Modernising the Fight Against Financial Crime: Innovation and the Role of RegTech
*By Standard Chartered Bank, April 2018*

Introduction

Some people have argued that the next frontier in the fight against financial crime is using new technology to detect money laundering. It could be, but the challenge is to make sure we are able to accurately understand the true costs and benefits of the new technology, both to our own Bank and across the wider industry – and importantly whether it helps those relying on our work to more often and more effectively interrupt the illicit actors benefitting from financial crime.

At Standard Chartered, we are committed to playing our part in the fight against financial crime. As one measure of our contribution, we employ thousands of Financial Crime Compliance (FCC) professionals, but we are also constantly looking to improve the net results of our efforts, and our success in reducing financial crime.

Technology plays a key role in our fight against financial crime, and RegTech solutions offer real opportunities to transform the efficiency of several key areas of our approach:
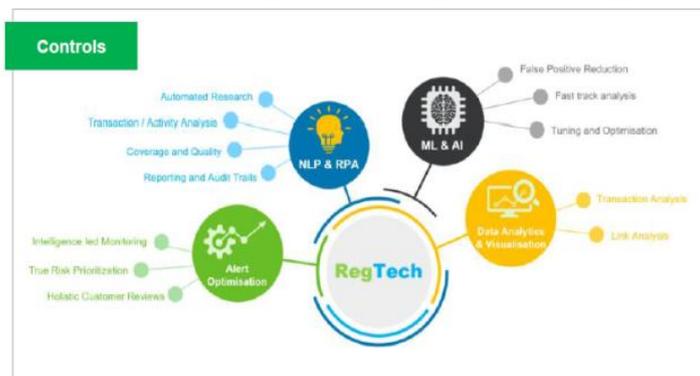
Transaction Monitoring: Each year Standard Chartered monitors well over a billion transactions, and investigates millions of cases. Yet most of these are false positives – less than 1% of cases lead to positive findings. And of these positive findings, where we file Suspicious Activity Reports, it's estimated that no more than 10% are of interest to law enforcement. Despite this, we have many examples of cases and SAR's which have lead to important investigations and significant outcomes.

Screening: We conduct Sanction, PEP (Politically Exposed Persons) and Adverse Media Screenings of customers and others to identify matches, which involves significant terabytes of data. We could configure our technology to produce fewer hits, for example by deploying exact match settings – but we don't do this because we would likely miss some important true matches where misspelling, or similar names, or translations have affected the result. Even with a reasonable settings configuration, we generate millions of cases, which our analysts must investigate to determine true hits or false positives – and the rate of false positives is similar if not higher than those experienced in Transaction Monitoring. Despite this, the true hits are very valuable, especially for Sanctions and senior PEPs.

Our response: Against this backdrop, one might conclude that the answer lies in narrowing the amount of data – or even to give up on technology, as the current approach certainly produces benefits, but

at what cost?

We think differently! At Standard Chartered, we are taking a seemingly counterintuitive approach: we are doubling down and increasing, not reducing, the volume of data we are looking at, and at the same time investing in improving the quality of the data we rely upon. And we expect this approach to improve both our efficiency and effectiveness. Here's how:

Over the past two years, our FCC Innovation team has led our work with a range of partners to explore several exciting RegTech solutions. Advances in technology, storage, data processing, and an increasing awareness of the issues that would benefit from RegTech applications has seen this area transform into one of the most exciting subsets of FinTech. It is a busy space to get involved in, and in many cases we are only at the start of the development stage. However, we believe that there are some clear 'use cases' and it is in these areas where we are well advanced already.

After much thought and thorough analysis of what we need to improve to make efficiency and effectiveness gains, we sought out a set of partners in the areas of work, which we believe are likely to have the biggest impact for Standard Chartered.

> *"Standard Chartered believes that RegTech presents new opportunities to augment the fight against financial crime. We believe that Financial Institutions can both increase effectiveness and efficiency and that RegTech has a role to play, but the goal of achieving both cannot be outsourced to technology providers and there are no silver bullets though there are some quick wins."* - **Markus Schulz | Global Head of FCC Controls, including FCC Innovation, Standard Chartered**

The following four focus areas will impact our Transaction Monitoring, Screening, and our overall fighting Financial Crime Investigations process:

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Machine Learning & AI (Artificial Intelligence): We have been working with our partner, **SILENT EIGHT** on pioneering work using AI powered solutions to augment our Screening activities. We have completed a pilot which produced very significant results using a limited data set – reducing the false positives by more than 25%. This, in turn, will reduce analyst workloads tremendously. Where a case cannot be closed entirely through the use of the AI tools, a recommendation can still be provided to the analyst, providing additional useful information to resolve the case. In our discussions with regulators to date, many see this as a sensible approach – where AI might be more accurately described as "Augmented Intelligence" for now.

