

The Financial Technologist

Q1 •• 2018


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THE DEFINITIVE LIST OF THE **100 MOST INFLUENTIAL FINTECH COMPANIES OF 2018**

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TOBY BABB, CEO,
THE HARRINGTON STARR GROUP

Welcome to the Financial Technologist's first issue of 2018

Harrington Starr's financial technology news, commentary, insight and features.

W

elcome to the first Financial Technologist of 2018. In this edition, we bring you outstanding content from some of the most innovative companies in the sector, a comprehensive salary guide of tech roles in New York and London, interviews, insight and a comprehensive listing of the 100 most influential companies in FinTech for the year ahead.

We've brought together a judging panel of FinTech experts from the London Stock Exchange, Baringa, London & Partners, CBPE Capital, Lloyds Banking Group, Innovate Finance, Seismic Foundry, EY and The Realization Group to bring you a listing of those, big and small, start-up and scaling, who we think will have the biggest influence in the year ahead.

The results and names on the list are indicative of some of the trends we expect to see in the

market in the year ahead. More of this to follow but it is no surprise that we see Challenger Banks, FX, Crypto, Risk and Regulation and Trading Solutions dominate the positions in the top 20 to watch. Working with the panel has been a fascinating process. There were numerous names who re-occurred on numerous occasions and others who truly stood out from the crowd. The FinTech scene is at an extremely interesting stage with a diverse range of problems, opportunities and issues being solved. By working with such a world class panel, we have been able to bring to you some of the brightest in the space and we would be delighted to try and connect as many of you together as we can.

So, what does FinTech's Future hold in 2018?

If I were to pick the six areas that I foresee having the biggest impact on the market, I would say:

1. Crypto
2. Blockchain Technology
3. AI
4. Digital
5. Security
6. Data Science

"Are there concerns to be had over the security surrounding Blockchain or are we looking at the answer to FS security?"

Whilst not in order, the above listing certainly presents the FinTech "heat map" that we have seen in our client base. Starting with Crypto, whether a friend or foe of what is happening, we seem no closer to any resolute authority telling us that it is either the future of finance or a bubble set to burst. By the end of this year we should be in a far better position to tell. A Bitcoin bombshell keeps promising to emerge but numbers continue to rise at extraordinary rates. Will we draw up ring-side seats to see an exponential rise continue or will it be popcorn as we watch the debris being picked? No two "experts" hold the same view. Equally strong arguments exist on both sides of the coin. In nearly twenty years in the FS technology space, rarely have I seen a more divisive subject for the authorities in the sector.

Which brings us on to Blockchain. Some say it simply doesn't work at the scale it needs to. Others say that within five years the technology will underpin the entire economy. The questions remain; are there concerns to be had over the security surrounding the technology or are we looking at the answer to FS security? The technology has evolved at an incredible pace over recent years with more and more companies investing time, talent and budget to gaining the advantage. Our belief is that this

will continue aggressively throughout 2018 with investment bringing the technology increasingly mainstream as the year continues.

Artificial Intelligence, Chatbots, and Machine Learning will continue to thrive. As cost reduction continues to appear high on agendas throughout board rooms, strongly aligned to customer experience and user design, we will see AI continue to be investigated. Breakthroughs and developments are occurring apace and the future of finance certainly looks set to lean towards the technology. Automation sees an opportunity to reduce the burden on finance professionals and continue the journey of improvement to efficiency and progression. We expect numerous mandates to focus on AI throughout 2018.

Digital solutions are here to stay in the financial services industry. We'll see the rise of Agile in the space with a lean to micro services and micro applications allowing faster change with minimal impact on existing deployments and, critically with data as the new oil, increased security. Digital transformation is so commonplace that it seems almost old hat to name it as one of the trends for the upcoming year. That said, the constant development

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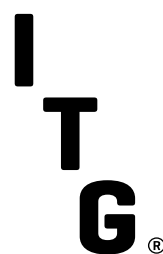


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"There is an overwhelming need for tech advancement and investment in the FS sector and we believe that this will continue to develop. We will be adding 50% to our global headcount with this in mind in the year ahead. Exciting times!"

• •

in the space means that both staffing and tech requirements will be even higher in the year ahead, creating a potential bottle neck with serious skills shortages and heavy competition from outside the sector for the best talent.

Security is another area where skills demand is far, far higher than supply. LinkedIn suggested at their recent talent intelligence summit in London that there are over six million live and unfilled security jobs globally at the moment. An incredible number. Security is at the very forefront of the FinTech revolution. Later in this issue we will see Volopa write about the importance of security in their operation. Financial Technology and Security are joined inextricably at the hip and the best talent needs to be attracted and trained in the industry. If there is one HOT skill that we will see demand for in 2018, Security will hold the key.

If Security is THE skill to have, Data Science isn't very far behind. Another heavily under-skilled area with an ever-increasing demand for talent, it represents an outstanding area to upskill in. The surge in data being created worldwide is astonishing with the retail sector leading the world in its adoption of data science. The Financial Services sector has recognised the opportunity but lagged behind in its adoption. 2018 looks set to be the year that this changes and our data science desk will see significant traction.

Of course, risk and regulation will be on the menu. We will see an increase in sales requirements from vendor technology requirements and change and

transformation will again swell in demand as more companies break through and more projects and programmes are invested in to continue the adoption of the aforementioned technologies. It does look like an incredibly exciting year for the sector. As we will see later in this issue, there is a speed of innovation and a wave of exceptional companies coming through. It could become one of the breakthrough years for FinTech.

We do, however, face the macro-economic situation across the globe. Europe remains a huge question mark. Like Crypto, for every positive argument there is an equally plausible negative. Quite frankly no-one knows, not least the Government. Economic forecasts have been contradictory and generally well wide of the mark. In the US, despite the natural aversion to the Trump government and the predictions of gloom and decline, the economic statistics have been positive and a strong labour market is showing no signs of slowing. The message for me is that there has been a lot of negativity in recent years with a swell of doom mongering. Despite that, the FinTech space has continued to thrive. There is an overwhelming need for tech advancement and investment in the FS sector and we believe that this will continue to develop. We will be adding 50% to our global headcount with this in mind in the year ahead. Exciting times!

At Harrington Starr, we have a number of key developments that we are looking forward to launching in 2018. We start in January with two major events. One of the world's leading authors, a top ten of all time TED speaker and business thinker, Dan

FinTech 2018 what next?



When: Thursday, 25th January 2018
5.30 - 9 pm

Where: Zopa, 1st Floor, Cottons Centre,
47-49 Tooley St, London SE1 2QG

We would like to invite you to the first in a series of events to be held during 2018. Our panel will discuss the overall Fintech landscape for the forthcoming year and will examine the trends, opportunities and challenges that lie ahead.

On the night we will be announcing the winners of the Financial Technologist Magazine's list of the Most Influential Companies in FinTech 2018, celebrating the people who are providing the tech solutions that matter.

Our discussion will be hosted by **Mike O'Hara** of **The Realization Group** with panelists including:

- **Ranzie Anthony** - Founder & Chief Creative Officer, **Athlon**
- **Sophie Bialaszewski** - Head of Innovation Culture, **Lloyds Banking Group**
- **Cathy Lyall** - Co-Founder, **Seismic Foundry**
- **Amrit Kang** - Account Manager, Business Growth Programme, **London & Partners**

FinTech Influencers is an exclusive, invitation only, group brought together with the aim of identifying how technology can tackle some of the biggest problems that the financial services community faces.

Be part of the conversation.

Please register through the EventBrite link:

<https://www.eventbrite.com/e/fintech-influencers-fintech-2018-what-next-registration-41210334219?aff=HarringtonStarr>



"If Security is THE skill to have, Data Science isn't very far behind. Another heavily under-skilled area with an ever-increasing demand for talent, it represents an outstanding area to upskill in"

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Pink, will join us at Vintners Place along with over 200 FinTech leaders for the first FS Breakfast of 2018. The evening beforehand we will celebrate the launch of the Definitive List of the Most Influential FinTech Companies of 2018 at the first of three FinTech Influencers meetings of the year. We will debate what the market holds in 2018 and provide a networking opportunity for the sector's most influential leaders at the Zopa HQ near London Bridge.

We'll continue to develop our digital video interview platform and are investing in new technology to provide a level of customer service unseen anywhere else in the industry. As mentioned, we are looking to grow Global Headcount by over 50% to react to increased demand and will be expanding our North American business to the West Coast whilst also increasing our focus on Asia. Our goal has been to create a FinTech community that allows people to grow their brands, networks and teams. We will continue to invest heavily in this in the year ahead ensuring the value you get from Harrington Starr continues to extend beyond just bums on seats.

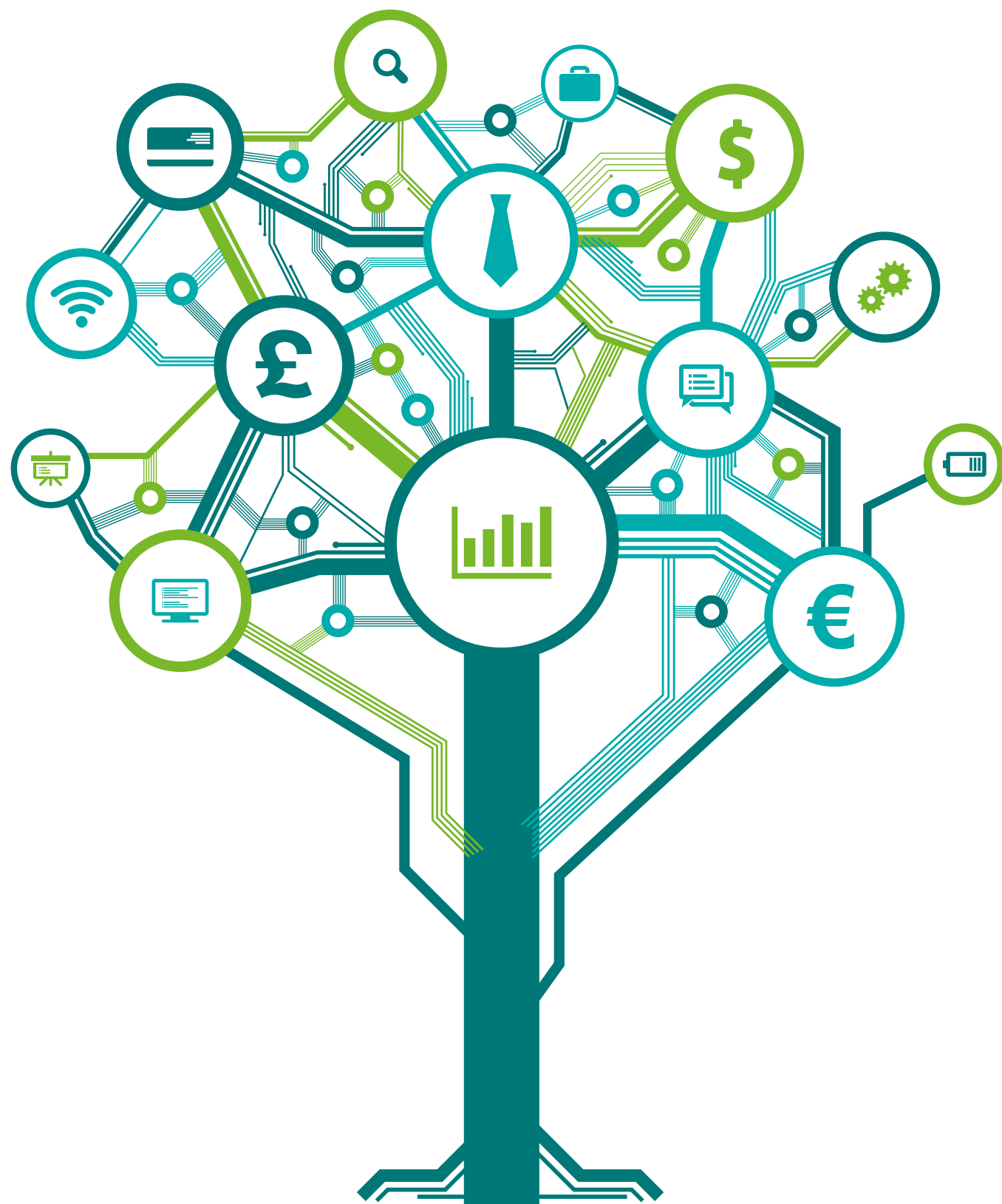
The recruitment industry has long been touted as "ripe for disruption." Whilst acknowledging that times are changing, we firmly believe in the value of the industry when done at its best. The launch of our own Faster, Better, Stronger Programme is designed to "run with the machines" ensuring we use both tech and human improvement to provide a faster, better recruitment service built on the foundation of stronger relationships. Kaizen, the art of continuous improvement, is a founding value of our business and woven into our DNA. We are incredibly excited about

our plans for the year ahead and look forward to working with you in 2018.

We hope that you enjoy the mixture of content that we have put together for you in the coming pages. If there is anything you feel would add real value, please do not hesitate to contact me at toby. babb@harringtonstarr.com. The whole point of the magazine is to ensure that we give you content that adds real value. Your feedback is important to us.

Good luck in the year ahead and I wish you a profitable and successful 2018.

Toby



RegTech - barking up the wrong tree?

By Benedict Nielsen
Co-founder,
FINBOURNE Technology



Huge amounts of money are being spent on bolt-on regulatory technology. Why don't we embrace the capabilities of our digital infrastructure and allow the data required by regulation to be gathered as part of the core business process? I worry that a lot of the RegTech industry is just barking up the wrong tree.

RegTech is expensive

Bloomberg says that financial institutions spend US\$70bn globally on compliance. Alpha FMC said that Asset Managers spend 21-30% of their change budgets on regulatory projects. Can it be any surprise that, according to KPMG, VC funds in H1 2017 invested US\$591mm across 60 deals in Europe alone. The FinTech Times says that "2017 will be the year of RegTech".

No kidding.

When financial institutions spend \$70bn on being compliant that is \$70bn of your money that is not being spent on improving the return of your pension fund.

RegTech isn't the solution

When I worked on the City's bond trading floors it dismayed me that it was acceptable to view regulatory adherence as a bolt-on module that a financial institution would buy in addition to running their business. I remain a huge believer in the financial services industry, but some things have to change. The ability to help that change is one of the reasons why I co-founded FINBOURNE.

For example, let's take a transaction which needs to be amended. The historical approach was to get middle office to make the change. This means the history is gone and the auditor/Head of Trading cannot see what it looked like when it was first executed.

The reaction from the RegTech and indeed the business community has been to add new layers of complexity around approval processes for trade amends, or to regularly copy the data into yet another data warehouse. At FINBOURNE, we believe this is structurally the wrong approach to the problem. A system where every action or event on this trade is kept would mean that you can always reproduce what it looked like at any point in time. >

Juggling isn't easy

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> Compliance can't be a bolt-on

A lot of time and effort is being spent searching for, collating and cleaning up data for regulatory submissions. The process is heavily manual and, by its very nature, reactive. If OTC trade reporting under MiFID 2 requires 81 data fields on all transactions, why not make it easy to add them at the earliest opportunity rather than having to do an expensive refit to add these specific fields. When "field 82" comes along next year, do you really want yet another expensive system change? Proactively capture your data in an efficient way at the time it becomes available and collect all your data in the highest fidelity.

And do it as part of your normal business process, using systems that never forget.

About three years ago when I ran Fixed Income Syndicate and Capital Markets for an Investment Bank, the FCA launched an industry wide investigation focusing on the allocation procedures for debt and equity issues. They asked all leading investment banks to provide a list of underwritten deals in the last seven years. Now, this is a big list for even the smaller banks who would routinely be doing several deals a day of varying sizes, currencies, structures and investor types. Luckily, in most houses one of the junior analysts would have been keeping a spreadsheet of the deal count (mainly used to impress senior management and potential clients).

But the FCA also wanted to know to whom the bonds were allocated, client type, in what size, at what price, and, crucially, why. In a "hot" deal why were certain clients allocated less and some more? (which is a really interesting question but a subject for another blog!).

Like most across the Street, we would have had to hire outside consultants and lawyers to go through our records looking for the data. In the end, the authorities had to cut back on their demands as no one had the ability to get the data with sufficient fidelity and in a reasonable cost and time frame. The market had just forgotten.

The one thing that we can confidently predict is that the level of demanded transparency placed on the financial services is only going to increase. The only way to be prepared for whatever the regulators, the clients or business opportunities require is to have the infrastructure to be able to keep accurate and clean data.

Let's Disrupt RegTech!

The RegTech companies we are inspired by are concentrating on systems to improve other areas such as Compliance workflow, document tracking, AML, identity and KYC.

However, the many RegTech solutions that merely automate previously manual processes are missing a key point. Modern technology offers a far more effective way of solving the problem, including using AI and Machine Learning. But these are dependent on having complete and comprehensive data. This is what the new wave of digital financial infrastructure should be enabling.

Modern digital infrastructure can,

- be the single source of truth for the front- and middle-office

- be immutable, i.e. no data is ever deleted

- be open - access to the data done using open APIs, easy integration with regulators and even other vendor and in-house systems

- be fully bi-temporal - combined with the immutability this means that it is always possible to go back in time and recreate the data as it was at any point in the past

FINBOURNE's LUSID™ technology has embarked on the journey to answer these problems. We will keep all the data the way it used to look like and we keep all the data the way it currently looks. But does that make us a RegTech company? I don't think so. I hope we are part of the wider evolution toward a better set of systemic digital infrastructure that, as a natural by-product, achieves the highest levels of compliance without huge additional cost for the customer.

