

# Primed for the Future, Hong Kong Steps Up to the Next Era of Fintech

## 準備就緒 迎接金融科技新紀元



Home to more than 600 Fintech companies, from faster payments to Wealthtech, Insurtech and Regtech, Hong Kong continues to bolster its financial technology ecosystem, which puts the city in the premier league of global Fintech hubs.

香港有600多家金融科技公司，業務遍及快速支付、財富科技、保險科技和合規科技，金融科技生態系統持續壯大，使香港成為全球領先的金融科技中心。

Fintech does not evolve in isolation. Launched in June this year by the Hong Kong Monetary Authority (HKMA), the “Fintech 2025” strategy sets out a number of aims to further strengthen Hong Kong’s Fintech capabilities as a growth engine for the financial industry in the post-pandemic era. During the unveiling of the strategy, the HKMA’s Chief Executive, Eddie YUE said that banks would be encouraged to go “all-in” with comprehensive Fintech

adoption including the digitalisation of their operations, creating next-generation data infrastructure and nurturing the ecosystem with funding and policies.

The new Fintech strategy will provide the shot in the arm to elevate Hong Kong’s banking industry to new heights, Mr YUE said at the time of the launch. He also pointed out how COVID-19 has permanently changed customers’ behaviour and in all probability their digital appetite will outlast the pandemic. With this being the case, the only way to satisfy increasing digital demand is to increase Fintech offerings, which in turn, will make consumers even hungrier for more. Evidence this is the case, in a HKMA update of the “Fintech 2025” strategy, the Authority highlighted how positive progress has been made on initiatives including data, cross-boundary Fintech cooperation, talent development, Central Bank Digital Currency (CBDC) and funding support.

**金**融科技的發展並不孤獨。香港金融管理局（金管局）今年6月推出「金融科技2025」策略，通過訂立多項目標進一步鞏固香港的金融科技能力，作為後疫情時代金融業增長的引擎。在公佈該策略時，金管局總裁余偉文表示，將鼓勵銀行全面應用金融科技，包括把業務運作數碼化、建立新世代數據基建，並善用資源及政策支持金融科技生態發展。

在公佈金融科技新策略時，余偉文指該策略將為銀行業注入強心針，把香港銀行業推至新高峰。他指出，新冠肺炎永久改變了客戶行為以及客戶使用數碼服務的偏好，並很可能持續至疫情以後。在這情況下，為滿足客戶對數碼化服務不斷增加的需求，唯一方法就是推出更多金融科技產品；這又倒過來導致客戶要求更多。這個趨勢有事實證明，金管局近期報告「金融科技2025」策略的最新進展時，指出在數據、跨境金融科技合作、人才發展、央行數字貨幣、資金援助等方面的舉措均進展良好。

Building on the momentum following the launch of the city's "Fintech 2025" strategy, in November the HKMA announced two new initiatives to further strengthen Hong Kong's Fintech capabilities. Focusing on the Fintech components of green bond tokenisation, the HKMA and the Bank for International Settlements Innovation Hub (BISIH) Hong Kong Centre concluded Project Genesis, which concept-tested the issuance of tokenised green bonds to retail investors in Hong Kong. Designed to encourage the adoption of Regtech, the second initiative announced by the HKMA involves the launch of the first Anti-Money Laundering Regtech Lab (AMLab), in collaboration with Cyberport. The AMLab aims to strengthen banks' capabilities to protect customers from fraud and financial crime losses. For the first time, in the initial phase, five banks will work with data experts using synthetic data to explore the use of digital footprints and conduct comprehensive network analysis.

### Collaboration and expansion

Together with the Hong Kong government, the HKMA, the city's de facto regulator, has put joint weight behind a wide range of Fintech initiatives to support enterprises and to help them to scale-up and accelerate. These include initiatives that foster collaboration on a local basis as well as international agreements and accelerator programmes such as sandbox environments where Fintech and financial institutions can test their innovations in a safe production environment with less arduous regulations.

