HONG KONG MONETARY AUTHORITY
香港金融管理局

QUINLAN
&ASSOCIATES

KPMG

A BRIDGE TO THE FUTURE:

HONG KONG FINTECH PROMOTION ROADMAP

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CONTENTS

FOREWORD

In an era marked by rapid technological advancement and increased demand for more efficient and customer-centric financial services, it is crucial for Hong Kong's financial services industry to embrace financial technology (Fintech). The Hong Kong Monetary Authority (HKMA), as well as the Securities and Futures Commission (SFC) and the Insurance Authority (IA), recognises the transformative power of Fintech and remains committed to fostering more widespread adoption throughout the industry. To further fuel the growth of the Fintech ecosystem, it is important that the HKMA engenders more concerted collaboration across the financial services industry.

Hong Kong's financial regulators have been closely coordinating their efforts to promote Fintech adoption in Hong Kong. Several initiatives, such as the launch of supervisory sandboxes for Fintech innovators, ongoing regulator and industry dialogue, and the introduction of Fintech facilitation teams, have all been integral to these efforts. This report is designed to further this momentum, presenting the case for amplifying the adoption of Fintech in Hong Kong and outlining the HKMA's roadmap to expedite this process.

The HKMA envisages that this roadmap will serve as an essential PACE ("Propagate", "Assess", "Connect", "Equip") guide for the industry. "Propagate" involves sharing of insights and best practices. "Assess" relates to understanding the intricacies of emerging technologies. "Connect" speaks to the HKMA's efforts in establishing stronger ties between Fintech users and providers. Lastly, "Equip" involves upskilling of Fintech practitioners.

The HKMA's PACE guide delves into five key areas:

* Under "Propagate", the HKMA will facilitate the sharing of Fintech experience and expertise among financial institutions and Fintech service providers.

* "Assess" consists of research projects that provide the industry with insights into the latest developments, opportunities and risks pertaining to emerging technologies.

* The first component under "Connect" entails fostering stronger connections between Fintech users and providers and creating a common ground for dialogue and collaboration. The second component looks at minimising duplicative efforts to enhance adoption efficiency.

* Finally, under "Equip", the HKMA will deliver training sessions designed to equip Fintech practitioners with relevant competencies, enabling them to utilise Fintech solutions more effectively.
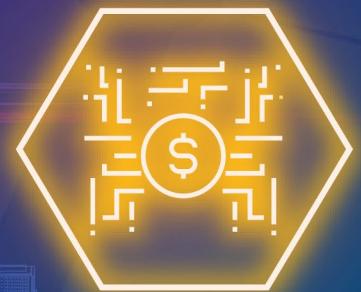
The HKMA trusts that its roadmap will inspire financial institutions in Hong Kong to actively consider the challenges that can be resolved with Fintech. The HKMA is eager to see these institutions explore, experiment and ultimately adopt more Fintech solutions. Simultaneously, there are ample opportunities for the Fintech community to tailor their solutions for the Hong Kong market.

The HKMA extends its deepest gratitude to all survey respondents, interviewees and industry bodies for their valuable contributions to this report. The HKMA also wants to express its sincere thanks to the SFC and the IA for their ongoing support and collaboration in this endeavour.

Arthur Yuen
Deputy Chief Executive
HKMA

1. EXECUTIVE SUMMARY

BACKGROUND

In recent years, Fintech has been a key driver underpinning the transformation of the financial services industry. Not only have Fintech solutions empowered financial institutions to provide a wider range of products and services at greater speed and lower cost, but end consumers have also benefitted from greater accessibility to financial services and an enhanced customer experience.

Recognising this potential, the Government of the Hong Kong Special Administrative Region of the People's Republic of China (HKSAR Government) has identified Fintech as a strategic priority for future growth and has been proactively supporting its adoption across the banking, securities and insurance sectors. To this end, Hong Kong's financial services regulators – the HKMA, the SFC and the IA – have implemented various policies and initiatives in recent years under five key pillars:

1. Promoting Hong Kong as a Fintech hub;

2. Clarifying regulatory requirements;

3. Bolstering Fintech supporting infrastructure;

4. Nurturing talent; and

5. Offering financial support.

Many of these initiatives build upon the strong foundations laid out by the HKMA in its Fintech 2025 strategy for the banking sector, which was announced in 2021. One of the five key directives outlined under the HKMA's Fintech 2025 strategy was "All banks go Fintech", which aimed at promoting the widespread adoption of Fintech solutions in Hong Kong's banking sector.

As part of this directive, the HKMA carried out the Tech Baseline Assessment in 2021 to evaluate the state of Fintech adoption among Hong Kong's banks, with key observations and the broader adoption outlook published in 2022.

Since banks (i.e. Authorized Institutions under the HKMA's purview) serve as a centralised platform where Hong Kong residents can access various financial services such as wealth / investment services (under the SFC's purview) and insurance services (under the IA's purview), the Tech Baseline Assessment was able to capture the overall Fintech adoption status across the financial services industry. Based on the findings of the Tech Baseline Assessment, the HKMA identified five key Fintech focus areas (see Figure 1) for Hong Kong:

Fintech Verticals:

1. Wealthtech / Investech

2. Insurtech

3. Greentech

Technology Overlays:

4. Artificial Intelligence (A.I.)

5. Distributed Ledger Technology (DLT)

FIGURE 1: FINTECH FOCUS AREAS

FINTECH VERTICALS

|	
WEALTHTECH / INVESTECH	Wealthtech / Investech aims to enhance wealth management in areas including financial planning, investment management, portfolio analysis, investment execution and client communication. For example, Wealthtech / Investech platforms offer features such as real-time portfolio tracking, performance analysis, risk assessment and rebalancing capabilities. These features can be used to better optimise asset allocation and manage risk more effectively.
INSURTECH	Insurtech is designed to improve operational efficiency, enhance customer experience and enable more accurate underwriting and risk assessment, leading to cost savings, increased competitiveness and better risk management. Insurtech solutions span across the digital enablement of agents, such as through a dedicated portal, facilitating front-end digital distribution of insurance products to end customers and streamlining the claims management process through automation and digitalisation. For example, claims can be submitted, tracked and processed online, reducing paperwork and improving the speed of claim settlement. In addition, Insurtech solutions may leverage A.I. algorithms to automate claims assessment and fraud detection, improving accuracy and efficiency in claims handling.
GREENTECH	Greentech helps businesses to identify sustainable investment opportunities and manage climate-related risks. It enables financial institutions to collect, analyse and interpret data relating to various environmental, social and governance (ESG) metrics of companies and / or assets. As a result, users can more easily integrate ESG factors into their investment and / or lending decision-making processes. Greentech solutions can also offer new ESG-specific thematic products, such as loan products that are extended – and underwritten – based on the ESG performance of the loan applicant.

TECHNOLOGY OVERLAYS

ARTIFICIAL INTELLIGENCE	A.I. refers to the simulation of intelligence in machines to enable them to perform tasks typically carried out by humans. There are a number of A.I. applications, such as optical character recognition (OCR), robotic process automation (RPA), biometric authentication, augmented data analytics, real-time monitoring, deep learning, federated learning and conversational natural language processing (NLP), enabling systems to learn from data, make judgments and predictions, as well as interact with humans. In the financial services industry, A.I. has the potential to revolutionise a broad spectrum of existing processes and services. A key recent advance has been the emergence of generative A.I. (GenA.I.), which can generate customised responses to prompts using text and images. This new technology has the potential to be used in a wide range of areas, such as selecting investment plans for customers, underwriting insurance policies and producing financial news and reports. A.I. is already used in chatbots, but the latest technology developments will facilitate more personalised customer support, tailored recommendations and a more seamless customer experience.
DISTRIBUTED LEDGER TECHNOLOGY	DLT is a decentralised and distributed database system that enables multiple ledgers (i.e. nodes) to maintain a shared record of transactions. By leveraging cryptographic techniques and consensus protocols, DLT offers enhanced levels of data integrity, security and transparency under a certain architecture and configuration, without the need for a central authority. DLT can be used to enhance the efficiency of cross-border payments, remittances and securities issuance and settlement by minimising the involvement of intermediaries. As a result, it can potentially reduce time delays and excessive costs associated with intermediation (e.g. data reconciliation, transfer and validation), making financial transactions faster and more cost-effective.

Source: HKMA

Given the promising outlook for cross-boundary wealth management, investment and insurance services offered by the Greater Bay Area (GBA) market, the Tech Baseline Assessment highlighted that adoption rates for Wealthtech / Investech and Insurtech solutions among local banks are forecast to rise by 20-40% from 2022 to 2025. The HKMA's ongoing emphasis on sustainability has also generated significant demand for Greentech solutions, with the Tech Baseline Assessment indicating that Greentech adoption will double between 2022 and 2025.

Beyond the projected growth in these Fintech verticals, the Tech Baseline Assessment also highlighted the interest of banks in novel technologies such as A.I. and DLT. Given that these two technology overlays hold transformative potential in reshaping the financial industry, the HKMA expects the adoption of A.I. and DLT to continue in Hong Kong, in line with global trends, which it seeks to encourage.

The five Fintech focus areas hold significant relevance across the banking, securities and insurance sectors. As such, stronger cross-sectoral collaboration, particularly amongst the financial regulators, is imperative to steer the city towards the next level of Fintech advancement.
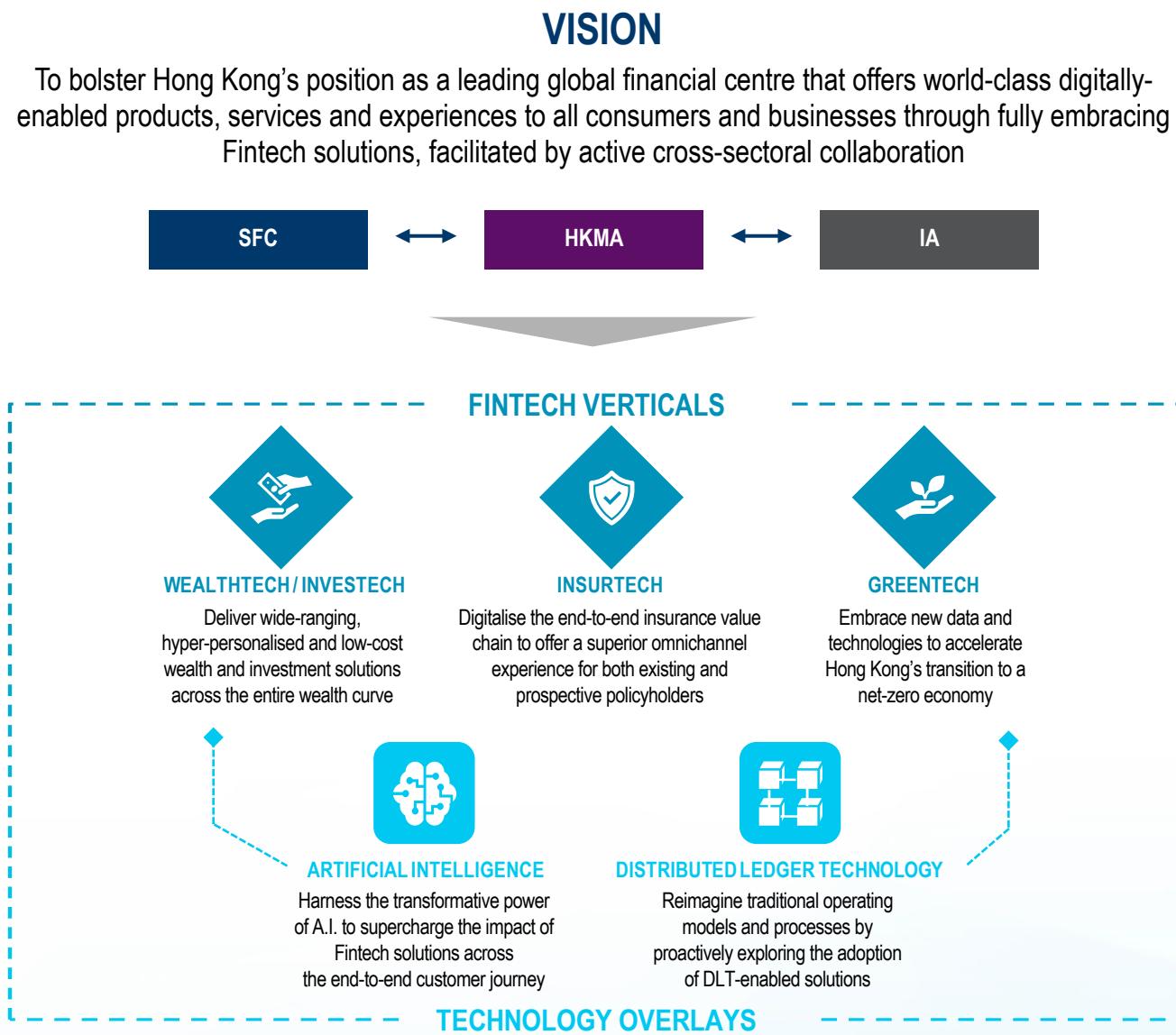
VISION

Given the strong interest shown by Hong Kong's financial institutions in adopting Fintech solutions, the HKMA – together with the SFC and the IA – remains committed to setting a clear, overarching vision that supports local Fintech stakeholders.

The vision of HKMA, together with the SFC and the IA, is to bolster Hong Kong's position as a leading global financial centre that offers world-class digitally-enabled products, services and experiences to all consumers and businesses through fully embracing Fintech solutions, facilitated by active cross-sectoral collaboration (see Figure 2).

FIGURE 2: VISION

VISION

To bolster Hong Kong's position as a leading global financial centre that offers world-class digitally-enabled products, services and experiences to all consumers and businesses through fully embracing Fintech solutions, facilitated by active cross-sectoral collaboration

| SFC | ⟷ | HKMA | ⟷ | IA |

FINTECH VERTICALS

WEALTHTECH / INVESTECH
Deliver wide-ranging, hyper-personalised and low-cost wealth and investment solutions across the entire wealth curve

INSURTECH
Digitalise the end-to-end insurance value chain to offer a superior omnichannel experience for both existing and prospective policyholders

GREENTECH
Embrace new data and technologies to accelerate Hong Kong's transition to a net-zero economy

ARTIFICIAL INTELLIGENCE
Harness the transformative power of A.I. to supercharge the impact of Fintech solutions across the end-to-end customer journey

DISTRIBUTED LEDGER TECHNOLOGY
Reimagine traditional operating models and processes by proactively exploring the adoption of DLT-enabled solutions

TECHNOLOGY OVERLAYS

Source: HKMA

Over the past few years, Hong Kong's financial services industry witnessed marked disruption from game-changing propositions brought to market by Fintech providers and Fintech-powered incumbents, including new virtual banks, virtual insurers and virtual asset trading platforms.

At its core, Fintech innovation is ultimately about benefitting the people of Hong Kong – be it with respect to improved accessibility, greater convenience, hyper-personalisation, faster and more intuitive experiences, improved security and lower costs. The vision manifests itself in harnessing the potential of Wealthtech / Investech, Insurtech and Greentech to better serve the people of Hong Kong. This also includes how the local financial services industry can better harness the power of A.I. and DLT to augment the quality of solutions across these key Fintech verticals, thereby uplifting the competitiveness of Hong Kong.

It goes without saying that the adoption of these new technologies necessitates well-orchestrated and close private-public sector collaboration. As the financial services industry strives to embrace Fintech to deliver better financial services for the people of Hong Kong, the regulators will seek to take a more proactive stance in creating and maintaining a more supportive and sustainable ecosystem that encourages the ongoing exploration and implementation of these transformative technologies.

