There's a revolution coming

Embracing the challenge of the new RegTech era

kpmg.com/cn

Introduction

Technologies such as artificial intelligence (AI) and machine learning can enable companies to move from big data to 'smart data' to gain insights into their own regulatory practices. They can automate complex reporting, conduct meaningful analysis of critical compliance risk areas and significantly broaden coverage with a relatively low investment.

Where will these applications come from? Startups are mushrooming and financial services companies have become more active in developing processes and protecting their intellectual property. Leading financial institutions have applied for more patents on an increasingly impressive range of innovative products. However, many in-house innovations still focus on products and services rather than RegTech – and the financial sector lags way behind the big technology companies.

We note in this article that the world's 15 largest banks together own five times fewer fintech patents (4,697) than the biggest single technology company (23,864).[1] In addition, technology companies' patents are not restricted to consumer-friendly innovations: they include credit checking, security and authentication, among others.

Companies should view RegTech as part of the wider digital transformation process that the industry is grappling with. While most institutions have built digital front-ends for their businesses, particularly in consumer-facing markets, these are built on legacy systems. Digital transformation requires a rethink of the whole business model and a redesign that spans the middle and back office as well as the front office – including risk and compliance.

[1] Aistemos, Technology Disruption Through a Patent Lens, July 2018

A sector under pressure

Financial institutions have faced an ever-increasing regulatory burden over the past 10 years. The cost of compliance has surged, particularly for global companies operating across multiple jurisdictions.

RegTech is one of the fastest-growing elements of financial innovation. RegTech uses technologies such as advanced analytics, robotic process automation, cognitive computing and the cloud to achieve regulatory and compliance outcomes more efficiently and effectively.

Shareholders want management to show they can meet regulatory demands without throwing more resources at the problem.

The wider market is challenging. Margins are slim, competition is intense and political uncertainty is feeding economic and financial market volatility.

Financial institutions are turning to RegTech to fill compliance gaps, reduce costs, and get ahead of requirements and detect risk before the regulators do.

The industry is spending big on digital transformation, especially in delivery platforms. Compliance monitoring tools need to adjust to this new environment.

It is easy to get carried away with new technologies that ultimately do not deliver. Most financial companies' use of RegTech is in its infancy and obstacles lie in the way.

RegTech has the potential to improve service and protection for customers and to help restore trust in the industry.

Regulators throughout APAC are receptive to innovation and are willing to support experimentation within common sense parameters.

US$780bn
Financial institutions' annual compliance spending[2]

>US$300bn
Fines paid by banks since 2008[5]

23,864
FinTech patents owned by the most prolific tech company[8]

US$3.7bn
RegTech investment in 2018 - more than triple that of all of 2017[3]

US$76bn
Forecast RegTech spending by 2022 - up from $10.6bn in 2017[6]

4,697
Total FinTech patents owned by the top 15 banks[9]

7,000
Number of compliance staff employed by a global bank in 2014 – four times more than before the financial crisis[4]

10-15%
of financial institutions' staff work on governance, risk management and compliance[7]

34%
RegTech's predicted share of all regulatory spending by 2022 (4.8% in 2017)[10]

[2] International Federation of Accountants, April 2018, https://www.ifac.org/system/files/publications/files/IFAC-OECD-Regulatory-Divergence.pdf
[3] *'The Pulse of Fintech 2018'*, KPMG International, February 2019, https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/02/the-pulse-of-fintech-2018.pdf
[4] FT, Banks face pushback over surging compliance and regulatory costs, 2015
[5] Bloomberg, World's biggest banks fined £321bn since financial crisis, 2017
[6] Juniper, Research Strategies for Financial Services 2017-2022, October 2017
[7] FT, Banks' AI plans threaten thousand of jobs, 2017
[8] Aistemos, Technology Disruption Through a Patent Lens, July 2018
[9] Aistemos, Technology Disruption Through a Patent Lens, July 2018
[10] KPMG, The Pulse of Fintech, July 2018

Where are you now?

When it comes to investing in FinTech and RegTech, we have observed three key drivers among financial institutions: Compliance, Cost and Complexity. The dominant driver will shape the ambition of the organisation in its adoption of RegTech.