I'd be interested to hear your experiences of the above so please don't hesitate to email me.
benedict.nielsen@finbourne.com

I referred to following:

- Alpha FMC report <http://www.actuarialpost.co.uk/article/compliance-costs-for-asset-managers-to-rise-finds-alpha-fmc-8274.htm>
- KPMG "Pulse of FinTech Q2 2017"
- The FinTech Times, "Tech to turn Reg" July-August 2017
- FCA Investment and Corporate Banking Market Study 2016



Improving your software development process

By Ehab Roufail
Harrington Starr Technology Consulting

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ome would not be surprised to hear that even as a developer I was always looking to do the least amount possible to deliver the goal of what I was working on – ie. I was always looking at ways to maximise my effort by trying my best not to do the same thing twice and would pull my hair out trying to see if I could automate what I was doing.

As a manager this deep sense has grown into a desire to incorporate some of the core practices below that I feel epitomize a good development team and should be in a Technology Manager's arsenal.

- Refactoring as you develop
- Drive for automated regression testing
- Automate your builds – Continuous Integration
- Industrialise your build process
- Agile Development Practices

These of course are not goals in and of themselves as they deliver monetary and time efficiencies due to:

- Lower development costs
- Lower maintenance costs
- Faster time to market
- Higher quality code
- The deliverable is more adaptable to changes that may arise

Refactoring as you develop

"Leave things better than you found them" is the old adage. In code we instinctively know that without

refactoring, the design of the program will decay over time and that poorly designed code usually takes more code and time to get it to do the same things.

It's often the case that on returning to code that we or others had previously written it could take a while to understand the functional design. One way of helping that is to refactor the code where needed to help familiarise ourselves with the code.

As managers we should be aware and genuinely concerned with quality as the lack of it usually comes back to bite us sooner than we think. We should not be obsessed with refactoring but should encourage it in our teams as on-going practice as they work.

Drive for Automated Regression Testing

We've all experienced it when a fix for something on our coding projects ends up breaking another part of the project. Automated regression testing is our insurance policy against this. As managers, if we are inheriting an existing project that lacks this insurance policy, we should require the development of an automation suite of tests that start off by testing our 'egg on face' key functionalities that we build on over time. If we are starting off on a new project that it should we should encourage that each business functional story should have automated tests that test their acceptance criteria. I know the above is a rather simplistic view of testing but this blog is only meant to be a summary of the key processes I think improve a software development team.

Having this approach to testing means that; developers spend less time bug fixing especially into the late hours of the night after a major release, managers push out better quality products that have had their risks identified earlier with less screaming customers, testers end up testing things once and not spending the majority of their time and company money on manual drudge work.

There are many tools and frameworks out there now to enable this to happen such as:

- Selenium
- Canoo WebTest
- JUnitPerf
- JMeter
- JBehave
- Cucumber
- Concordion
- FitNesse
- HttpUnit

And many more... >

> Automated Builds

Continuous Integration is the practice of automatically triggering a code build and running of unit and regression tests whenever a change is made to the code base. This provides instant feedback to developers and helps to keep the code base always close to a 'ready to release' state. Build problems are caught earlier, either by the builds failing or the tests.

Most development teams don't automate their release process as it seems such a huge task to do and lack at times their managers support to do it. I would advise from experience that this is such a huge time saving exercise and is worth every penny. At one organisation that I pushed for the implementation of this, our build process to go into an environment could take upwards of a week. After implementing this the build took a few minutes!

This is now a normal and fundamental practice amongst many agile development teams now and reaps benefits such as; accelerated code release time, improved build quality, elimination of dependency on key personnel etc...

A good book for this is Continuous Integration – Steve Matyas and Andrew Glover

Industrialise Build Process

I've separated this from the above Continuous Integration as Continuous Delivery (Jez Humble & David Farley book), an Industrialised Build Process, deals more holistically with the build, deploy, test and release process. For me it is reaching that peaceful state of knowing that you can rebuild any server in your development or release environments at the click of a button because your server configuration scripts and tests, in version control, are being kept up to date regularly.

Benefits are that our development teams and their processes are so streamlined that there are no pieces of infrastructure lying around whose configuration is unknown or hidden in someone's head that has probably left the organisation! When problems like this occur, with no configuration scripts, it can cause significant downtime with added stress and effort to fix.

Added benefit is knowing that your tests are consistently testing against the same configuration of environment as the same configuration scripts have created them. If tests pass in the Test environment they should pass in Pre-Production, UAT and Production, making for a smoother deployment and maintenance process to live.

Agile Development Practices

A research report published by Forrester in May 2010 showed that agile is becoming mainstream. A total of 35 percent of surveyed organizations described their primary development method as agile. Moreover, 11 percent said Scrum was the most popular agile development approach. In another survey, Forrester examined the level of agile adoption and found that 39 percent of the surveyed organizations considered their implementation mature.

I'm not going to argue the pro's and cons of Agile vs Waterfall here but suffice it to say that for most, if not all projects, I have come across agile development practices have been successful in their delivery. The greatest ideological differences for me are that Waterfall assumes that it is possible to have a near perfect understanding of the requirements before you begin while Agile embraces the reality that things change.

So with Agile small teams work together with the real stakeholders to define quick prototypes or proofs of concept to explain the problem to be solved. The team then defines the requirements with the stakeholder for the whole project at hand but then agree to bite of a small working deliverable set of features in a short cycle – iteration. Work on this

iteration begins and at the end the stakeholder is shown the results and a further iteration is discussed, according to the current requirements, to continue to deliver the whole with a subsequent iteration.

With Agile customer satisfaction is the primary measure of success rather than performance to plan but there is still a plan and planning. This is split out over the Release Planning, Iteration planning and daily stand ups. This makes for a high-speed development schedule that can only succeed when coupled with the automated process discussed above.

There are clear processes in Agile for it to work and succeed, for example, users must review and approve changes before they are merged into the baseline code, developers must review each other's code and code must be unit tested and have good test coverage. These process though give greater freedom to development within a light-handed enforcement framework that is inductive of success.

Release the Kraken!

(or as I like to say, "release the rays")

By Gav Patel
Harrington Starr

The Kraken is a legendary sea monster of giant size. In the films Clash of the Titans (1981 and the 2010 remake) Zeus orders his men to unleash the legendary squid like sea monster by shouting "release the Kraken!". The Kraken then terrorises the city of Joppa whose princess is Andromeda, and is chained to a cliff as a sacrifice to the Kraken. The Kraken in its attempt to get to the princess tears down large parts of the city in the process.*

In a waterfall development framework the release is normally a big bang approach to software releases, the whole thing is released out live across systems and departments on a predetermined date. A substantial amount of planning goes into this.

After all the requirements, development, changes, testing and user testing – the date arrives and it's time to announce "Release the kraken!". For a release of this, it's near impossible to be without issues. There will inevitably be dependencies, legacy code or systems forgotten about, user behaviour not thought of. A week later there will be son of Kraken to release, a hot fix, but just as large a release with probably just as much risk.

Little and Often

In an Agile methodology we release often, if possible at the end of each sprint. It doesn't have to be visible to users, it can be out there, but hidden. We build on top of this, like a Lego model, but adding value for the customer at each stage.

The first iPhone didn't have cut and paste, no front camera, no voice recording, no video recording, looking back it could be described as unusable by today's technology, BUT you could make calls and send text messages. Upon each subsequent hardware and software release more functionality and features were added.

This reduces time to market, and ensures customers are using the product, giving early feedback too. Our biggest efficiency gains have been seen where CI and CD is implemented. Amazon used to release every 11.9 seconds and this was in 2013!

This also gives the benefit of having more releases quicker, so hotfixes can be deployed without a fear of risking a knock-on effect elsewhere.

To be able to release continually we would recommend doing the following:

1. Ensure you have a good branching strategy

2. Version control everything (Content, Databases and Configuration)

3. Ensure the team is able to deliver on its commitments – plan accordingly

4. Automate as much as possible, from builds, to testing to deployment – this will ensure consistency

5. Pre-production environments and data should be as close a match to the real thing

You are now in pipeline, things will go out often, like a conveyor belt so this will require a mind shift in all parties, especially stakeholders, but once they see consistent useable software being delivered you will have their buy in.

To me releases should be small and useable without destroying everything around them. When releasing into the wild, instead of "Release the Kraken", I say "Release the Rays!" (Rays are smaller, elegant, fast and beautiful to watch).

*No Krakens, Princesses, Cities or Rays were harmed in the research of this article.





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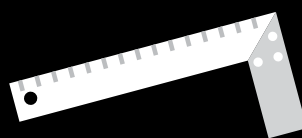
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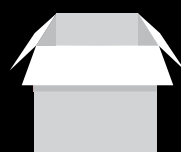
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Open APIs: who's going to profit?

By Tom Bandy, head of technology, Athlon

In today's interconnected world, we're used to having more choices, thanks to the integration between systems, even if we don't realise it's happening. Our everyday tasks are getting smarter and more connected, so why not our banking?

Decisions, decisions, decisions

Let's take a closer look at how the new open banking API requirements will boost choice for consumers, and standardisation across banks, benefitting FinTech startups as well as the banks themselves.

As consumers of digital products and services, we take choice for granted. Surfing the internet? We can choose from a range of browsers, each with its own features and flaws. Updating social media? It's up to us which of the many networks we use to share our information. Shooting a video of a birthday party? We might use our phone's native camera app, or one of the many others we can download from an app store.

In other words, we're free to choose the solution that best fits the task, the one we find most helpful, or the one that makes us feel most at home. We might even choose one that has a specific, unique feature.

So why doesn't the same apply to the way we interact with our banks?

"Why can't we choose the banking solution that best fits the task, or the one that makes us feel most at home?"

Late developers

Banks are traditionally large, cumbersome organisations where, when innovation happens, it stays in a closed loop within the parent company. Partly due to compliance, partly due to regulation and to some extent the need to keep ahead of the competition, banks keep their cards close to their chests.



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> They certainly don't like to share customer information with each other or with other industries, but steps are being taken to change this. As we've seen with credit cards, chip and pin technology, or contactless payments, new technologies eventually becomes ubiquitous across the industry.

However, banks are forced to adopt these innovations to keep up with the pack. How they will respond to technology as a way simply to share customer information or payment methods remains to be seen.

Taking the rough with the smooth

We're used to interacting with our banks online, whether it's via a desktop browser, mobile site or bespoke mobile app, giving the impression of choice. But all these interactions are delivered by the bank's own team, meaning our choices are more limited than they might first appear.

What if these online services don't provide our account information in the right way, or if we don't like the features provided? A few years ago my wife struggled with a personal banking website. It suffered from a poor UI and slow loading speeds, often hanging mid-transaction. Clearly the bank wasn't investing enough in their online property, but we enjoyed the ethical financial products and good interest rates. As consumers, we couldn't separate the good from the bad: if we wanted the advantages, we were stuck with bad as well.

What if we could have chosen the bank for the values we like, but used another service to interact with our bank accounts, mortgage and savings in a way that we enjoy? Wouldn't that be a better experience?

Opening up the industry

In recent years, various governments and organisations have been pushing banks to accept third-party services integrating with their systems in a standardised way. This would require banks to provide a set of APIs (Application Programming Interfaces) to give structure and consistency to the way account information and other products are fetched and manipulated by the third party system. As a result, external companies would start making well-built apps and online

services that use these APIs to interact with any given bank.

For consumers, this would mean the ability to keep the beneficial parts of a particular bank but sidestep the bad by using the third-party banking app we prefer. Not only could this app offer features traditionally provided by the bank, but also new ones, such as showing mortgage rates from competing banks, or projections based on markets and rival bank data.

Savings for all

The banks themselves might be reluctant to adopt these measures, not seeing a financial benefit to opening up their systems to third parties. However, they could very well reap benefits.

As well as dashboard-style information for customers via third party apps and websites, the ability to allow third parties to process payments would be a game-changer.

Currently, making a payment on a website such as Amazon leads to a series of intermediary steps, each with their own charges. If the customer could authorise Amazon to connect and accept payment directly with their bank account, the process would be both simpler and cheaper.

The revolution is coming

This is an exciting time for banking, ushering in a new wave of FinTech start-ups. These companies will offer us insights into our financial data, helping us choose better banking products. Open banking also promises to change the way we pay for goods and services online, and maybe even how we get paid. Key to all of this, of course, is consumer trust: methods of authorising third parties to access our money will have to be bulletproof. But opening up banking to third party services is just the start — many other industries including energy, telecoms, logistics and health could benefit from open APIs, helping customers choose how we interact with these services.

How do you think banking will be shaped by the new open API's? Let us know your thoughts.



Setting up in Europe is a hard thing to do

By Benedetta Arese Lucini, co-founder and CEO, Oval Money

I spent the beginning of my start-up career in the United States and it was clear to see that for every new company the total addressable market was over 320 million people. Even though many can argue that a New Yorker and a Texan have little in common, the currency, language and general culture of the market is uniform across state borders. And this allows companies to scale with incredible ease across the country.

When I moved back to Europe, it was clear that the way in which start-ups had to think of the addressable market and the cost of expansion was very different. I started working for Uber at the start of 2013, firstly opening Milan, and then expanding my role to the wider Italian market.

I was very surprised to see that for such a local product, the regulation meant addressing expansion decisions differently, even between cities, let alone countries. And whilst Europe has tried to deconstruct borders, economically and monetarily, it is very clear that for businesses who want to grow across the whole continent, there are still some real barriers to overcome. The most obvious of these being language, but cultural barriers exist too.

When my three co-founders and I conceived of Oval Money, we decided that the company would be European from the start. Oval Money is a start-up that aims to bring education, fairness and inclusion to the financial sector by creating a platform, which connects users (potential investors) with financial products and service providers that offer them savings and investment solutions. Through its machine learning technology, Oval Money can spur a positive saving pattern from its users based on saving commands that are linked to common user behaviours, empowering its current users to save £130 per month on average.

Deciding to be present in multiple markets was definitely a bold move, considering that start-ups generally prove their model in one niche market and then expand.

We decided, instead, to offer the app across all countries with EUR and GBP currencies, and language support for Italian and English to begin with. Initially, this was a very demanding move, but we think that it paid off on a number of levels.

First, we set up Oval Money as a UK holding company with an Italian subsidiary. After careful study, we realised that the UK's Financial Conduct Authority (FCA) is very open to new innovations and so we wanted to be

regulated by them. Therefore, we opened a UK company and participated in the FCA's first regulatory sandbox. Establishing Oval Money as a European company allowed us to choose the best regulator for our needs, also taking advantage of the European Passporting regime when it comes to certain financial authorisations that can be extended to operate in multiple markets.

Second, we decided to open a subsidiary in Italy, with

the benefit of being able to participate in local start-up competitions and access government sponsored funding to help in the initial seed stage of the company. Also, given that the founding team is Italian, we had a very good network in the country, which allowed us to attract great local press, very renowned advisors, and the best staff talent.

Third, following up on the talent, it is very clear that one of the largest hurdles in setting up a successful business is attracting the most competent individuals. If we had to limit the scope of recruiting to the city we were based in, this was not going to work. We decided to have a policy that first identified candidates based on their skills and fit within the Oval Money team culture, and then consider the location or, if necessary, a possible relocation. We now have an international team working across multiple cities and have created processes that allow for smooth workflow and collaboration regardless of location. We also allow our employees to travel to Torino, the office with the largest team, so that we make sure some quality face to face time is always inserted in the work schedule.

Finally, launching in multiple markets allows you to better understand and segment customers. The exercise of finding the persona of your product when you launch somewhere and then finding out, maybe too late, that the product fits a different user group, when expanding, can be very hard. Having two user groups with different cultural norms allows us to be flexible with the messages, and to understand at a design level how to create a product that will satisfy the needs of users in a number of countries, straight away.

If I had to give advice to companies considering expansion, I would say, remember that, for business, a united Europe does not exist, so if you want to be European do it early and test as you grow to ensure that you have a product that can align easily with the bigger market potential. This means greater effort and cost at the beginning but fewer major setbacks makes it all worthwhile when the company arrives at its critical expansion phase in the future.





Accelerating deep learning through cost-effective infrastructure

By Stef Weegels, Business Development Director, Verne Global

Exploiting deep learning opportunities in finance could turn out to be very costly, but firms could get better results by tapping specialist data centers.

Sound and effective training lies at the heart of any successful business venture. To be sustainable and cost-efficient in the long run, companies need the right systems and processes in place to recruit the best staff and train them up so that they meet their objectives and remain motivated.

The successful evolution of deep learning in the financial services sector rests on a similar logic - machines must be connected to the right infrastructure and properly trained if they are to bring tangible benefits to businesses.

While this is not a technology that will work for every process, there is no shortage of potential use cases for deep learning. On the trading desk, for example, a machine could be trained to determine the best way of slicing an order to achieve optimal execution, resulting in greater preservation of Alpha. Or in dealing with complex regulations, deep learning might be deployed to sift through vast volumes of data and spot anomalies or discrepancies that require investigation, pre-empting costly penalties for non-compliance, for example.

In some cases, work has already begun on developing such tools, however these are still early days and although deep learning in finance is becoming more widespread, particularly in quantitative finance, it remains in the nascent phase. The jump from a hypothetical idea to a living reality is a big one, and will require market participants to be imaginative, innovative and resourceful in training their machines.