By 2025, the HKMA envisions Hong Kong to be one of the world's leading global Fintech hubs: a hub that strives for excellence, nurtures innovation, promotes financial inclusion and fuses the know-how of financial incumbents with the nimbleness of Fintech firms to bring the next generation of financial services to all individuals and businesses in the city.

HKMA FINTECH ADOPTION STUDY

To this end, the HKMA commissioned KPMG and Quinlan & Associates (hereafter, "we") to jointly review the current state of Fintech adoption in Hong Kong, with the aim to develop a forward-looking roadmap that outlines the steps necessary to further promote and enhance Fintech adoption in the city, with emphasis on the five Fintech focus areas mentioned above. Given the relevance of these key Fintech verticals and technology overlays to both the securities and insurance sectors, the HKMA collaborated closely with the SFC and the IA to capture a broader set of perspectives on industry-specific challenges and opportunities.

The HKMA's study reveals that the financial services industry is very well informed and aware of the importance of Fintech, although overarching challenges around the lack of availability of data, the lack of funding support and the shortage of Fintech talent remain. As part of the Fintech 2025 strategy, the HKMA has been supporting the market by launching initiatives such as the Commercial Data Interchange (CDI), financing schemes and talent programmes.

The study also highlighted a clear need for more proactive and practical support across the Fintech adoption lifecycle (see Figure 3), particularly when Fintech users (i.e. financial institutions) aim to acquire new capabilities through third-party Fintech solution providers.

Understanding that awareness is no longer a major hurdle to Fintech adoption, as well as acknowledging market-specific needs and the importance of nurturing a balanced, mutually beneficial and sustainable Fintech ecosystem, the HKMA will dedicate its efforts to driving Fintech adoption across the broader financial services industry by addressing practical challenges across the Fintech adoption lifecycle.

FIGURE 3: FINTECH ADOPTION LIFECYCLE

SOURCING	CONSIDERATION	NEGOTIATION	ONBOARDING	ACTIVATION
The users and providers identify and present each other as potential partners	The users shortlist suitable providers based on their presented value propositions	Both parties negotiate to establish mutually agreed contractual terms	The user initiates a due diligence and onboarding process with the provider	Both parties ensure deployed Fintech solutions are being well utilised

Source: HKMA, Quinlan & Associates analysis

Key Findings: Fintech Verticals

The industry has a solid understanding of the Fintech verticals and is aware of the notable benefits these technologies can offer. As such, there is a high level of interest across Wealthtech / Investech, Insurtech and Greentech solutions, signifying room for growth in the adoption and integration of these innovative technologies in the coming years.

When adopting Fintech-driven innovation, financial institutions prefer in-house development or partially enhancing capabilities through deploying third-party generic solutions (e.g. RPA) to support their existing processes. This preference is fuelled by a perceived weakness in the business case for more wholesale change, questions around the quality of solutions and cybersecurity / counter-party risk concerns associated with third-party Fintech solutions. For Fintech solution providers, extensive onboarding processes are seen as the most notable adoption barrier.

Business referrals are the preferred sourcing method for both Fintech users and providers, underlining the value they place on robust networks and relationships. However, many financial institutions find it challenging to source Fintech solution providers that meet their high internal standards, highlighting users' needs for greater quality control and validation. In response, Fintech solution providers seek more avenues to showcase their capabilities, indicating the potential for enhanced connectivity between users and providers.

Notable mismatches exist between the expectations of financial institutions and the capabilities of Fintech solution providers. Financial institutions often find providers' implementation abilities falling short of their expectations, while Fintech solution providers argue that the timelines and expectations of financial institutions do not align with their operational capacities. Additionally, disparities in corporate maturity, organisational processes and risk management protocols present major challenges to Fintech solution providers in adhering to the stringent standards set by established financial institutions, such as securing third-party accreditations, among other requirements.

Before deploying solutions in their day-to-day operations, financial institutions seek a deeper understanding of the technology, enhanced employee training and a convincing business case. Fintech solution providers, meanwhile, strive to showcase their solutions' capabilities and educate financial institutions on their business case. This mutual quest for understanding underscores the importance of education and clear communication in advancing Fintech adoption.

Key Findings: Technology Overlays

A.I. and DLT hold the potential to enhance not only the efficiency and competitiveness of financial institutions, but also the quality of Wealthtech / Investech, Insurtech and Greentech solutions. The Tech Baseline Assessment, however, indicates there is still room for growth. For example, although supervised learning models remain the most widely used in A.I., more advanced models (e.g. GenA.I.) could be more vigorously pursued. DLT, on the other hand, offers vast opportunities for a diverse range of applications, including central bank digital currencies (CBDCs), Decentralised Finance (DeFi) and tokenisation of financial assets, supporting streamlined financial settlements and the provision of a more cyber resilient "golden source of truth".
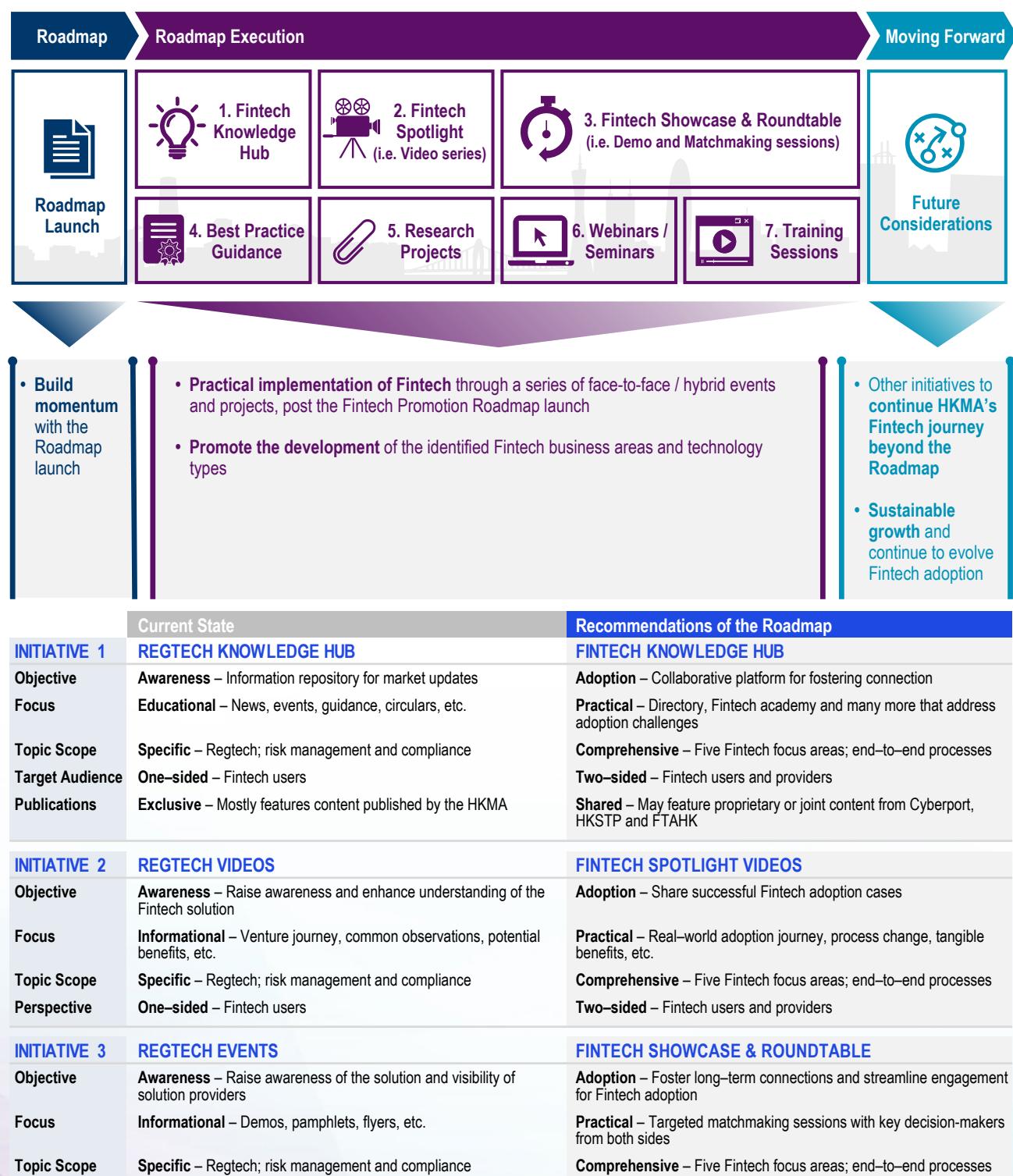
The adoption of these technologies, however, is not without challenges. Key hurdles include (1) a lack of comprehensive understanding of the technology overlays, (2) regulatory uncertainties, (3) implementation considerations, specifically concerning secure architecture, data privacy and data sharing, and (4) the absence of compelling business cases that can substantiate the required investments.

RECOMMENDATIONS

Building on its success in enhancing the market's awareness of Fintech, as well as its experiences gained from executing past initiatives to drive Fintech adoption, the HKMA, with the help of KPMG and Quinlan & Associates, has developed a new Fintech Promotion Roadmap (see Figure 4). Guided by the insights obtained from the HKMA Fintech Adoption Study, the HKMA plans to further fine-tune and deepen its efforts to promote greater adoption across the five Fintech focus areas identified in the Tech Baseline Assessment.

FIGURE 4: FINTECH PROMOTION ROADMAP & KEY DIFFERENCES

	Current State	Recommendations of the Roadmap
INITIATIVE 1	**REGTECH KNOWLEDGE HUB**	**FINTECH KNOWLEDGE HUB**
Objective	**Awareness** – Information repository for market updates	**Adoption** – Collaborative platform for fostering connection
Focus	**Educational** – News, events, guidance, circulars, etc.	**Practical** – Directory, Fintech academy and many more that address adoption challenges
Topic Scope	**Specific** – Regtech; risk management and compliance	**Comprehensive** – Five Fintech focus areas; end–to–end processes
Target Audience	**One–sided** – Fintech users	**Two–sided** – Fintech users and providers
Publications	**Exclusive** – Mostly features content published by the HKMA	**Shared** – May feature proprietary or joint content from Cyberport, HKSTP and FTAHK
INITIATIVE 2	**REGTECH VIDEOS**	**FINTECH SPOTLIGHT VIDEOS**
Objective	**Awareness** – Raise awareness and enhance understanding of the Fintech solution	**Adoption** – Share successful Fintech adoption cases
Focus	**Informational** – Venture journey, common observations, potential benefits, etc.	**Practical** – Real–world adoption journey, process change, tangible benefits, etc.
Topic Scope	**Specific** – Regtech; risk management and compliance	**Comprehensive** – Five Fintech focus areas; end–to–end processes
Perspective	**One–sided** – Fintech users	**Two–sided** – Fintech users and providers
INITIATIVE 3	**REGTECH EVENTS**	**FINTECH SHOWCASE & ROUNDTABLE**
Objective	**Awareness** – Raise awareness of the solution and visibility of solution providers	**Adoption** – Foster long–term connections and streamline engagement for Fintech adoption
Focus	**Informational** – Demos, pamphlets, flyers, etc.	**Practical** – Targeted matchmaking sessions with key decision-makers from both sides
Topic Scope	**Specific** – Regtech; risk management and compliance	**Comprehensive** – Five Fintech focus areas; end–to–end processes

FIGURE 4: FINTECH PROMOTION ROADMAP & KEY DIFFERENCES (CONTINUED)

	Current State	Recommendations of the Roadmap
INITIATIVE 4	**REGTECH ADOPTION PRACTICE GUIDE**	**BEST PRACTICE GUIDANCE**
Focus	**Risk-focused** – Outline adoption of Regtech in different risk and regulatory areas	**Adoption-focused** – Contractual requirements and onboarding practices (e.g. data protection)
Topic Scope	**Specific** – Regtech; risk management and compliance	**Comprehensive** – Five Fintech focus areas; end–to–end processes
Target Audience	**One–sided** – Fintech users	**Two–sided** – Fintech users and providers
INITIATIVE 5	**RESEARCH PROJECTS**	**RESEARCH PROJECTS**
Objective	**Awareness** – Introduce core technology and governance concepts	**Adoption** – Showcase various exploration efforts and successful implementation cases (if any)
Focus	**Educational** – Guidance on governance, legal implications and control principles	**Practical** – Adoption challenges, considerations and suggested operating models
Target Audience	**One–sided** – Fintech users (mainly banks)	**Two–sided** – Fintech users and providers
INITIATIVE 6	**WEBINARS / SEMINARS**	**WEBINARS / SEMINARS**
Focus	**Educational** – Knowledge-sharing by guests	**Practical** – Real–world business case, process change, tangible benefits, etc.
Topic Scope	**Specific** – Regtech; risk management and compliance	**Comprehensive** – Five Fintech focus areas; end–to–end processes
Target Audience	**One–sided** – Fintech users (mainly banks)	**Two–sided** – Fintech users and providers
INITIATIVE 7	**FINTECH TRAINING PROGRAMMES**	**TRAINING SESSIONS**
Objective	**Awareness** – Deepen financial practitioners' understanding of Fintech	**Adoption** – Equip industry practitioners with relevant technical skillsets
Focus	**Educational** – High–level introduction of the technology with potential adoption benefits	**Practical** – Guided demonstration to provide first–hand experience

Source: HKMA

1. **Fintech Knowledge Hub:** A key strategic undertaking is the transformation of the HKMA's existing Regtech Knowledge Hub into a more comprehensive Fintech Knowledge Hub, encompassing other Fintech verticals and technology overlays. This centralised platform will build upon the Regtech Knowledge Hub and serve as the one-stop shop for curated Fintech contents that, in addition to aggregating relevant news and events, will update the industry on new features demanded by the market. It will also serve as a comprehensive and cross-sectoral directory of Fintech solution providers, financial institutions and associations to address sourcing challenges. A Fintech Academy will be added as part of the platform, where users can easily identify Fintech-related academic programmes, training modules and contacts of relevant training providers to address challenges in the activation stage. This transformation will foster collaboration and enhance resource accessibility for all stakeholders across the financial services industry.

2. **Fintech Spotlight:** The HKMA plans to launch a video series that will highlight innovative Fintech solutions across Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT. While existing showcase videos have helped to raise the visibility of local Fintech solution providers, the survey and interview participants would like to better understand the underlying business cases for deployment. To address this, the HKMA plans to launch videos that focus on the implementation of Fintech solutions across the five focus areas and financial sectors, highlighting the impacts of Fintech solutions, common adoption challenges and how they can be overcome. These videos will include perspectives from both Fintech users and solution providers, making them more relatable and useful for prospective users interested in deploying Fintech solutions. As these videos will be uploaded and shared on the Fintech Knowledge Hub, the content will enhance brand visibility and product trustworthiness of the participating Fintech solution providers.

3. **Fintech Showcase & Roundtable:** The HKMA will organise quarterly Fintech showcase and roundtable events, serving as a stepping stone to fostering connections between Fintech solution providers and users for future collaboration opportunities. In response to the demand for clear commercialisation outcomes, the HKMA aims to shift the focus of these events from merely raising awareness to facilitating long-term connections and dialogue between Fintech solution providers and interested users across the banking, securities and insurance sectors. Each event will spotlight one of the Fintech focus areas (i.e. Wealthtech / Investech, Insurtech, Greentech, A.I. or DLT), providing a unique opportunity for key decision-makers from both ends of the spectrum to openly communicate their business needs and expectations, setting these events apart from others in the past.

