

THE FINTECH TIMES

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**PAYMENT GIANTS AND THE
BIG BROTHER EFFECT**

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BUSINESS?**

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SHAPING A SINGLE VERSION OF TRUTH



Haytham Kaddoura, CEO of SmartStream Technologies,
discusses AI and blockchain strategies for increasing data
quality in combatting trade failures.

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Modex is launching a Smart Contract Marketplace that allows for easy, user friendly access to smart contracts. Companies can easily find Smart Contracts that meet real-world needs, are already audited and secure, without having to scout developers and manage one-off development projects.

Modex plans to make deployment of Smart Contracts significantly easier, faster and more cost-effective, speeding up blockchain technology adoption.

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SHAPING A SINGLE VERSION OF TRUTH

SmartStream Technologies is blazing a trail with a number of future forward activities within the fintech industry. From the growth of its Reference Data Utility (RDU), that has had buy-in by Goldman Sachs, JPMorgan and Morgan Stanley for delivering reference data management services to the banks, to the launch of its Innovations Lab in Vienna, SmartStream is doing its bit to combat trade failures. Zoya Malik, Managing Editor *TFT* spoke to SmartStream's CEO Haytham Kaddoura about his AI and blockchain strategies for increasing data quality and reducing data management costs for SmartStream's partners

ZM: What are SmartStream's activities in the fintech market?

HK: We are a player in the fintech space, starting as a processing platform provider, primarily addressing reconciliation and over the years we have branched out into other ancillary areas such as cash and liquidity management, corporate actions and expense management, which handles charge backs between brokers and other counter parties.

Since 2015, we have formed a joint venture with JPMorgan, Goldman Sachs and Morgan Stanley to develop The SmartStream Reference Data Utility (RDU) that picks up data from various financial exchanges, along with data feeds from digital financial news and information providers such as Bloomberg and Reuters in order to deliver a greater level of accuracy. RDU is about delivering clean and rich data to financial institutions via more developed data sets than banks can access individually. The more accurate and the more comprehensive this data is, the easier it becomes to avoid losing trades because of data failure.

At the moment, we are focussed on ETDs (Exchange Traded Derivatives) and expanding into equities and in 2019, we will be looking at fixed income as an asset class. We are well supported in these efforts by the aforementioned three highly credible partner banks and we are increasingly targeting Tier 1 institutions globally.

ZM: What are the problems you are addressing for bank partners?

HK: The data that is being pumped into banks' various operations is not necessarily consistent; inaccuracies creep in from individual exchanges and financial news agencies. These discrepancies can be time consuming and costly for the banks who end up spending significant resources on addressing the shortcomings of the data i.e. filling in the blanks. So instead, we do that leg work on their behalf whilst making that data available to a whole host of financial institutions. This eliminates a duplication of banks' individual efforts and ensures an improvement in speed, accuracy and cost effectiveness in the processing of reconciliations.

ZM: Over the past year, how has SmartStream invested in AI and blockchain within your business?

HK: In the early days, I was really cautious about jumping onto the AI and blockchain bandwagon but, eventually, I

became confident about what value add it could bring to our industry and to our clients. So confident that, in fact, towards the latter part of 2018, we announced the set-up of the SmartStream Innovations Lab in Vienna, with the objective being to build a team to look at implementing AI and blockchain within our existing solution sets.

We took a really dynamic and young team of data scientists, with great analytical skills, lead by an AI academic to study financial institutions' pain points and to address their needs. Prioritising AI and blockchain solutions as a strategy prerogative means that this is a critical investment for us and thus far, it's proving a great success. The Innovations Lab team even invites banks to sit "within" the organisation and, with the appropriate Chinese walls in place, these institutions can share their anomalous data so that we can make it more intelligible, enabling them to better understand why they have breakdowns in processes.

Don't forget that SmartStream has almost 30 years of market expertise within the industry and our solutions are running at 70 of the world's top 100 partner institutions, so with the expertise we have working at the SmartStream Innovations Lab, we are able to test our blockchain technology while increasing our understanding in tandem with our partners' growth plans, to evolve strategic solutions. Testing our solutions is a critical way to develop and prove our technologies.

In 2019, these solutions will become commercially available to even smaller partner institutions who may not have the data volumes of a Tier 1 organisation. Designed to be plug and play and modular, these solutions can sit on both our own existing platforms and directly on the client's system.

ZM: How is the Innovations Lab finding solutions for clients?

HK: If you look at the financial markets, you can see that they're changing at great speed. Typically bank transitions were originally driven by cost efficiency and I think that with conventional technology we have raised everything to a certain level, where they can't easily optimise any further. However, there is progress with Blockchain and AI or machine learning.

The blockchain and AI teams were asked by clients to innovate and our product managers had a lot of great ideas. They reviewed the products and they found all the areas where we could apply innovation. For example, if you look at the reconciliation process specifically where data doesn't allow exact matching, then AI gives our customers a lot of possibilities. If they allow for an AI engine to come up with suggestions, they can process much higher volumes in less time. Then, due to inexact matching, of course, there might be more mistakes however, this is typically still a great business case for them.

ZM: How many proof-of-concept projects are underway?

