk management to any FinTech and who would you recommend to use risk management solutions?

Every company is subject to internal and external risks and the first step is to be honest about them and identify them within a business. The goal then is to reduce them by following best practice controls and processes and ideally certifying these to industry recognised levels. This will then be a good argument and evidence to improve insurance coverage and premiums, while improving the overall governance and operational control of a successful FinTech

Last question, please share with us how Elmore is helping the FinTech industry?

I started Elmore 2 years and apart from the cyber security and GDPR risks which needs cyber insurance we have been doing a lot of work recently on PSD2 and the professional indemnity insurance. About half of our clients now are FinTechs and they value to be dealing with an insurance start-up that not only understands their challenges, but also shares a similar culture.

Startups and ideas to change the world

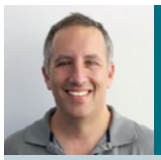
Sergey SEDOV

Founder & CEO
Robo.cash

Robo.cash is an investment platform created as a part of the international financial holding which comprises affiliated creditors specialized in the issue of short-term loans. The motto of the platform "More money in less time" is reflected within the peer-to-portfolio model it is based on and those advantages provided to investors. Robo.cash is distinguished to be fully automated and implies no manual investments. Following the concept designed to save the time of investors and increase their income, we completely undertake the necessity to assess and select loans according to given settings and deal with any other concerns which might arise in case of an overdue. Another point to mention is the absence of long-running loans that might greatly slow down the turnover of assets. There is no need to wait long for the return of the invested money with accrued interests what gives an opportunity to decide freely whether to reinvest under the same terms or change the settings.

For a long time investments were an attribute of banks or particular entities only and were available for a small number of people. The market of the alternative finance has spread it more widely. However, even at that market, there are still proposals that are out of reach for many people due to various reasons. From that point of view, we consider that the easy and fully automated investment process makes the P2P-lending open for a much greater number of people. There is no need to find an enormous sum of money to start investing or be a qualified financial expert to know what loans to choose and how to solve any related issues.

Despite the immense growth of the P2P-market, there is still a misconception about it in the society because it has proved to be risky enough and thus considered as rather complicated. Since we are intended to make the P2P-lending clear and understandable, we try to explain all the pros and cons of such kind of investments. We believe that such an approach helps to increase people's awareness of the market.



Brandon KRIEG

CEO & Co-Founder
Stash Invest

Stash is a mobile investing and saving platform targeted at mainstream American millennials. In our research, we found that there were two reasons people weren't investing: a belief that you had to be rich before you could begin investing, and the belief that investing was so complex ordinary folks couldn't understand it. We set out to fix those two problems, so Stash was developed to educate and empower the underserved market through simplification, accessibility, low fees, and a focus on education.

A Federal Reserve study found that half of Americans cannot cover an unexpected $400 expense. That's a hugely troubling stat. Whether with Stash Invest or Stash Retire, we're on a mission to make the market and saving for the future more accessible to everyone across America - to help narrow the gap in financial inequality and empower customers to prepare better.

Our focus, and biggest obstacle really, is around inaction caused by lack of financial education. Stash encourages investors to take ownership of their investment choices and invest with intent, and invest in things they believe in. Our focus on financial literacy enables the first-time investor to learn the ropes and invest on their own. 86% of our 1 million users report having no prior investing experience or consider themselves beginners - that's something we're very proud of.

There's a huge saving epidemic happening in the US and we're trying to help rectify that. Through Stash, this community is not only breaking into the investment world but also developing solid financial habits that will enable them to make smarter financial decisions for life.

The biggest impact is breaking down traditional barriers - whether institutional or psychological - that typically prohibit or discourage people, of all ages and backgrounds, from saving and investing for their future. We're trying to lessen the inequalities in wealth and financial literacy and with 86% of "Stashers" identifying as first timers, we think we're on the right path. Our goal is to offer a new kind of financial education - accessible and simple - and ultimately a platform where you're encouraged to take ownership of your choices and your future.