The toughest challenge is that training a machine to carry out resource-intensive tasks requires a volume of data that is many times greater than the industry is accustomed to dealing with. It also demands untold levels of compute power, not often to be found in a typical bank or investment firm, and

prohibitively expensive in traditional financial hubs like New York, London and Frankfurt, where power costs are high, and only getting higher.

Housing this volume of data and compute power internally is unlikely to be practical for the majority of financial institutions, so external storage facilities would need to be considered. Many firms already use data centers to co-locate their trading engines close to exchange matching engines and thereby reduce latency, but space in such data centers tends to be both limited and costly.

Crucially, the data and infrastructure needed to support deep learning applications do not need to be stored in close proximity to the firm using them - as long as the access is easy and the basic site-selection criteria are ticked, they can be located pretty much anywhere. In this context, there is a strong case to be made for low-cost data centers in locations such as Iceland for example - where there is an abundance of green power - as a means of bringing these ambitious new concepts to market. Data centers in Iceland are able to pass on the considerable savings (approx. 70%) of utilising renewable energy, free-cooling of servers and long-term price contracts. This is why Iceland and other Nordic countries are seeing an increase in the amount of intensive compute applications moving northwards.

"Machines must be connected to the right infrastructure and properly trained if they are to bring tangible benefits to businesses."

Much of this does, inevitably, come down to cost. In the current environment, when all market participants are battling with the rising costs of doing business, few firms are lucky enough to have unlimited IT budgets with which to test and develop new ideas. But if firms can find the most cost-effective infrastructure that allows them to begin training systems, then it may be that the evolution of deep learning will accelerate at a faster pace and help to solve some of the most pressing market and regulatory challenges with which firms are currently contending.

Let the data flow

Data is becoming increasingly important in the new economy and has been called the world's most valuable resource. So how can we help financial services firms unlock this value?

By Mike O'Hara, The Realization Group
and George Andreadis, TreoTrade

Legacy systems

Over the last two decades or so, as banks and asset managers have tried to put systems and processes in place to build business value, their legacy technologies have often been a limiting factor, in particular because of their siloed approach to data.

For example, a bank might want to develop an application for interrogating cross-asset positions in a portfolio, to calculate net asset value and better manage risk. However, the bank might find that the information needed is not stored in one central location but instead is held by different parts of the organisation, in different systems, and in different formats.

This is a common situation in our industry. Legacy technologies will have been built up over time in order to accommodate siloed business needs. For example, a derivatives team will have evolved with different needs to a cash equities unit and their systems will have been developed accordingly.

This of course results in ongoing difficulties when trying to develop any new applications that require data from more than one of these siloed systems.

Open source

In contrast, outside the financial services sector, Web-scale firms such as Google, Amazon and Alibaba have prioritised data and designed and built processes to interrogate that information efficiently in open source databases such as Postgres, to the huge benefit of their businesses. And instead of tying up and licensing the

technology for huge sums, they have encouraged open source communities, where anyone can develop improvements.

Given the situation that financial institutions face today with their legacy, closed systems and their data silos, how can they move towards this ideal?

A bottom up approach

The key to migrating from legacy systems that were created around silos, to new architectures that are built around data, is to take a bottom-up rather than a top-down approach. Basically, this means tackling one silo and one business function at a time, rather than trying to go for a 'big bang' type approach.

The first step is to understand all the information that is required for downstream processing, both in the existing architecture and for the new application to be built. Where does the data in the legacy system come from and where it is stored? How does that system work? How is the data structured? How can it be pulled out? Does the data need to be scraped or can it be pushed out somehow?

The next step is to store the requisite data in an open source database (such as Postgres), so that it can be formatted, augmented and indexed with appropriate metadata, enabling it to be accessed via standardised APIs.

The power of the API

The standardised, or RESTful (Representational State Transfer) API is a key aspect to all of this, as it provides interoperability between the legacy systems, the open database and the new components to be built. In essence, it provides the

"The key here is to demonstrate value, so that there is proper commitment to that change from higher levels within the organisation"

'glue' between the old and new systems, standardising the way the two systems work together.

Of course, APIs (Application Programming Interfaces) are nothing new. They have been around in some shape or form for as long as computer applications have needed to communicate with each other. But today, with the open source nature of collaboration, we are seeing APIs become more standardised and therefore more efficient.

Taking a standardised API-based approach means that the migration challenge can be tackled one silo at a time. Once you know what data is needed, where it comes from and where it needs to go, you can use the same API to extract it and feed it into a new system. Of course, the most difficult part of the challenge is not actually creating the API, but understanding where all the necessary data is currently held internally and where it is used by existing downstream systems.

However, by breaking down individual siloes one at a time, you can extract the necessary information from those legacy systems without switching them off, especially as they may still need to be used by other parts of the organisation. This means you can address one business function at a time without taking down the whole system for a 'big bang' type migration.

Another benefit of this API-based approach is that a proof of concept can be delivered quickly, to demonstrate that there is a business case for making changes in one specific area before being rolled out to other business functions.

What about top down?

So, what needs to happen from 'top down' perspective, i.e. at the business level, the management level and the cultural level within a firm, to enable this approach to be taken?

In short, you need the buy-in of senior management, which, in terms of silos, often means the people looking after those legacy systems. It's all very well if your bottom-up approach works technically and you have something up and running, but if there's no buy-in from the senior IT people, or the group IT people in that particular silo, then your project could be dead in the water. The key here is to demonstrate value, so that there is proper commitment to that change from higher levels within the organisation.

In conclusion, by using an open API-based approach, financial services firms can not only extract valuable insight from the data within their current legacy systems, but can also migrate more easily to platforms architected on next generation technologies. By doing this, they will be well placed to meet the business challenges of the future.



By Ian Grieves, Director, Product Management, Vela

Clever beats fast in the trading race

The quest for low latency – speed – has been the name of the game in trading over the last decade, resulting, for example, in the increased demand for expensive co-location sites. But trading ingenuity today demands more than speed. While low latency remains a key factor, today's smart trading firms have more complex goals. One is achieving deterministic low latency, i.e., speed that can be relied upon. But just as important, if not more, is the ability to access multiple venues, multiple asset classes and via multiple counterparties, with more effective risk management providing better use of capital.

Speed and Connectivity

In the past, speed and connectivity were ends in themselves that enabled circumstantial and opportunistic trading for a select group of market participants. Today however, these two factors have become essential components for a much wider set of activities, across both the buy side and the sell side. The global electronic trading landscape has become a much more complex ecosystem in the last few years, so trading ingenuity means knowing how to capitalize on this fast, global access in order to drive new areas of profitability, for example, by diversifying into new asset classes, venues, and geographies. Simply developing an incrementally superior new algorithm or gaining a marginal improvement in raw speed won't cut it anymore, giving short-term gains at most.

From the sell-side perspective, the ingenuity is in the tools and services that banks and brokers are providing around that connectivity. This adds value for their clients on the buy side, who need to be able to quickly access new markets, for example. By allowing their clients to work with specialized solution providers and integrating tightly to view and control risk, they can reduce their cost of technology and provide greater capital efficiency to their clients.

Speed and connectivity are really just commodities. The value for firms today comes from working with solution partners that understand the sources of profit opportunities in the modern trading world, and can apply this speed and connectivity in a variety of circumstances, connecting clients to an ever-broader array of opportunities.

Risk Management

Additionally, the market is moving toward tools that

will give clients a global view of risk, with the ability to perform pre-trade risk analysis across assets. To achieve true margin and capital efficiency, firms need to be able to view their full exposure across multiple venues, counterparties, and asset classes in a single view.

Important to that process is a risk API to be able to receive real-time normalized information and then be able to programmatically make updates across market access infrastructure. Firms need to be able to change limits on one venue based upon exposure from another.

With analytics providing a good handle on events unfolding in multiple markets across the globe, firms need the ability to modify or set risk limits at appropriate levels to gain the greatest use of capital with the correct level of control.

So, when the discussion is about low latency, remember that it is only one part of the equation. Trading ingenuity today is about a lot more than speed. Gaining and knowing what to do with these new capabilities around speed, connectivity, and normalized access is essential for a firm that wants to differentiate itself from the competition. Aided by APIs, these capabilities are on track to become the lifeblood of trading ingenuity today.

"Simply developing an incrementally superior new algorithm or gaining a marginal improvement in raw speed won't cut it anymore, giving short-term gains at most."

The definitive list of the 100 most influential FinTech companies





**TOBY BABB, CEO,
THE HARRINGTON STARR GROUP**

Welcome...

The inaugural listing of the Most Influential FinTech Companies of 2018 brings 100 of the companies set to shape and influence the global FinTech scene in the year ahead. The Financial Technologist has worked with ten FinTech experts from some of the most respected companies in the financial services markets. In collating the listing, we looked for companies who look set to raise the bar, drive innovation and provide real solutions to the problems that lie ahead in a

fascinating macro-economic climate.

We are looking to celebrate the people who are raising the bar, innovating in tech, customer experience and delivery. Who are providing the tech solutions that matter? Who are providing the solutions to the challenging economic environment? Who is disrupting and changing the game? This isn't solely a start-up list. We are looking for companies large and small who are doing things that provide real solutions for the regulatory, economic and technological climate. The judging panel blends some of the UK's largest financial institutions with start-up incubators and

accelerators. There are consultancies, service providers and growth specialists sizing up the market alongside the London Stock Exchange. What was fascinating was the remarkable commonality in thinking. There was significant crossover on the lists perhaps pointing to key themes in the development and emphasis on the market in the months ahead.

The judges were asked to provide listings of the companies that most fitted the criteria mentioned earlier. They were further asked to pick the ones who they felt would make the biggest impact. This formed the top 20 listed below. This group embodies a very














interesting cross section of trends that we can expect to see in 2018. Volopa and Revolot represent the clear trend towards digital and money-saving, tech-driven solutions. Clearbank and Starling Bank provide a fascinating insight into the innovation and rapid advances we see in the sector. We see numerous companies rising to the opportunities and solutions in the trading technology world with the likes of Acuris, Calastone, Finbourne, and Xceptor, all succeeding where others fail to see genuine market problems and finding real solutions for them. We see the likes of Crypto Facilities and R3 representing the ever-changing world of crypto currencies. >



Meet the judges

<p>Hessam Khoshnevisan CIO Information Services, London Stock Exchange Group</p> 	<p>Colin Preston Partner, Head of Banking, Baringa Partners</p> 	<p>David Williams Partner, Banking & Capital Markets Advisory, EY</p> 	<p>Brendan Bradley Co-Founder, Seismic Foundry</p> 	<p>Jason Khaksar Partner, CBPE Capital LLP</p> 	<p>Melanie Budden Joint Managing Director, The Realization Group</p> 	<p>Amrit Kang Business Growth Programme, London & Partners For further insight, visit page 58</p> 	<p>Sophie Bialaszewski Head of Innovation, Lloyds Banking Group</p> 	<p>Charlotte Croswell Interim CEO, Innovate Finance</p> 	<p>Toby Babb CEO, Harrington Starr Group</p> 
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The judge's top 20 picks

<p>For further insight, visit page 50</p>  <p>Acuris</p>	 <p>Calastone</p>	 <p>Clear Bank</p>	<p>For further insight, visit page 51</p>  <p>Crypto Facilities</p>	<p>For further insight, visit page 52</p>  <p>Finbourne</p>	<p>For further insight, visit page 42</p>  <p>Fundapps</p>	 <p>Funding Circle</p>	<p>For further insight, visit page 48</p>  <p>Mambu</p>	 <p>Minium</p>	 <p>Monzo</p>
 <p>Onfido</p>	 <p>R3</p>	 <p>Revolut</p>	 <p>Starling Bank</p>	<p>For further insight, visit page 45</p>  <p>Steel Eye</p>	 <p>Symbiont</p>	<p>For further insight, visit page 54</p>  <p>Trade Informatics</p>	 <p>Transferwise</p>	<p>For further insight, visit page 56</p>  <p>Volopa</p>	<p>For further insight, visit page 61</p>  <p>Xceptor</p>

> What the listing tells us is a story that we have long been stating at The Financial Technologist. The last five-ten years has seen an explosion of start-ups all set to disrupt and change the game. Those who have succeeded in doing either have, however, been remarkably few and far between. The companies that have promised much and either withered or failed to scale are characterised by technical founders who fail to do one of two main things. Firstly, we find those who mismanage their business plan with a particular focus on expectations of time to market. In a regulatory era and a banking world gripped by fear and ruled by procurement, the number of sponsors needed, the sales experience required and time to bank the first cheque is often woefully underestimated. Slowly, the oxygen is squeezed until companies are wound up before they actually have the opportunity to prove their worth. Secondly, we see highly intelligent and supremely skilled technologists fail to truly solve the real-world problems that need to be solved. So busy are they telling people what they need to have fixed, that they fail to actually listen to the numerous pain points we see littered in the market.

The companies that dominate the 100 names listed and absolutely characterise the 20 judge's picks understand certain critical elements that have allowed their brands to position themselves brilliantly.

- They provide real solutions to the plethora of real problems and challenges in the market.
- They have exceptional sales propositions to back exceptional technology offerings.
- They have superb teams who understand what it takes to bring ideas to reality.
- Their leadership are consistent, inspirational and have clear routes to market.
- They are purpose and values driven with the desire to create real change in the market.
- They adapt to the issues and opportunities in the market with equal focus without the ego to stick to plan A.

■ They are well-funded with realistic business plans and the patience plan to "last the course."

■ They are focussed on technology that is set to "change the game."

■ They are obsessive about the customer and focus relentlessly on the user experience.

All of the above read as common sense but rarely do we see them as common practice in the FinTech space. Those with clarity and focus on the above tend to thrive. Those without may have great ideas but they rarely come through to truly influence the sector.

Growth is synonymous with the firms on the list and particularly the top 20. Companies such as Acuris look set for considerable growth. Having been founded in 2000, their family of brands boasts over 1300 staff covering Fixed income, Transactions, Equities, Compliance, Infrastructure and Research. Their ambitious plans for expansion are echoed by ambitious firms such as Xceptor who have enjoyed

phenomenal growth in recent years with more set to follow in the months to come.

The companies in the list are exceptional. Mambu, for example, offers a successful and well-proven core banking system with customers in 40 countries including ABN AMRO. It lends itself to easy integration with FinTech and so is highly relevant for OpenBanking. Clearbank appeared on the top pick list of many of the judges. As the first new UK clearing bank in 250 years, ClearBank has become the fifth clearing bank alongside Barclays, HSBC, Lloyds and RBS. It provides Swift, MasterCard, Visa, CHAPS, BACS, and Faster Payments services to start-ups and challenger banks. Launched in H2 2017, and is predicted to show strong growth in 2018 with a high level of engagement across the industry.

Starling Bank has dominated headlines in recent years and has just launched their marketplace that allows other FinTech providers to connect via APIs and offer a full range of different FinTech services in one place to customers. They are expanding their customer >

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> base and plan to raise £40 million (\$54 million) from investors to drive expansion into markets beyond the U.K and will be launching a business banking service in early 2018

From Transferwise, the profit-making UK unicorn valued at \$1.6bn, to Revolut, building a digital bank of the future with 800,000 customers across Europe, valued at £300m, there looks set to be some extraordinary money made by those in the list. Revolut's innovative product (pre-paid card) shows how important the customer is to the "FinTech Revolution". Easy to set up, digital centric, and money saving, they are quickly broadening their product offerings beyond retail banking, so are likely to see some significant growth in the coming years. Yet even in this innovative disruptor space, we see the next generation appearing already. Volopa, who offer a diverse range of financial services products which are fully integrated and accessible through its proprietary FX platform, look set to provide serious competition in the space in the year ahead. More on them to follow.

Finbourne's exceptional team have an outstanding track record and are already receiving extensive praise all over the world. Winning awards in New York and gaining significant attention and interest in Europe, this is being mooted as one of the most exciting companies to come out of the space for years. We anticipate significant growth for Finbourne and they have recently launched LUSID, a cloud-based asset management software providing real time information, history of all transactions, in a secure and compliant solution. For a company at such an early stage, they are currently in active contract negotiation with some of the world's foremost asset managers and financial services companies. Absolutely one to watch.

Monzo appeared regularly in the judge's conversations. Users have spent more than £20m in over 130 countries since launch and they are currently 400,000 customers and counting. They are transferring all customers from pre-paid cards to current accounts next year and promising new services leveraging open banking whilst targeting 1m customers in Q1 2018 and building a truly likable FS brand!

The regulatory and data worlds are well-documented

as boom areas. We've already mentioned Xceptor who continue to go from strength to strength and Steel Eye are worthy of significant attention. They have built a platform with MiFID II in mind that will enable their clients to not only meet their regulatory obligations, but that can also give them the opportunity to drive significant business benefits through the data that is made available through the platform.

And what of Crypto? Many of those on the list have pushed significant attention towards the most interesting area of tech revolution within finance. R3 have attracted headlines throughout 2017. Crypto Facilities showed real growth in the same period and both look set for strong years ahead. Where the market drives us is the big question on investor lips all over the world.









































We are both proud and delighted to be able to showcase so many outstanding companies on this list. The FinTech industry boasts a genuine depth of talent and to trim a list down to 100 was no mean feat from the judging panel. We are hugely grateful to Hessam, David, Colin, Brendan, Jason, Melanie, Sophie, Amrit and Charlotte for their thoughts, suggestions, nominations and commentary. To have been validated by a panel of this quality is hugely satisfying and something we are incredibly grateful to be able to provide you with.

