

SFC Regtech and Fintech Contact Day 2016

Hong Kong, 7 November 2016

On 7 November 2016, the Securities and Futures Commission (SFC) hosted a Regtech and Fintech Contact Day¹ which focused on emerging regulatory technologies (Regtech) and financial technologies (Fintech) and how they intersect with securities regulation.² More than 200 senior delegates from financial institutions, brokers, asset managers and other industry stakeholders attended the full-day event, which was part of the inaugural Hong Kong Fintech Week³ sponsored by InvestHK and supported by the Asia Securities Industry and Financial Markets Association (ASIFMA) and the Hong Kong Investment Funds Association (HKIFA).

Fintech development in Hong Kong

Mr James Lau, Acting Secretary for Financial Services and the Treasury of the Hong Kong Special Administrative Region, noted in his opening remarks⁴ that Hong Kong is an ideal place for Fintech development. It is a leading international financial centre and provides first-class market access to the Mainland and the rest of Asia, and these, Mr Lau added, are the main draws for Fintech entrepreneurs to set up in Hong Kong.

To underscore Hong Kong's commitment to Fintech, Mr Lau highlighted the measures to develop Hong Kong into a Fintech hub mentioned in the Financial Secretary's 2016-17 Budget speech,⁵ and he commended the efforts undertaken by Hong Kong's financial regulators to achieve them. Mr Lau introduced some major Fintech and Regtech themes, including payments and robo-advice as well as potential process efficiency improvements through blockchain, and concluded by encouraging collaboration among start-ups, financial institutions, professionals, regulators and other stakeholders.

Regulatory implications

Mr Ashley Alder, SFC Chief Executive Officer (CEO), began his welcoming remarks by noting that the event is part of a series of initiatives to enhance the SFC's interaction with financial and regulatory technologies, and it underscores the SFC's efforts to work closely with the

¹ [Event programme](#). Presentations were offered as illustrative of new business models and emerging technologies currently being contemplated, proposed or offered, and which regulatory and industry stakeholders may find of interest, and participation in the event should not be construed as a regulatory endorsement of the products or services of the presenters or their employers.

² See also "[Fintech and Regtech: A Securities Regulator's Perspective](#)", a speech by Ms Bénédicte Nolens, SFC Senior Director, Risk & Strategy.

³ www.hongkong-fintech.hk.

⁴ [Full speech](#).

⁵ [Full speech](#).



market. Mr Alder added that the SFC is closely following developments in the sector with a particular focus on how they intersect with the rules the SFC administers.

Mr Alder highlighted the broader regulatory implications of increased automation by incumbents, new entrants and regulators in securities and capital markets, noting that new skills and new approaches to supervision will be required. He emphasised that he is encouraged by the opportunities that Regtech presents to regulatees in helping them ensure compliance with regulatory standards, as well as to regulators in the performance of their functions.

Regulating rapidly transforming financial systems

Professor Douglas Arner from the Faculty of Law of the University of Hong Kong delivered a keynote speech based on a paper he published recently.⁶ He observed that regulatory changes and technological developments following the 2008 Global Financial Crisis are fundamentally changing the nature of financial markets, services and institutions. For policymakers and regulators, the challenge of regulating rapidly transforming financial systems requires increased use of and reliance on Regtech.

To date, Regtech has been focused on the digitisation of manual reporting and compliance processes, such as in the context of know-your-customer (KYC) requirements. In Professor Arner's view, this offers significant potential cost savings to both the financial services industry and regulators. However, he sees even greater long-term potential if Regtech is used to enable a close-to-real-time and proportionate regulatory regime which identifies and addresses risks while facilitating regulatory compliance. In conclusion, he asserted that the transformative potential of technology will only be captured by a new approach that sits at the nexus of data, digital identity and regulation.

Regtech – Onboarding, suitability, digital identity and cybersecurity

In the first of three presentations by Regtech providers, Mr Andrew Au, CEO of AGDelta, a digital wealth management solutions company, described the use of an end-to-end digital process to integrate client onboarding, product due diligence, suitability assessments, reporting and surveillance, and thereby combine record keeping, auditing features and the monitoring of different types of conduct and product risk in one compliance engine. Mr Au also discussed industry collaboration as a way to overcome difficult industry challenges, and cited Contineo, where he is a founding board member, as an example of a shared industry platform aimed at providing increased transparency and best execution in the structured-product market.