Adam DELL

Founder and CEO,
Clarity Money

Clarity Money is a personal finance app designed to act as a champion of our customers' money. Customers share their financial accounts information with us, and we use this access to review customer spending. We then identify ways that customers can improve their financial wellness. For example, we highlight recurring costs (memberships, subscriptions, etc.) so that customers can review those "out of sight" transactions. If something is no longer relevant for the customer's lifestyle, they can even cancel that subscription via our app. We also partner with BillShark to help negotiate down customer bills. And we provide customers recommendations about which credit cards may be best aligned with their spending habits.

Other companies in this space may capture customer spending, but they fail to convert customers' past financial behaviour into recommendations about how to improve future behaviour. We want to help our customers make informed decisions.

Customers trust brands that they know. They're entering very sensitive information about their financial accounts, and our name doesn't carry the same weight that their national or international institution might. But we didn't go into this blind. We wouldn't opt to face these headwinds if we weren't 100% confident that what we're providing is different. And consumers are catching on: we launched in January and already have more than 450,000 users.

To get the most benefit out of our product, customers need to have some financial accounts. This way, we can virtually get to know them – through their transactions and spending habits. We look at their patterns and are able to then convert our findings into tailored recommendations to help them further their financial wellness.

Clarity Money was designed to be the champion of our customers' money. The app does what it can to identify ways that consumers can improve their financial habits, but it's the consumers that must take action. We work to analyse past spending, identify areas to cut costs, anticipate consumer spending, and provide recommendations about financial services that might benefit the consumer. But our greatest tool? Information. We encourage the customer to take the right actions for them, by arming them with information.

Marc SCHNEIDER

CEO, President, & Co-founder
Zebit

Zebit's mission is to become the first company to bring no-cost credit to every consumer, without a credit check.

The company provides up to $2,500 interest-free credit to shop millions of products in our online store. Members pay for their purchases over 6 months with no interest.

There is a crisis in America that impacts millions of consumers who struggle with financial stability because of limited access to affordable credit options. 75% of workers live paycheck-to-paycheck, 63% of US households can't afford a $500 purchase, and 36% of workers struggle with both credit card and student loan debt.

In addition, consumers pay over $70B of excess credit charges a year. No one is solving this problem. The majority of credit products are only accessible to banked customers. Any credit innovation that is available to underserved consumers perpetuates the debt incurred by high-cost financing products. Zebit empowers customers to buy what they need at competitive prices and always at 0% APR.

A major challenge is reaching consumers with Zebit's unique value proposition—lower cost, building positive behaviours, no interest or penalties, a brand truly interested in their financial well-being—that contrasts the "Gotchas" in most credit products. Only when they TRY Zebit do they realise the true value.

Another major challenge is designing, building, and leveraging advanced technologies in eCommerce, credit risk management, fraud control and fulfillment to provide the best product and experience to our members at the lowest cost. Zebit uses its proprietary technology to optimize these areas.

Zebit's vision is to put financial control back into the hands of consumers by giving them interest-free credit that supports their daily lives. Our goal is to build service offerings that allow anyone the flexibility and confidence to use credit when and where they need it, no matter their credit history.

Zebit is the complete contrast to predatory lenders and high-cost financing options. Consumers who are typically penalized with fees or rejected for credit due to their credit history, now have access to an interest-free credit alternative that they can trust. Zebit is building a brand that consumers are proud to refer without hesitation.

Token economies: a disruptive model for charities (and everyone else)

With ZEENA QURESHI, CEO and EMAD MOSTAQUE, CIO, Ananas

> **"This is an incredibly disruptive model for organisations looking to create something of high future value, as long as the tokens created fall outside of the remit of securities."**

Ananas are a UK based, non-profit organisation who aim to be the source of authoritative information surrounding beliefs and ideologies internationally.

By using cutting edge technology and behavioural science to forge stronger communities and in turn combat rising ideological hate; Ananas are on a mission to promote peace and fight hate.

Zeena Qureshi, CEO and Emad Mostaque, CIO at Ananas spoke to Fintnews about the journey so far and their venture into 'token economies' with Anacoin.

Following their initial research Zeena and Emad discovered that, "ideological hate usually stems from an illusion of expertise." An increasingly common online phenomenon which sees people with very little awareness of a subject acting with the confidence that they, indeed, have an exhaustive subject knowledge.

For Zeena and Emad, "part of the solution was to build a platform where users could find information, and have access to the context behind it" and to provide the user with the opportunity to interact with individuals who may in fact have completely different ideologies to themselves.