Typically, companies start their journey concentrating purely on meeting regulatory obligations. If they choose to deploy RegTech for those purposes only, they are Defensive users of RegTech. Progressive companies aim to reduce costs and improve customer experience for both internal and external users. In the final level of sophistication, companies become fully adept at reinvention and use their solutions to interrogate and navigate a dynamic environment. Successful companies will deploy all three strategies in a deliberate and coherent fashion.

Complexity

Political events are creating global uncertainties as the financial sector seeks to navigate new products, services and regulations. Added to these factors is the complexity created by the data environment, legacy systems and operating models.

Reinvention requires the company to become a data-driven IP organisation. System infrastructure will be challenged to produce data that can form the basis of enhanced compliance, cost reduction and consumer benefit. The company has its own innovation and commercial culture embedded.

Cost

Regulatory constraints and pressure on margins have made it harder for financial institutions to generate consistent profit growth. Financial institutions' need to reduce cost will see them embrace technology which enables them to increase efficiency and productivity in the risk and compliance function.

Progressive companies have moved on to augmenting meeting compliance requirements with customer-driven process efficiencies, thereby improving customer experience.

Compliance

Regulatory expectation continues to grow as regulators focus on reforms in supervision and managing systemic risk such as data and consumer protection.

Defensive companies are concerned mainly with meeting regulatory requirements. Measures of success include keeping up with regulatory change, while maintaining a flat cost line and adopting a 'wait-and-see' approach to innovation.

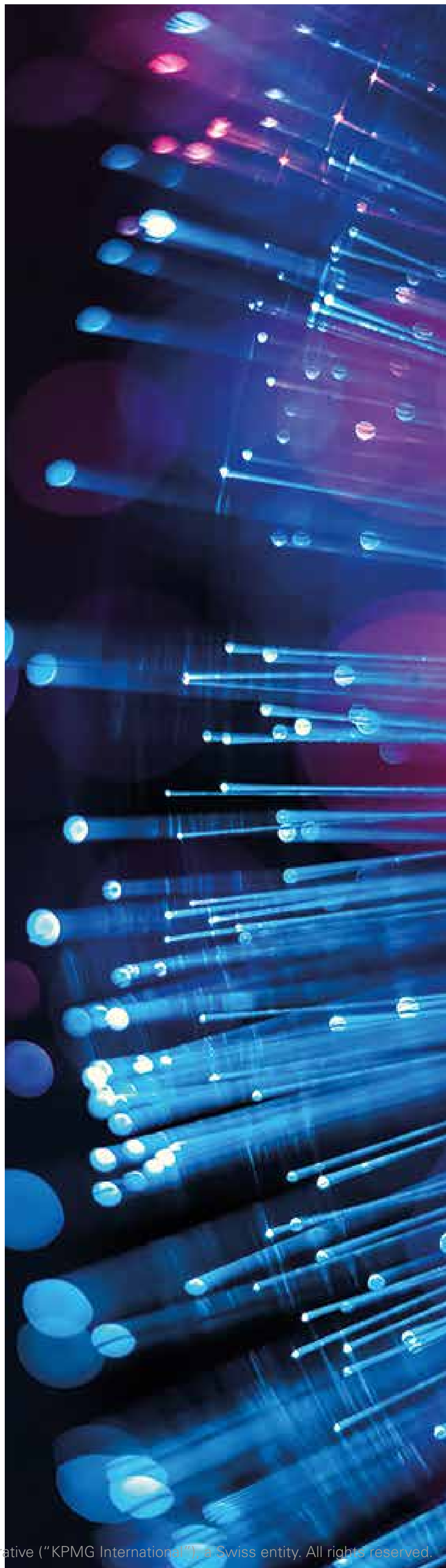
Source: KPMG

There's a revolution coming

RegTech is on the cusp of a breakthrough that has the potential to transform the industry's approach to compliance and create additional value. The potential for RegTech is framed by support from regulators, the drive of the front line towards digital change, expanding investment and a growing list of success stories of startups and big technology companies seeking to meet demand.