4. **Best Practice Guidance:** The HKMA plans to issue a best practice guidance to mitigate common challenges (e.g. cybersecurity, documentation requirements, etc.) encountered during the negotiation and onboarding processes. Since these challenges are shared across different sectors, the HKMA anticipates that its guidance will benefit all Fintech users and solution providers. The forthcoming guidance will be more detailed and tailored, covering contractual requirements and onboarding practices to clarify frequently misaligned expectations beyond what has been covered in previous practice guides. The best practice guidance will serve as a useful reference for both Fintech users and solution providers to create better alignment during the negotiation and onboarding stages, ultimately fostering greater industry convergence.

5. **Research Projects:** To facilitate the consideration and activation stages, the HKMA plans to undertake research projects on key emerging technologies with a fast pace of development that hold relevance for the financial services industry, such as A.I., DLT, Open API, cloud and many more. Given the rapid speed of development in the A.I. and DLT space, the HKMA intends to equip industry participants with information on the latest trends and developments to make more informed decisions when it comes to adopting Fintech solutions. These reports will cover topics such as recent market trends, key technological advancements, notable use cases, adoption challenges and implementation considerations.

6. **Webinars / Seminars:** The HKMA will host a series of webinars / seminars, expanding the scope of its Regtech-focused events to the five Fintech focus areas. The main objective of these webinars / seminars is to foster knowledge / experience exchange and collaboration amongst Fintech solution providers, users and regulators. Through these sessions, key stakeholders will be updated on the latest Fintech development trends and successful adoption case studies, with a focus on understanding implementation journeys. The webinars / seminars will allow open discussions for key stakeholders to have a more holistic understanding of the practical intricacies around Fintech adoption.

7. **Training Sessions:** The HKMA will conduct targeted training sessions designed to improve Fintech usage by equipping participants with practical Fintech skillsets to enhance Fintech activation. The HKMA recognises that many of the existing training programmes for industry professionals tend to be more theoretical and academic in nature, given that they are typically module-based certification programmes. To address this gap, the HKMA's future training sessions will be facilitated by experts from various Fintech verticals and technology overlays, providing more practical, hands-on training that better prepares participants to implement and use Fintech solutions at their work.

Through establishing a robust Fintech Promotion Roadmap that addresses existing adoption challenges, promotes end-user adoption and facilitates continued connectivity and collaboration, the HKMA aims to better support Fintech users and solution providers across all stages of the adoption journey, catalysing sustained technological innovation in Hong Kong's financial services industry to better serve the people of Hong Kong.

2. FINTECH FACILITATION INITIATIVES

In recent years, the HKMA, the SFC and the IA have been proactively facilitating Fintech adoption in support of the HKSAR Government's ambition to become a leading Fintech Hub. This has been achieved through various policies and initiatives across the five key pillars (see Figure 5).

FIGURE 5: FINTECH INITIATIVES

PROMOTING HONG KONG AS A FINTECH HUB

2016

Hong Kong Fintech Week (Cross-sector)
An annual flagship event that brings together the global Fintech community, featuring keynote speeches

Whitepaper on DLT (HKMA-ASTRI)
A whitepaper discussing the potential application of DLT in financial services and possible challenges

2017

Whitepaper 2.0 on DLT (HKMA)
The second series of the DLT whitepaper, covering the latest technology update, compliance issues and governance

IOSCO Fintech Research Report (SFC)
First methodological analysis report led by SFC of the intersection of Fintech with securities regulations

2021

Whitepaper on Alternative Credit Scoring of Micro & SMEs (HKMA-ASTRI)
A whitepaper covering the alternative credit scoring mechanism for banks and providers of alternative data

Cyberport Fintech InnoCon (Cross-sector)
An online conference with professional bodies, financial institutions, regulators and Fintechs discussing key topics

Regtech Conference (HKMA)
A flagship conference discussing the two-year roadmap to further promote Regtech adoption in the banking sector

2023

WOW Hong Kong (Cross-sector)
A summit to discuss the future of the Internet, blockchain, real asset tokenisation, CBDCs, regulations and many more

Data Summit (HKMA)
A summit to facilitate the exchange of ideas related to the CDI, as well as discussing digitalisation of banking operations

CLARIFYING REGULATORY REQUIREMENTS

2016

Fintech Supervisory Sandbox (HKMA)
A controlled environment for banks & their partner tech firms to conduct pilot trials and gather user feedback

Fintech Contact Point (SFC)
A centralised point of contact to communicate with the Fintech community to facilitate their understanding of regulations

Fintech Advisory Group (SFC)
A group focusing on the opportunities, risks and regulatory implications of developments related to Fintech, including facilitating the contact point

Future Task Force (IA)
A working group focusing on Fintech adoption and drawing up recommendations to promote Fintech development

2017

Fintech Supervisory Chatroom (HKMA)
A platform dedicated to banking institutions and Fintech firms seeking supervisory feedback on Fintech applications

Fast Track (IA)
An expedited pathway for new authorisation applications from insurers that are using solely digital distribution channels

Insurtech Facilitation Team (IA)
A team in charge of running dialogue to help the community learn about the regulatory regime and exchange ideas

Regulatory Sandbox (SFC)
A confined regulatory environment for qualified firms to operate regulated activities before Fintech is fully adopted

Insurtech Sandbox (IA)
A controlled environment for insurers to experiment with innovative Insurtech and other technology applications

2018

Granting of Virtual Insurers Licences (IA)
A licence is granted to the first virtual insurer, followed by 3 other insurers in 2019 and 2020 respectively

2019

Granting of Virtual Bank Licences (HKMA)
Licences are granted to 8 virtual banks to innovate new technologies and promote financial inclusion

2020

Granting of a VATP Licence (SFC)
The granting of the first licence in Hong Kong to a VATP, which may only serve professional investors

2022

Regtech Knowledge Hub (HKMA)
A central repository of Regtech-related content, including past circulars, guidance papers and research reports

2023

New Licensing Regime for VATPs (SFC)
Centralised VATPs operating in Hong Kong or actively marketing their services to Hong Kong investors need to apply to the SFC for a licence

Dedicated Virtual Asset Webpage (SFC)
Launched a webpage outlining the regulatory regimes in governing VATPs and other intermediaries conducting VA-related activities

BOLSTERING FINTECH SUPPORTING INFRASTRUCTURE

2017

Innovation Hub (HKMA-ASTRI)
A centre with around 200 virtual workstations and collaborative set-ups for development activities

2019

Open Banking API – Phase 1 & 2 (HKMA)
Facilitate access of third-party service providers to banks' product information and enable customer acquisition

2020

Virtual Onboarding Platform (IA-HKFI)
A platform that streamlines distribution of long-term insurance products via video conferencing tools

2021

Open Banking API – Phase 3 & 4 (HKMA)
Facilitate access of third-party providers to users' information at multiple banks and ability to perform transactions

Working Group for Open API (IA)
A working group to develop an open API framework for data sharing within and beyond the insurance industry

2022

Commercial Data Interchange (HKMA)
A venue through which data owners can share data with banks via data providers by consent

NURTURING TALENT

2015

University Partnership Programme (Cyberport)
A Fintech-focused entrepreneurship programme for students to participate in a boot camp overseas and receive mentorship

2016

Fintech Career Accelerator Scheme (HKMA)
A talent development scheme involving internship / work opportunities and training for current university students and graduates

2020

Fintech Practitioners Fintech Training Programme (Cyberport)
A training programme for senior executives and execution teams of FIs on Fintech innovations, with enrolment subsidies offered

2021

Fintech Future Leader Academy (ASTRI)
An internship programme for university students in relevant disciplines (i.e. I&T and Business) at ASTRI, with field visits to top firms such as BOC, Cyberport, HKMA and other firms

Enhanced Competency Framework on Fintech (HKMA-HKIB)
Competency standards required of Fintech practitioners in the banking sector, with necessary training courses and assessment

Future Banking Bridging Programme (FBBP) (HKMA-HKIB)
Offer training to university students in a few key areas, including Fintech and ESG, with the support of banks and universities

2022

Fintech Career Accelerator for Insurance (IA-HKMA)
A programme that offers Insurtech internships to university students at 9 insurance companies, attracting over 600 internship applications and the first batch of applicants is scheduled to start their internships in 2023

Industry Project Masters Network (HKMA)
A joint programme in collaboration with universities for postgraduate students to gain working experience at top organisations

OFFERING FINANCIAL SUPPORT

2005

Incubation Programme (Cyberport)
A programme for Fintech startups to access financial resources, professional advice, networking opportunities and facilities

Incubation Programme (HKSTP)
A 3-year programme for startups to develop their early-stage solutions, with funding, R&D, mentorship, investor matching support and facilities

2009

Creative Micro Fund (Cyberport)
A financial assistance / grant scheme of HKD 100,000 offered to produce PoCs and prototypes out of business ideas

2014

Accelerator Programme (Cyberport)
A programme to prepare its member firms to go international and attract investors, with up to HKD 300,000 of financial assistance

2015

Accelerator Programme (HKSTP)
A fast-track programme for growth-stage companies that are seeking global expansion, with financial assistance offered

Venture Fund (HKSTP)
A HKD 600 million AuM fund that invests in early-to-growth stage companies, where returns are returned to fund more startups

2016

Macro Fund (Cyberport)
A HKD 400 million investment fund that targets to co-invest in Cyberport digital entrepreneurs and startups to support their growth

2018

Overseas / Mainland Development Support Scheme (MDSS) (Cyberport)
A programme for members to expand internationally, involving funding support for landing services, marketing and other services

2020

Fintech Anti-epidemic Scheme for Talent Development (FAST) (Cyberport)
A job creation scheme that offers subsidies on salaries (HKD 10,000 / month) to Fintech providers that open up a new position

2021

PoC Subsidy Scheme (Round 1) (Cyberport)
A 100% subsidy scheme with funding up to HKD 150,000 for joint projects between financial institutions and Fintech firms

2022

PoC Subsidy Scheme (Round 2) (Cyberport)
A 100% subsidy scheme with funding up to HKD 150,000 for joint projects between financial institutions and Fintech firms

Source: HKMA, SFC, IA, InvestHK, FSTB, HKSAR Government, Cyberport, HKSTP, ASTRI, Quinlan & Associates analysis

2.1 PROMOTING HONG KONG AS A FINTECH HUB

Hong Kong's success as a global Fintech hub owes much to a series of well-curated events and initiatives that spotlight the city's vibrant Fintech ecosystem, providing a platform for industry leaders, investors and enthusiasts to come together and explore the latest trends and innovations in the Fintech landscape. Additionally, a collection of Government-sponsored publications dives into a wide range of cutting-edge developments in the local Fintech sector, offering valuable insights for industry stakeholders.

Events & Promotions

The HKSAR Government and financial regulators have organised and supported a wide variety of events. For example, Hong Kong Fintech Week was launched in 2016 by the HKMA, the SFC, the IA, InvestHK and the Financial Services and Treasury Bureau (FSTB). In 2022, the event hosted more than 300 thought leaders and was attended by over 30,000 in-person participants (and over 3 million online attendees). The event has also been instrumental in promoting the Global Fast Track (GFT) programme, which has successfully supported over 800 startups across 49 countries by facilitating meaningful interactions with over 100 corporates and investors.

Aside from the flagship Hong Kong Fintech Week, there are a host of other events that have been supported by the Government and financial regulators, including the Cyberport Fintech InnoCon in 2021, WOW Summit, Digital Economy Summit and the inaugural Data Summit in 2023, which have collectively drawn over 9,000 participants. Through supporting various conferences, exhibitions and networking events, Hong Kong has fostered valuable opportunities for collaboration, knowledge-sharing and the exploration of mutually beneficial opportunities across the Fintech ecosystem.

Whitepapers and Research Reports

Hong Kong's financial regulators have been proactive in sharing insights on innovative Fintech technologies through the ongoing release of thought leadership publications, providing the industry with comprehensive "deep dives" into various Fintech solutions, together with detailed use cases.

The HKMA, for example, published two whitepapers focusing on DLT in 2016 and 2017. The reports guide industry players to better navigate the complexities of the DLT landscape in the city, offering insights into the latest advancements, adoption considerations for compliance and governance perspectives surrounding implementation. Aside from DLT coverage, the HKMA released a report on the application of A.I. in banking in 2019, followed by a publication on anti-money laundering (AML) / counter-financing of terrorism (CFT) supervision in the digital age in 2020, as well as various reports in 2021, including case studies and insights on Regtech solutions.

Similarly, in 2017, the SFC partnered with the International Organisation of Securities Commissions (IOSCO) board to publish an in-depth report on the delivery of securities and capital market products and services through Fintech solutions. By showcasing various use cases, the report highlighted the benefits that Fintech solutions, such as robo-advisory, bring to the retail trading and investment landscape, as well as technological innovations in bond trading markets via the use of institutional trading platforms. The report equips readers with a comprehensive understanding of the opportunities and challenges presented by Fintech solutions in the securities industry to navigate this rapidly evolving landscape. The SFC also participates in the crypto and digital assets and decentralised finance workstreams under IOSCO's Board-level Fintech Task Force. For example, the SFC contributed to the Consultation Report on the Policy Recommendations for Crypto and Digital Asset Markets in May 2023.

2.2 CLARIFYING REGULATORY REQUIREMENTS

The HKMA, the SFC and the IA maintain an open dialogue with the Fintech community through the regular issuance of guidance and other documents, covering Regtech, virtual assets and cybersecurity. Such guidance allows Fintech solution providers and users to stay updated on the latest regulatory developments, minimise regulatory ambiguities and promote a transparent regulatory environment.

For example, the HKMA's Banking Made Easy Initiative, part of the Smart Banking initiatives announced in September 2017, was designed to reduce regulatory frictions that could hinder technological innovation. This initiative was expanded in September 2018 to further facilitate the adoption of Regtech solutions, with a focus on AML / CFT, prudential risk management and machine-readable regulations.

Three further regulatory initiatives that have supported Fintech adoption in Hong Kong are the establishment of a supervisory sandbox, licensing support for qualifying Fintech solutions and forming a centralised point of contact.

Supervisory Sandbox

Many financial regulators offer a supervisory sandbox (i.e. controlled environment) to conduct pilots of new technologies and gather user feedback to make refinements before the solutions are launched in the market. These sandboxes serve as collaborative spaces that encourage experimentation and innovation, while ensuring appropriate safeguards are in place.

The HKMA established the Fintech Supervisory Sandbox (FSS) in September 2016 to enable banks and their partnering technology firms to conduct pilot trials of their Fintech initiatives, including A.I. and DLT, to expedite the launch of new Fintech products and reduce development costs. Over time, the FSS has evolved with new features, including FSS 2.0 in 2017, FSS 3.0 in 2021 and FSS 3.1 Pilot in 2022, jointly with Cyberport, to further support innovation and development in the sector.

The SFC introduced its supervisory sandbox in September 2017 to provide a confined regulatory environment for firms to operate regulated activities under the Securities and Futures Ordinance before Fintech is used on a fuller scale. The IA also established an Insurtech sandbox in September 2017 for insurers (and in 2022 for insurance brokers) to experiment with advanced solutions such as virtual onboarding, streamlined suitability assessment and automated claims processing.

Licensing Support

Specific regulatory frameworks and approvals have been implemented in Hong Kong's banking, securities and insurance sectors to foster innovation and ensure compliance amid rapid digitalisation.