Ananas' initial focus is on Islam, targeting both Islamic extremism and Islamophobia was chosen as they found that there was often conflicting information about the subject in the media. "We needed a system to organise the data and engage with individuals."

The Foundation claims that the "classical charity structure would have had a low chance of success unless they had powerful backers on board," who in their opinion, "would have likely influenced the direction of the platform."

Instead, "the nascent token economy, built on the Ethereum blockchain, provided a novel and ideal solution for building what will be an incredibly useful and powerful resource.

For the Ananas project, we have built a unique cryptocurrency, the Anacoin, to drive our project on top of our UK-registered charitable Foundation. Anacoins are used by holders to pay for research on the platform and other actions to benefit its growth, such as community moderation or building the technology.

Ananas' unique 'token economy' has been designed so that the value of Anacoins is directly tied to the value of the content on the platform and its usage. Meaning that their cryptocurrency can also be used for "special sponsorships" on the site.

"Contributors and early adopters can directly participate in, and influence, the value creation of the platform with their Anacoin holdings. With the option to either hold or rapidly exchange for dozens of global currencies using the Ethereum infrastructure.

This is an incredibly disruptive model for organisations looking to create something of high future value, as long as the tokens created fall outside of the remit of securities.

Even for tokens that are securities, such as the recent Filecoin issue, raising $187 million in one hour from accredited investors, this represents a huge disruption in the classical funding model, providing incredible flexibility for fundraisers and far greater liquidity and alignment for funders.

There is a core of significant potential for disruption in this model that we have only just started to see."

Find out more about Ananas' mission to promote peace through technology at ananas.org.uk

Pennies – fintech giving with marathon ambition

Pennies have been digitising the traditional collection tin over the past six years and are now available through an ever growing network of 60 +participating UK retailers.

Pennies' micro-donations are data-free, quick, and a choice every time. The retailer chooses the charity that its customers can support. Customers are simply prompted on screen during their card transaction and asked if they would like to round their payment up to the nearest pound for a local charity. No personal data is collected, and there is no follow up; it really is about dropping a few pence in a charity box – but via a debit or credit card or a mobile wallet. In fact, someone donates using Pennies every three seconds!

Helen Dickinson of the British Retail Consortium explained why the Pennies concept works so well "it's profoundly collaborative, appreciative of the needs of simplicity for retailers and transparency for consumers. The reassurance of anonymous cashless giving has clearly been a key driver in its growing adoption across the retail industry."

In addition, the new contactless Pennies solution, supported by Worldpay – which further widens the potential for the micro-donation movement through UK retailers. Currently available in The Entertainer toy shop, Founder and Managing Director of The Entertainer, Gary Grant reacted to being Pennies' first retailer to raise "1m donations annually raising over £400k" after being the first to adopt Pennies' contactless option in stores. "In just a few weeks, we have seen our generous customers' donations double which will have a huge impact on local children's hospitals."

At Pennies' Autumn celebration on September 19th in the very appropriately named Fable venue, Alison Hutchinson CBE, CEO of Pennies said: "we're thrilled to be able to expand the micro-donation movement across the UK via retailers' Apps and Apple Pay, and to support many more causes and communities as a result. This announcement changes the pace of feel-good giving in the UK, meaning millions more customers could give their small change a big purpose through retailers like Domino's."

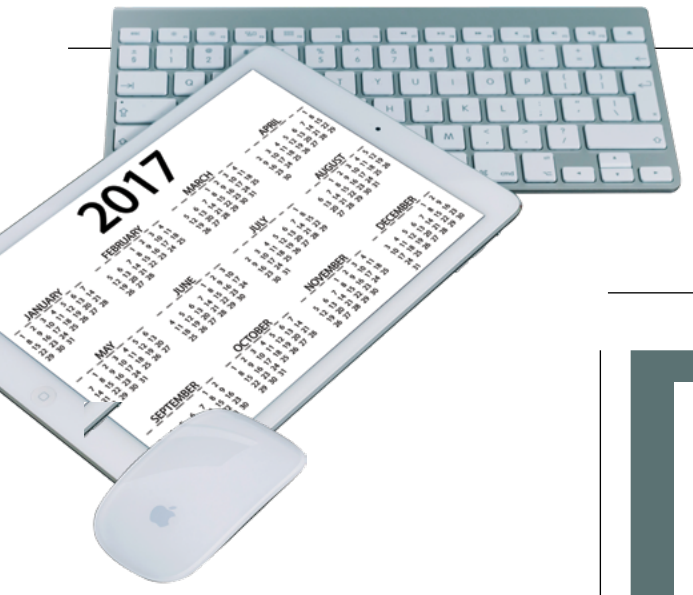
Simon Wallis, Chief Operating Officer at Domino's, who were first to go live with Pennies said:

"As a company dedicated to digital innovation, we're excited to offer our generous customers the opportunity to make a difference with their small change through In-App donations with Pennies. Since partnering with Pennies at their launch in 2010, our pizza fans have already donated millions to charity, including over £1.2M for Teenage Cancer Trust, and this is another Pennies first we're extremely proud of."

By matching the fastest growing mobile wallet, Apple Pay, and contactless card payments with the fastest expanding UK fintech charity, Pennies can currently run a marathon in a month (the distance achieved if all the donations were converted into real pennies and then laid end to end from the start line to the finish line.) Pennies' ultimate goal is to be able to run a marathon in the world record time, that's 2 hours, 2 minutes and 56 seconds to be precise! See http://pennies.org.uk/ to find out more.

THE FINTECH TIMES

Events



30-31 January 2018
Paris Fintech Forum @ Paris

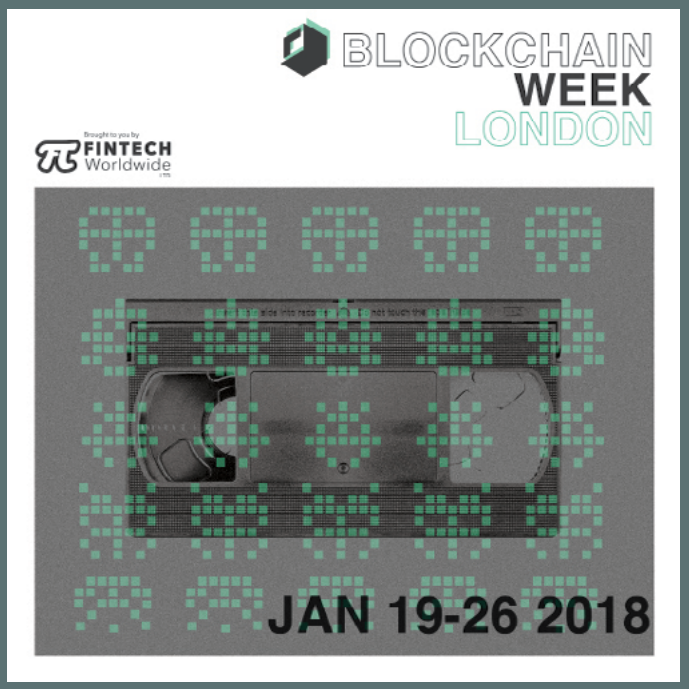
Following the huge success of 2017 edition, Paris Fintech Forum 2018, organized by Altéir with the support of 60+ international partners next January 30th & 31st, aims to gather 2,000+ attendees over 2 days in the very heart of Paris, to listen to 200+ CEO's and c-levels from banks, insurance, telco, regulators and of course fintechs from all continents. Over 150 fintech CEOs from all over the world will be in both panels & interviews and on the stage, dedicated to pitches & showcases. Most of those fintech will also be present in the exhibition hall in one of our 100+ fintech pods.

parisfintechforum.com

6-9 March 2018
Finovate @ London

The event hosted a crowd of over 1,300 attendees at FinovateEurope 2017. Even more are expected in 2018. The audience: decision-makers from across the financial services spectrum including banks, brokerages, card issuers, payment providers, investment companies, insurance providers and everything in between; execs and founders of fintech and general technology companies; VC, corporate, private equity, and angel investors interested in funding fintech companies; leading government, regulator, and industry association representatives focused on the emerging fintech sector.