You don't have to believe the hype – or have made the move to our reinvention category – to adopt RegTech to deal with immediate issues and improve your business. Here are some real-world examples, including projects we have worked on, of improvements using RegTech:

- Combining workflow automation and robotics with advanced analytics, a European bank automated credit decisions to reduce approval time for existing customers from two days to a few minutes. The number of credit office employees required to handle the transactions halved as a result – and customers received better, faster service.
- A bank used robotics to record the maturities of products when trades were executed and loans were made. Before, three parties would enter different categories of information on a manual spreadsheet in a highly inefficient process. Robotics and workflow technology enabled the bank to complete work in less than an hour that had previously taken five days.
- To combat financial crime, a bank wanted a scalable solution to review 400,000 SME customers, gain a holistic view of risk and establish a robust audit trail. The company adopted a cloud-based solution that halved the time required for a customer review, improved monitoring of financial crime and enhanced the bank's understanding of customers' business activities.



RegTech in Asia: from buzzword to reality

Asia-Pacific is expected to become the new engine of RegTech growth and innovation, driven by increased investment in new technologies and digital transformation, greater regulatory acceptance, extensive infrastructure development and the healthy growth of economies in the region. What has long been viewed as an abstract concept is fast becoming a viable solution for financial institutions.

In the past, RegTech has focused primarily on KYC and AML, for example in improving the effectiveness of the sanctions alerts clearance process. However, over the next 12 to 24 months we expect RegTech investment to focus more on Governance, Risk and Compliance (GRC) solutions coupled with other tools to track regulatory developments, automate business-wide control assessments, further reduce false positive alerts in trade surveillance and digitalise voice monitoring.

Many of these developments will be driven by AI and machine learning. For example, AI is being deployed to help financial institutions reassess their LIBOR-linked contracts for derivatives and other financial instruments as they prepare for the transition away from LIBOR and towards alternative risk-free rates.

Greater alignment of compliance across the organisation

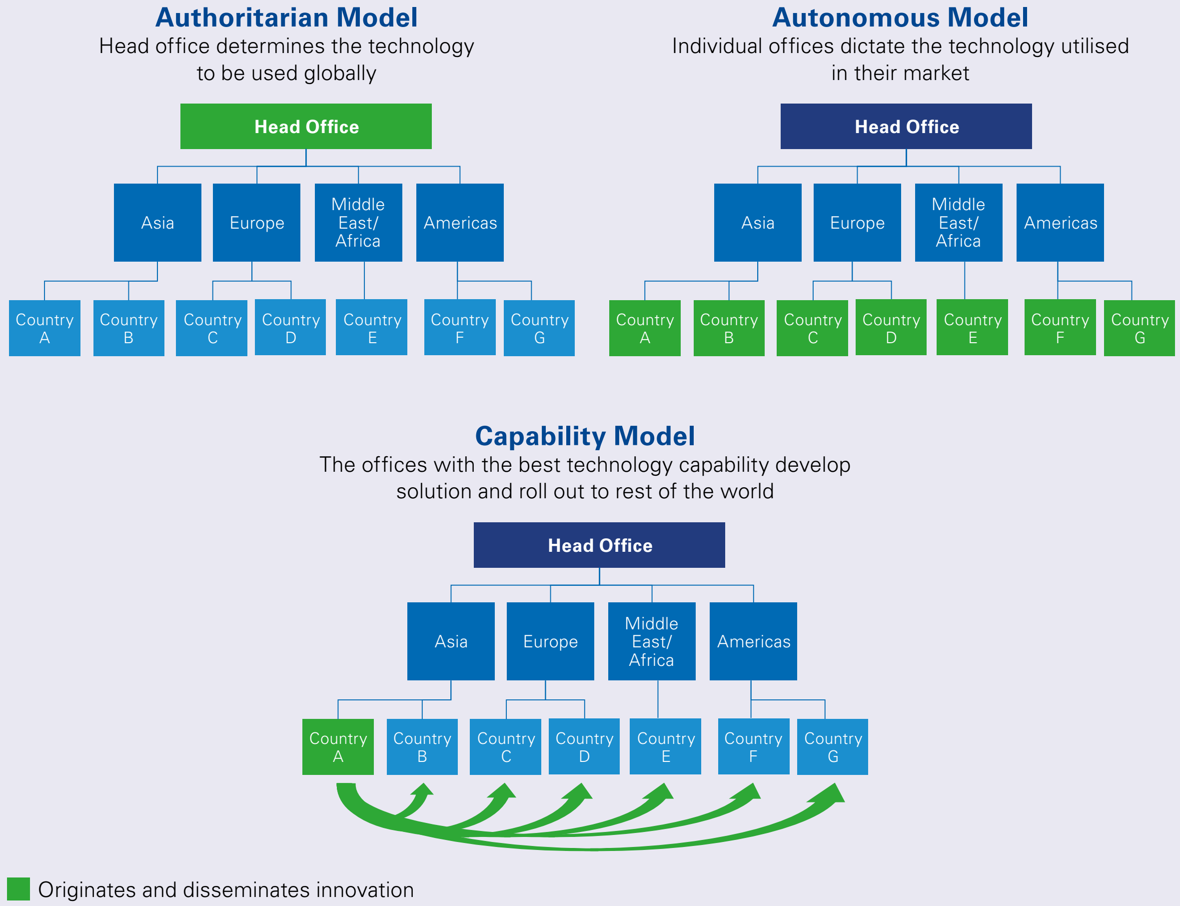
Not only is RegTech investment poised to increase significantly, but financial institutions are also becoming smarter and more agile in the way that they incorporate new solutions into their organisations. Leading financial institutions take a holistic view of their solutions and technologies to ensure that their compliance efforts are consistent across the organisation, and tend to mandate technology selection and implementation at a global level in order to drive consistency and efficiency. When it comes to innovation however, successful organisations adjust this approach.