HK: At the moment we have 11 that the SmartStream Innovation Lab is working on. We were able to discuss these in October this year at SIBOS and Money2020.

ZM: How do you set up an environment that supports innovation?

HK: We focus specifically on real world problems of our clients in the POCs. We want to meet client needs and innovate in that direction. When the POC is done and successful, then we seed the innovations back to our product centre so that all the other SmartStream customers benefit.

So, for me, innovation is really end-to-end. It has to start with the team that innovates and has to be put into the product line. It has to go to all the customers.

ZM: How is SmartStream investing in blockchain?

HK: One of the solutions that we are developing is communication of verification and reconciliation of orders which is happening at around 20 banks as an on-premise offering. We can put this solution for them onto a blockchain environment so that clients can then see the data online, as a single version of truth and thus discrepancies can be reduced between organisations. We demonstrated the prototype at Sibos earlier this year and are testing it with one of our clients. We will have a major announcement on AI and I am confident we will have a major impact in the blockchain space.

ZM: How will blockchain transform the payments industry?

HK: We support digital payments and this is high on our agenda for 2019 as it is for financial institutions, especially where banks are reconciling and processing payments from mobile phones, credit cards, e-payments gateways and now even crypto currency level payments. Banks are aiming to develop a unified platform that is able to handle such payments seamlessly, so this is one of the areas we have on our drawing board for 2019. In terms of payment processing by blockchain operators, we support the infrastructure providers such as Ripple by assisting with their payment management.

ZM: Where are you seeing business growth?

HK: Corporate actions processing is one of our fast growing business lines. Let's say that an organisation announces an action globally across multiple financial jurisdictions where they must communicate, for example, a stock strip or an

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M&A, buy back or dividends declarations. This information gets disseminated through different channels, whether it's the stock exchange or the corporation themselves, and every country and every jurisdiction has its own modes of communication. The data needs to be acquired by financial institutions so that it can understand the implications of that on their clients' portfolios. Historically, that's been a massively labourious undertaking by banks because very few institutions are able to afford automated processing of that data. What we are doing is creating solutions for smaller institutions to automate their process and adopt technologies that permit them to keep pace.

ZM: Which are these smaller financial institutions?

HK: Everybody. From small brokers to small hedge funds to any entity that hold securities that are subject to corporate actions. It has global implications whether in terms of source of data that is being produced by the corporations, or the people at the end of the trail who are assessing this data for their clients' portfolios.

ZM: What other non-banking sectors will look for growth by leveraging fintech?

HK: We are seeing growth in other sectors and have signed deals with the telcos and oil and gas corporations. Many of these corporations historically relied on banks to provide them with an assessment of their exposures to various currencies, various jurisdictions, to be able to manage their liquidity. Now by asking us to provide this service, they are able to run that on their own. For instance, a big oil and gas conglomerate can see what is its exposure to the Japanese Yen or Pound Sterling, so that Treasuries can act on a more active and dynamic basis. The saving in time can have a real impact on the corporate's portfolio.

ZM: What are the leading jurisdictions for fintech startup development?

HK: We are seeing interest in Emerging Markets coming from African countries in adopting new technologies and from Dubai. For instance, they are doing some interesting things at The Hive in Dubai sponsored by DIFC and Accenture and fintech accelerator activity in Singapore. I think it has to be done as a concentrated effort; it starts with academic institutions producing concepts and, from there, entrepreneurs and developers building solutions. From the government side, we need IP protection and the infrastructure and guidance for the start-up entrepreneurs. The whole environment has to work together for the proposition to work and once these are there, the investors will come. The DIFC and The Hive launched a roadshow that invited InsureTech firms and Tier 1 banks to step up and give guidance to entrepreneurs in one-on-one sessions, so a great example of a government enabling exposure to institutions.

ZM: As the industry embarks on the regtech journey, how can banks convince regulators that the technology works?

HK: Regulators themselves will have to look into AI technologies, I believe it will solve the challenges we do not have the answers for today. A good example is the BCBS-248 regulation and its requirement for cash and liquidity stress testing. Regulators require banks to monitor internal stress,

counter party stress, and market stress. The monitoring requires a technology that understands the nature of a normal behaving market and can sense abnormalities. This is a perfect example of a machine learning use case and SmartStream is currently implementing a stress monitoring tool to address this.

ZM: How does SmartStream partner with start-ups in terms of your business model?

HK: Again, I believe it's everyone's responsibility to support start-ups. We partner with them and they offer us exposure to their client-base and we work with them to develop their proposition when it directly works with our business model. We like to do our fair share. The criteria for partnering these firms is by the track record of the team that they have evolved from a concept and which offers us confidence that our time in nurturing them will be well spent and that they have something unique and not just a me-too solution. We would like something unique, something that we are proud to take to our clients.

Of course, regulations are significant drivers for our growth and we've witnessed, for example in KSA, Dubai and across the GCC and in other Emerging Markets, that there is a strong push by regulators and market authorities to help create opportunities. Regulators in these jurisdictions have shown confidence in us, knowing we can deliver projects on time. So certainly, the change and speed of adoption of regulations in our industry, is a major part of our growth story. ♦TFT

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Haytham Kaddoura