Notable milestones to boost Fintech adoption in the banking sector include the issuance of the first and second batches of stored value facility (SVF) licences in 2016, followed by the granting of eight virtual banking licences in 2019 by the HKMA. The introduction of e-wallets and virtual banks has transformed the way local payments and banking services are being delivered, providing consumers with more convenient, accessible and personalised financial solutions.

The SFC has been promoting the adoption of Fintech through the provision of clear and consistent regulatory guidance. One example is the issuance of the Guidelines on Online Distribution and Advisory Platforms which came into effect in 2019 to provide tailored guidance on the design and operation of online platforms, including specific guidance on the provision of robo-advice. Further, the SFC has been developing a regulatory framework for virtual asset activities since 2018, with the aim of striking a balance between promoting innovation and enhancing consumer protection. Examples include the publication of licensing conditions for entities managing portfolios that cover virtual assets and the introduction of an "opt-in" regime for regulating centralised virtual asset trading platforms (VATPs) trading security tokens in 2019. In 2023, a new licensing regime for centralised VATPs trading non-security tokens was introduced to fulfil the latest standards promulgated by the Financial Action Task Force on virtual asset service providers and to protect investors.

In 2017, the IA introduced a fast-track programme to streamline the authorisation process for insurers operating exclusively through digital distribution channels, allowing them to swiftly bring digital offerings to market. Since 2018, the IA has granted four virtual insurer licences (two offering life insurance and two non-life products) in Hong Kong that enable the holders to operate solely in digital distribution channels. The rise of digital insurance has also created new opportunities for Insurtech providers to offer their solutions to incumbent insurers.

Centralised Point of Contact

To maintain ongoing communication with industry players and nurture proactive regulatory dialogue, Hong Kong's financial regulators have all established dedicated, centralised points of contact. These serve as a central resource hub, updating industry players on regulatory changes and offering expert advice on Fintech-related matters.

In 2017, the HKMA formed the Fintech Supervisory Chatroom, which acts as a platform for providing supervisory feedback on Fintech applications to banks and Fintech firms. The chatroom facilitates communication through various means, including the option for emails, face-to-face meetings or video conferences.

The SFC established the Fintech Contact Point in 2016 to provide information on the current regulatory landscape and emerging trends, as well as offer guidance and support to firms engaged in regulated Fintech activities, including robo-advisory services. The SFC also established the Fintech Advisory Group in 2016 to discuss the opportunities, risks and regulatory implications of the latest Fintech trends and developments.

Similarly, in the insurance sector, the IA formed the Insurtech Facilitation Team in 2017 to enhance communication with companies involved in the development and application of Insurtech in Hong Kong, as well as to promote the city as a regional Insurtech hub. The team aims to facilitate the Insurtech community's understanding of the current regulatory regime, acts as a platform for exchanging ideas of innovative Insurtech initiatives among key stakeholders and provides advice on Insurtech-related topics, as appropriate.

2.3 BOLSTERING FINTECH SUPPORTING INFRASTRUCTURE

Various mechanisms have been put in place by regulators to facilitate the ongoing adoption of Fintech within the financial services industry, including innovation hubs and shared infrastructure.

Innovation Hubs

Hong Kong's financial regulators have fostered innovation by establishing innovation hubs in collaboration with various institutions. The Government has played a crucial role by supporting industry bodies such as Cyberport and Hong Kong Science and Technology Park (HKSTP), which together house and provide support to over 3,000 startups, including many local Fintech firms. Cyberport and HKSTP members can access their state-of-the-art facilities and a wide range of programmes and schemes to support them at different stages of their business lifecycle, from pre-seed to initial public offering (IPO).

Another notable example is the HKMA-Hong Kong Applied Science and Technology Research Institute (ASTRI) Innovation Hub established in 2016. ASTRI serves as a centre for collaboration, with approximately 200 virtual workstations available for Fintech solution providers to test their solutions. The Hub can connect to 30 innovation facilities, such as developer laboratories, via virtual private networks in Hong Kong and abroad.

Shared Infrastructure

Financial regulators have self-initiated various shared infrastructure projects, including the HKMA's Open API and CDI initiatives, which were launched in 2019 and 2022 respectively.

Since 2021, the banking sector has been progressively implementing new batches of Open API that include deposit account information and FPS App-to-App payment functions, further facilitating collaboration between the banking sector and third-party service providers (TSPs) to develop innovative banking products. As of end-March 2023, more than 1,300 registrations from these TSPs have been recorded, with about 1 million monthly banking product applications, account enquiries and payment transactions completed by leveraging banks' Open API. Recognising the benefits of such developments, the IA established its own Open API working group in 2021 to develop the API framework in the insurance sector.

Meanwhile, the HKMA's CDI provides a secure platform for financial institutions to retrieve consented commercial data of enterprises, particularly small and medium enterprises (SMEs), from private and public data providers, including Fintech solution providers. The CDI has the potential to overcome challenges related to data fragmentation and incompatible data-sharing protocols yet retains the flexibility for data providers to explore customised collaboration models with different banks. By enabling seamless data sharing between providers and users, the CDI streamlines many existing processes within banks, such as supplementing loan applications for SMEs and expediting loan approvals, facilitating over 4,900 loan applications and reviews since its inception.

The HKMA's Open API and CDI initiatives have paved the way for increased data sharing between financial institutions and Fintech solution providers, giving rise to novel use cases that not only bring greater convenience to end users, but also open new avenues for revenue generation.

2.4 NURTURING TALENT
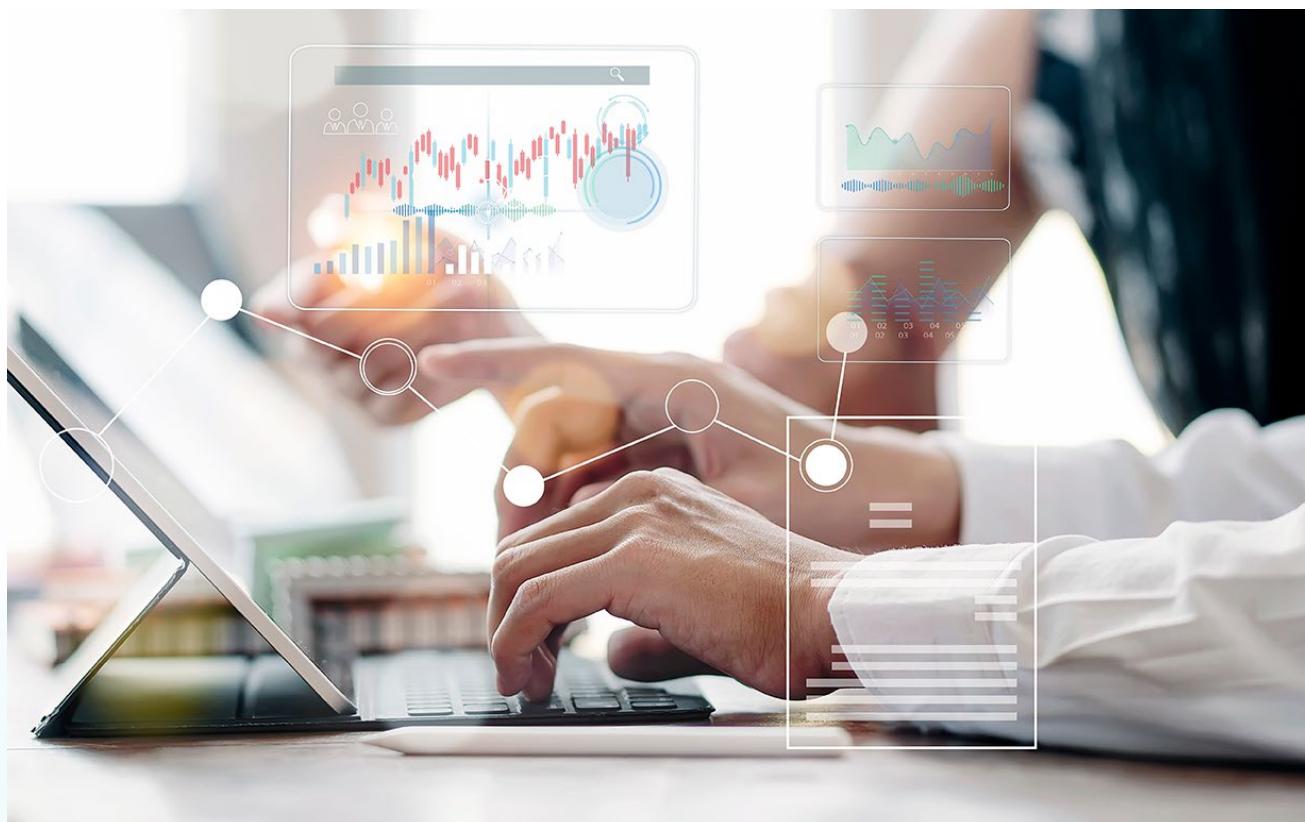
Financial regulators and industry bodies have implemented various talent schemes to attract, nurture and retain top talent, designed to cultivate a pool of skilled professionals in Hong Kong.

To address the need for upskilling at traditional banks, the FSTB commissioned Cyberport to develop the Financial Practitioners Fintech Training Programme, which was launched in 2020. This programme aims to provide financial sector professionals with the knowledge and skills for Fintech implementation, with full enrolment subsidies for eligible participants. The second round of the Financial Practitioners Fintech Training Programme in 2022 witnessed significant growth, with a total of 7,174 registrations, a 240% increase compared to the first round.

To address the growing need for Fintech expertise in the banking industry, the HKMA introduced the Enhanced Competency Framework on Fintech (ECF-Fintech) in 2021. The ECF-Fintech aims to enhance the knowledge and professional competencies of banking practitioners across various Fintech areas.

Within the ECF-Fintech, specific job roles related to Fintech, such as Fintech solution development and Fintech product design, are identified. For each role, a comprehensive set of competency and qualification standards is outlined, providing guidance for the necessary skills and qualifications that individuals in these roles should possess.

While upskilling the current workforce is important, looking ahead and prioritising talent development among young individuals is crucial. To this end, the HKMA introduced the Fintech Career Accelerator Scheme (FCAS). For current university students, the scheme offers gap year placements that provide valuable internship opportunities to work alongside industry professionals. As part of FCAS, Insurtech internships have been offered in collaboration with the IA, attracting over 600 applications. Furthermore, the Industry Project Masters Network (IPMN) scheme, officially launched in 2022, focuses on nurturing and growing talent among postgraduate students. The HKMA has also supported talent development initiatives launched by other ecosystem partners such as HKSTP, Cyberport and ASTRI.

2.5 OFFERING FINANCIAL SUPPORT

Developing innovative solutions in the Fintech industry requires continuous investment, but accessing suitable funding and investors can be challenging for many Fintech solution providers.

To address this concern, the Government has implemented several subsidies and grant schemes via a two-pronged approach:

1. Helping Fintech solution providers to realise their business ideas; and

2. Encouraging Fintech adoption among users, thereby boosting demand.

These funds are primarily distributed by government-led industry bodies, such as Cyberport and HKSTP, to their members.

To facilitate easier funding for Fintech solution providers, Cyberport launched its Creative Micro Fund in 2009. The fund offers a range of support, including grants of HKD 100,000 to new startup projects and HKD 200,000 via its Overseas / Mainland Market Development Support Scheme to help startups participate in overseas exhibitions and conferences.

Other initiatives to encourage funding for startups include the two most recent phases of the PoC Subsidy Scheme in 2021 and 2022, which were designed to provide 100% financial support to eligible financial institutions and Fintech solution providers, with funding capped at HKD 150,000.

2.6 MOVING FORWARD

Recognising the importance of fostering a sustainable Fintech ecosystem in Hong Kong, the HKSAR Government, financial regulators and industry bodies have collectively supported various initiatives to create an environment where both Fintech users and Fintech solution providers can thrive.

To promote a sustainable Fintech ecosystem and encourage broader Fintech adoption within Hong Kong's financial services industry, it is essential to identify and understand the key obstacles and their underlying causes from the perspectives of both Fintech users and Fintech solution providers.

"

Over the years, the SFC has been supporting the adoption of Fintech by providing regulatory clarity and consistency, as demonstrated by the SFC's guidance on robo-advice and automated investment services, as well as its comprehensive policy response to virtual asset-related activities. Such regulatory clarity and consistency are critical to foster the sustainable and responsible development of innovative technology. As the landscape evolves with the advent of DLT, the growth of the Fintech community will help Hong Kong harness technology through innovative products and transparent regulations. The SFC embraces the confluence of innovation and regulation as the pathway to the future of finance. It also remains firmly committed to developing Hong Kong's financial markets as well as protecting investors and market integrity.

Keith Choy
Interim Head, Intermediaries, Securities and Futures Commission

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In recent years, the adoption of Insurtech solutions has been a driving force behind the progress in digital transformation efforts. Recognising the benefits of digitalisation, the IA has explored multiple avenues to realise this potential, with developments underway to develop an open API framework for the insurance industry, paving the way for enhanced connectivity and collaboration. By promoting Open API and concentrating on talent development, cybersecurity and technology application research, we aim to shape a dynamic and customer-centric future for the insurance industry.

Tony Chan
Associate Director, Policy and Development, Insurance Authority

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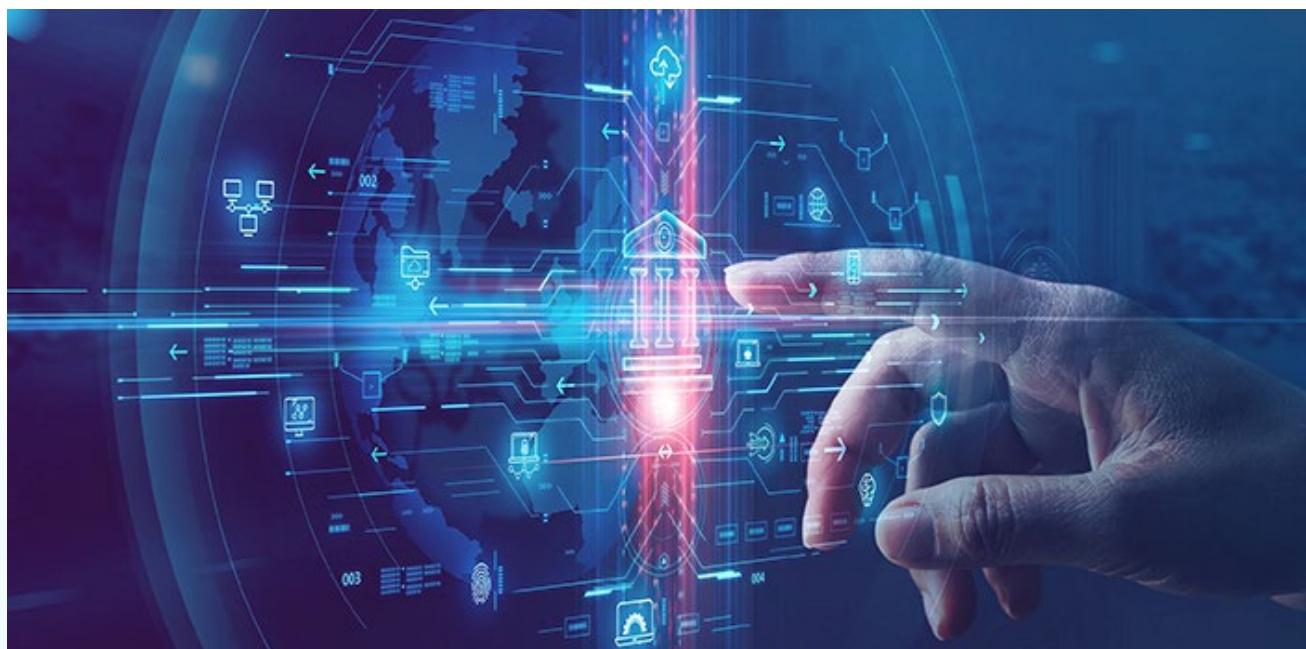
The transformative power of Fintech is not limited to a single area of our industry. It has the potential to revolutionise our entire financial landscape, cutting across sectors from front to back end. This is the future we should strive for in Hong Kong's financial industry.