Exploring new models for RegTech adoption

In addition to aligning compliance efforts across the organisation, some global financial institutions may also seek to revisit how they drive RegTech initiatives in Asia-Pacific (see Figure 1). The traditional approach has been to adopt RegTech solutions in the head office before rolling them out to the Asia-Pacific branches. We believe this to be a key factor in the relative lag in RegTech deployment in Asia-Pacific.

However, we have seen examples where market-leading organisations are giving more autonomy to individual offices to lead their own RegTech initiatives, especially if that region is where the biggest opportunity resides. This is an increasingly viable option for multinationals as there are distinct benefits to be had from using some of these tools as point solutions for discrete challenges such as country specific regulatory requirements. Alternatively, offices with better technology capabilities may seek to develop their own solutions that can then be scaled up and deployed in other markets.

Figure 1



Source: KPMG

Regulatory support

Regulators worldwide are exploring how they can apply technology to their own processes, as well as how technology can increase efficiency and relieve the burden on firms. Many have sought the views of firms and hold events to explore potential innovations. In the future, companies should expect mandatory requirements for technology that lets regulators scrutinise their data more effectively.

Regulators in Asia-Pacific are increasingly supportive of RegTech and the benefits it can bring to help financial institutions meet their regulatory and compliance obligations more efficiently. As part of their drive to facilitate development in this area, a number of regulators have launched regulatory sandboxes in recent years to allow the testing and piloting of FinTech solutions and initiatives – including RegTech – within a supervised framework.

We expect that regulators will also become major users and beneficiaries of RegTech as they embrace new technologies to meet their supervisory challenges. RegTech deployed by the regulators – also known as 'SupTech' – should enable them to take data-driven and forward-looking approaches to supervision.

“RegTech, which essentially means the use of innovative technologies to achieve regulatory compliance or better risk management in a more effective and automated manner, is well positioned to further enhance the interface between banks and regulators.”

- Hong Kong Monetary Authority

“We will further strengthen exchange and cooperation at home and abroad, establish and improve financial and technological innovation management mechanisms suitable for China's national climate, handle the relationship between safety and innovation and guide the proper use of new technologies in the financial field. We will seek to strengthen the actual implementation of regulatory technology.”

- People's Bank of China (on setting up a FinTech committee)

“MAS is encouraging our financial institutions to use RegTech – using technology to help financial institutions overcome their regulatory pains…we are setting aside S$35 million to help smaller banks and insurers make use of RegTech.”

- Monetary Authority of Singapore

“RegTech has enormous potential to help organisations build a culture of compliance, identify learning opportunities and save time and money relating to regulatory matters.”

- Australian Securities & Investments Commission

Sources: Hong Kong Monetary Authority; People's Bank of China; Monetary Authority of Singapore; Australian Securities & Investments Commission

Emerging technology will continue playing a major role in shaping the world

The pace of technological development will continue to create possibilities, which in turn will become minimum standards of performance. The organisations that are able to dynamically innovate in collaboration with next-generation technology providers will thrive. Those that are unable to will most likely cease to exist. In this environment, the ability to scan and successfully screen the RegTech landscape for effective collaborators with successful solutions is already a core capability.