As ever, with a listing like this, there will be those that agree and those that disagree. We'd love to continue the conversation with you. Why not join the conversation on Twitter? We'll be using the hashtag #Fintechinfluencers100 and would love to hear your thoughts. Who has been missed out? What are your thoughts on who is influencing the market? What are your thoughts for 2018? What's hot in the year ahead?

Congratulations to all of those listed and particularly, the 20 that made the tough cut to becoming the judges' picks. Good luck on a big year ahead and we look forward to seeing many of you make the 2019 list in twelve months' time!

Toby

The 100 most influential FinTech Companies 2018

 Adjoint	 Akoni Hub	 Amazon	 AQMetrics	 Arker	 Athlon	 Atom	 Atom Bank
 Axe Trading	 BigXYT	 Bitstocks	 Black Mountain Systems	 Blockex	 Bud Financial Ltd	 Byhiras	 CashPlus
 Centtrip	 Cinnober Surveillance Software	 Circle	 Clear Compress	 Cloud Margin	 Coinbase	 Coinfloor	 Commcise
 ComplyAdvantage	 Concirus	 Duco	 Eigen Tech	 Elliptic	 Encompass	 Enepath	 Equiniti
 FCA	 Feature Space	 Feedstock	 Fenergo	 FixSpec	 Flux	 GMEX	 GoHenry

The 100 most influential FinTech Companies 2018

							
Goldi	Google	IG	iPush Pull	iWoca	KX (First Derivatives)	Lloyds Banking Group	LMrKts
							
Mespo	Nasdaq Smarts	NEX Infinity Project	Nutmeg	OpenFin	Paycasso	Peernova	Pico Global
							
Privitar	Smarkets	Scalable Capital	Scila	Sernova Financial	Setl.io	ShieldFM	Single Track
							
Suade	Symphony	Tandem Money	Taskize	The Hub Exchange	Thought Machine	Tide	TreoTrade
							
Trussle	Vela	Vortexa	We Fox	Wealthify	White Clarke Group	YouLend	Zopa

The 100 Q&A



www.fundapps.co

Why do you feel that your company has been nominated by the panel?

FundApps has extraordinary product/market fit, an incredible client roster and offers services to automate some of the most complex tasks in financial compliance. These services are used by some of the largest asset managers, hedge funds and pension funds globally. With over 500 compliance professionals using our services daily we have built a reputation for our expertise, regulatory knowledge and support. Our Net Promoter Score is in the 99th percentile for B2B tech companies.

Based in the heart of East London, FundApps stands apart from the crowded FinTech scene, and shines brightly in the burgeoning RegTech scene. With 32 employees from over 22 nationalities, our skills range from infrastructure and computer architecture to financial compliance and marketing. We're an entirely bootstrapped company that has never taken a penny in angel investment or venture capital. We have been profitable since signing our first client, organically expanding as we closed new deals and developed new services. We currently monitor over 3 Trillion USD of assets every day, servicing 2 of the world's 10 largest hedge funds and 2 of North America's 10 largest pension funds.

Financial compliance is a demanding and exacting task. Investment positions held by a company can change multiple times a day, and keeping track of constantly changing financial legislation is a big resource commitment for compliance teams. Traditional software is bereft of features, difficult to maintain, lacking in legal content and often extremely complicated to use. FundApps is unique as we don't just provide software: we deliver truly managed services, blending regulatory insight with technology. Rather than make all of our

clients encode identical financial regulation themselves, we relieve them of that burden and do it for all of them, all at once, whenever legislation is updated.

Why was the company set up? How did you select the vertical and decide to be a part of the global FinTech community?

FundApps was founded in 2010 by Andrew P. White, after the frank realisation that compliance could be done far more effectively. What started as an idea first coded in a South London bedroom soon evolved to be a multi-million-pound software company headquartered in East London, with a growing office in Manhattan; making compliance simple for financial institutions around the world by blending innovative technology with regulatory expertise in a clever, easy-to-use package.

What is your company looking to achieve in 2018?

We continually focus on expanding our client base, increasing awareness of regulatory requirements and how our services can help make compliance simple.

What challenges did you face in your initial years? What can your peers learn from it?

A key challenge we faced as a startup was building brand awareness. It's very hard to sell a service when no-one has heard of you. In the first few years there were issues around being cloud-based. People weren't aware of what it really meant and they needed to be convinced that cloud was secure. Today it has flipped completely and people are actively looking for cloud-based solutions.

One massive take-away is to remain tenacious! Things take time and 90% of products and services are not overnight successes. Have patience and try to continually learn and improve.

If you have to list five factors that have been/are the biggest asset to your organisation, what would they be and why?

1. People and partnerships

FundApps was founded, built and is continuously improved by people with extensive compliance experience. By building strong relationships with industry experts such as regulators and lawyers, FundApps combines its software with up-to-date regulatory analysis to make compliance simple for the financial industry.

2. Dedicated team of compliance experts

Regulatory expertise is at the core of what makes FundApps different. Our dedicated team of compliance experts monitor and interpret the latest in financial regulation, coding it into rules so our clients don't have to. The decades of compliance experience held by the team at FundApps set us apart from other providers, who are typically just software companies operating in the regulation space.

3. Intuitive, easy-to-use software

Maintaining compliance is a difficult task, and there is no room for software to make things even more complicated. FundApps' web-based compliance platform provides everything needed to identify and respond to regulatory requirements quickly and easily. All users need is a modern web-browser. And due to the subscription model, a single yearly fee is charged with zero hidden costs.

4. Instant updates

Updates to our compliance platform and the rules are delivered seamlessly to users. We have always been cloud-based, so updates take place instantly in the background. This is a breath of fresh air for our clients, who are typically used to using branched software that

"We continually focus on expanding our client base, increasing awareness of regulatory requirements and how our services can help make compliance simple"

would require an armada of consultants and a week of downtime every six months so updates could be deployed.

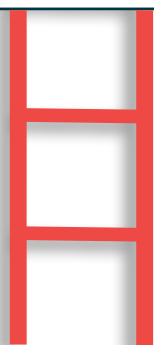
5. Community

FundApps' compliance forum is used by our client community to ask questions and share knowledge about the intricacies of regulation. Much of its functionality is about harnessing the power of our user community, e.g. letting users comment on rules and making these comments visible to each user. Similarly, by using the power of crowd-sourced data, there is no longer a need for every client to input the same data.

With so much competition in the FinTech space, and so many companies failing to get traction, what has allowed your business to thrive?

The typical mistake of most start-ups is to build a product and look for a market to sell it to. Hence why "achieving product/market fit" is so difficult for many companies. With FundApps it was simple - compliance is something every single financial institution has to do, therefore we knew the market was there. All we had to do was provide a service that was so compelling that it beat the competitors hands-down. >

The 100 Q&A



> **How do you bring the best out of your team?**
As Lee Iacocca said, "I hire people brighter than me and then I get out of their way."

8. With so many buzzwords in FinTech around disruption and innovation, how have you really stepped up to solve an industry problem?

Financial compliance is a demanding and exacting task. Our clients typically invest tens, or hundreds of billions of dollars into equities traded in dozens of jurisdictions, and the complexities in maintaining compliance in so many countries are enormous. Previously, the fund industry has had two choices to deal with a shifting sea of regulation: buy a large, expensive and archaic software package... or build a large, expensive and unreliable software package in-house.

FundApps offers a third choice with its unique compliance service and provides both technology and content. Our services have been designed based on the input provided by the real compliance experts - the FundApps user community. Combining software and up-to-date regulatory content, provided by aosphere (an affiliate of Allen & Overy), our services address the key challenges of investment restrictions, position limits and shareholding disclosure monitoring, enabling clients to build and sustain a robust compliance infrastructure and a culture of oversight and transparency. It also significantly addresses the risks of non-compliance, which attracts ever stricter penalties.

One of the biggest problems that compliance teams at large financial institutions face is keeping track of regulatory updates around the world. By supporting over 90 jurisdictions with our compliance services, we're extremely attractive to clients with an international approach to investment, as well as those with offices in multiple countries. The global fund industry currently manages about \$74 trillion, so the target market is enormous. In 2013 KPMG estimated that the investment management industry spends 7% of its total costs on "compliance related technology, staff and strategy", and that number has certainly grown in the past four years. This shows that firms do not only spend a significant amount of money on compliance technology, there is also enormous appetite for services that increase efficiency, save time and lower costs, such as FundApps.

What do you see as the major trends for the year ahead?

Distributed Ledger Technology will still be over-hyped but might actually start to deliver on some of its promises. ■

"One of the biggest problems that compliance teams at large financial institutions face is keeping track of regulatory updates around the world."

The 100 Q&A



www.steel-eye.com

Why do you feel that your company has been nominated by the panel?

At SteelEye, we built an affordable, innovative answer to an unmet need. A year ago, we assembled a team of diverse, talented people to focus on a particular problem and challenged ourselves to develop a distinct solution that was urgently required in our target market. Our technology helps financial firms, large and small, to meet several onerous obligations arising from new and old regulations, all in one innovative product. SteelEye is scalable and helps to simplify compliance with the second Markets in Financial Instruments Directive (MiFID II), the General Data Protection Regulation (GDPR), Dodd-Frank and many more - compliance with such regulations can be challenging, resource intensive and expensive.

Our motto is "don't just comply, compete", because we provide a bonus beyond merely helping firms to achieve regulatory compliance. SteelEye's solution permits firms to bring together information from disparate systems and to leverage this stored data, previously impossible to view on a consolidated basis; users can thus gain valuable insight into their whole business activity, drive operational efficiencies and gain a competitive edge.

Why was the company set up? How did you select the vertical and decide to be a part of the global FinTech community?

Our opportunity arose from the sweeping changes in the European regulatory landscape, which in turn is part of an ongoing global initiative to achieve fairer and more efficient markets. SteelEye's team has a wealth of experience in data analytics and we were attracted by the challenge of reducing cost and complexity for the firms affected.

Our initial focus was on MiFID II and its start date of January 3, 2018. To have this compelling event concentrating minds in our target industry of financial services, where our team had a deep reservoir of experience, expertise and contacts, was a significant tail-wind. Our challenge was to build a product that would delight our audience and to deliver it on time.

While we were confident that our proprietary data management platform would deliver, we had to build a suite of regulatory applications on it (even though ESMA had yet to agree the final shape of the rules as we wrote code). Our design incorporated the most advanced data and analytics capabilities but we ensured our product would be affordable for small and medium-sized firms. Such smaller firms typically don't have the resources to build complex new systems in-house, and were not being well served in the market.

Our plan played out well and everything worked as intended, with the product receiving a great reception in the marketplace. It particularly helps those on the buy side for whom record-keeping and transaction reporting are totally new obligations. We effectively provide clients with a virtual data lake in the cloud at an affordable price, thus democratising advanced data management capabilities for even the smallest firms.

Though initially seen as a nuisance by many firms, we believe that the new wave of international market regulation will spur the adoption of more intelligent data management practices across the industry.

What is your company looking to achieve in 2018?

We want to help as many firms as possible to solve their regulatory burden and leverage their own dormant data, both in Europe and beyond. We're a young company and there is immense scope >



The 100Q&A

> for us to grow. As our installed client base increases, we plan to deliver the best customer care possible. We will continue to refine and expand our FinTech/RegTech product offerings, in particular enhancing our capabilities in trade surveillance and behavioral analytics to provide our clients with greater insights into their own business and the market as a whole. We are also preparing for our next funding round in 2018 and are actively assessing opportunities in adjacent industries. 2018 is going to be another year of exciting challenge for SteelEye!

What challenges did you face in your initial years? What can your peers learn from it?

We officially launched in 2017 with a very experienced leadership team, giving us the ability to react quickly to the changing needs of our clients. Being data-centric allowed us both to solve clients' regulatory needs and to give them the chance to benefit from bringing together all their business data, structured and unstructured, in a new way and to gain an edge from the resulting insights.

An initial challenge was learning to integrate clients quickly and efficiently, bringing all their sources of data together. We challenged ourselves to improve with every client integration. Much like a Formula 1 pit crew, our integration team continuously practices how to refine the integration process.

As with every startup, raising seed capital was initially a challenge as you seek investors who share your vision, especially before you have a fully developed MVP to show. My advice is to prepare well, ensure all elements of the raise have been covered and to communicate your passion, commitment and vision. Most importantly, build a world class team around you!

If you have to list five factors that have been/are the biggest asset to your organisation, what would they be and why?

Five factors that help to make SteelEye special:

- Talented and ambitious team, with a passion for data and innovation**
- Clear understanding of the wants and needs of our clients**
- Differentiated product based on superior technology**
- Overarching desire to help firms solve problems and reduce costs**
- Strong relationships with our clients and external partners**

What really makes your company stand out in the FinTech market?

SteelEye is intentionally disruptive, offering a differentiated solution at a highly competitive price. Our offering is built on the most advanced data and analytics technologies available. Our mission is to empower clients to leverage the opportunities presented by their data - safe in the knowledge that it is both completely secure and compliant with the latest regulation. We aim to deliver exceptional care to our clients as we support them into the future. Our intention is to have clients who are loyal and as passionate about the value SteelEye adds to their business as we are!

With so much competition in the FinTech space, and so many companies failing to get traction, what has allowed your business to thrive?

It's early days, of course, but our solution has been embraced by clients as it breaks down the complexity of a challenging new regulatory regime and, in addition, helps firms leverage their own previously dormant data

"My advice is to prepare well, ensure all elements of the raise have been covered and to communicate your passion, commitment and vision."

in a simple, clear solution. The challenge for a new FinTech firm is to simplify a complicated problem for their target clients, to overcome inertia and replace incumbents.

How do you bring the best out of your team?

To bring out the best in our team, we first ensure we are hiring people who have a passion for tech and an appetite to learn and solve problems. On a day to day basis, we emphasise trust and autonomy, giving our team the time to solve problems through their own unique approach. We also enable our developers to work with the latest in tech, which always helps to excite them, make their life easier and ensure they feel empowered to deliver the best result for our clients. We aim to ensure SteelEye is a fun, diverse and family-friendly company to work for.

With so many buzzwords in FinTech around disruption and innovation, how have you really

stepped up to solve an industry problem?

We try to avoid buzzwords, short-term fads and fashions and to focus on delivering durable answers for our clients, using all the leading-edge tools and techniques. We are very open to embracing every new development in the marketplace and have most likely experimented with them all.

What do you see as the major trends for the year ahead?

SteelEye holds the view that we are at a very early stage in a secular transformation of the financial services sector globally. Regulation is an important driver but technological innovation is the enabler. In every part of the eco-system, we will see new entrants with great ideas; some will work better than others. It may not necessarily be the first-movers who benefit from their invention. This is a threat that keeps us all on our toes, and motivates us to become even better at serving our clients. In the FinTech jungle, a little paranoia may improve your chances of survival! ■

The 100 Q&A



www.mambu.com

Why do you feel that your company has been nominated by the panel?

We are very grateful to EY for recommending Mambu to the judging panel. We feel the nomination is a reflection of our reputation as the leading SaaS banking engine and our proven track record of providing best-in class service to innovative banking and lending institutions. Our success illustrates the increasing demand for cloud-native solutions that drive innovation, enhance operational efficiency, provide flexibility and enable the **great** customer experience needed to succeed in the highly competitive digital banking market.

Mambu supported OakNorth's vision of becoming Europe's first fully regulated cloud-based bank and helped them achieve profitability in only 11 months by reducing their operating costs by 60%. We have also helped N26 scale operations to support their exponential 500% growth and expansion to 17 countries. We are collaborating with established institutions like ABN AMRO which is seeking to differentiate itself through the launch of its own FinTech, NewIO which offers innovative lending products and provides Dutch SMEs with credit decisions in 15 minutes. The project went from concept to launch in 10 months with the Mambu implementation taking just four months.

Why was the company set up? How did you select the vertical and decide to be a part of the global FinTech community?

Cloud technology was disrupting industries, with internet and smartphone penetration becoming the norm, even in remote regions. The three Mambu co-founders identified an opportunity in the financial industry, legacy approaches to building banking technology were too expensive, slow and cumbersome. Their idea was to bring lending and banking technology into the 21st century via the cloud, making it accessible to projects of

any size and flexible enough for any market opportunity.

Mambu now works with a broad range of clients from, traditional tier one financial institutions to FinTech revolutionaries. We help providers to rapidly launch a digitally native financial services platform without diving into the hassle of a custom, in-house solution in the highly regulated finance industry. Mambu helps clients to successfully start up new business ventures, transform existing operations, launch new products and expand into new markets.

We are proud to be part of the global FinTech community, our cloud native solution is now running over 180 live operations with more than 6,000 loan and deposit products in over 45 countries, serving more than 4 million end customers.

What is your company looking to achieve in 2018?

2018 will be a very exciting year for Mambu, we expect to accelerate our growth and geographical expansion into the Americas and Asia-Pacific. We will continue to invest in innovation adding more functionality to our solution to keep pace with the needs of our clients and the market.

What challenges did you face in your initial years? What can your peers learn from it?

Our initial challenge was time to adoption as banks and financial services are traditionally reluctant to adopt new technology. But the speed, agility and of cloud technology are undeniable, the industry saw the strengths and there was a strong push to accept it with more regulators not only approving but encouraging its use.

The next challenge was convincing institutions to take a risk on being one of the first to implement Mambu, which was at the time a new and untested product which

"We expect that innovation will continue transforming the digital banking landscape."

would own and control their mission critical data like customer details, transactions and financial data.