Raymond Chan
Executive Director (Banking Supervision), HKMA

3. HKMA FINTECH ADOPTION STUDY

3.1 OVERVIEW

The objective of this study is to foster greater adoption of Fintech by gaining a comprehensive understanding of various practical challenges encountered during the Fintech adoption journey from the perspectives of both Fintech solution providers and users. This study looks at Hong Kong's wider financial services industry, encompassing the banking, securities and insurance sectors, providing us with a more holistic understanding of Fintech adoption challenges and potential solutions for the future.

This study covers all five Fintech focus areas identified in the Tech Baseline Assessment: Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT, all of which have relevance to the wider financial services industry and are projected to see growth in adoption. This underscores the interconnectedness and shared opportunities for innovation and technological advancement across Hong Kong's financial services landscape. Moreover, these technologies offer a wide range of applications, encompassing customer acquisition (e.g. target identification, lead generation, etc.), customer monetisation (e.g. product development, execution management, etc.), customer maintenance (e.g. report generation, queries management, etc.), as well as back-end operations, such as risk management and process optimisation.

3.2 STATUS QUO
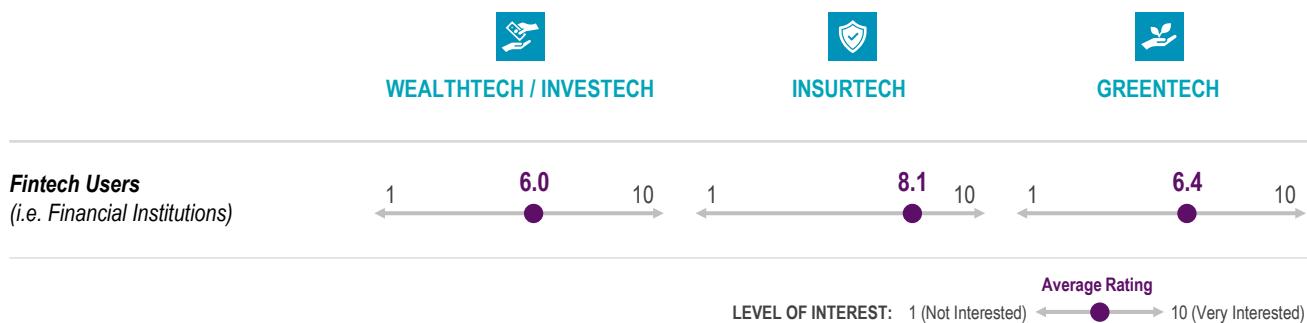
The industry executives we surveyed indicated varying levels of interest in adopting Fintech solutions (see Figure 6). On a scale from 1 to 10, Wealthtech / Investech scored an average of 6.0, Insurtech 8.1 and Greentech 6.4.

Despite its relative nascency, there is a growing level of interest in Greentech solutions across the banking, securities and insurance sectors. This is being fuelled by rising expectations from regulators, asset owners and end-investors with respect to ESG considerations, particularly in relation to environmental sustainability. The Chief Executive Officer (CEO) of a Greentech company we interviewed echoed this view, noting rising regulatory obligations with respect to ESG reporting and a greater emphasis by asset owners and end-investors on prioritising investments that align with environmental goals. In this regard, the adoption of Greentech solutions is expected to drive positive change and create long-term value for industry stakeholders.

While interest in Insurtech solutions remains strong, there are several key challenges hindering adoption, especially the lack of robust data frameworks and structured datasets available in the market. Insurance companies recognise the importance of addressing this issue to fully embrace Insurtech and provide enhanced services to their clients. The Chief Digital Officer of an insurance company we interviewed shared this sentiment, stating, "With well-designed and structured data in place, I am confident that Insurtech deployment will take a significant leap forward."

FIGURE 6: LEVEL OF INTEREST

	WEALTHTECH / INVESTECH	INSURTECH	GREENTECH
Fintech Users *(i.e. Financial Institutions)*	1 ——— **6.0** ——— 10	1 ——— **8.1** ——— 10	1 ——— **6.4** ——— 10

Average Rating

LEVEL OF INTEREST: 1 (Not Interested) ⬤ 10 (Very Interested)
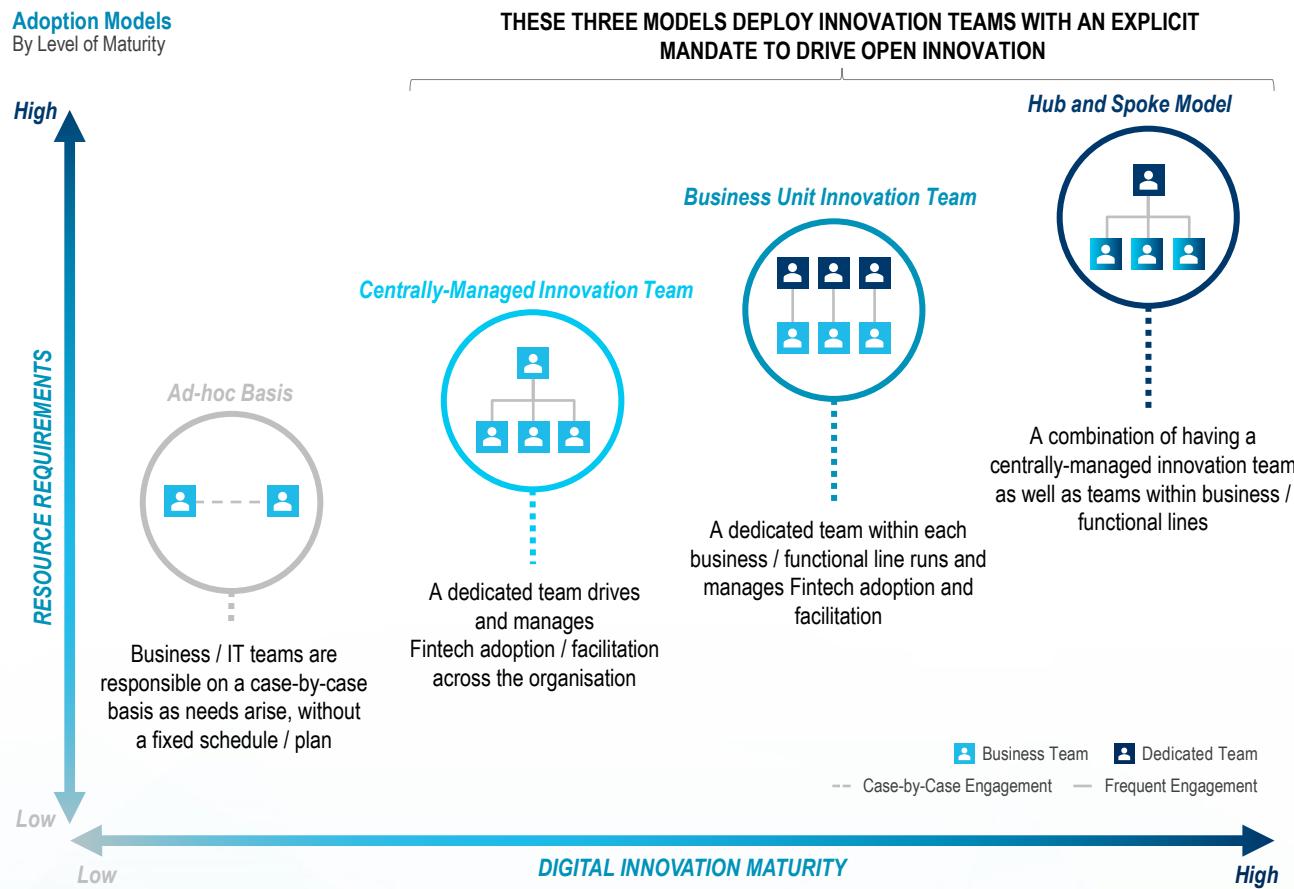
Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

In looking to adopt Fintech solutions, financial institutions typically employ four different approaches based on their level of maturity and available resources (see Figure 7):

- **Ad-hoc Basis:** Forming a taskforce team to explore the adoption of Fintech solutions on a case-by-case basis as specific needs arise, without a fixed schedule / plan;

- **Centrally-Managed Innovation Team:** Operating a single dedicated team that is responsible for managing the adoption of Fintech solutions across the organisation;

- **Business Unit Innovation Team:** Operating a dedicated team within each business and / or functional line to drive the adoption of Fintech solutions; and

- **Hub and Spoke Model:** Having both centrally-managed and business unit innovation teams, where the central team sets the innovation strategy across the wider organisation, while the business unit teams identify the specific business needs and drive Fintech implementation within their respective areas.

FIGURE 7: ADOPTION MODELS

Adoption Models
By Level of Maturity

THESE THREE MODELS DEPLOY INNOVATION TEAMS WITH AN EXPLICIT MANDATE TO DRIVE OPEN INNOVATION

High

Hub and Spoke Model

Business Unit Innovation Team

Centrally-Managed Innovation Team

Ad-hoc Basis

RESOURCE REQUIREMENTS

A combination of having a centrally-managed innovation team as well as teams within business / functional lines

A dedicated team within each business / functional line runs and manages Fintech adoption and facilitation

A dedicated team drives and manages Fintech adoption / facilitation across the organisation

Business / IT teams are responsible on a case-by-case basis as needs arise, without a fixed schedule / plan

Low

Business Team   Dedicated Team
Case-by-Case Engagement   Frequent Engagement

Low   DIGITAL INNOVATION MATURITY   High

Source: Quinlan & Associates analysis

When it comes to innovation and the adoption of Fintech solutions, different approaches are observed among financial institutions. Companies in the earlier stages of their innovation journey often adopt Fintech solutions on an ad-hoc basis, typically a function of having more limited resources to establish a clear innovation strategy. Approximately 30% of financial institutions we surveyed adopt Fintech solutions in this manner (see Figure 8).
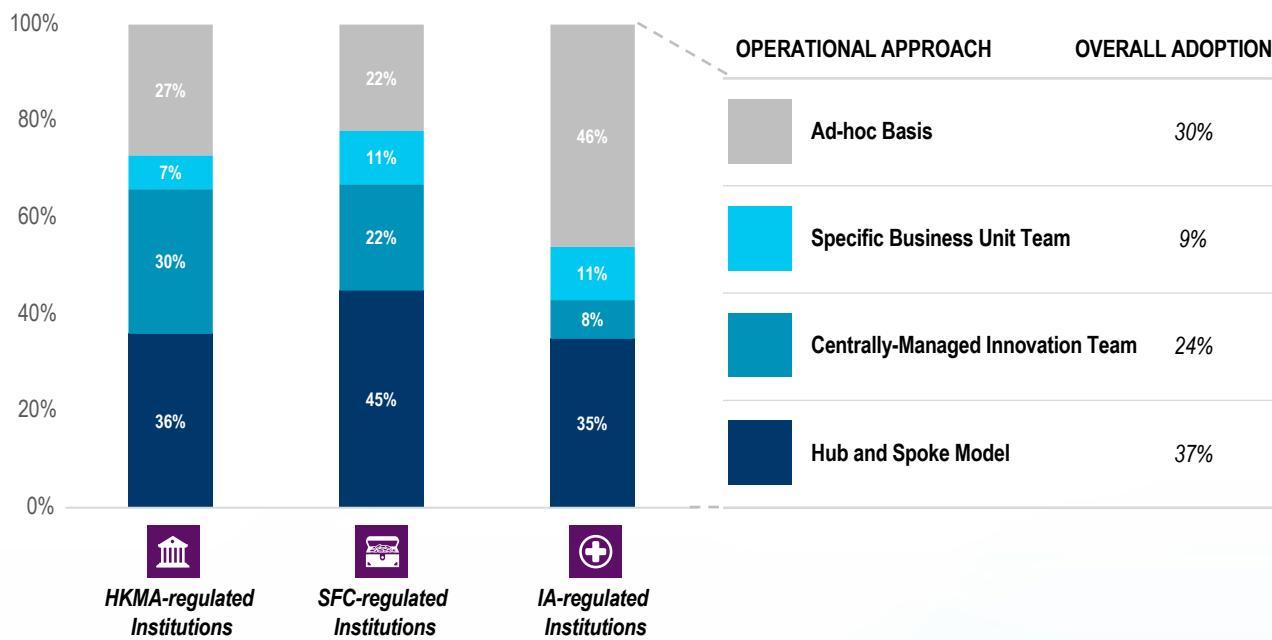
Larger financial institutions typically have more resources to adopt Fintech solutions in a systematic manner, with 24% of financial institutions we surveyed employing centrally-managed innovation teams, a model that is particularly prevalent in the banking sector. Additionally, 9% of financial institutions we surveyed assign dedicated teams within each business or functional line, focusing on integrating Fintech solutions into their respective domains. This approach allows for a more tailored and specialised adoption of Fintech solutions based on the specific needs and requirements of each business unit.

The majority of financial institutions we surveyed use a mix of both approaches. The hub and spoke model, implemented by 37% of surveyed financial institutions, involves collaboration and communication between centrally-managed innovation teams and the specific business unit innovation teams.

FIGURE 8: INTERNAL FINTECH TEAM ARRANGEMENT

Internal Fintech Team Arrangement
Fintech Adoption, % of Respondents

OPERATIONAL APPROACH	OVERALL ADOPTION
Ad-hoc Basis	*30%*
Specific Business Unit Team	*9%*
Centrally-Managed Innovation Team	*24%*
Hub and Spoke Model	*37%*

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis
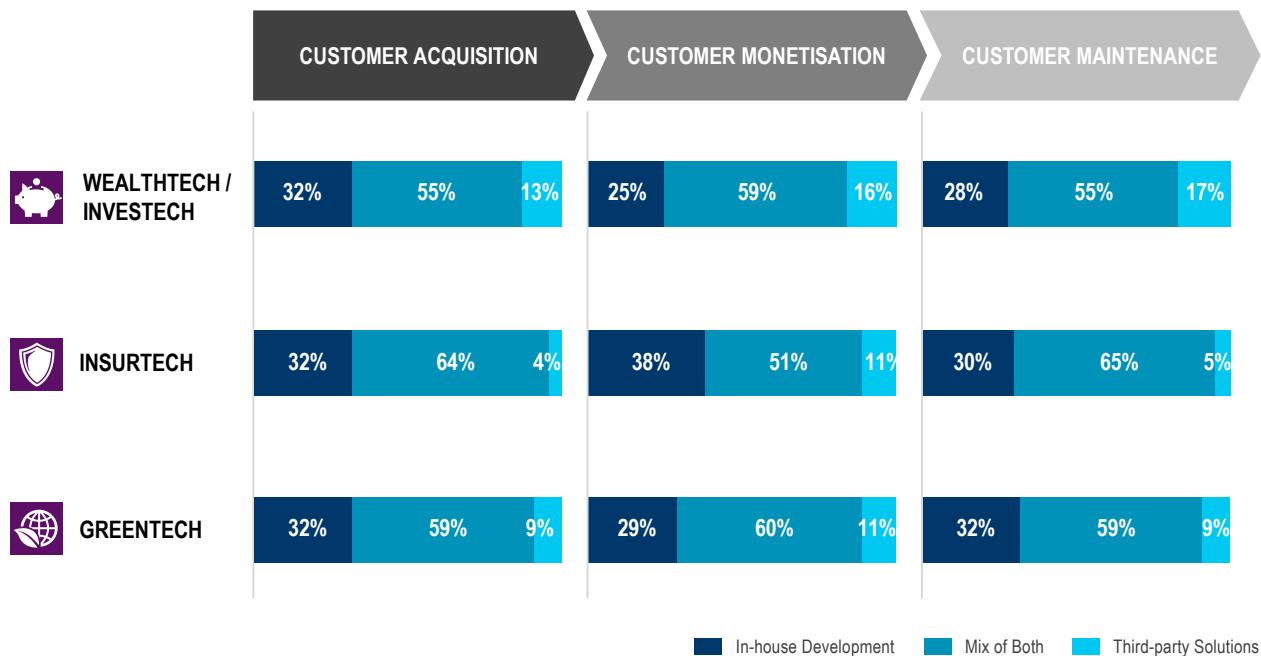
As financial institutions increasingly embrace Fintech solutions, they have different approaches to adoption: (1) in-house development, (2) leveraging third-party solutions or (3) mix of both. Each approach has its own advantages and trade-offs. In-house development is preferred for high-touch engagements or where differentiated solutions are required (as it provides greater flexibility and control), with third-party Fintech solutions being sought where faster execution and implementation (and fewer upfront resources) are needed (see Figure 9).