The wave is reaching Asia-Pacific

RegTech is turning the corner in Asia-Pacific, and will transform the financial services industry's approach to compliance, helping organisations to increase efficiency, reduce costs and maintain their competitive edge. We believe that emerging RegTech solutions will establish themselves as an indispensable part of the value chain and transform every area of compliance, as it has already started to do in AML.

RegTech is no longer a buzzword; it can be applied and its benefits realised today. Not only can it help reduce the cost of compliance, but it can also provide leading financial institutions with a first mover advantage over competitors who have yet to unlock the true potential of RegTech. The regulators are adopters – are you?

How KPMG can help

KPMG has the capability to act as your trusted advisor to your RegTech ambitions. We understand the role of RegTech solutions as a part of your wider compliance efforts. We also understand how institutions can implement RegTech as a digital transformation enabler, helping them to reduce the cost of compliance, enhance customer service and achieve greater competitive differentiation.

We can advise you on your RegTech strategy and your immediate tactical requirements. Our approach is to understand the issues you face and then find the appropriate technology-enabled solution. We have a multitude of contacts in the RegTech sector – from startups to the biggest tech companies, both in Asia and overseas – and can help you find the right solution for your business.

Our services include:

RegTech/FinTech Selection Platform

KPMG Matchi is a leading global FinTech matchmaking platform that connects financial institutions and other corporates with FinTech solutions from across the globe. The KPMG-Matchi FinTech capability combines deep industry knowledge with sector experience, allowing clients to successfully identify and partner with suitable FinTech/RegTech organisations.

KPMG AI Ignite

Using industry-first AI and advanced data aggregation techniques, KPMG has developed a tool to assess plain language contracts and agreements in the financial services industry. The Ignite tool is able to extract terms in a structured format and subsequently interpret, reset and identify challenging and non-standard contracts. The tool is able to significantly reduce the time taken to identify problematic contracts, vastly reducing the time and cost of compliance.

Model Validation Automation

Allows us to automate the execution and compilation of model validation tests in a procedural, standardised, traceable, comparable and repeatable way. This enables the client to spend more time on tasks with greater value – such as analysing test results, arriving at conclusions and generating critical opinion.

KPMG Ignite Financial Contract Assessment Solution

KPMG's automated contract assessment solution defines an approach to scope the population of agreements impacted by the changes to LIBOR, based on products and business lines. Our AI-enabled solution allows institutions to adopt automated processing engines to read and assess LIBOR-related contracts and agreements; trace rate reset and determination mechanisms across related documents; and test and validate contract changes at scale. Built-in dashboards track financial contracts based on product, tenor, and notional or risk exposure.

KPMG Dynamic Risk Assessment (DRA)

KPMG's DRA marks a groundbreaking shift in risk identification. DRA marks an evolution in risk assessment that applies actuarial theories, sophisticated algorithms, mathematics and advanced data and analytics together in a KPMG proprietary methodology to identify, connect and visualise risk in four dimensions.

Contact us

Paul McSheaffrey
Partner, Head of Banking & Capital Markets, Hong Kong
KPMG China
+852 2978 8236
paul.mcsheaffrey@kpmg.com

Susanne Steyn
Director, Risk Consulting
KPMG China
+852 2140 2317
susanne.steyn@kpmg.com

Christopher Ingle
Associate Director, Risk Consulting
KPMG China
+852 2685 7807
christopher.ingle@kpmg.com

Rani Kamaruddin
Partner, Head of AML & Sanctions, Hong Kong
KPMG China
+852 2140 2815
rani.kamaruddin@kpmg.com

Avril Rae
Director, Head of Fintech
KPMG China
+852 3927 5540
avril.rae@kpmg.com

Natalie Cheung
Senior Consultant, Risk Consulting
KPMG China
+852 2978 8256
natalie.w.cheung@kpmg.com

kpmg.com/cn/socialmedia

For a list of KPMG China offices, please scan the QR code or visit our website:
https://home.kpmg.com/cn/en/home/about/offices.html

This document was originally published by KPMG UK.

Publication number: HK-FS19-0002

Publication date: June 2019