As every institution is at a different stage on the technology adoption curve, we worked on providing the right value for them at the right time, from speed to market to speed of change, in order to overcome the perceived risks of both cloud and new technology. Once the value perception of initially cost, and then speed to market and speed to change was higher than the perceived risk of being an early adopter, we were able to gain customers and traction and build on top of that.

What our peers can learn from the Mambu story is that while FinTech is fast moving, the market, especially in B2B, may not be so quick to adopt. So if you are getting into the business, know that you are signing up for a marathon, not a sprint.

What do you see as the major trends for the year ahead?

We expect that innovation will continue transforming the digital banking landscape.

In addition to competition from nimble new banking and lending entrants, traditional institutions face struggling business models, huge legacy costs, regulatory changes such as open banking and ever evolving consumer demands.

Incumbents Launching FinTechs Spinoffs

Prompted by these pressures, we are seeing a growing trend of established financial institutions looking to launch their own FinTech or digital bank. It's a concept we refer to as 'launching speedboats from cruise ships'. These spin offs combine the best of two worlds, the resources and experience of an incumbent with the technology and culture of a FinTech.

More Than Monoline

Many FinTechs which disrupted the market with innovative but monoline offerings, now find themselves critically limited by their initial business model and internal development.

With increased competition and saturated niche markets, their business needs have evolved to focus on growth and diversification and their technology must also evolve in order to support these objectives. We see these companies seeking out new technology to support their long-term strategy.

API-driven ecosystems

Both FinTech and traditional institutions are shying away from internal development due to the significant time and resource implications. Instead they are looking to build operating models using SaaS and API-driven ecosystems at their core, developing a composable architecture.

The composable approach embraces thinking that one company cannot focus on everything and be the best at it. The architecture can be divided in small pieces and managed through life cycles separately and tested, removed or replaced without risk.

Taking a composable approach enables the use of best of breed providers. Each company is focused on a specific part of the architecture from the SaaS engine to chatbots or credit scoring, to analysing customer data insights. All of these combine to create a better user experience.

Apart from flexibility, this composable approach prepares organisations for innovation and the next market shift. The digital banking space is dynamic and evolving at a rapid pace and companies with a composable architecture will be ready to adapt to continue delivering innovative services to their consumers. ■

The 100 Q&A



Business information first

Acuris has been keeping financial professionals one step ahead of their markets since 1999

We're a company that was founded on solving a financial industry problem – being able to understand and predict what's going to happen next in a specific market. The story began in 1999 with Mergermarket. This product was set up on one simple insight: there is a great deal of information in the M&A market, but very little intelligence. Lots of "noise", not enough "signal". So the Mergermarket team hired specialist reporters to talk directly to market insiders – the people actually doing the deals, or advising on them – and then published what they learned via a subscription-only online service.

An idea with traction

This gave subscribers the "actionable" intelligence they were missing in the market – signals that help them make the fastest and most profitable decisions. It was an idea that rapidly gained traction as people realised the advantage this sort of intelligence gave them. So in the 18 years that followed, we extended it into many other niches – fixed income, infrastructure, equities, compliance – through acquisition and organic growth.

It was challenging to build up the large team of expert, specialist reporters and analysts that was needed. Creating this "critical mass" of expertise took time. But today, we've grown to become a significant player in our market, with revenues of almost £200m and 1,300 employees worldwide. And with our renaming as Acuris, we have created a strong information brand that reflects our skills and qualities: acumen, curation and insight.

Scale and influence

We'd like to think we've been nominated as one of the 20 Most Influential FinTech Companies for 2018 because

of this growing scale and influence. It could also be because our proprietary, forward-looking intelligence is something that no other vendor can offer with the same scale or depth. Combined with our data resources, it means that in many sectors, an Acuris brand is the first source financial professionals turn to when they want insight into their specialist area. And we've also kept a consistent focus throughout our history, doing one thing – niche financial intelligence – and doing it well.

It's this combination of reach and focus that sets Acuris apart. Having a global network of specialist journalists and analysts means we can give subscribers unique insight into specialist financial markets. The data that we collect has also built up over time into a powerful resource for financial professionals who want to back up the intelligence we provide with in-depth analysis. As a strong, standalone, focused group, Acuris brings together many information brands into a portfolio of products that all have the same purpose: helping financial professionals to make the best decisions based on the strongest evidence.

Real insight depends on people

What next? Markets and technology are evolving faster than ever, and we think that artificial intelligence and machine learning will continue to make more things possible in our markets, arming financial professionals with even more predictive intelligence. We aim to use this technology as much as possible to benefit our subscribers. Yet we also believe that the "human angle" that has driven our growth for the past 18 years will remain a critical source of advantage in financial markets. As one of our senior managers has said: "It's impossible for a computer to get inside the mind of a CEO or CFO. Human interaction is essential if you want real insight into strategic decisions and to be able to interpret what's happening – and what could happen next." ■

www.acuris.com

The 100 Q&A



www.cryptofacilities.com

Crypto Facilities has been an innovator in the blockchain space since 2014. We operate a regulated, London-based crypto currency exchange and are the market-leading provider of crypto currency pricing data. Our flagship pricing product, the CME CF Bitcoin Reference Rate, serves as the underlying in bitcoin Futures listed by the Chicago Mercantile Exchange.

Crypto currencies have reached a combined value of over half a trillion dollars as of December 2017. The decentralization of finance, disintermediation of payments and shift of power towards the end-user are dominant market trends. Crypto currency enables these trends and has emerged as the fastest growing sub-sector within FinTech.

There are several reasons why crypto currencies have attracted so much attention. As political instability is on the rise, the benefits of blockchain-based, censorship-resistant digital tokens have become evident. The ability to "be your own bank" by using a decentralized peer to peer ledger to conduct transactions has become a real option for people around the globe. Bitcoin and crypto currencies as an asset class have been growing rapidly over the past few years. The focus of service providers in this area is to enable adoption and foster education among those still bound to the legacy financial system.

At Crypto Facilities we focus on the intersection of digital asset technology and traditional finance. Institutional investors require advanced risk management tools such

as derivatives contracts, reliable pricing products and liquid markets. Using our knowledge and experience in the investment world has been a key competitive advantage in building a crypto financial exchange that facilitates the needs of large traders while still preserving the principles of crypto currency.

The after-shock of the financial crisis in 2008-2009 continues until today with Millennials and Generation Z being less willing to use banks and invest in the stock market than they are to invest in bitcoin and use crypto payment protocols. The trend over the coming decades will be for individuals to take more control over their financial lives.

In the early years of the crypto currency space, untrustworthy exchanges would get hacked, or worse, run away with the clients' money. As a London-based regulated firm, Crypto Facilities is one of the first credible exchanges to provide its products and services to the Bitcoin community.

As crypto currency adoption is sky rocketing, the demand for access to this asset class is larger than ever. The 2018 prospect for crypto is bright, with more and more new money coming into the industry as investors are seeking to secure a foothold in the crypto revolution. Crypto Facilities fills a vital role in the market needed for professional, secure, and regulated mechanism for acquiring digital assets and managing the risks associated with this asset class. ■

"The 2018 prospect for crypto is bright, with more & more new money coming in."

The 100 Q&A



www.finbourne.com

Finbourne Technology is a developer of advanced financial software for the asset management industry. We create data systems to enhance the availability and utility of information, to simplify user access and reduce operating and capital costs.

We thank the judges for selecting us to the short list and giving us this opportunity to present ourselves. FINBOURNE's LUSID platform tackles a huge market need. Investment management is heading for global assets under management (AUM) of \$145 trillion by 2025. In the UK alone there are 10 million pensioners and our technology's aim is to help them all. We estimate that global buy-side spend on technology is \$50bn annually and growing. In the face of all this asset growth, asset managers are facing headwinds. Increasing demand for more transparency, better reporting and increasing regulation has inflated the cost base. At the same time the active vs passive debate and low absolute level of yields have combined to put pressure on their fees.

In October FINBOURNE launched LUSID® "a revolutionary replacement software system for the asset management industry. LUSID, which stands for 'Liberated Unified Secure Data-machine' is a new cloud-based system which will replace existing in-house hardware and software... dramatically cut operational and capital costs, modernise capabilities and liberate managers from infrastructure worries to concentrate on their core competency – asset management."

We try to summarise that in our strap line: LIBERATE/SIMPLIFY/CONNECT.

FINBOURNE may be a start-up but we're not in any way typical. Unlike a lot of start-ups, we focus

on the end customer - the asset manager - we are not payments or selling a modular service to a market intermediary. Although we would all love to be 25 again, understanding the industry problem necessitates many years of dedication. Our average age is 38 and we have had heavy duty experience in both financial technology and financial management. As such, we are building a platform which experience tells us is both needed and will function as designed. Because of our previous experience, we knew we had to collaborate with industry thought leaders so we set up the LUSID Design Council to fashion a platform that will give our customers what they want. The Council includes, among others, two top ten global and European asset managers and a major international bank, in its custodian guise.

Working with our clients we know the market place cares more about such things as immutability and bi-temporal versioning and far less about "distributed nodes" and "cryptography". The technology choices we made were based on practical need. The thought leadership, and the deep tech skills, lie in combining only the essential and appropriate elements of technology in a cloud-based platform to meet the needs of complex portfolios. This is unique. And important because, in so doing, LUSID will cut costs – running and capital – using computational need rather than the much-hated percentage of AUM pricing mechanism. Specific benefits of LUSID include:

- **Real time, every time: valuations, transactions, analyses**
- **LUSID never forgets: every transaction or data change immutably recorded, kept in a bi-temporal store so that effects and circumstances of any change are instantly available**

- **Open APIs: LUSID adopts an open Application Programming Interface to facilitate best-of-breed vendor integration. It is not a compulsory one stop shop.**
- **Compliance enabled: the 'never forget' feature maintains data which makes future compliance need easy to access and makes specialised RegTech software for keeping archives of data redundant**
- **State of the art security: we use best financial industry practice, built on top of AWS' world-class physical security.**

LUSID is a market utility. Just as no business would think of installing its own water supply, nor should fund managers endure the expense of installing, updating, staffing and worrying about systems for recording and accessing investment data. These are non-differentiating activities and their costs will be mutualised by LUSID. This liberates:

- **By granting freedom of charges from technology updates**
- **From the common problem of conflict between inherited systems**
- **Because LUSID is unified, asset managers, asset owners, institutional investors have a single source of truth, a definitive record, for the of fiduciary duties**
- **Through scalability: for large or small firms, across asset types, system capacity is no longer a worry**
- **Through simplified budgeting: reduced costs and improved transparency on costs**
- **By eliminating the distraction of running infrastructure: giving asset managers more time and money to research investment decisions – liberating core competency.**

"The technology choices we made were based on practical need."

FINBOURNE believes that to change the world, you work with it: less "disruption" more collaboration. In December, at a large tech industry convention in New York, the audience voted us 'the start-up I would most like to partner with'. Who wants pension savings "disrupted"? We don't, but we do want to partner with people wanting to improve the customer experience.

Finding the right people will be key to our growth: last year, we doubled in size and some of the team declined job offers from investment banks and impressive companies like DeepMind. Unlike others, we haven't off-shored key technology roles as proximity to on-shore clients improves the quality and interest of the work we offer. Yes, we need to show a way to financial reward but we are doing this, at least in part, because it is stimulating and, simply, important.

Looking forward to 2018; we dare to hope that a happy confluence of ever increasing cloud adoption, a post MIFID II era, and maybe greater clarity on BREXIT implications may lead to fewer distractions for your pension fund manager. Who can now concentrate on improving their performance and maybe even upgrading their systems. Within our advisory group we have noticed a growing appreciation of the worth of collaboration and co-operation in cutting admin costs. We expect to see this realisation grow elsewhere in the finance industry.

Freedom (for asset managers) to improve performance has been an important part of our positioning and we expect it to be even more relevant in 2018. ■

The 100 Q&A

tradeinformatix



www.tradeinformatix.com

Why was the company set up? How did you select the vertical and decide to be a part of the global FinTech community?

We set up Trade Informatix in 2009, prior to the global FinTech surge, to extend on our experiences in institutional equity trading. At this time the industry was largely high-touch plus a nascent low-touch with basic benchmarking algorithms. The major sell-side objectives, to get the best price and the best experience for customers, were supported using anecdotal and subjective assessments.

Our team was on the leading edge of using traditional quantitative trading analysis techniques to improve client outcomes at multiple global banks. Following the banking crisis, we took the opportunity to gather talent and set up a small un-conflicted FinTech shop with the sole focus of helping asset managers take control of best execution and increase portfolio returns, by bringing optimal efficiency to trade implementation. In nine years, Trade Informatix

has grown from a small group of five technologists to thirty plus staff, comprised of technologists, practitioners and consultants, delivering on our mission to achieve frictionless trade implementation for all market participants globally through our proprietary Total Implementation Framework.

What challenges did you face in your initial years? What can your peers learn from it?

In 2009, the FinTech vendor community was still in its infancy in trading and the work we were doing was too early for broad adoption. Our strategy was well formulated and forecasted but asset managers were mostly relying on the sell side for best execution. Providing vended services for optimised trading technology directly to the buy side was disruptive, and to a certain extent it still is today. Buy-side and sell-side trading desks can be slow to adapt to new ideas, and we struggled in the early days to find the right message, conveying relevance and accretive growth.

"Following the banking crisis, we took the opportunity to gather talent and set up a small un-conflicted FinTech shop."

Another difficulty we have observed when practitioners and technologists get together to do something new and exciting, is that there is often very little thought given - or skill sets available - for effective branding and marketing. When you are building something exciting and effective, it is easy to overlook the fact that you need to actively market yourself, rather than rely on your solution selling itself. We now recognise how important it is, as a FinTech, to get a branding and marketing campaign going sooner that delivers greater market awareness and improves business success.

What really makes your company stand out in the FinTech space?

The uniqueness of our company is that we are truly focused on harvesting returns for asset managers and hedge funds through optimising the trade implementation process. As a trading data analysis firm, we can show investors how their trades are being executed, help them understand where to identify cost attribution and most importantly devise a trade implementation strategy to maximise portfolio returns by minimising cost across all investment agents who touch an order. While we have always focused on micro market structure and venue level trade analysis, ultimately we want to help investors understand the entire order lifecycle, from idea generation at the Portfolio Manager level to venue-specific characteristics. We have a dedicated in-house research team comprising academics in various data science fields, who focus on nothing but researching quantitative techniques for optimising trading approaches. Over the past 12 months, we have turned the group's attention to using artificial intelligence to enhance our alpha preservation offering.

"When you are building something exciting and effective, it is easy to overlook the fact that you need to actively market yourself, rather than rely on your solution selling itself."

With so much competition in the FinTech space, and so many companies failing to get traction, what has allowed your business to thrive?

In order to thrive in our space, what we have found to be most helpful in promoting our mission is partnership and cooperation with the industry at large. Some companies have aligned themselves with a single player or constituent of the community, whereas we believe it is important to be transparent with the entire industry and to work closely with participants, whether they are clients, potential clients, other FinTech firms including competitors and complimentary firms, and in our space, the global sell-side banks. ■

The 100 Q&A



www.volopa.com

Why do you feel that your company has been nominated by the panel?

Volopa offers a diverse range of financial services products which are fully integrated and accessible through its proprietary FX platform. By combining these features with a flexible multicurrency pre-paid Mastercard capable of being branded in its client's livery, Volopa directly meets its customer's needs and key objectives and delivers core values of transparency, security and simplicity.

Why was the company set up? How did you select the vertical and decide to be part of the FinTech community?

Volopa was established to offer corporate and retail customers total transparency in FX service, something that to this point had not previously been offered in the FX market as a whole. Accessed through Volopa's highly developed, easy to use bank to bank platform with integrated multi-currency, pre-paid Mastercard's (capable of holding up to 14 currencies on a single card), Volopa has gone on to develop a number of value added services that complemented and expanded its core offering. Through listening to and working with its customers Volopa has delivered a product range which directly meets their needs, including Volopa Lifestyle and global expense management capabilities, achieving significant discounts on hotels and restaurants while reducing administrative time and delivering cost savings in international travel expenses. Through use of innovative, relevant, scalable, financial technology, Volopa maintains a low overhead passing cost savings on to customers while continued development of products and services maintain its edge in customer service and value delivery.

What is your company looking to achieve in 2018?

Volopa's focus is to consolidate on its domestic and

European customer base delivering card volumes from its existing and rapidly growing sales pipeline and plan to launch three newly developed products in the New Year with Volopa Media, Volopa Bullion and VoloPay, to enhance its core offering.

Looking beyond its current UK and European offering, Volopa plans to expand its worldwide service to include special focus on empowering 2.1 billion un-banked customers in Asia, Africa, and Latin America with on-line e-commerce banking solutions.

What challenges did you face in your initial years? What can your peers learn from it?

Software development took longer, and cost considerably more than we anticipated. As our products were developed the level of complexity increased exponentially which required additional management and cash resources to ensure seamless service delivery and scalability.

If you have to list five factors that have been/are the biggest asset to your organisation, what would they be and why?

Volopa's people are its strongest asset. Its management team are drawn from the highest levels of industry with relevant experience and track records of success. Volopa has attracted top managers from leading financial organisations and UK Special Forces and intelligence preparing for the obvious convergence of FinTech products and high level cyber and physical security.

The Volopa Group of companies are independently Authorised and Regulated by the FCA and HMRC underlining our core principals of transparency, integrity and accountability.