FIGURE 9: FINTECH ADOPTION APPROACH PREFERENCE

Fintech Adoption Approach Preference
Fintech Adoption, % of Respondents

	CUSTOMER ACQUISITION			CUSTOMER MONETISATION			CUSTOMER MAINTENANCE		
WEALTHTECH / INVESTECH	32%	55%	13%	25%	59%	16%	28%	55%	17%
INSURTECH	32%	64%	4%	38%	51%	11%	30%	65%	5%
GREENTECH	32%	59%	9%	29%	60%	11%	32%	59%	9%

■ In-house Development ■ Mix of Both ■ Third-party Solutions

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

When comparing financial institutions that solely prefer in-house development to third-party solutions, 30% of respondents prefer in-house development, while only 12% prefer third-party solution adoption across all stages of the customer journey. Many executives we interviewed attributed their lack of preference for third-party solution adoption to (1) increasing technology costs as the business scales, (2) the lack of a compelling business case, with costs and implementation complexities outweighing the benefits, and (3) the difficulties in integrating third-party solutions due to deeply-rooted and highly-intricate legacy systems, impeding deployment and creating significant operational risks.

In the insurance sector, we also noted some specific observations regarding the deployment of standalone Insurtech solutions. The CEO of an Insurtech company highlighted the highly risk-averse nature of many incumbent insurers, coupled with the lack of supporting infrastructure tailored to accommodate new solutions, makes third-party solution deployment less viable.

On the Greentech front, major challenges arise due to discrepancies in standards among ESG data and index providers, highlighted by the Chief Sustainability Officer (CSO) of a major securities company. The absence of a "golden source of truth" creates challenges around deploying standalone third-party Greentech solutions, hence a need for greater alignment and standardisation in the ESG data space.

Most financial institutions surveyed (59%) indicated their preference for a mixed approach that incorporates both in-house development and the use of third-party solutions. According to the CEO of a Wealthtech / Investech company, this approach tends to be adopted by more sizable organisations, allowing them to incorporate external expertise and innovative solutions while capitalising on their internal capabilities. This was based on their view that the adoption of third-party Fintech solutions is primarily driven by the desire to enhance – rather than fundamentally disrupt – existing processes at incumbent organisations.

However, several executives we interviewed stated that this approach predominantly involves engaging third-party providers for technology overlay solutions, such as OCR and RPA, which aid in automating or streamlining specific parts of their existing business processes, suggesting there is relatively subdued interest in adopting more comprehensive solutions being offered by Fintech solution providers. The Chief Operating Officer (COO) of an insurance company expressed a preference for procuring Fintech solutions rather than forming ongoing partnerships with third-party providers, given that Fintech solutions are better managed and integrated if treated as one of the many components of the insurer's overall business operations.

Given that third-party Fintech solutions contribute to ~70% of the digital transformation efforts of financial institutions in Hong Kong, either by partially or fully enhancing existing processes, it is clear that third-party Fintech solution providers play an integral role in fortifying Hong Kong's Fintech ecosystem. However, the Fintech adoption journey and the exploration of collaboration opportunities with financial institutions are not devoid of challenges.

3.3 FINTECH ADOPTION LIFECYCLE

To get a full picture of the current hurdles to Fintech adoption in Hong Kong, it is important to understand the perspectives of both Fintech users and Fintech solution providers across the Fintech adoption lifecycle, from sourcing to activation (see Figure 10).

1. **Sourcing:** Financial institutions must identify and source the Fintech solution providers that cater to their specific needs. Concurrently, Fintech solution providers must use the most effective channels to present themselves as potential vendors. To better understand this interplay, we have examined the outreach processes of Fintech solution providers and the sourcing processes of end users.

2. **Consideration:** Financial institutions must then decide on which vendors to engage based on relevant decision factors. Correspondingly, Fintech solution providers must present a proposition that aligns with these decision factors while standing out from their competitors. Some of these consideration factors may include track records, product offerings and implementation timelines.

3. **Negotiation:** Upon selecting a specific Fintech solution provider to engage, the two parties enter negotiations to establish mutually agreed contractual terms. This process typically encompasses diverse aspects such as intellectual property (IP) and data rights, fees and pricing models, service terms and liabilities / obligations, each with varying degrees of flexibility.

4. **Onboarding:** Following successful negotiation and the finalisation of contract terms, financial institutions embark on an onboarding process with the selected Fintech solution provider. This involves integrating the vendor's offerings into their existing systems and processes while ensuring compliance with their internal policies and procedures. Given the considerable documentation requirements of users, we sought to better identify key impediments and / or delay factors from both user and provider perspectives.

5. **Activation:** After successfully onboarding a Fintech solution provider, it is important that the solution is well utilised by the financial institution and delivers on its intended use case, ensuring both parties involved reap the full benefits of adoption. Influencing factors at this stage can include technical understanding, training, cultural barriers and regulatory concerns, among others.

FIGURE 10: FINTECH ADOPTION LIFECYCLE

	SOURCING	CONSIDERATION	NEGOTIATION	ONBOARDING	ACTIVATION
FINTECH USERS' PERSPECTIVE	What is the process for sourcing Fintech vendors that offer relevant services to address pain point(s)?	What factors are being considered when deciding on a preferred Fintech vendor?	What are negotiable and non-negotiable factors when contracting with Fintech vendors?	What does your onboarding process look like for Fintech vendors (e.g. KYC requirements, documents)?	What are the reason(s) behind the low utilisation rate of the onboarded Fintech vendors?
FINTECH PROVIDERS' PERSPECTIVE	What are the most preferred (and effective) sales processes to be considered as a vendor?	How do Fintechs distinguish their service offerings from key competitors?	What are the key contracting factors to be negotiated with potential Fintech users?	What are the key onboarding requirements being faced by Fintechs (e.g. documentation)?	Why may Fintech services not be actively used by financial institutions, as expected?

Source: Quinlan & Associates analysis

3.4 FINTECH VERTICALS: IDENTIFIED CHALLENGES

3.4.1 SOURCING STAGE

70% of Fintech solution providers surveyed actively seek out potential clients through their existing networks via business referrals (see Figure 11). In particular, the CEO of an Insurtech company identified consulting firms as valuable sources of referrals, especially those that are working with financial institutions on their digital transformation strategies. These "warm introductions" are difficult to achieve through cold calling or emailing, with only 16% of Fintech solution providers adopting this approach.

As highlighted by the CEO of a Wealthtech / Investech company, building close relationships with key decision-makers at financial institutions, particularly with Heads of Digital / Innovation, plays a critical role in facilitating initial discussions.

Similarly, over half of Fintech users rely on referrals and recommendations to identify suitable Fintech vendors, which suggests the importance of the value of personal

connections in establishing trust. However, relying on business connections can be a slow process.

Another key outreach channel, leveraged by approximately half of Fintech solution providers and users, is through a traditional tender process. Tenders provide users with a wider array of options that they can compare, while also allowing them to ask questions directly to vendors. The tender process is significantly preferred to mass online promotions and sponsored media posts, which may only provide one-way messaging and limited interactions, although such approaches can create greater brand recognition. While Fintech showcase events or conferences are another common way for Fintech users to meet solution providers, this is highly dependent on the availability and frequency of such events.
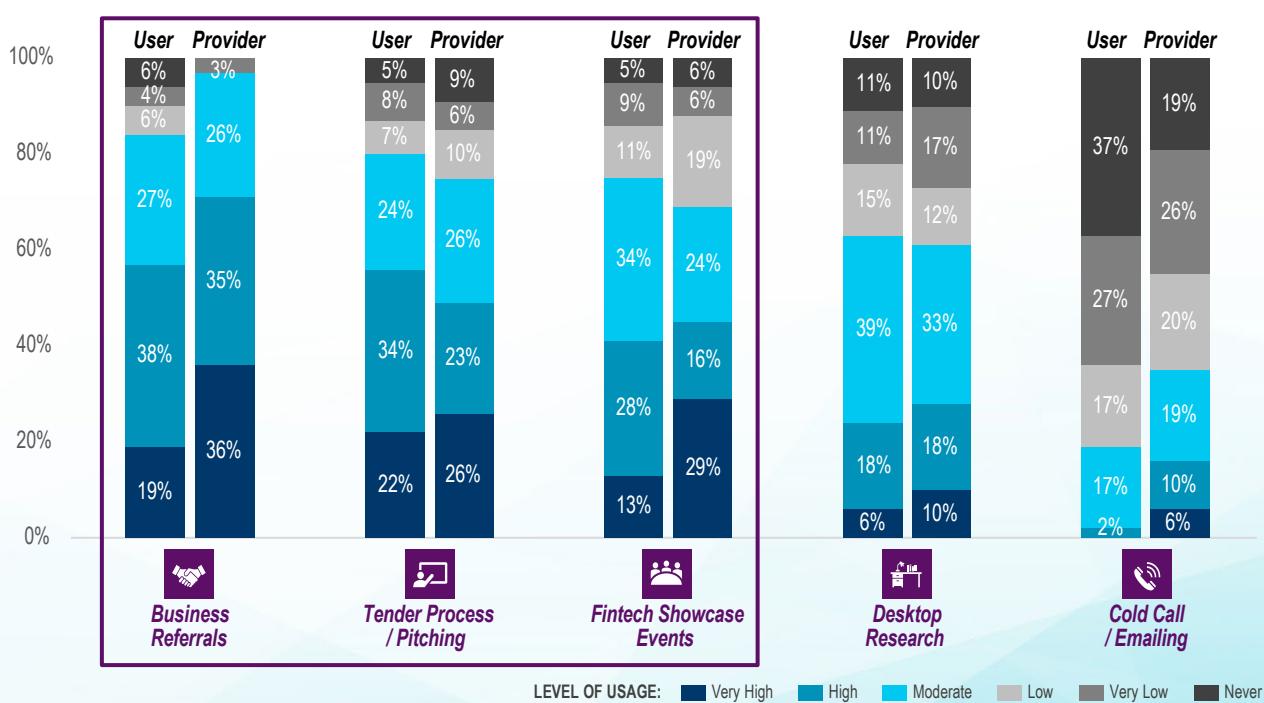
It is clear that Fintech solution providers and users place considerable value on a more personalised, high-touch engagement process that facilitates interactive, two-way communication. Such a process allows Fintech solution providers to better understand the challenges and objectives of users, while helping users to deepen their understanding of the Fintech solutions being offered, including how they can add value to their business.

FIGURE 11: CHANNEL PREFERENCE

Sourcing Channel Preference
Level of Usage, % of Respondents

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Roadblocks

Both Fintech solution providers and users encounter similar challenges during the sourcing stage, with the primary obstacle being limited dedicated resources available. Over 77% of Fintech solution providers and 65% of Fintech users identified this constraint as a key factor that hinders their outreach efforts (see Figure 12). This constraint is understandable, considering their shared preference for a high-touch engagement model that demands substantial resources in the form of manpower. This is especially problematic for early-stage Fintech startups that are not as well-funded as their peers.

From a user perspective, several interviewees highlighted that, apart from relying on word of mouth and direct interactions with Fintech solution providers, there are limited avenues available for them to better understand the available – and relevant – solutions in the market.

While the number of Fintech players in Hong Kong is increasing, 63% of Fintech users still encounter a major or moderate roadblock in sourcing fit-for-purpose vendors.

On the other end of the spectrum, Fintech solution providers face challenges in identifying and understanding the specific pain points of users, as were highlighted by the Regional Head of Digital Innovation at a global asset manager. These challenges influence Fintech solution providers' ability to customise solutions accordingly and subsequently pitch their products and services to prospective clients. More broadly, this suggests that one of the main roadblocks to adoption lies not in the quantity of available Fintech solutions, but rather in the limited availability of suitable solutions that align with specific needs and expectations of users.

Another challenge identified by users is the absence of aggregation or comparison sites that provide comprehensive information about local Fintech offerings.
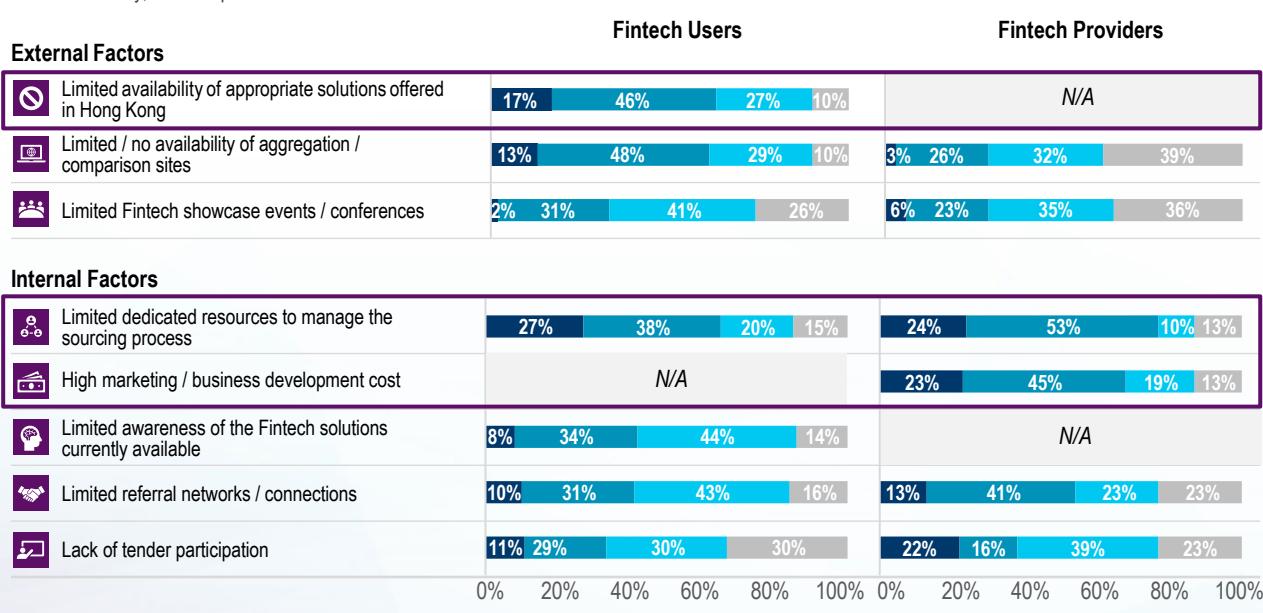
From a Fintech solution provider perspective, brand recognition is often driven by a strong track record that requires substantial time and effort to build. In fact, 68% of Fintech solution providers face significant marketing and development costs as they experiment with various strategies to establish their presence. According to the General Manager of an industry association, this includes establishing a position as a thought leader in their field, organising events (such as joint webinars) and undertaking other efforts to build credibility and brand recognition with target customers.