In October, the People's Bank of China (PBoC) and the HKMA signed a "Memorandum of Understanding (MoU) on Fintech Innovation Supervisory Cooperation in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA)". By signing the MoU, they have agreed to link up the PBoC's Fintech Innovation Regulatory Facility with the HKMA's Fintech Supervisory Sandbox. The move aims to advance cooperation on Fintech innovation on the basis of law and regulations, improve the quality and efficiency of financial services in the GBA and increase financial support for its development. The arrangement also strengthens Fintech supervisory exchanges in an environment of rapidly advancing technology.

乘着推出「金融科技2025」策略的勢頭，金管局在11月公佈兩項新舉措，進一步提升香港的金融科技能力。金管局與國際結算銀行創新樞紐 (BISIH) 轄下香港中心完成了Project Genesis，集中研究綠色債券符號化過程中的金融科技元素，完成了在香港向零售投資者發行以數碼形式持有的綠色債券的概念認證。在鼓勵採用合規科技方面，金管局另一項舉措是與數碼港合作推出反洗錢合規科技實驗室，旨在加強銀行的能力，以協助客戶防禦欺詐，避免因金融罪行而招致損失。五家銀行將率先聯同數據專家應用合成數據，探索使用數碼歷程進行更全面的網絡分析。

### 合作與擴展

金管局與香港政府合力推動多項金融科技舉措，支持並協助企業提升能力和加速發展，當中既有促進本地合作的措施，也有國際協議和加速器計劃，例如提供沙盒環境，讓金融科技公司和金融機構在安全的實際運行環境中、規管較寬鬆的情況下測試創新產品。

Under the cooperation framework, Fintech innovation testing services will strive to inject new impetus into the high-quality financial development of the GBA. Within a week of the "network link-up" announcement, about 10 banks in Hong Kong expressed an interest to test their cross-boundary Fintech initiatives in Hong Kong and the Mainland GBA cities via the network, according to an HKMA update.

About half of these initiatives are related to, or can be used in, the context of the Cross-boundary Wealth Management Connect (WMC) platform, which aligns closely with the future development of the GBA, a key strategic element of the National 14<sup>th</sup> Five-Year Plan (FYP). Deepening the cooperation between Hong Kong and the Mainland in the areas of finance, technology and supervision is in line with the direction of enhancing Hong Kong's competitive position and better integrating Hong Kong into China's overall development, as set out in the 14<sup>th</sup> FYP. Furthermore, the Fintech Innovation Supervisory Cooperation, in the form of a "network link-up", will allow the GBA to reinforce its leading Fintech position and facilitate innovation in the region.

中國人民銀行(人民銀行)和金管局在10月份簽訂了《關於在粵港澳大灣區開展金融科技創新監管合作的諒解備忘錄》，同意把人民銀行的「金融科技創新監管工具」與金管局的「金融科技監管沙盒」對接，目的是在法規的基礎上加強金融科技創新的合作，提升大灣區金融服務的質量和效率，並為金融科技發展增加財務支援。在科技快速發展的環境中，這項安排也可加強金融科技監管工作方面的交流。

在該合作框架下，金融科技創新測試服務的推出將為大灣區的優質金融發展注入新動力。根據金管局的最新資料，在「聯網對接」的消息公佈後一星期內，約有10家香港銀行表示有興趣透過聯網，在香港和內地大灣區城市測試其跨境金融科技項目。

這些項目當中，約有一半與跨境理財通平台有關，或可在該平台上應用，因而與大灣區的未來發展息息相關。大灣區的發展，正是國家十四五規劃的重要戰略之一。在金融、科技和監管方面深化香港和內地的合作，與十四五規劃當中提升香港的競爭力、讓香港更好地融入國家發展大局的方向一致。此外，金融科技創新監管合作的「聯網對接」模式，有助鞏固大灣區的金融科技領導地位，推動地區創新。



“The demand for talent also illustrates how technology is an enabler, which underpins how the development of Hong Kong's Fintech and Regtech capabilities interconnect human talent and technology.”