A team approach of solution provision, drawn from client consultation which balances technical capabilities with

practical solutions fit for purpose. Volopa maintains close cooperation and communication between its teams across IT development, operations, sales and marketing, compliance and customer service.

Speed of reaction to client requests driven by the fact that Volopa owns its technology and can quickly deliver specific features and functionality that directly meets its clients requirements.

Volopa's reputation for good governance and focused solution provision enables it to deliver the highest load limits in the industry, issue cards across 41 EEA countries and white-label its cards to promote its customers brands as a card for employees, to cement customer or fan loyalty and reduce costs while increasing efficiency in all areas of its offering.

What makes your company standout in the FinTech market?

Honesty and transparency in a market traditionally operated with hidden charges designed for profit which disadvantages its users. Volopa is unique in offering its clients real time market information, highlighting its charges and giving clients the option to transact or not, putting the customer back in control of the facts and the costs. Volopa's technology delivers a diverse and relevant product range, 14 independent currencies on one card with the ability to settle in 120 currencies worldwide, complete ease of use, 24hr 365 day worldwide reach, flexible and powerful systems with strong customer focus.

With so much competition in the FinTech space and so many companies failing to get traction, what has allowed your company to thrive?

Focus on the B2B offering with close consultation with clients to ensure its offering directly meets the needs

of each customer. The ability to brand its cards with a client's own brand increases the value to its customers who can see how the benefits that Volopa delivers will enhance their own offering to staff and clients alike. Volopa has a powerful brand but is equally happy sitting behind and delivering significant value to its customer own brands.

How do you bring the best out of your team?

Our team thrives on the challenges involved in producing unique, world class products in a friendly, cooperative environment, with the knowledge they are helping millions reach 1st world financial solutions.

A management approach that encourages employee engagement and openness, combining and utilising best management practices whilst taking advantage of the speed of implementation, innovation and communication skills that exists in a small but highly capable and cohesive FinTech team. Volopa encourages continuous improvement, empowers employees and enables autonomy, confident that the team will do their personal and collective best at all times.

With so many buzzwords in FinTech around disruption and innovation, how have you really stepped up to solve an industry problem?

Keep it clear and simple to use. Advanced FinTech is basic FinTech done exceptionally well, also provide total transparency of charges where nothing is hidden.

What do you see as the major trends for the year ahead?

A convergence of cyber security technology and enhanced security as a USP in the FinTech space. Volopa is focused on delivering the most secure multi-currency card on the planet and have prepared well for this challenge. ■

The 100 Q&A

LONDON
& PARTNERS

www.londonandpartners.com

London is Open

London & Partners is the Mayor of London's official promotional agency. Our purpose is to support the Mayor's priorities by promoting London internationally, as the best city in the world in which to invest, work, study and visit. We do this by devising creative ways to promote London and to amplify the Mayor's messages, priorities and campaigns to international audiences. Our mission is to tell London's story brilliantly to an international audience.

We are the experts on doing business in London. We help overseas businesses set up in London, help London businesses win business overseas through the Mayor's International Business Programme, support companies to grow in London through our business growth programme and attract capital investment into regeneration projects.

For more information, please see londonandpartners.com

At London and Partners we aim to help business' through two different programmes which we are currently running.

About The Mayors International Business Programme:

The Mayor's International Business Programme helps ambitious high-growth (scale-up) companies from London's technology, life sciences and urban sectors to expand their businesses internationally. Tailored to fit a company's specific international growth ambitions, this exclusive programme provides:

- One-to-one and one-to-many mentoring and ongoing guidance from entrepreneurs and business leaders

- Focused workshops and events that provide the opportunity to learn from expert advisers
- Live leads for specific business opportunities in North America, Europe, China and India
- The opportunity to join high-profile targeted trade missions led by our team of international business experts

For more information on the programme please visit gotogrow.london

About The Business Growth Programme:

Tailored to your business growth ambitions, London & Partners' **Business Growth Programme** offers free impartial business advice and support to SMEs looking to grow across London. Partly funded by the European Regional Development Fund, the programme can help unlock your business potential by identifying barriers to growth and providing tailored solutions including mentoring, workshops, business growth advice and opportunities across our London network.

If you are an SME based in London with 3-250 employees, a minimum viable product and an ambition to grow, we may be able to help you. Sign up to the programme via businessgrowth.london.

Profiles of Mark Walker and Amrit Kang

With a strong, growing and dedicated team at London & Partners, we have profiles of a few that have worked extensively with FinTech's internationally both Mark Walker and Amrit Kang have at least 8 years between them.

Mark is an experienced enterprise technologist, having started his Executive career leading the development of a number of significant new Life Science software and hardware offerings within Brady Corporation. A

"We are the experts on doing business in London. We help overseas businesses set up in London, and help London businesses win business overseas."

large international firm selling signage and labelling solutions to identify and protect premises, products and people, Mark was instrumental in leading new software developments through coordinating a team of developers, writing specifications and monitoring/testing new software systems. His successes at Brady led Mark to form his own enterprise software company, producing and selling to Universities and institutions working within scientific research.

Mark is a former Senior Adviser in digital and media at UKTI, where he used his time well to build a significant contact base in the technology space and development community, as well as the investment and company accelerator environment. Managing a team of seven, his role facilitated a good understanding of the London start-up and technology environment. He was also a start-up Mentor at Google Launchpad, an accelerator programme covering Business setup, Product & UX design and Marketing theory. Many of the learning concepts involved working with teams on HTML 5 and PHP development systems, as well as the various server space providers such as amazon web services and rack space, with services and advantages differing according to roll out locations and software requirements. Most recently, Mark was approached by London's

Inward investment agency to be tech adviser to the Mayor's international business programme. Helping London start-up tech companies expand into new geographies, Mark works closely with partner organisations that support and are adjacent to high growth technology providers, facilitating access to a wealth of different developer types and skills.

Amrit began her career in Law and worked in Criminal Defence and Commercial Law which, enhanced her analytical and written skills from having to comprehend and underpin legal precedent and policy. During this time, she also worked with an NGO which looked at Counter Human Trafficking. Assisting with the designing and implementing policies and procedures for NGO's, SOCA and UKBA.

Amrit is client focused and has the ability to build strong relationships with clients, which she did during her time as a head-hunter in financial services having moved teams and helped lead on an acquisition she set up her own business Ravenscroft Solutions. Working with banks she took an alternative direction and looked at researching the peer to peer market place companies as a result of this she then worked internationally learning the FinTech landscape by working with SME's and fast-growing companies.

Most recently, Amrit is working at London and Partners on the Business Growth Programme helping a company's direction, achieving their goals and optimising their core business. This is through facilitating one to one mentoring, workshops and events around the following; Finance and Funding; Team and Talent; Sales and Markets; Marketing and Branding. Amrit is now working with a number of FinTech's who are looking to overcome certain barriers of growth. ■

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"AIR POLLUTION IS MAKING OFFICE WORKERS LESS PRODUCTIVE"
(HBR 2017)



"THE SHAMEFUL STATE OF LONDON'S TOXIC AIR HAS RESULTED IN THE TRIGGERING OF THE FIRST 'VERY HIGH' AIR POLLUTION ALERT"
(MAYOR OF LONDON, SADIQ KHAN, 2017)



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PURITII

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The 100 Q&A



"Through data transformation, we ensure data is accessible, no matter where it sits or what format it exists in."

Xceptor is one of the UK's high growth FinTech companies. As a strategic partner to our clients, we are helping businesses to transform their data, processes and technology as part of their digital transformation programmes.

Over the past 12 years, how Xceptor has worked with its clients has changed. Previously firms were looking for more operational level solutions to point problems, now they want strategic partners to help them on their digital transformation journeys. After all, digital transformation has now become an industry imperative for firms who want to both survive and thrive.

Digital transformation is a big job and a large change programme. Our approach is designed to deliver rapid returns. Firms need an approach that is agile, focussed on results and in manageable pieces.

We work with our clients to establish and continue to develop the all-important digital backbone. This enables them to analyse their data across their current clients, business and products and this in turn helps them to succeed with their digital transformation goals.

Our clients, many of them tier one financial institutions, are all under enormous pressure to innovate and be relevant for their future client. With over 40 clients including HSBC, J.P. Morgan, Standard Chartered, BNY Mellon and Deutsche Bank, Xceptor sits at the heart of the digital backbone.

Through data transformation, we ensure data is accessible, no matter where it sits or what format it exists in. We turn data into high quality, reliable, trusted data, in a format that can be used and reused; even for purposes not yet thought of.

This first focus on data leads to process transformation and opens the door to effective technology transformation. By focussing on the data, and not the process, our clients are able to realise the true potential of using new technologies in higher value areas. This thereby increases adoption, buy-in and ROI across their businesses.

Technology transformation can involve anything from RPA to NLP to AI, the list is extensive and constantly growing. We are at the forefront of enabling our clients to get the most out of these new technologies, in the most effective way. This can be as part of the Xceptor solution from robotic document processing to using AI for adaptive configuration and AI-driven workflow or simply enabling firms to use RPAs for higher value process automation.

Clients work with Xceptor to build the digital backbone. They need customer, product and business insights based on trusted data to be able to understand how they can transform their business. This in turn supports the creation of new business models, becoming customer centric, making more strategic use of staff and developing operations built for the future – be it in IT, finance, HR, risk, trading, wherever it may be.

Moving forward, we see our potential markets continuing to grow across all regions and this includes developing further technology partnerships to underpin the digital transformation ecosystem. We are excited for 2018 and the opportunities for Xceptor. ■

www.xceptor.com

Women of FinTech

Harrington Starr launched the @womenofFinTech campaign to not only celebrate the women in the industry but to also inspire women to join it.

The campaign brings women together to allow them to support one another on their career growth and mentor a new generation into the field.

Diversity is a huge topic at the moment, but how do we make it more than just talk?

Turn the page for 10 proactive suggestions from our campaign supporters, to turn this ongoing conversation into action



Women of FinTech



Marieke Flament

Managing Director of Europe, Circle

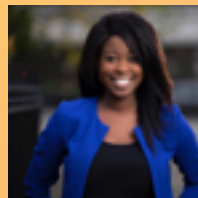
Unconscious bias affects everyone, even the most progressive organizations and individuals, leading you to make judgements about people based on key characteristics, including appearance. What's important is to learn about and be aware of your biases, and challenge them.



Fiona Ghosh

Partner, Addleshaw Goddard LLP

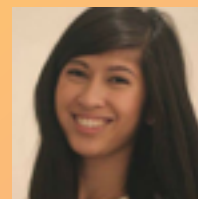
Long term? We desperately need more girls sticking with STEM subjects. I have 2 young daughters; it's key to me that they learn to code as well as to tell fairy stories. I don't want them to be like me: mathematical but feeling more acceptable to be good with words. (Funnily enough, I'm a skilled technician, just in an area where it's traditionally more acceptable for women to lead in this way).



Charity Mhende

Associate, Anthemis

I believe to achieve true diversity, it's not just about hiring different people, it's about making sure everyone is present in the room. Just because you have representation, it doesn't mean they have a forum to speak and be heard. It is important for employers to make sure they encourage open dialogue on issues pertinent for the business' growth across all levels. Your eureka moment may come from the person you least expected. Being present and having a say opens the gateway for diverse thought, experience and background to drive the evolution of businesses.



Ina Yulo

Senior Content Strategy Manager, BrightTALK

I'm a staunch supporter of grassroots programmes, and role models are so integral to the success of these initiatives. When I was little, my mom was a chemist. I thought that working in science and technology meant wearing a lab coat and doing experiments, and similarly, I thought that working in finance meant you had to sit behind a desk at a bank. If I had the ability to meet the people I have seen now who are doing super cool things with coding, platforms, and new tech, I would have definitely had a bigger interest in getting involved in these industries.



Elena Mesropyan

Global Head of Content, Let's Talk Payments

To create a better, more diverse and rich professional environment in any field: acquire knowledge, share it, and be an enabler for others. Being a knowledgeable person enables you to be a valuable resource for other professionals throughout their journey. By being knowledgeable in your industry and willing to share your experience and expertise, you can help others to evaluate their own steps, take on new challenges, and better understand their own strategies of achieving goals.



Chia Brewin

Director of Customer Development, Trunomi

Exactly this! (Referring to the @womenofFinTech campaign). Highlight the representation of women - actively demonstrate the huge opportunities for women in FinTech.



Michelle Tampoya

Director of Product Marketing, Interac

It was the little things that mattered in my career and I encourage we all do - asking for my opinion, bringing me to strategic meetings, fighting for me to lead large projects and celebrating wins. This helps highlight expertise but most of all, builds confidence.



Lelemba Phiri

Chief Marketing Officer, Zoona

One way to drive diversity is to be deliberate about ensuring that when we are hiring - we put in place measures that encourage diversity. For example, at Zoona to drive our diversity agenda we insist - for all key management hires that the final shortlisted candidates for any position must include a woman.



Emilie Allaert

Head of Operations and Projects, The LHoFT Foundation

Education is often key, if we bring technology early at school we could develop interest from girls and boys, without distinction. Coding for example is just a language to learn, which could be taught at school. Also, it is important to bring forward women role models in the technology industry, we hear a lot about men in the technology space but we could bring in the spotlight some women who are successful and can serve as an example: Marissa Mayer, Cheryl Zuckerberg, Sallie Krawcheck ... It is essential to reassure women that there are not male reserved jobs, obstacles have been put over the time and they are made to be destroyed. Nothing is more rewarding than achieving your goal (whatever the path you take) and having a job you love, no matter



Benedetta Arese Lucini

co-founder and CEO, Oval Money

What people often forget is that half of the addressable market for financial products is female. And with an ever-increasing emancipation of women in the workforce, there is going to be a gap in the market for products tailored to financially independent females. Until now, the finance and the FinTech industries have been dominated by men. With the right approach, however, this will change, as it will be obvious that this is a good business decision, which will have an enormous economic impact.



You can follow the campaign on twitter or Instagram at @womenofFinTech

To support the campaign or nominate someone to be featured please email gemma.young@harringtonstarr.com

FINTECHFOCUS

HARRINGTON STARR TALK TO SOME OF FINTECH'S MOST EXCITING BUSINESSES



1

DEAN LUMER
Managing Director,
Supplier Vision

What can you tell us about your business?

SupplierVision is a comprehensive software application that delivers functionality to support the management, governance and oversight of suppliers and vendors. It has been specifically designed to address three main objectives; Support supplier governance and oversight to best practice standards, manage regulatory risk and make vendor management more efficient (i.e. reduce cost)

What has been your journey to current position?

SupplierVision was created by Knadel Software Solutions a specialist technology company established to provide innovative software solutions to the financial services sector. The Company was founded by myself and a team of consultants from the industry who specialise in helping organisations procure products and services from 3rd party suppliers. Myself and the team identified that as more and more organisations were outsourcing aspects of their value chain there was a growing need for a comprehensive supplier management system. This need was further exacerbated by the regulators of the industry demanding more robust governance and oversight of these relationships. So, I established Knadel Software Solutions and set about creating SupplierVision, launching it to the market two years ago.

What interested you in this space?

I had always worked in the financial services sector and had a desire to create my own software company. From speaking to clients and contacts in the industry I knew there was a strong need for a system such as SupplierVision. Indeed, a number

of these clients were happy to contribute to the design of the systems functionality. Being a highly regulated sector an organisation has to perform good governance and oversight of its suppliers irrespective of whether they deploy SupplierVision. Being able to deploy a system to help was, I hoped, going to be an attractive proposition. Eight financial services organisations have taken the system so far which is a testament to the need identified and the value offered by the system.

How have you settled into the business?

I have settled in well and we have made a great start to growing the business. At the start, we clearly had nothing other than an idea. We now have a team of staff providing excellent pre- and post-sales support for the product. We have a growing user group of clients who meet to discuss the system, our service and supplier management generally. We recently launched SupplierVision 2.0 of the system which, is attracting lots of interest and we managed to win an award for Technology Innovation from a leading industry publication.

What lessons did you learn in your previous role?

From my previous role, I learnt that client service is of paramount importance. I therefore wanted to create a different type of software vendor. Basically, one that could provide great technology but with a professional service ethos as this is what I was used to providing as a consultant. We therefore constantly strive to provide the best service we possibly can to all our clients.

Where do you see the opportunity for you

in the UK and European market?

The challenges SupplierVision is helping organisations address in the UK are equally applicable in other financial markets around the world. We already have two clients in North America and interest from Asia. Our next task is to begin marketing the system in mainland Europe.

What are some of the major challenges facing the industry that your company overcomes?

The main challenges that SupplierVision is helping organisations overcome are:

- Addressing the need to be able to demonstrate to Regulators, Senior Management, Auditors, Trustees and Clients that good governance and oversight of suppliers is being performed
- Ensuring that good supplier management disciplines are adopted throughout the organisation something that is particularly challenging given that the activity is usually federated across the firm
- Ensuring that supplier management is cost effective i.e. it is performed in as efficient a manner as possible as the number of supplier relationships grow, deepen and expand

How does your company differentiate itself from its competitors?

We look to differentiate in two main ways:

- We offer a specialist and comprehensive supplier management solution. One that is tuned to the specific needs of our industry and one that covers all aspects of supplier management

At the start, we clearly had nothing other than an idea. We now have a team of staff providing excellent pre- and post-sales support for the product.

- We look to operate with a professional services mentality. We strive to excel in the way that we support our clients

Where do you see the future of the market heading?

Financial services organisations will outsource more and more activities they do not add value to and they will source more and more best in class products and services from 3rd parties – helping to give them a competitive edge. As they do this, regulators will put more and more emphasis on good supplier management and the need for systems to help with this endeavour is likely to increase.