finovate.com



January 19th - 26th

LONDON BLOCKCHAIN WEEK
London, UK

London Blockchain Week brings together of multiple events focused on blockchain and DLT kicking off with the Hack-The-Block Blockchain Hackathon at Cocoon Network.
The 4th Annual Blockchain London Conference & Expo will take place during London Blockchain Week. This year, the event will span 3 days. The first day will feature an expo of 40-60 of the hottest blockchain companies worldwide. After the expo they'll run their two-day conference exploring Blockchain/DLT across all sectors.

blockchainweek.com

13-15 March 2018
Money 20/20 Asia @ Singapore

Money20/20 Asia will bring together senior representatives from across the ecosystem – from the mighty markets of China and India, global financial hubs of Hong Kong and Singapore, innovation centres of Japan, South Korea and Australia and emergent fintech markets such as Indonesia, Malaysia, Bangladesh, the Philippines and more to connect and create the future of money.

asia.money2020.com

19-20 March 2018
Innovate Finance Global Summit @ London

IFGS 2018 will convene the global fintech community to the fintech capital of the world: London. Taking inspiration from the expansion of fintech globally, the summit will welcome the world's leading lights, from innovators, institutions and investors to policy makers, regulators and international trade bodies.

ifgs.innovatefinance.com

11-12 April 2018
eFintechshow-2018 @ Barcelona

The new decentralised economy.
The consolidation of decentralised technologies such as Blockchain together with the various fintech business models that exist today make the financial sector has to reinvent itself more than ever. A new economy is coming and will forever change the financial services that we know today.
efintechshow.com

6-7 December
Fintech Connect Live @ London

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 startup 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 ecosystem.
fintechconnectlive.com

A fintech Investment bank? Is that even a thing?

We talked to banker and yogi JEFFREY SWEENEY, CEO of US Capital Partners, about leveraging tech across sectors, embracing regulations, and running a bank where almost everyone's a vegetarian…

BIO

NAME: Jeffrey Sweeney
OCCUPATION: Chairman and CEO of US Capital Partners Inc.
BORN: Seattle, WA.
EDUCATION: University of California, Santa Barbara, BSc in Business Economics

CAREER

1979 – 1994
CEO, Machine Works Corporation
2008 – 2014
Co-Managing Partner, Breakwater Investment Management LLC
1997 – Present
Chairman and CEO of US Capital Partners Inc.

FAVOURITE

BOOKS: The Bhagavad Gita - I really love the ancient wisdom principles expounded in the book as well as the examples of the timelessness of the human experience.
Also, the Aubrey-Maturin series by Patrick O'Brian. O'Brian's charmingly flawed yet functional characters live fully and fiercely against the backdrop of the sea and sailing ships, which I love. It is a powerful series that I have enjoyed revisiting often over the years.

RESTAURANT:
Shizen Vegan Sushi Bar in San Francisco - great atmosphere and amazing food!

HOBBIES:
Sailing, yoga, and charitable activities in India providing education for underprivileged girls near Delhi and Kolkata and supporting San Francisco Food Bank.

BUSINESS PHILOSOPHY:
I believe in taking an entrepreneurial approach to everything in life. Having an innovative mindset allows for better problem-solving and driving real market growth, which fintech is doing for the banking sector. It's letting us take the best of traditional banking and repackage it in products and processes that allow greater access to financing by a wider pool of deserving candidates. So it's an exciting time to be in finance.

So … who are you and why did you create US Capital Partners?

I was born in Seattle and moved to Southern California with my family as a child. My father had a middle market aerospace manufacturing company. That business made use of a lot of emerging manufacturing high technology back in the 70s and 80s, which was revolutionising both our family business and that sector at the time.
We were on the cutting edge of manufacturing tech back then. Technology prices were dropping, computing power increasing, and it was an exciting time see the implementation of new metal cutting and financial reporting technology applied to our business. I got to see first-hand how tech could transform an entire sector, and as a young man who started out there in my late teens, it was a formative experience that inspired me to keep my entrepreneurial edge when I eventually became CEO of the family business. I think it has formed my approach to business ever since. Using tech to improve efficiency lets people do more at less cost. It let us get our business to a place where I could sell it off at the height of its success, in the mid-90s.