### Demand drives innovation

Fintech companies are drawn to places where large financial services clients are located and headquartered, criteria which Hong Kong meets as a globally recognised leading international financial centre. As a panellist speaking at the HKIB Annual Banking Conference noted, the primary advantage of Hong Kong's status as a financial hub is that it allows established and start-up Fintech companies to collaborate with large financial institutions, in turn unlocking new opportunities to scale-up. Now in its ninth year, the 2021 KPMG Global Technology Industry Survey ranked Hong Kong in the top 10 of the world's top technology innovation hubs outside Silicon Valley over the next four years. According to the survey, local factors that influence a city's status as a technology hub include infrastructure, university community, demographics and tax incentives. Hong Kong is already home to several Fintech unicorns – start-ups valued over USD1 billion – such as Airwallex, a cross-border payment service provider; Fintech company TNG; and WeLab, an online financial company. King LEUNG, the Head of Fintech at InvestHK, notes that together with supportive government and regulator policies, substantial pools of private investment and rising Fintech adoption rates, Hong Kong's Fintech success is in large part due to the breadth and depth of the city's financial services industry and entrepreneurial culture.

### Unlocking the potential of data

In order to support Hong Kong's banking sector in risk assessment, while enhancing borrowers' access to financing, and at the same time unleashing the city's potential for the next generation of technology-driven banking, the HKMA has taken the lead in enhancing existing data infrastructure as well as building new technology infrastructure. Initiatives include the launch of a Commercial Data Interchange (CDI), digital corporate identity, and DLT-based (distributed ledger technology) credit data sharing platform, to facilitate consent-based data sharing. In the words of the HKMA: CDI is a consent-based infrastructure that enables more direct, secure and efficient data flow between banks and sources of commercial data to enhance inclusive finance in Hong Kong. Along with other regulator-led initiatives, it is believed that CDI could function as a catalyst for further industry developments in open banking by tackling data flow pain-points and security challenges. For example, open banking using CDI could enable small and medium-sized enterprises (SMEs) to secure loans more easily. Currently, there is reliance on multiple one-to-one connections

### 需求帶動創新

大型金融服務機構所在或設置總部的地區，會吸引金融科技公司進駐；作為全球公認具領導地位的國際金融中心，香港正好符合這個條件。正如《香港銀行家峰會》討論環節的一位嘉賓所指，香港作為金融中心的最大優勢，就是讓根基穩固的金融科技公司和金融科技初創企業都能有機會與大型金融機構合作，這又帶來再提升的新機會。根據今年第九次發表的《2021年畢馬威科技行業創新調查》，香港將在未來四年躋身矽谷以外全球十大科技創新中心之列。該調查顯示，影響某城市的科技中心地位的當地因素包括基礎設施、大學環境、人口特徵和稅務誘因。香港已有多家金融科技獨角獸（價值超過10億美元的初創企業），例如跨境支付服務提供者Airwallex、金融科技公司TNG，以及網上金融公司WeLab。投資推廣署金融科技主管梁瀚環表示，除了政府和監管機構的政策支持、大量私人投資、採納金融科技的情況日益普遍外，香港金融科技的成敗，很大程度上有賴香港金融服務業的廣度和深度，以及企業家精神。

### 發揮數據潛力

為協助香港銀行界評估風險，提升借款人得到融資的機會，同時充分發揮香港新世代以科技為本的銀行服務的潛力，金管局率先提升現有的數據基建，並建立新的技術基礎設施，包括推出「商業數據通」、企業版「智方便」和「區塊鏈共用信貸資料平台」，在取得數據所有者同意的前提下，促進數據共享。據金管局稱，「商業數據通」是以數據擁有者授權為基礎的數據基建，讓銀行和商業數據來源之間的數據流通更直接、安全和有效率，以促進香港普及金融發展。配合其他監管機構的舉措，「商業數據通」有望可解決數據流通的痛點，應對保安方面的挑戰，從而催化開放銀行的進一步發展。

“對人才的需求也顯示科技可幫助解決問題，說明建立香港的金融科技和合規科技能力可如何把人才與科技聯繫起來。”

between banks and data providers. Under CDI, each bank and data provider will have a single connection to an interoperable platform. This will allow SMEs to authorise their own service providers to provide banks with relevant and authenticated data.