What makes your company an employer of choice?

As a new firm operating in the tech industry we can offer employees a dynamic and hard-working environment. We can provide plenty of opportunities to learn new skills and to grow and develop. Our employees feel part of a successful and growing team and have the opportunity to share in the company's success.

SupplierVision

Vendor Risk Management Software

www.knadelsoftware.com



‘Wild West’ cryptocurrency markets continue to gather pace and interest, enter the Hedge Funds...



By Tim Dobie

I have been writing about distributed ledger and cryptocurrencies for some time now, I have also been working heavily within the space to capitalise on the opportunity there. The sector suits my preferred style of recruitment; I have access to decision-makers to help me add maximum value through my insight – this is sorely lacking in some areas of financial markets recruitment.

It is also an interesting and emerging technology space that generally hires strong technologists, people who are looking for something a little different when compared with the ‘traditional’ financial markets without nullifying their experience or interests.

Having worked in the space for some time, I started watching cryptocurrency prices and immediately got a bad case of FOMO, there are so many stories of people making a LOT of money by getting in early with bitcoin and making \$billions. For example, Mark Komaransky, a former trader at DRW, reportedly bought circa 300,000 bitcoin in the early days (not long ago), he has since retired a billionaire (he was probably doing ok anyway, he was trading cryptocurrencies for DRW who have had a desk working on these markets for four or five years now). There are also many stories of near misses; a man called James Howells threw away a laptop containing access to 7,500 bitcoin when they were worthless, now they are worth \$40-ish million dollars. The most extreme I have heard though, is that Lily Allen was offered around 200,000 bitcoin to perform a concert online for Second Life in the early days of Bitcoin, she turned the offer down, those bitcoin are now worth circa \$1.2 BILLION.

I want my own slice of the ‘made it big’/‘got very lucky’ stories so, as a firm believer that the market is still embryonic, I have taken the plunge. I set up Coinbase and Bittrex accounts, Coinbase to buy Bitcoin and Bittrex to convert to alternative coins. I then bought the coin I was talking about in one of my previous articles, ADA just after their ICO. The distributed ledger for ADA is being built by Charles Hoskinson and his team at Cardano/IOHK. The word is that they may have the ‘magic’ formula to build a cryptocurrency and distributed ledger which will help make cryptocurrencies both highly useable in the real world and regulation friendly.

So, I bought circa 20000 coins at about 2p a coin, not a huge investment but enough to make things interesting. Very quickly I am realising that basically what you are investing in is trust in the team building the DLT and promoting the coin. Trusting that they won’t simply give up at some point, trusting that they are smarter than their competitors and that they will build something of value in the future. At the moment, the coin is bumbling along at circa 2p/coin, the hope is that as the developers at IOHK build their platform, promote what they’ve built and get closer to making something of use to the world, during that process more people will want to buy coin and the value will go up. It strikes me that there are plenty of similarities between this and that by investing in shares, you are backing/trusting the people behind the investment, their product and the demand for that product.

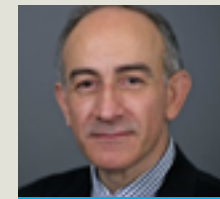
If ADA does well over the next couple of years, it could work out very nicely indeed compared with putting that money in a bank account. They may, of course, lose interest and simply give up. It’s all very exciting! My strategy is to invest in a few of them in the coming months and hope that one of my choices rockets in value when they discover some sort of DLT holy grail.

I don’t think I’m the only one finding it exciting, whilst I have been working with exchanges and DLT businesses for the most part this year, I am starting to see more and more interest from Hedge Funds who are starting to allocate assets to the sector, presumably attracted by the wild west nature of the markets and massive volatility of the marketplace. These businesses are also starting to hire developers to work on cryptocurrency trading systems.

The cryptocurrency markets have been under attack from various angles this year, big name bankers have been slamming them, China has banned them, etc. However, they continue their march upwards and continue to gain momentum, even though actual uses for cryptocurrencies are still limited, the people behind them are just getting started and the potential is evident in the value of the overall market.



People Leave Managers, Not Companies!



By Antonio Ciarleglio

Whenever I ask the question “why do you want to leave your company?”, the reply I often hear is that they find their manager very difficult to work with. We have all heard the same comment from family members, friends or colleagues about being unhappy with their manager. We may have also experienced the same in our careers.

According to a Gallup study, almost 50% of employees leave their company to because of their manager’s behaviour, management or communication style.

However, now is the time to hit the pause button and think about how many of us, as “Leaders”, have thought that we may be the managers and the reason the employee /s are leaving?

If this pause for thought may come as a surprise or is not relevant to you, consider then when an employee recently left your team, did you ask the question to yourself, was it me? Something I said? Did not say? Or something I did or did not do?

Considering the fact that almost one in two people leave companies because of their managers, simple maths tells us that there is a 50% possibility that if someone did leave our team, it could be we as leaders that are the reason!

When an employee resigns, it is rarely mentioned, if ever.... that the true reason for leaving is that they cannot work for their manager any longer. And despite not being given as a reason, this doesn’t mean that it’s not the real reason for leaving.

Employees who have a difficult time trying to get along with their managers, experience constant management changes, or don’t like or respect them, will leave any company, regardless of having a “Blue Chip” name and despite a high salary or great company benefits.

The reverse is also true, people will often join people they will be reporting into and not necessarily because of the company name or brand.

It is not simply a case of buying employee commitment or loyalty to the company by offering high salaries, good benefits and opportunity to travel. A good manager, no matter how much the employees are paid, will create loyalty by; setting an excellent example with their own work productivity, providing coaching and support and understanding the goals the employee wants to achieve

both professionally and personally. This will help create an environment which fosters loyalty and trust between employees and managers, increase employee performance and will help the company retain the majority of their people.

To build that loyalty with employees, we all need to create the right opportunities, and we need to help develop them, by giving them interesting and challenging jobs. We need to ensure we are communicating with employees, and this must be two-way, we need to listen to employees as well as talking to them. This will show our respect, building trust, openness and loyalty.

According to Maslow’s Hierarchy of Needs, esteem is one of our most important needs. We must appreciate our employees. We can help achieve this by giving individuals and teams praise for a job well done, for example; achieving and exceeding targets, meeting deadlines, deliver projects on time and on or under budget. Everyone likes and needs to be appreciated.

We need to inspire our people, create a dynamic and positive environment where they can thrive, and be successful. And we need to support them. If we do this, our employees will become the greatest advertisement for our organisations, they will speak highly of us, and help attract more talented people to work of our business Remember, success, breeds success!

The opposite is also true. If we are seen to be bad managers, our people will share this with family, friends, work colleagues, and contacts, and can cause serious damage to our reputations. When they finally leave, they will take and share this bad experience in their new company and beyond.

Our people are our greatest assets. A company is only as good as the people leading and working in the business. As business leaders, it’s our responsibility to protect, support and keep these great assets. How? Simple.....by being the best manager we can be!

If you would like to comment, I would welcome your thoughts at: antonio.ciarleglio@harringtonstarr.com

For more information about Harrington Starr, our services, new career opportunities in FinTech or a career as a Recruitment Consultant with Harrington Starr Group, please contact me at: antonio.ciarleglio@harringtonstarr.com or visit: www.harringtonstarr.com

Market trends for 2018

By Scott Richardson

With a new year upon us and a tumultuous few years behind us, there has never been a better time to take stock of where we are as a Financial Services Technology and Sales community. Technology is advancing quicker than we could ever have imagined and in an attempt to keep some semblance of control, so are the rules and regulations surrounding how that technology is used. Compliance and Regulations are on the lips of every FinTech Vendor and Financial Services board member as deadlines approach. Those same board members will be facing potential resource constraints as competition for the best talent around is only getting fiercer. The outcome of the maligned Brexit vote is also still clouded in mystery, however new regulatory and technical standards, combined with the impact of the aforementioned MiFID II, Payment Services Directive (PSD2) and Benchmarks Regulation (BMR) will increase sales and business opportunities, leading to another buoyant hiring market for FinTech companies across the UK and EMEA.

The MiFID II topic won't die down in 2018. Given that hundreds of firms will miss the deadline, the most commonly held view is that the regulators will focus on ensuring that these firms have a plan and timescales in place to comply. It is likely that

there will be a lot of wrist-slapping as opposed to more severe punishment given the volume of non-compliant firms. The market for MiFID II solutions will remain strong for the foreseeable and we expect MiFID II focussed start-ups to keep popping up.

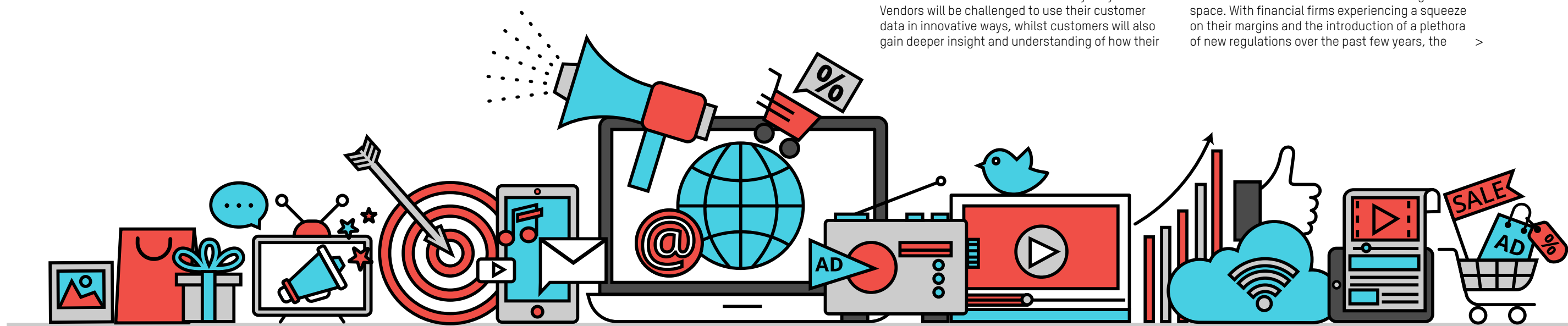
It will, however, completely change the trading landscape reflected in the continued demand for staff within the RegTech Vendor space. As a result, the Financial Markets ecosystem will be turned on its head. Traditional companies will be forced to forge different levels of relationships with new start-ups as technological innovation and third-party service providers create whole new opportunities for collaboration. As we have seen with recent technological advances, these opportunities can come in the shape of new products, new and innovative ways of conducting business as well as improving customer services and allowing for flexible working. However, these same opportunities can pose a serious threat to those companies that cannot move with the times and update their business models to cope with changing tides. These companies face severe competitions from those more agile and innovative challengers and we have seen this spell the end for many in recent years.

It is not just the businesses, customers also face the risk of missing the boat and having opportunities pass them by through a lack of understanding, control or application. FinTech Vendors and customers will have to evolve the way they interact. Vendors will be challenged to use their customer data in innovative ways, whilst customers will also gain deeper insight and understanding of how their

data is used, particularly when the General Data Protection Regulation (GDPR) becomes effective in May 2018. It is here where we are likely to see the greatest acceleration of innovation as new technologies will look to enable new levels of interaction between FinTech Vendors, Customers, Financial Services Organisations and Third Parties. We are already seeing an increased demand for Chief Data Officers whose primary task will be to manage this goldmine of information and evolve the way in which data is gathered, handled and utilised. This could also prove lucrative for the contract market as SQL and ETL projects will increase. Anything related to Data warehousing and how companies access and use data for making quicker trading decisions will be prime pickings for skilled contractors to take advantage.

Market Data Vendors remain busy in the market looking for business development staff who can boast industry or asset knowledge and proof of a prior successful sales career. In the Software Vendor space, languages are becoming more of a "must have" than a "nice to have" in the current market, in part due to the ongoing Brexit negotiations as well as the world becoming a much smaller place, generally. Languages alongside a genuine specialist or niche skillset will put a candidate in good stead against the competition in an ever-more competitive arena.

Consultative, value-based selling has become the established method in the FinTech and RegTech space. With financial firms experiencing a squeeze on their margins and the introduction of a plethora of new regulations over the past few years, the



> appetite for 'luxury' technologies – the "shiny, new things" piece of software that banks and asset managers would buy without a second thought – has dwindled. Sales people now need to sell using clear ROI and cost-saving benefits if they are to prize open tightly guarded technology budgets.

Away from compliance and regulations, the words on everyone's lips from Tech CEO to layman on the street are Cryptocurrencies and Distributed Ledger. We have witnessed a significant rise in activity within the cryptocurrency space this year as one may expect, London is increasingly becoming a centre of activity due to the UK government's relatively open-armed stance to the emerging marketplace. Exchanges are setting up and growing here, Hedge Funds are now building and running cryptocurrency only funds which are doing frighteningly well - one quoted that they are 100% up on the cryptocurrency market this year alone! The well-publicised CME Futures product which went live in December is a partnership with a UK-based exchange; this exchange is also a key provider of market data on Bitcoin and other currencies. There are also companies emerging from London to help people to spend or use their cryptocurrencies which is the next piece in the puzzle in it becoming an everyday method of exchange.

All of these organisations have been hiring and mostly in London, at present, overwhelmingly they have been hiring developers across various languages to get their offerings off the ground and into the market. Support analysts, testers, project managers, infrastructure, devops and hires in other disciplines will follow as they continue to mature.

The other half of this industry sector is distributed ledger without cryptocurrency. There are various businesses building distributed ledger or similar platforms which will support up to 100,000 million transactions per second (Blockchain can reportedly do about 7/second) making them viable solutions for the transactional needs of the World's Financial Markets. R3 and SETL have UK-based technology teams, there are also some smaller start-ups working towards similar objectives in London. These all require seriously smart technologists and are taking them from banks, high frequency trading firms, large internet-based companies such as Google and other areas of industry where programmers work at the hardware/software interface level where significant latency efficiencies can be gained.

The growth is unlike anything we have seen in the last decade and it is showing no signs of slowing as it is still in its infancy. Many questions remain unanswered and major problems are as yet unsolved, which should be its appeal to technologists as it is unknown how much longer the terrain will remain as unregulated as it stands currently. Overall, it's a very exciting time in this marketplace!

AI and Machine Learning stand alongside DLT as two areas that are set to transform FinTech and the financial sector. We have already seen a number of start-ups come to the fore but, as with any new technology, growth ramps up as potential clients become more familiar and comfortable with the concept. On that basis, we anticipate AI and ML technology adoption to accelerate in 2018 as financial firms look to automate

Hottest Skills

RegTech
MiFID II
GDPR
Crypto Currencies
Business Development
Distributed Ledger
AI (or Artificial Intelligence)
Regulations
Data Science

processes and gain competitive advantage from advanced analytics. Using traditional technologies (JAVA, C++) we anticipate seeing a rise in the hedge fund space for AI and ML-based projects.

Demand for permanent developers in 2017 has reached new highs. This is in part due to a number of large firms bringing development teams back on-shore, and another part due to a number of 'update' projects that will enable firms to keep their tech at the cutting edge to drive their businesses forward, and the final part due to a record number of start-up business building the next innovations in FinTech.

With this increased demand, our prediction for 2018 is that salaries for developers are going to rise significantly as firms are competing to secure the best talent in the market.

This rise in salary, however, will also mean that firms will be expecting very strong developers for their money, so the standard expected from candidates will also see a significant up-tick.

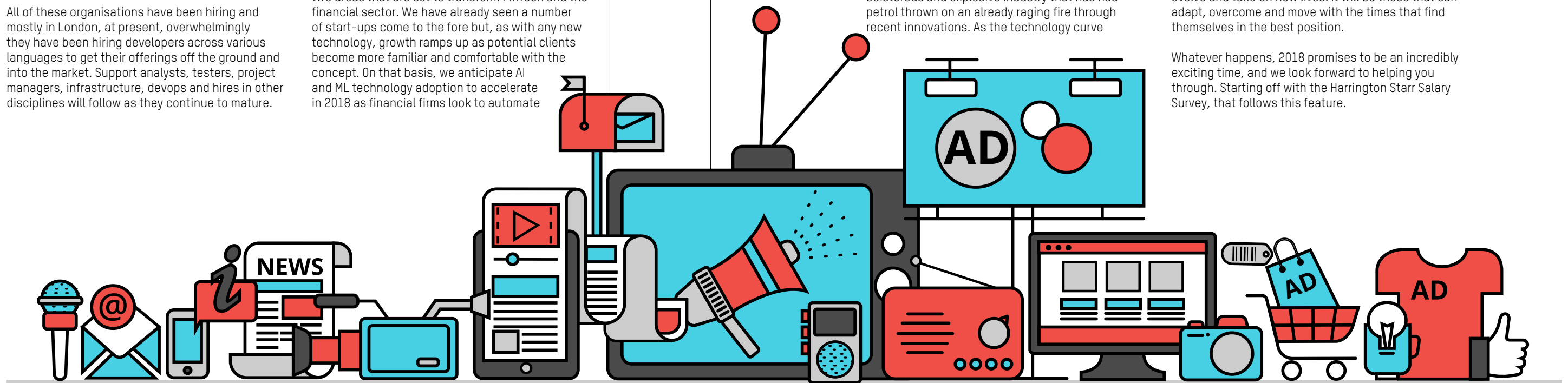
In summary, the landscape for 2018 is looking volatile. The UK Government had made some big moves to try and wrangle what is an incredibly boisterous and explosive industry that has had petrol thrown on an already raging fire through recent innovations. As the technology curve

"The UK Government had made some big moves to try and wrangle what is an incredibly boisterous and explosive industry that has had petrol thrown on an already raging fire through recent innovations."