⁶ Douglas Arner, Janos Barberis and Ross Buckley, "[FinTech, RegTech and the Reconceptualization of Financial Regulation](#)", October 2016.



The second presenter, Mr Edmund Lowell, the founder and CEO of KYC Chain, a start-up company using emerging “Distributed Ledger Technologies” (DLT) to provide KYC solutions, explained how “self-sovereign digital identities” can allow clients’ personal data and identity certificates to be shared in a secure fashion among financial institutions participating in the distributed ledger and thus eliminate duplication in client onboarding processes. In the next presentation, Ms Michelle Kam, Head of Regional Design for Risk, Thomson Reuters, described how duplication can also be reduced through the use of KYC utilities that combine the collection of client information with enhanced client due diligence and ongoing screening for negative news, anti-money laundering, financial crime, tax evasion and sanctions risks.

Mr Duncan Wong, Vice President, Financial Technologies, Applied Science and Technology Research Institute of Hong Kong (ASTRI), gave a presentation on cybersecurity where he shared statistics on the increasing variety and sophistication of ransomwares⁷ and observed that cyber intrusion discovery times remain stubbornly high at a global average of around 150 days. Mr Wong said ASTRI is undertaking several cybersecurity initiatives to reduce these risks in Hong Kong, including developing the Cyber Intelligence Sharing Platform for use by participating financial institutions and the Cyber Range, a dedicated training zone for cyber security officers of financial institutions. He added that ASTRI is also developing client authentication and fraud control technologies which use biometrics, and invited the audience to learn more about ASTRI’s mission to enhance Hong Kong’s competitiveness in technology-based industries, including Fintech.⁸

Fintech – Robo-advice, sentiment analysis and automation

In the first of four presentations on Fintech, Mr Alex Ypsilanti, CEO and co-founder of Quantifeed, a provider of digital investment solutions to wealth management institutions, focused on how “goals-driven robo-advice” can provide personalised investment portfolios to mass affluent investors and to small retail investors, a segment where financial institutions face profitability challenges. Similarly, Mr Donald Chan, Director, Asia Pacific, BondIT, highlighted how automation can be used to provide real-time rebalancing and risk management of fixed-income investment portfolios as well as to generate investment ideas tailored to individual clients, in combination with a robust audit trail.

Mr Philippe El-Asmar, CEO and founding partner of Amareos Ltd, explained how social media “sentiment analysis”⁹ can assist in predicting outcomes as well as in reading, charting, and understanding market sentiment by combining crowd-sourced data, natural language processing, machine learning and big data analytics, and how it can be used to supplement investment and risk decisions.

In the final Fintech presentation, Mr Peter Hatz, Director, Marketing and Client Relations, Veridate Financial, discussed the use of highly automated, end-to-end investor onboarding, administration, fund accounting and reporting services by family offices, fund managers and wealth managers.

⁷ A type of malicious software designed to block access to a computer system until a sum of money is paid.

⁸ www.astri.org/technologies/initiatives/financial-technologies.

⁹ The automated transformation of unstructured text into sentiment indicators that visualise what crowds think.