In an update on CDI progress made during Fintech Week 2021, the HKMA revealed that, following the pilot launch, the proof-of-concept study on the technical feasibility has been completed and the CDI platform is expected to officially launch by the end of 2022. The second phase of the concept test – which focused on the exchange of commercial data to facilitate alternative credit scoring by banks – has also been completed. This led to participating banks granting more than 550 loans to SMEs, totalling HKD900 million. Speaking at a conference in October, Howard LEE, Deputy Chief Executive at HKMA, said the CDI infrastructure would help banks pursue more data-driven operations. He added the HKMA sees its role as necessary to ensure that banks have the tools to meet big challenges like sustainable financing. “This is not traditional prudential supervision, but capacity enhancement,” he said.

例如使用「商業數據通」的開放銀行，可讓中小型企業更容易獲得貸款。目前業界倚賴銀行各自與數據提供者之間一對一的連接，有了「商業數據通」，每家銀行和每個數據提供者將只須與一個共同操作的平台連接，中小企便可授權其服務提供者向銀行提供已認證的相關數據。

金管局在香港金融科技周2021期間說明「商業數據通」的最新進展，指出試點項目推出後，有關技術可行性的概念驗證研究已經完成，「商業數據通」預計可在2022年底正式推出。第二階段概念驗證的重點，是探討如何協助銀行以商業數據作為替代數據進行信貸評估，現亦已完成。「商業數據通」試行後，參與銀行已向中小企批出超過550宗貸款，合共9億港元。金管局副總裁李達志在10月份一個研討會上發言時指出，「商業數據通」有助銀行運作更趨向以數據為本，而金管局的角色，是為銀行提供工具，迎接可持續金融等重大挑戰。他說：「這不是傳統的審慎監管，而是能力提升。」



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The only way to satisfy increasing digital demand is to increase Fintech offerings, which in turn, will make consumers even hungrier for more.”

### Regtech is revolutionising compliance

In the face of digitisation and a new evolving wave of cybercrime, banks and other financial institutions are increasingly depending on specialised technologies in the form of Regtech to enable them to meet regulatory requirements. At the same time, in response to climate risks and regulatory challenges of meeting green financing, there is a growing demand from regulators for more disclosure on governance, risk management, investment strategies and environmental metrics. Regtech also has a key role to play in scenario analysis, simulation and stress testing to enhance climate change risk management and sustainability governance framework. With banks and financial institutions under constant pressure to keep up with the latest regulation and compliance requirements, they are also faced with the obstacle of finding the right talent. According to a report on Hong Kong market from human resources consultant Michael Page, more than 60% of employers face difficulties when it comes to hiring Fintech talent. The search to find talent with requisite Regtech skills is even more problematic.

### Talent the key to future Fintech and Regtech empowerment

Providing a summary of the HKMA *Transforming Risk Management and Compliance: Harnessing the Power of Regtech* white paper findings at the recent FinTech Week 2021, James O'CALLAGHAN, Partner, KPMG Advisory (Hong Kong) Limited and Consultant to the HKMA on Regtech talent topics, highlighted the major Regtech-related skills gaps identified in the white paper and a range of solutions to narrow them. Based on the HKMA's Regtech adoption Index (RAI), the majority of banks in Hong Kong have embarked on their Regtech journeys. While these journeys are coupled with opportunities for growth, the rapid transition to digital business models raises a number of talent-related issues. Prime among these is how banks can attract new employees with the requisite digital and industry expertise or re-skill existing employees to meet Regtech objectives. Lack of suitably skilled or experienced



### 合規科技徹底改變合規工作

隨着數碼化發展，加上網絡罪行的演變，銀行及其他金融機構日益倚賴專門的合規科技，幫助他們符合規管要求。同時，為應對氣候風險和綠色融資的規管挑戰，監管機構要求金融機構披露更多有關管治、風險管理、投資策略和環境指標的資料。在進行情景分析、模擬及壓力測試，以加強氣候變化風險管理和永續管治框架的工作方面，合規科技也能發揮重要作用。銀行及金融機構須時刻緊貼最新的規管和合規要求，往往難以聘得合適的人才。根據人力資源顧問公司Michael Page一份有關香港市場的報告，超過六成僱主在招聘金融科技人才方面遇到困難，要物色具備所需合規科技才能的人才更不容易。