Transaction Monitoring/Optimisation: We are continuing to tune our Transaction Monitoring "detection engine" (DE). It uses algorithms to generate alerts which are consolidated into cases and then worked via an enterprise-wide case manager system (ECM). Tuning has limitations so we are working with our Transaction Monitoring partner to develop an "intelligence layer" that sits between the detection engine and the case manager. We want to take the alerts (or 'risk events', as we call them) generated by the DE, and by using technology to triage and enrich them before handing them over to our analysts for investigation. In this way we will be able to provide our analysts with higher-quality work to investigate; for example, we know that certain patterns of activity or frequently generated numbers of risk events are of greater interest.

Natural Language Processing & Robotics Process Automation: While Alert Optimisation will improve the quality of risk events provided to our analysts to investigate, improvements in the investigative process itself are also possible. We are focusing on reducing the time our analysts spend collecting and sorting data prior to assessing a case to speed up the process and give them extra help in surfacing what is important. Our analysts consult a wide range of data sources as they conduct an investigation – including public media, open source information, numerous subscription services and internal data sources. Working with another partner we are using Natural Language Processing and Robotics Process Automation to not only source and sort data that has been carried out manually, but also to prioritise data that has more important attributes, while also helpfully creating a clear audit trail.

Visualisation & Data Analytics: To further support our analysts in the investigation process we can present risk events in a more compelling way using visualisation tools and help managers gain insights through data analytics. With visualisation, we are deploying tools from our partners that allow analysts to see the flow of funds or the relationship between various entities in more complex investigations. Another tool, which combines visualisation and data analytics, allows analysts to get a better sense of what the 'normal' activity of a party looks like and how different generated risk events therefore look. As we provide our analysts with the wherewithal to improve effectiveness we also provide managers and supervisors with the tools they need to identify strong performers, whose investigations lead to positive results, and less strong performers who escalate too many irrelevant risk events. With training and support we can therefore help all our analysts to become strong performers and in doing so further improve the effectiveness and efficiency of our financial crime programme.

As RegTech moves from concept to reality, the fight against financial crime will evolve. Despite this, a fundamental transformation that will improve our collective approach to financial crime is only possible with additional support in the following 3 areas

The Road Ahead

Regulatory Support: It is clear that fighting financial crime is an important area where regulators expect banks and others to play a significant role. There has been reluctance by regulators at large to see banks deviate from established activities, and there are hurdles which mean it is harder to embrace innovation and make meaningful changes. There is a recognition that if we want to modernise the fight against financial crime, regulators (including amongst themselves) will also need to be more flexible and allow banks to move forward and to try new ways of working.

> "*Together with Standard Chartered Bank's FCC team, we want to help revolutionise how Screening will be done in the future. Introducing AI into this space is not straightforward, with regulatory oversight and tolerance for errors extremely low. Still, Standard Chartered had a very clear opinion on what they wanted and how AI could fit in to their programme. We only had to focus therefore on proving AI could play its part and augment the work the Bank was doing and we are very pleased with the results.*" - **Martin Markiewicz | CEO & Co-Founder, Silent Eight**

Supporting New Skills: In using machines to augment our work, we need to guard against introducing "Artificial Stupidity." To make RegTech work we need to ensure we have specialist expertise, not only by working with partners but also within banks, law enforcement and the regulators. The greatest RegTech risk is that those who need to engage with it don't understand it or how it can help. Exaggerated claims by the industry about its potential benefits are not in the long-term best interests of RegTech.

Collective Action: As banks modernise and leverage tools to improve effectiveness and efficiency, and progress and expand information sharing models, do we have a collective strategic vision of what each of us can contribute to make the whole truly greater than the sum of its parts.

> "*Let's not lose this opportunity to modernise the fight against financial crime and not limit ourselves to a discussion around what the latest machines can do for us. This is much bigger than a discussion about machines and is integral to the way we as humans see our future. After all it's not machines that are damaged by illicit finance but our communities and families.*" - **John Cusack | Global Head FCC, Standard Chartered**