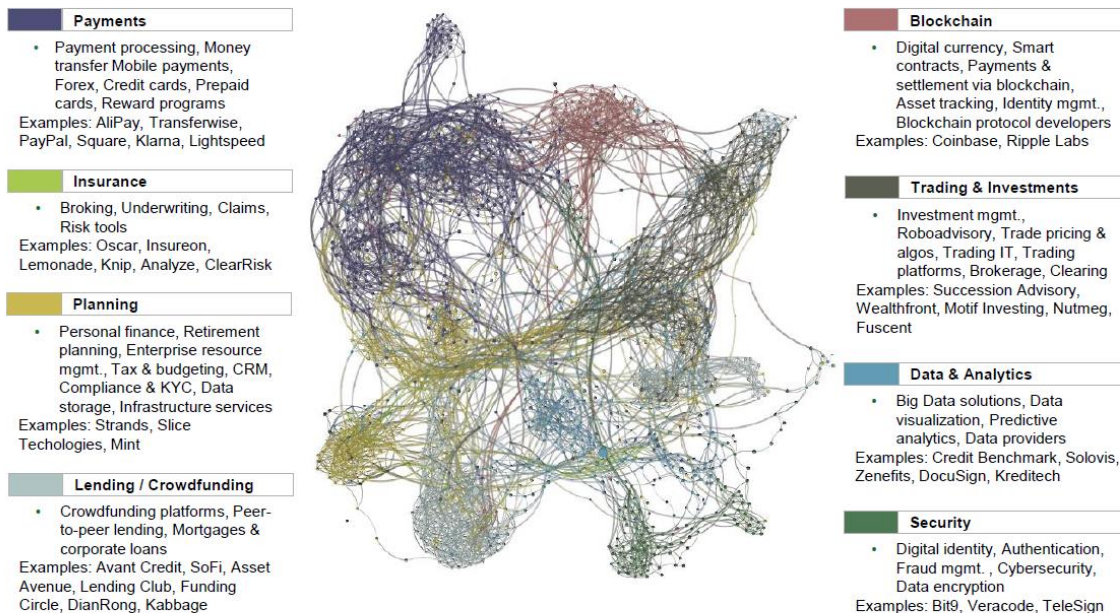


Intersection of Regtech and Fintech with securities regulations

A panel discussion moderated by Mr Mark Austen, CEO of ASIFMA, began with an introduction by Ms Bénédicte Nolens, SFC Senior Director, Risk and Strategy, to the intersection of Regtech and Fintech with the regulatory perimeter. Ms Nolens reviewed the eight main components which make up the Fintech landscape, namely payments, insurance, planning, lending/crowdfunding, blockchain, trading and investments, data and analytics, and security, and observed how most of these directly intersect with or otherwise relate to financial regulation.

The Fintech landscape

The global FinTech landscape can be mapped across 8 broad categories



Visualization based on ~1,800 FinTechs receiving the highest amount of private funding. Dataset mapped with Quid and allowed to cluster based on similar products, technologies, customers etc.
1) Data based on over 8,800 companies which were discovered across over 10 data sources. Total funding based on date of funding. Total companies based on founding year. Data as of November 2016.

Source: Expand Research

Mr Nelson Chow, Chief Fintech Officer, HKMA, provided an overview of the HKMA's Fintech initiatives, including the Cyber Fortification Initiative,¹⁰ the set-up of a Fintech Facilitation Office¹¹ and a Fintech Supervisory Sandbox (FSS).¹² Several banks in Hong Kong are already using the FSS to pilot biometric authentication and blockchain-based applications, he noted.

Ms Sandra Liu, Senior Legal Counsel of the Privacy Commissioner for Personal Data, explained the six key principles of the Hong Kong Personal Data (Privacy) Ordinance,

¹⁰ www.hkma.gov.hk/eng/key-information/press-releases/2016/20160518-5.shtml.

¹¹ www.hkma.gov.hk/eng/key-functions/international-financial-centre/fintech-facilitation-office-ffo.shtml.

¹² The FSS enables banks to conduct pilot trials of their Fintech initiatives in a controlled environment without the need to achieve full compliance with the HKMA's usual supervisory requirements.



including data collection, accuracy and retention, access and correction, use, security and openness.¹³

Mr Lukas Petrikas, Senior Vice President of Group Strategy of the Hong Kong Exchanges and Clearing Limited (HKEX), expressed the view that a stock exchange is a Fintech company at its core. He explained how HKEX prioritised technology¹⁴ and stressed the importance of data and data analytics.

During the question and answer session, Ms Nolens addressed a question on regulatory sandboxes, noting that a comparison of sandboxes announced so far reveals significant differences in scope, purpose and content. Seeing through the differences, she observed that sandboxes typically serve one or more of the following types of companies:

- business-to-customer Fintech companies offering either the same services as traditional financial companies or more innovative services;
- business-to-business Fintech and Regtech companies offering services to traditional financial companies, including to help them manage their regulatory requirements and processes and better service clients; and
- business-to-business Fintech and Regtech companies offering products and services directly to regulators.

Ms Nolens closed the day by recapping the main themes of the event. She expressed that the SFC is encouraged to see Fintech and Regtech innovations that endeavour to improve investor and regulatory outcomes, or that serve to enhance Hong Kong's position as an international financial centre.

¹³ [The Personal Data \(Privacy\) Ordinance at a Glance.](#)

¹⁴ [HKEx Next Generation.](#)