I took a few years out after that to sail around the South Pacific and get more deeply involved in practicing yoga, which included spending time in India to connect with the South India Ashtanga yoga tradition. It was a great way to enjoy the windfall that came with selling the family business, but it also gave me the time to contemplate what the challenges were running a tech manufacturing company. One thing about that sector is how capital intensive it is. I spent a lot of time being on the client side of the table looking for adequate financing, which was not so easily available then and is less so now when you're on the low to middle market end of the spectrum. Investment banks haven't traditionally catered much to businesses in that category, and my time in manufacturing made me appreciate that and want to do something about it.
So that's really been the inspiration behind starting US Capital Partners. To serve small and lower middle market businesses by providing financing that's typically available only to bigger players. So in 1998, I used some of our family office money from my sale of our business to buy US Capital, which was originally an equipment-leasing company that I have transformed into what it is today – a full-service, technologically innovative private investment bank.

Sounds like quite a jump. How did you manage that?

The short answer? Embracing new technology - fintech - and new approaches to financial regulation - regtech. Applying the best of the latest tech allowed us to take our aerospace manufacturing company to new heights. But we couldn't have done that without also working closely with regulators – which, in aerospace, is an absolute must, because if you make a mistake in finance, people lose money, but in aerospace, they die. Success for us came from being early adopters of tech and being very savvy with sourcing financing, but also having a close relationship with regulators, which enforced quality.

That has been the driver for success for US Capital Partners as well. We strongly believe in working with regulators and regtech to give structure to the process of implementing new financial technology, which can be a bit chaotic in the early stages. Regulations put safeguards in place that protect our investors and clients, so it's essential.
The goal of US Capital, and my mission for the next few years, is to take technology, adapt it early and be able to use it in our business to make it more efficient. We want to serve more people at a lower cost while providing more revenue to share with our stakeholders. The trick to doing that is to be a discerning early adopter of technology - like in the old aerospace days - and to work closely with regulators to make sure that what you're building or implementing is efficient, innovative, and compliant. We're in the business of building better processes, not displacing people's jobs or jeopardizing their wealth. So regulation helps to keep tech innovation responsible and productive – in fintech and elsewhere.

So you've got tech and finance and regulations. What about core values?

Our core value is to do well by doing good. We like to use our capital to create profit while having a positive social impact. Of course, we're not a charity, so our reason to exist is maximising shareholder value. We believe this can be done in a way that benefits everyone involved – including our local communities and economy. And we're doing this by using technology to bring the sophistication of Wall Street financing to serve Main Street needs.
On a personal level, I maintain a lifestyle that's based on generally socially responsible principles. I've been vegetarian for 35 years, and 4 out 5 directors in our company are also vegetarian. We like to be on the right side of social and environmental progress, because it's a sign of having intelligent humanity. If that means choosing between, say, an industrial hog farm and a renewable energy company that both generate 10% profit, we're going to choose the renewable energy firm. In today's world, we are fortunate to have those choices now.

Speaking of progress, what do you think of ICOs? Real opportunity or false hope?

We are implementing ICO blockchain ledgers for our offerings going forward in 2018, because ICOs are very useful when done correctly. We firmly believe, along with the SEC, that they are securities. And the blockchain technology necessary to hold these ICO securities is a great way to hold assets in general, if there is transparency when necessary. For us, it's going to be a big area, because we're very active in private placements of debt and equity as well as venture secondary sales. An ICO or blockchain equity ledger will let us facilitate smaller or larger private secondary offerings at a lesser transaction cost with more security and transparency. Using blockchain to record the ownership rights and subsequent transactions for shares allows for greater efficiency and security. It's miles ahead of what we've got right now in the sector, which is an awkward series of checking and confirming things between multiple parties across multiple platforms and channels. Blockchain will remove that unnecessary back-and-forth, making it cheaper and more secure.
This is why we're fintech, with a capital 'F' and a small 't'. We use tech as a tool to support and grow our core business of finance, and we're not afraid to explore the possibilities that come with it. Because really, we're entrepreneurs at heart, and our ability to deliver the best service as an investment bank comes from us being forward-thinking and dynamic in our approach.
As I like to say, we're twenty years in to our hundred-year plan. We're very much here to stay, and being a fintech firm is going to make that happen for us.