### 掌握金融科技與合規科技 人才至為關鍵

畢馬威諮詢(香港)有限公司合夥人、為金管局提供合規科技人才事宜顧問服務的James O'CALLAGHAN，最近在香港金融科技周摘要說明《善用合規科技力量：轉變風險管理及合規》白皮書，介紹白皮書內所指與合規科技相關的主要才能缺口，並提出填補這些缺口的多個方案。根據金管局的合規科技採用指數，香港大部分銀行已展開合規科技之旅。伴隨這些旅程而來的，是業務增長的機會，但急促轉型至數碼商業模式時，有多項人才相關事宜須予

talent to develop and or implement Regtech process and strategies is highlighted as a key barrier to Regtech adoption by 44% of surveyed banks that contributed to the white paper. The white paper identified skills gaps separated into four domains, namely soft skills to drive collaboration and innovation, compliance skills to address cybersecurity and operational controls and efficiencies, business skills to direct process automation and customer experience, and technology/data skills to drive systems integration and cybersecurity. “These skills ... have been identified as critical by traditional and virtual banks and Regtech providers,” said O'CALLAGHAN who explained a skills matrix had been established to develop a structured pathway to guide industry efforts in the development of Regtech talent in Hong Kong.

Describing people with the requisite Fintech and Regtech skills the market is looking for as “translators and conductors”, O'CALLAGHAN said the banking industry is looking for talent with the ability to develop the software and hardware required to turn ideas into solutions, instead of merely being users of technology. He added that people with the necessary background and understanding, for example business, analytics, compliance and risk and the ability to translate and apply them as solutions through the use of technology, are extremely rare. “The market is crying out for these people,” O'CALLAGHAN noted. The demand for talent also illustrates how technology is an enabler, which underpins how the development of Hong Kong's Fintech and Regtech capabilities interconnect human

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為滿足客戶對數碼化服務不斷增加的需求，唯一方法就是推出更多金融科技產品；這又倒過來導致客戶要求更多。”

處理。當中最主要的，是銀行可如何吸引具備所需數碼及行業專長的新僱員，或重新培訓現有僱員以符合合規科技的目標。接受調查的銀行當中，44%認為缺乏具備適當技能或經驗的人才以建立或實施合規科技程序及策略，是採用合規科技的一大障礙。白皮書識別了四個範疇的技能缺口，即推動合作及創新的軟技能、處理網絡保安及營運管控措施與效率的合規技能、指導程序自動化和客戶體驗的商業技能，以及推動系統整合和網絡保安的科技／數據技能。O'CALLAGHAN稱：「傳統及虛擬銀行以及合規科技提供者均視這些技能為關鍵技能。」他表示已設計技能矩階梯，提供有序的方法，指導業界培育香港的合規科技專才。

O'CALLAGHAN形容市場尋求具備金融科技與合規科技技能的人才才是「翻譯員和指揮」，銀行業正物色懂得開發軟硬件把意念轉化為解決方案的人才，而並非只是科技的使用者。他補充，具備有關商業、分析、合規與風險的所需背景和知識，以及懂得利用科技轉化和應用這些知識，作為解決方案的人才十分罕有。他說：「市場正努力尋找這些人才。」對人才的需求也反映科技可幫助解決問題，說明建立香港的金融科技和合規科技能力可把人才與科技聯繫起來。他特別強調目前和將來要維持香港作為環球金融中心的地位，同時提升技能和學習新技能是必不可少的。O'CALLAGHAN表示，必須讓全世界知道，香港起着培育人才的領導作用，才可確保香港獲公認為開發金融科技和合規科技方案的先導地位。

talent and technology. He emphasised the point by stressing how the development of new skills alongside upgrading and re-skilling are essential to maintaining Hong Kong's position as a global financial hub, both now and in the future. It is crucial, O'CALLAGHAN said, that Hong Kong is seen around the world to be taking a leading role in nurturing talent to ensure the city is recognised as a leading hub for developing Fintech and Regtech solutions.