FIGURE 12: SOURCING ROADBLOCKS

Sourcing Roadblocks
Level of Difficulty, % of Respondents

☐ Top Roadblocks

	Fintech Users	Fintech Providers
External Factors		
🚫 Limited availability of appropriate solutions offered in Hong Kong	17% / 46% / 27% / 10%	*N/A*
🖥 Limited / no availability of aggregation / comparison sites	13% / 48% / 29% / 10%	3% / 26% / 32% / 39%
👥 Limited Fintech showcase events / conferences	2% / 31% / 41% / 26%	6% / 23% / 35% / 36%
Internal Factors		
🔗 Limited dedicated resources to manage the sourcing process	27% / 38% / 20% / 15%	24% / 53% / 10% / 13%
💳 High marketing / business development cost	*N/A*	23% / 45% / 19% / 13%
🧠 Limited awareness of the Fintech solutions currently available	8% / 34% / 44% / 14%	*N/A*
🤝 Limited referral networks / connections	10% / 31% / 43% / 16%	13% / 41% / 23% / 23%
📋 Lack of tender participation	11% / 29% / 30% / 30%	22% / 16% / 39% / 23%

LEVEL OF DIFFICULTY: ■ Major Roadblock ■ Moderate Roadblock ■ Minor Roadblock ■ Not a Roadblock

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

3.4.2   CONSIDERATION STAGE

During the consideration stage, financial institutions face the task of evaluating and selecting Fintech solution providers based on their own criteria such as product offerings, vendor reputation, governance and on-ground implementation support.

Fintech users prioritise cybersecurity and data privacy as the most crucial factor when shortlisting Fintech solution providers, followed closely by the quality of solutions being offered (see Figure 13). Implementation considerations – such as compatibility, scalability and post-implementation support – also play a significant role in the shortlisting process. The Chief Compliance Officer of a banking institution emphasised the importance of product quality, customisability and ongoing maintenance when they assess Fintech solutions. However, less emphasis is placed by users on the breadth of solutions, vendor brand reputation and management team.

The factors that are most important to Fintech users – cybersecurity / data privacy, implementation considerations and quality of solutions – are also the areas where they encounter the most significant roadblocks when shortlisting suitable vendors. Lengthy deployment times, misalignment of deployment schedules and a lack of post-implementation support are noted by Fintech users as major obstacles to adoption: the first two factors can lead to delays, while the latter can create disruptions to current processes.

FIGURE 13: FACTORS FOR CONSIDERATION

Factors for Consideration
Level of Importance / Difficulty, Average Rating

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Roadblocks

Fintech solution providers focus on differentiating themselves from competitors by highlighting the quality of their solutions, their company's track record and the strength of their management team. However, the latter two factors are not among the major considerations for Fintech users.

In addition, some Fintech solution providers downplay the importance of deployment times, cybersecurity / data privacy and post-implementation support when pitching to potential users, even though these are among the most important considerations for users. This discrepancy suggests Fintech solution providers' pitching strategies may not be well aligned with the priorities of their target customers.

While Fintech solution providers generally encounter fewer roadblocks compared to users, they do identify certain challenges that impede their interactions with financial institutions, viewing a lack of brand reputation and track record as their largest roadblocks, followed by concerns raised by Fintech users regarding the breadth of solutions. The COO of an insurance company we interviewed emphasised the importance of a Fintech solution provider's track record, particularly whether they have any previous engagements with Government organisations as a means of validating their reliability and trustworthiness.

Interestingly, Fintech users do not identify brand reputation and track record as major roadblocks when evaluating Fintech vendors. Moreover, Fintech solution providers perceive implementation compatibility / scalability, cybersecurity / data privacy and the management team as the least significant roadblocks. These perceptions highlight notable gaps between Fintech solution providers and users, which may reflect a lack of detailed understanding of specific user demands / concerns or insufficient resources to address such roadblocks.

There are, however, roadblocks that are shared by both parties, including lengthy deployment times / the misalignment of deployment schedules. The CEO of a Wealthtech / Investech company highlighted that integrating their solutions with banking systems can take 6-12 months or even longer, as a result of completing stringent security test requirements that need to be met. To meet the expectations set by banks, unsynchronised timelines and milestones between users and providers may occur. This can lead to challenges around coordination and testing, hindering successful integration.

Insufficient product capabilities and functionalities to effectively address user needs form another major shared roadblock during the consideration process; financial institutions seek solutions that can provide tangible value, enhance operational efficiency and address specific pain points, while Fintech solution providers strive to develop solutions that meet user demands and expectations. Recognising the shared roadblock of insufficient product capabilities highlights the importance of continuous innovation and collaboration between users and providers to develop fit-for-purpose solutions.

A recurring roadblock faced by Fintech users that frequently emerged during our interviews was the development of a robust business case. The Head of Innovation at a global banking institution highlighted the need to conduct PoC trials to demonstrate the commercial benefits of adopting any new Fintech solution. However, the costs and benefits of this adoption are frequently compared to existing projects within the bank (i.e. needing to meet internal "hurdles rates"), which may be an inappropriate benchmark for evaluating more innovative, external solutions.

The Head of Distribution at an insurance company said that justifying the return on investment (ROI) of Fintech solutions is a key challenge due to the limited scalability of their insurance business in Hong Kong. To find affordable solutions, smaller or local vendors are considered, who often lack the capabilities needed by the insurer. However, when the insurer turns to more established global Fintech solution providers, considerably higher price tags make it difficult to build a sound business case. And without a sound business case in place, the Fintech adoption discussion stops in its tracks.

3.4.3 NEGOTIATION STAGE

During this stage, both parties strive to align their interests and define the parameters of their collaboration.

Both Fintech users and solution providers generally share similar views as to what items can and cannot be negotiated in their contracts, with both parties considering indemnity / liability, IP rights, termination clauses and data rights as the four most significant non-negotiables terms (see Figure 14). For example, the CEO of a Wealthtech / Investech company mentioned that their company is always trying to eliminate or extend – to a minimum of three years – termination clauses in their contracts, which sit at odds with much shorter termination notice periods of just six months at many banks. They also cited challenges with respect to sizeable indemnity / liability

clauses, which are oftentimes many multiples of the contract's commercial value itself. The mirroring of views around non-negotiable terms imposes significant challenges with respect to reaching a mutually agreeable position between Fintech solution providers and users. In reality, Fintech solution providers are regularly forced to compromise on their standard clauses to secure a commercial contract, especially for smaller firms with less negotiating power.
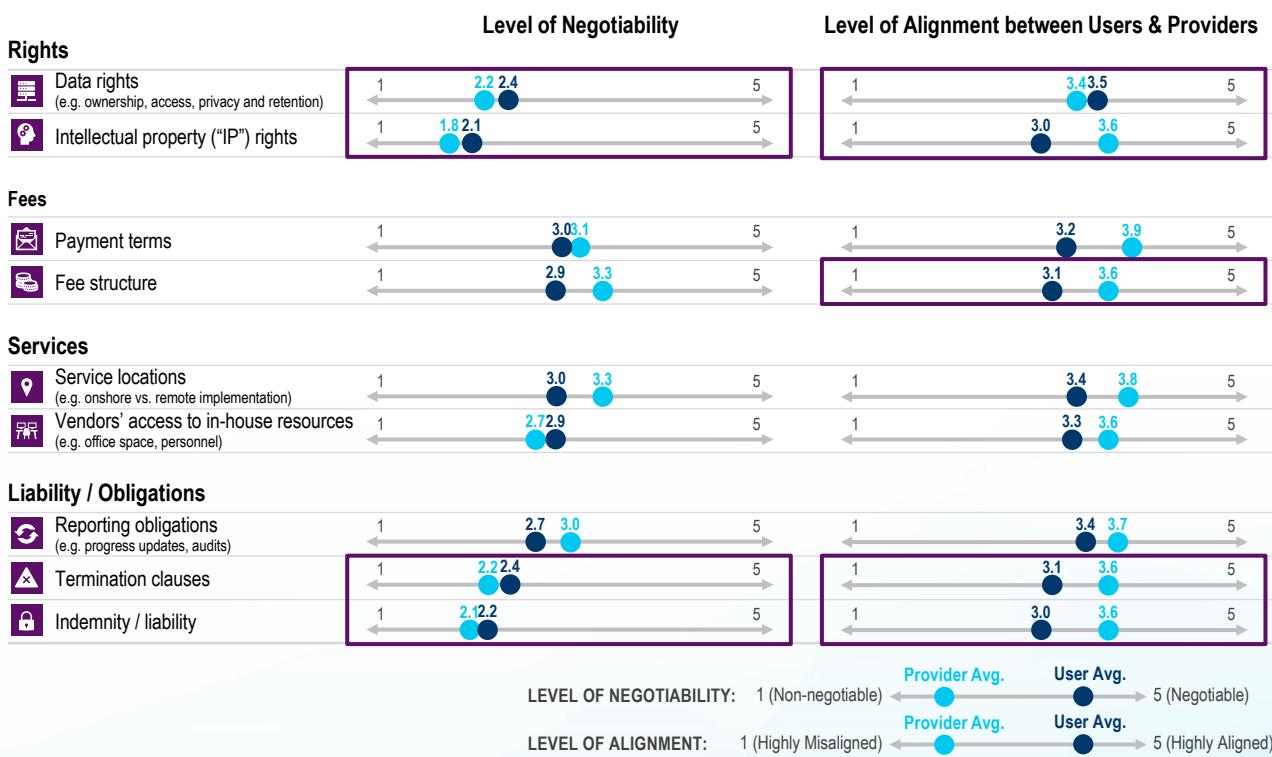
For other contract terms, such as service locations and reporting obligations, both parties tend to be more aligned. However, greater levels of misalignment with respect to data rights, IP rights and indemnity / liability tend to create considerable delays during the contracting process.

FIGURE 14: CONTRACTING FACTORS

Contracting Factors
Level of Negotiability / Alignment, Average Rating

Roadblocks

The (1) level of negotiability and (2) level of alignment between Fintech solution providers and users both serve complementary functions that influence the difficulty in establishing mutually satisfactory contractual terms. Misalignments on non-negotiable factors pose a significant challenge, potentially leading to the breakdown of agreements.

While Fintech solution providers see less alignment on indemnity / liability clauses, Fintech users do not share such a view, potentially due to the risk management protocols implemented by financial institutions. Financial institutions, being inherently risk-averse, often seek to transfer a significant portion of risk and liability to Fintech solution providers. Given that indemnity / liability is seen as one of the top non-negotiable contractual items, this places a greater burden on Fintech solution providers. The CEO of an Insurtech company said that some users require them to have HKD 1 billion in liability insurance coverage, with few firms able to afford such coverage.

Data rights and IP rights are another area of considerable misalignment. Fintech solution providers identify data rights, such as ownership, access, privacy and retention, as the least aligned item during contract negotiations. Conversely, Fintech users consider it to be the most aligned item. Financial institutions, driven by regulatory and risk management considerations, often prioritise maintaining control over their data and ensuring its confidentiality and security. As a result, they may seek contractual terms that allow them to retain control and enforce stringent data protection measures. This difference in perception can lead to challenges and complexities in negotiating data-related terms, as Fintech solution providers need to navigate data relinquishment requirements while satisfying data control requirements for their users.

Another area of misalignment identified during our interviews is fee structures. Financial institutions often prioritise cost-effectiveness and flexibility, seeking pricing structures that align with their budgets and operational requirements. Discounts to standard pricing schedules are also frequently requested, which many Fintech solution providers said are not a feature of other markets in the West, such as Europe or the United States. Given the level of negotiation power that large financial institutions possess, Fintech solution providers said that they regularly slash their fees to secure a contract. In the long term, finding a balance between meeting financial institutions' pricing expectations and maintaining profitability for the Fintech solution provider is essential.

3.4.4   ONBOARDING STAGE

Fintech users typically require Fintech solution providers to submit specific documents and information, including (1) business, (2) product / customer and (3) compliance / financial information. Among the most commonly sought-after documents are the business registration certificate, product technical specifications, and cybersecurity accreditation(s). The onboarding stage presents a significant barrier to the adoption of third-party Fintech solutions in Hong Kong, with Fintech solution providers facing considerable challenges.

Roadblocks

The challenges faced by Fintech solution providers during the onboarding process appear rooted in the internal policies and processes of many financial institutions. These requirements, while necessary for risk management purposes, can create significant barriers for Fintech startups with limited resources, who often struggle to meet the extensive documentation requirements of highly regulated global financial institutions.
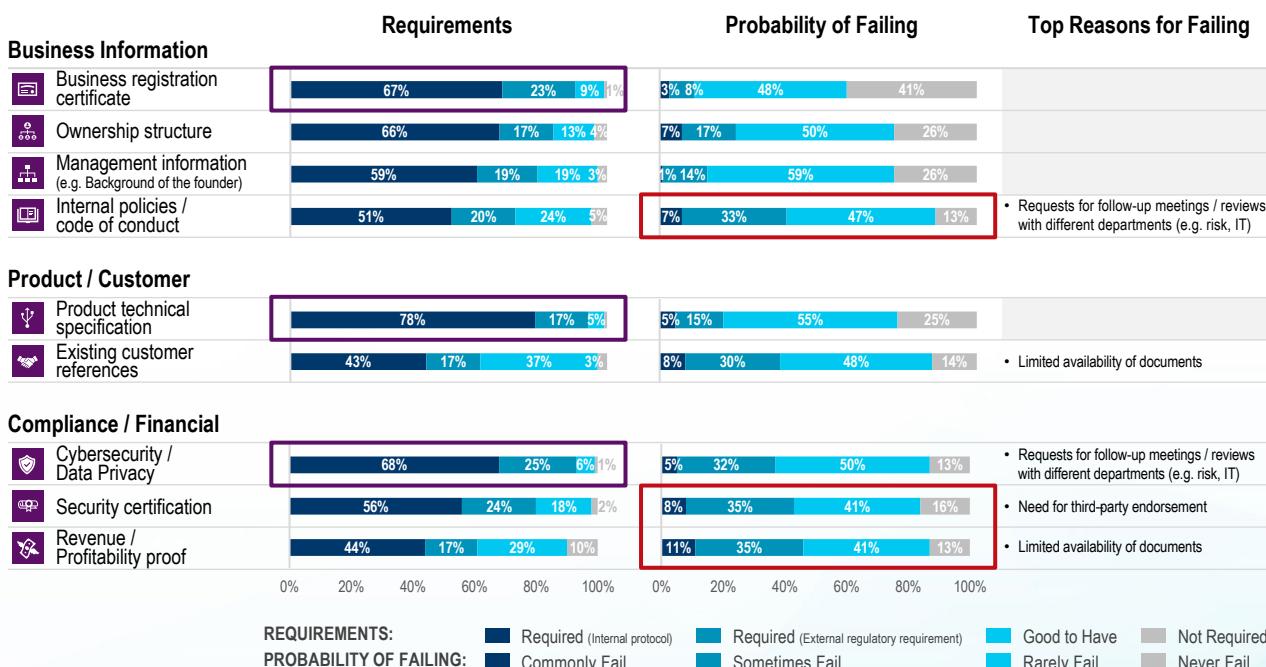
According to our survey findings, the top three most frequently required documents from Fintech solution providers are product technical specifications, cybersecurity / data privacy protocols and business registration certificates. These documents are mandated by over 90% of Fintech users, driven by both external regulatory requirements and internal procurement policies. On the other hand, approximately 40% of Fintech users do not consider existing customer references and revenue / profitability as mandatory requirements, although having them may provide additional validation to end users (see Figure 15).