• •

continues to get steeper, opportunities arise for technologists and sales people that can seize the initiative. There are some arguments that life spawned from a huge volcanic eruption, you only need to look at the bountiful Pacific Islands to see what beauty can emerge from catastrophe. Whilst the Financial Technology industry is not there yet, there are certainly rumblings with the imminent implementation of various regulations and innovations around the corner. It will be from this chaos that new roles emerge and existing positions evolve and take on new lives. It will be those that can adapt, overcome and move with the times that find themselves in the best position.

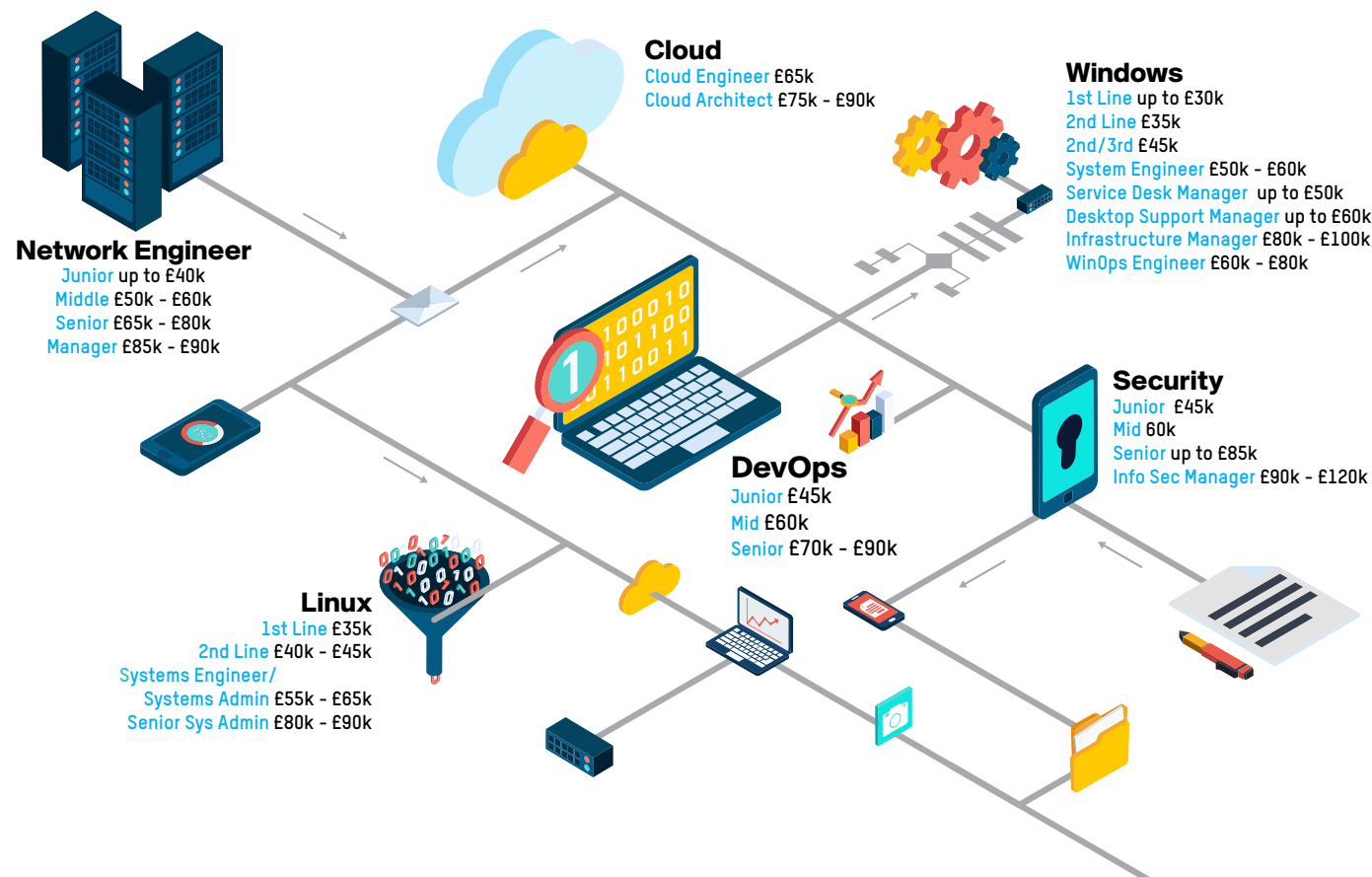
Whatever happens, 2018 promises to be an incredibly exciting time, and we look forward to helping you through. Starting off with the Harrington Starr Salary Survey, that follows this feature.



BREAKDOWN 2018

Harrington Starr returns with an extensive survey of the financial services industries technical & sales roles for the year ahead. Q1 begins with: Software & Network Sales, Infrastructure & Networking, Change & Professional Services and the London Contractor markets.

Infrastructure and networking salary trends 2018



The 2018 sales market

	2017 SALARY	2018 SALARY (+/- %)	PREDICTIONS FOR Q2/3
NETWORK SALES			
Sales Exec	£40k - £60k	£35k - £55k	.
Senior Sales Exec	£75k - £90k	£65k - £80k	.
Sales Manager	£90k - £110k	£90k - £110k	No change
Head of Sales	£120k - £150k	£120k - £150k	No change
SOFTWARE SALES (TYPE A)			
Pre-Sales	£65k - £90k (OTE £120k - £130k)	£70k - £90k (OTE £100k - £130k)	£70k - £90k (OTE £100k - £130k)
Sales Exec	£40k - £70k (OTE £80k - £120k)	£50k - £75k (OTE £100k - £150k)	£60k - £80k (OTE £120k - £160k)
Senior Sales Exec	£65k - £90k (OTE £130k - £180k)	£70k - £110k (OTE £140k - £220k)	£80k - £115k (OTE £160k - £240k)
Sales Manager	£80k - £110k (OTE £160k - £220k)	£80k - £120k (OTE £180k - £250k)	£90k - £120k (OTE £180k - £250k)
Head of Sales	£120k - £140k (OTE £200k - £280k)	£130k - £150k (OTE £200k - £300k)	£140k - £175k (OTE £250k - £300k)
SOFTWARE SALES (TYPE B)			
Sales Exec	£40k - £65k	£40k - £70k	No change
Senior Sales Exec	£75k - £85k	£75k - £90	No change
Sales Manager	£80k - £110k	£80k - £120k	No change
Head of Sales	£130k - £140k	£130k - £150k	No change
SALES US			
Graduate Sales 0-2 yrs	£40k - £50k (OTE £60k - £80k)	£45k - £55k (OTE £63k - £85k)	£47k - £57k (OTE £65k - £87k)
Junior Sales 1-3 yrs	£55k - £70k (OTE £70k - £110k)	£58k - £75k (OTE £75k - £115k)	£55k - £70k (OTE £78k - £117k)
Sales Exec 3-6 yrs	£70k - £95k (OTE £140k - £190k)	£80k - £100k (OTE £160k - £200k)	£85k - £105k (OTE £170k - £210k)
Senior Sales Exec 6-9 yrs	£90k - £115k (OTE £180k - £230k)	£100k - £120k (OTE £200k - £240k)	£100k - £130k (OTE £200k - £260k)
Sales Manager 9-12 yrs	£100k - £150k (OTE £200k - £300k)	£110k - £150k (OTE £220k - £300k)	£120k - £170k (OTE £140k - £340k)
Head of Sales 12-17 yrs	£140k - £190k (OTE £280k - £380k)	£150k - £200k (OTE £300k - £400k)	£200k - £250k (OTE £400k - £500k)

Permanent Testing Market 2018

Manual Test Analyst

Junior to Mid-Level £35k - £45k
Mid-Level to Senior £45k - £60k
Senior to Lead £60k - £75k

QA Test Analyst - Manual/Automation

Junior to Mid-Level £35k - £45k
Mid-Level to Senior £45k - £60k
Senior to Lead £65k+

QA Automation Engineer

Junior to Mid-Level £40k - £50k
Mid-Level to Senior £50k - £70k
Senior to Lead £70k - £95k+

Developer In Test (SDET)

Junior to Mid-Level £50k - £60k
Mid-Level to Senior £60k - £75k
Senior to Lead £80k+

QA/Test Manager

Junior to Mid-Level £65k - £75k
Mid-Level to Senior £75k - £90k
Senior to Lead £100k+

Permanent Application Support Salary Trends

Financial vendor Application Support Analyst

Junior £30k - £40k
Mid-Level £40k - £55k
Senior £55k - £65k
Manager £65k+

Sell-Side Application Support Analyst

Junior £35k - £40k
Mid-Level £40k - £55k
Senior £55k - £70k
Manager £70k+

Buy-Side Application Support Analyst

Junior £55k - £65k
Mid-Level £65k - £75k
Senior £75k - £95k
Manager £95k+

Exchange/brokerage Application Support Analyst

Junior £35k - £50k
Mid-Level £30k - £65k
Senior £65k - £85k
Manager £90k



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Change and professional services salary survey 2018

	BUY SIDE/ COMMODITIES HOUSE	VENDOR	CONSULTANCY	EXCHANGE/ BROKERAGE	SELL SIDE
BUSINESS ANALYST					
Junior	£40k - £50k	£40k - £50	•	•	£50k - £65k
Mid	£50k - £75k	£50k - £70	£60k - £75k	£55k - £65k	£65k - £85k
Senior/Lead	75k - £95k	£70k - £90	£75k - £90k	£65k - £90k	£85k - £95k
Head	£100k+	•	•	£80k+	£95k+
BONUS	15%	10-30%	10-20%	10-25%	10-50%

	BUY SIDE/ COMMODITIES HOUSE
COMPLIANCE	
Junior	£55k - £65k
Mid	£65k - £75k
Senior	£75k - £100k
Head	£100k+
Programme Manager	£80k - £120k
BONUS	15%

	BUY SIDE/ COMMODITIES HOUSE	VENDOR	CONSULTANCY	EXCHANGE/ BROKERAGE	SELL SIDE
PROJECT MANAGER					
Junior	£55k - £65k	£45k - £55k	•	•	•
Mid	£65k - £75k	£55k - £70k	£60k - £70k	£65k - £85k	£60k - £80k
Senior	£75k - £100k	£70k - £100k	£70k - £100k	£85k - £95k	£80k - £100k
Head	£100k+	•	•	•	£120k+
Programme Manager	£80k - £120k	£90k+	£110k+	£100k+	£120k+
BONUS	15%	10-30%	10-20%	10-25%	10-50%

	VENDOR
HEAD OF PROFESSIONAL SERVICES	£120k - £170k
BONUS	10-30%

	VENDOR
PRODUCT MANAGER	
Mid	£65k - £80k
Senior	£80k - £100k
Senior Strategic Product Manager/owner	£100k+
BONUS	10-30%

	VENDOR
IMPLEMENTATION CONSULTANT	
Junior	£40k - £55k
Mid	£55k - £65k
Senior/Lead/Manager	£65k - £90k
BONUS	10-30%

	VENDOR
BUSINESS AREA PRODUCT MANAGER	
Senior	£100k - £120k
Senior Strategic Product Manager/owner	£120k+
BONUS	10-30%

	VENDOR	EXCHANGE/ BROKERAGE
TAM		
Mid	£45k - £65k	£45k - £65k
Senior	£65k - £75k	£65k - £75k
BONUS	10-30%	10-30%

Compliance 2018 Salary Survey

AML/KYC Officer or Analyst £35k - £60k

Compliance Officer £50k - £70k

Senior Compliance £70k - £90k

Head of Compliance/
CF Function £90k - £150k

Chief Compliance Officer £110k+

Front end Salary Survey 2018

Front End Developer (HTML5, JavaScript, CSS3)

Junior £25k - £35k
Mid-Level £40k - £50k
Senior £55k - £65k

Front End Developer (React.JS)

Junior £30k - £40k
Mid-Level £45k - £60k
Senior £65k - £90k

Full Stack JavaScript Developer (Node.JS, AWS, React)

Up to £75k

Generally Front End Developers who have been building out complex Single Page Applications are sought after, thus leading to higher salaries offered as the demand increases.



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US Salary Survey 2018

Sales

Inside Sales Executive \$45k - \$50k

Account Manager \$65k - \$120k

Sales Director \$120k - \$175k

Head of Sales \$175k - \$250k

Development

Java Developer \$110k - \$150k

QA Engineer \$90k - \$100k

Jnr Java \$75k - \$90k

Senior C++ (Algo Trading) \$180k - \$210k

Support

Level 2 desktop Support \$50k - \$60k

Technical Account Manager \$100k - \$130k

Field Service Engineer \$65k - \$75k

Solutions Architect \$90k - \$100k

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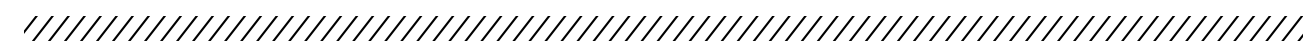
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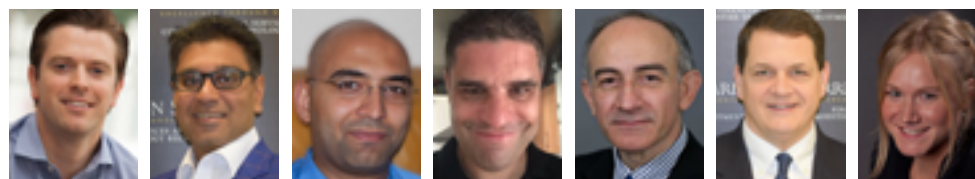
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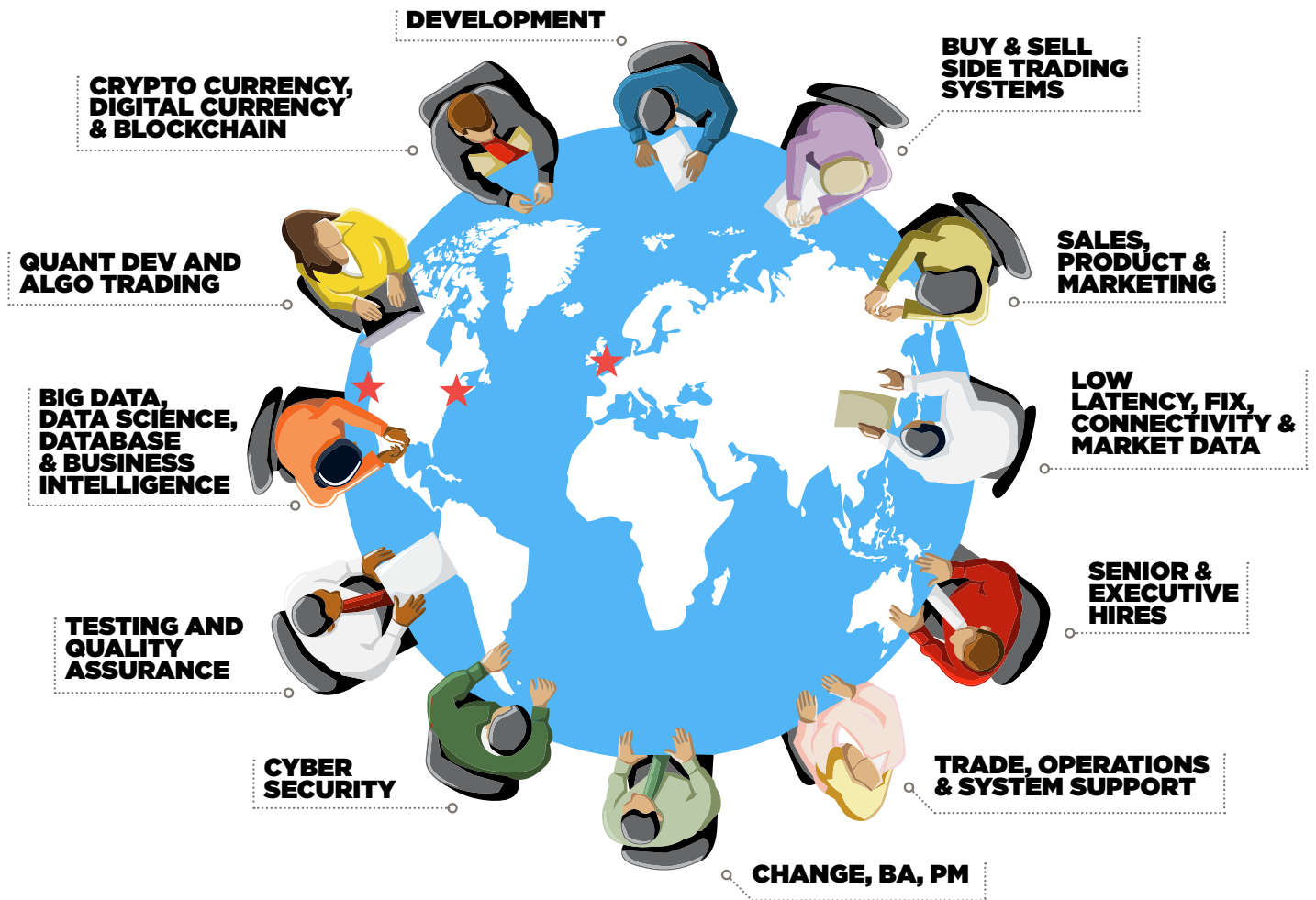


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