Speaking at the same event, Philip KAM, General Manager of HKIB explained how the Institute is working with the HKMA to launch a new ECF on Fintech programme under the Enhanced Competency Framework (ECF). Expected to be launched by Q1 2022, the same as other ECF programmes administered by HKIB, the ECF on Fintech programme will provide training to provide a recognised professional development pathway for employers and practitioners in the banking and finance industry. KAM said modules, which include relevant Regtech concepts, would focus on areas including AI, blockchain and data from a banking professional perspective rather than a technology perspective. "Instead of coders and programmers, the ECF on Fintech programme is aimed at those distributing or involved with the innovation of products," KAM said. Delivered in flex-learning format, the ECF on Fintech programme would equip participants already working in the banking sector and people working in the technology sector looking to join the banking and finance sector with professional qualification and training to "future-proof" skills to better respond to the innovative financial and technological trends. Within the Fintech ecosystem, considering the vast number of advancements taking place, the ECF on Fintech programme will help participants to develop a forward-looking mindset to not only navigate the rapidly evolving technologies, but also Fintech-influenced business models, customer preferences and the regulatory landscape. For example, with the border between Hong Kong and the Mainland currently closed preventing face-to-face on-boarding, KAM cited how Regtech, through the use of bio-metrics, was providing support for meeting on-boarding regulations requirements for investors participating in the recently launched cross-boundary WMC scheme, which allows residents in the GBA to invest in wealth management products distributed by banks in each other's markets.

In light of the rapid technological advancement, with the right guidance and incentives and strong commitment from stakeholders to support its healthy development, in the short and long-term, Hong Kong is strongly positioned to remain a leader in the global Fintech space. **BT**

香港銀行學會總經理甘志堅在同一場合發言時表示，學會正與金管局研究增設「銀行專業資歷架構—金融科技」課程，預計於2022年首季推出。與學會其他「銀行專業資歷架構」課程一樣，「銀行專業資歷架構—金融科技」將設培訓課程，為銀行及金融業僱主和從業員提供認可的專業發展途徑。課程單元涵蓋相關的合規科技概念，重點內容包括人工智能、區塊鏈和數據，從銀行專才的角度切入，而非從科技的層面講解。甘志堅指出：「課程的對象是銷售或創製產品的人員，而非編碼員及程式設計員。」「銀行專業資歷架構—金融科技」課程以靈活學習的模式授課，適合已投身銀行業，以及在科技界工作而希望加入銀行金融界的人士，讓他們取得專業資歷和學習新技能，以便更能應對金融與科技的新發展。金融科技生態圈發展蓬勃，新課程將幫助參與者培養前瞻性思維，以掌握快速發展的科技，同時了解在金融科技影響下的商業模式、客戶偏好和監管環境。甘志堅舉例說，最近開通的跨境理財通，讓大灣區居民可投資於其他大灣區城市銀行銷售的財富管理產品；目前香港與內地之間未能通關，未能為參與跨境理財通的客戶面對面安排開戶，合規科技便可利用生物辨識技術，協助符合開戶的規管要求。

科技發展一日千里，隨着各方提供恰當指導和誘因，加上持份者積極投入，支持金融科技的健全發展，在短期以至長期而言，香港定能維持金融科技全球領導者的地位。 **BT**

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## Annual Banking Conference Shines a Light on Key Issues Relevant to the Banking Industry in the New Normal

### 《香港銀行家峰會》聚焦探討銀行業在新常態下的熱點問題

*With "Re-Globalisation, Sustainability, Transformation, under the New Normal" as the overarching theme, this recap of the HKIB Annual Banking Conference highlights how the flagship event provided an unparalleled platform to focus on emerging trends and topical issues closely related to the local banking community.*

2021年度《香港銀行家峰會》(峰會)以「回應新常態：重塑全球化 由蛻變達永續」為焦點主題，為銀行業提供獨一無二的平台，讓大家深入探討最為關注的新興趨勢和熱門議題。本文回顧峰會所討論的各項要點和策略方向。