FIGURE 15: ONBOARDING REQUIREMENTS & CHALLENGES

Onboarding Requirements & Challenges
Requirements / Probability of Failing, % of Respondents

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

While Fintech solution providers rarely fail to submit a business registration certificate and management information, as indicated by over 85% of Fintech users, they often struggle to submit internal policy documents, security certifications and revenue or profitability proof.

We also examined the reasons why Fintech solution providers failed to satisfy these documentation requirements, which included insufficient document details and ongoing requests for follow-up meetings / reviews with different departments, such as risk and IT. These factors end up prolonging the onboarding process and eating into the resources of many startups. Additionally, for security certification, the lack of third-party endorsement poses a significant roadblock for over 40% of Fintech solution providers. Onboarding timelines are also exacerbated by complex and lengthy cybersecurity and penetration tests that Fintech solution providers must undertake, as highlighted by the CEO of a Wealthtech / Investech company.

Fintech solution providers may also fail to submit existing customer references and revenue / profitability proof due to their lack of availability, particularly for newly established startups, as relayed by the Head of IT of an insurance company. More broadly, many Fintech solution providers and incumbent financial institutions we interviewed, including the Head of Innovation at a global bank, said that the contracting process with the user's legal department tends to add significant delays to the onboarding process.

The Government and regulators have made efforts to alleviate the challenges associated with onboarding, such as through supervisory sandboxes and PoC schemes that allow financial institutions to trial Fintech solutions in a more flexible environment.

However, our interviews with Hong Kong-based Fintech solution providers highlighted that while the supervisory sandbox and PoC schemes are excellent platforms to initiate contact and foster relationships with financial institutions, the concrete commercial benefits that follow these interactions remain uncertain, with challenges associated with extensive onboarding processes frequently remaining unresolved, undermining the effectiveness of these initial engagements. The executives also revealed that Fintech solution providers in Hong Kong are frequently required to perform repeated cybersecurity checks and validations for each potential client conversion, which is time-consuming and costly.

The onboarding process for third-party Fintech solution adoption typically spans anywhere from 6 to 12 months. The executives we spoke to said that during such a prolonged timeframe, corporate priorities and the management team dedicated to the Fintech adoption endeavour could change, leading to delays or even derailing the adoption process altogether.

3.4.5 ACTIVATION STAGE
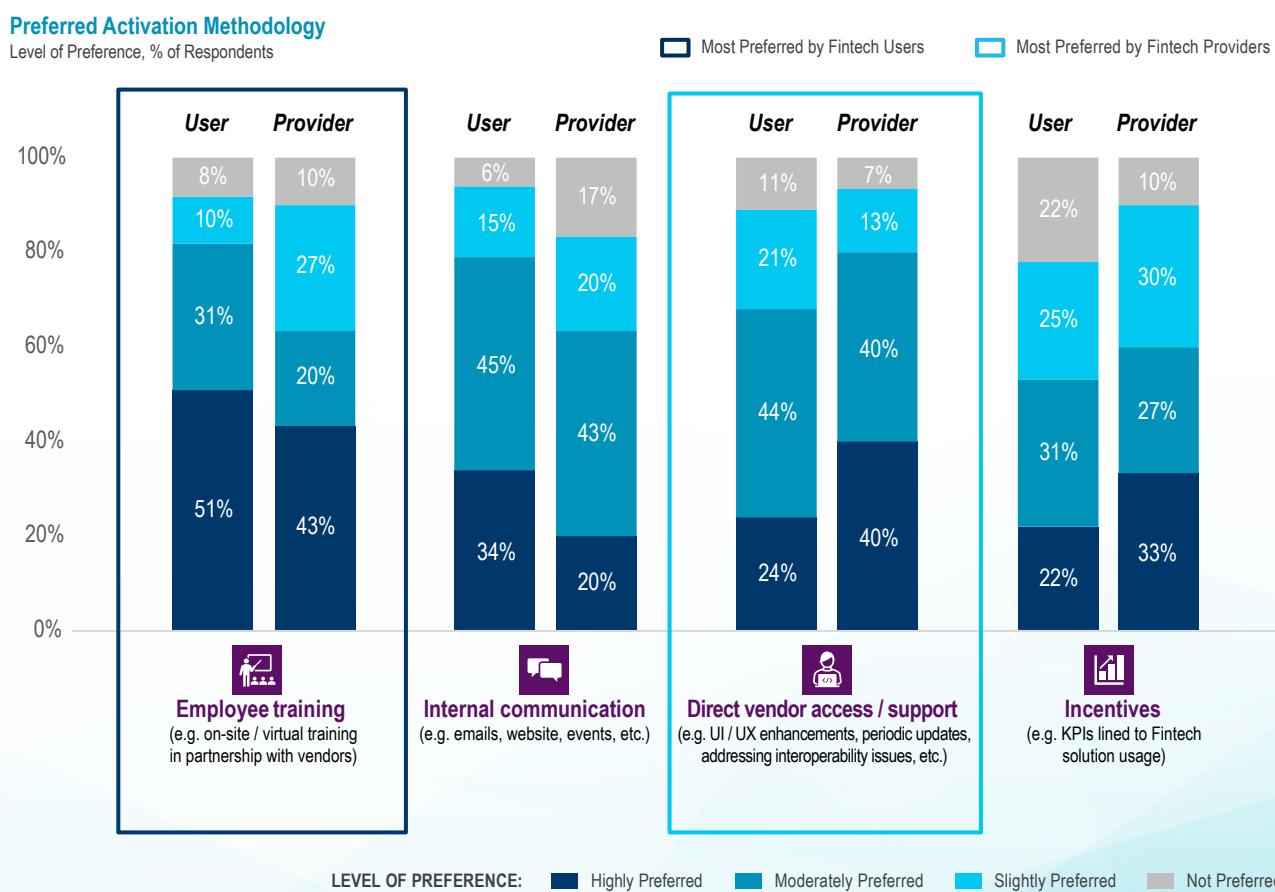
Once a Fintech solution has been deployed, it takes time for utilisation to rise. This can be attributed to various factors, including a lack of awareness about the Fintech solution within the financial institution, a limited understanding of how to incorporate the solution into existing daily practices or organisational inertia due to familiarity with existing tools and processes.

Fintech users find on-site or virtual training, provided in partnership with Fintech solution providers, to be especially useful in boosting activation, with 82% of survey respondents stating a high or moderate preference for this approach (see Figure 16). Training complements internal communication efforts within organisations, ensuring that employees are well-informed about the Fintech solution, how it integrates into their overall business and its potential impact on their daily workflows.

On-site or virtual training sessions also provide an opportunity for employees to ask questions, seek clarification and receive personalised guidance directly from Fintech solution providers. By investing in creating and running robust training programmes, Fintech solution providers can address key barriers to activation.

The Regional Head of a Wealthtech / Investech company highlighted that while Fintech solutions should be intuitive enough to be utilised without training, they also recognised the value of providing training videos and post-implementation consulting services to clients to enhance adoption. Additionally, quarterly follow-ups are conducted to identify the reasons behind dormancy among internal users, addressing barriers to active usage in an ongoing manner. Such an approach promotes a more positive user experience and long-term utilisation of the solutions.

FIGURE 16: PREFERRED ACTIVATION METHODOLOGY

Preferred Activation Methodology
Level of Preference, % of Respondents

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Direct support from the vendor in the form of user interface (UI) and user experience (UX) enhancements, periodic updates of solution features and addressing interoperability issues, is seen by 80% of Fintech solution providers as a highly or moderately effective means to encourage more active utilisation of deployed solutions. However, the same sentiments are not shared by Fintech users. Moreover, vendor access / support falls outside the scope of initiatives that facilitate user understanding, which is necessary to tackle core issues related to activation.

While Fintech solution providers may invest significant resources in providing direct support, the lack of alignment with user preferences and needs can undermine their effectiveness in driving activation. Unlike other stages of the Fintech adoption lifecycle, where there is a need to address roadblocks for both Fintech users and providers, activation rests primarily with the user. Given the limited visibility that some Fintech solution providers may have on the effectiveness of their solutions once they are deployed, it is important to actively engage users to gain a deeper understanding of their preferred means to boost activation.

To catalyse activation and encourage employees to use Fintech solutions, Fintech solution providers (63%) and Fintech users (79%) also highly / moderately prefer internal communication – in short, communicating the purpose, functionality and benefits of the solutions to relevant employees in a simple and effective manner.

There appears to be a level of resistance among approximately half of Fintech users and 40% of solution providers (i.e. rated as slightly preferred / not preferred at all) when it comes to implementing key performance indicators (KPIs) and connecting them to monetary or non-monetary incentives for employees to actively use a Fintech solution, suggesting that both parties prefer activation to be driven by intrinsic motivations rather than performance-based incentives.

Roadblocks

Organisational inertia and a lack of user understanding are seen as major or moderate roadblocks hindering the full activation of Fintech solutions. 55% of Fintech users surveyed indicated the existence of organisational inertia due to concerns about security, reliability, disruption of established routines and many more. This figure was 90% for Fintech solution providers.

The CEO of an Insurtech company highlighted organisational inertia and a lack of internal endorsement as the key challenges to activation, arising from financial institutions' limited understanding of the potential benefits of Fintech solutions for their business and the resources required to implement them. For instance, integrating Fintech solutions with existing systems may require additional time, budget and resources for IT departments if the programming languages are inconsistent. Moreover, as mentioned by the Chairman of an industry association, active utilisation of Fintech solutions requires a comprehensive transformation that encompasses not only software and hardware, but also personnel and expertise. As such, a significant barrier to organisation-wide implementation is the absence of on-ground staff equipped with technical knowledge and skills to both advocate for and effectively utilise newly adopted solutions.
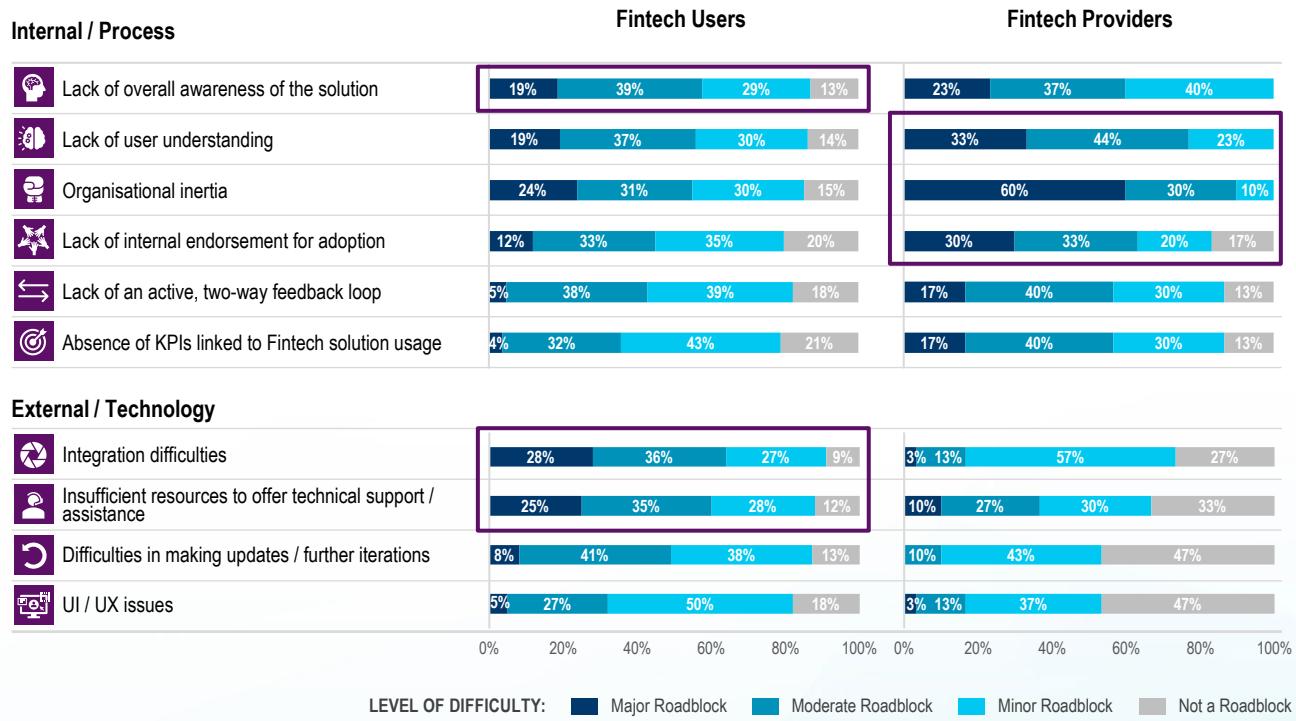
This sentiment is shared by many Fintech solution providers, with 76% of survey respondents viewing a lack of user understanding as a major / moderate roadblock, compared to just 56% of Fintech users (see Figure 17).

FIGURE 17: ACTIVATION ROADBLOCKS

Activation Roadblocks
Level of Difficulty, % of Respondents

☐ Top Roadblocks

Internal / Process	Fintech Users				Fintech Providers			
Lack of overall awareness of the solution	19%	39%	29%	13%	23%	37%	40%	
Lack of user understanding	19%	37%	30%	14%	33%	44%	23%	
Organisational inertia	24%	31%	30%	15%	60%	30%	10%	
Lack of internal endorsement for adoption	12%	33%	35%	20%	30%	33%	20%	17%
Lack of an active, two-way feedback loop	5%	38%	39%	18%	17%	40%	30%	13%
Absence of KPIs linked to Fintech solution usage	4%	32%	43%	21%	17%	40%	30%	13%

External / Technology								
Integration difficulties	28%	36%	27%	9%	3%	13%	57%	27%
Insufficient resources to offer technical support / assistance	25%	35%	28%	12%	10%	27%	30%	33%
Difficulties in making updates / further iterations	8%	41%	38%	13%	10%	43%	47%	
UI / UX issues	5%	27%	50%	18%	3%	13%	37%	47%

0%　20%　40%　60%　80%　100%　0%　20%　40%　60%　80%　100%

LEVEL OF DIFFICULTY: ■ Major Roadblock　■ Moderate Roadblock　■ Minor Roadblock　■ Not a Roadblock

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Integration difficulties and insufficient resources to offer technical support / assistance pose significant roadblocks for financial institutions when it comes to the activation of Fintech solutions, as highlighted by 63% and 60% of Fintech users respectively. The process of integrating new Fintech solutions into existing systems and workflows can be complex and time-consuming, requiring careful coordination and compatibility with legacy infrastructure. Issues such as data migration, system interoperability and seamless integration with existing processes often arise, causing delays and hindering the full activation of Fintech solutions.

While Fintech users perceive integration difficulties as a key challenge, Fintech solution providers perceive it as a relatively minor concern. This disparity suggests that Fintech solution providers may not have a full appreciation of the challenges faced by users when integrating Fintech solutions into their existing systems.

To activate Fintech solutions at scale, it is crucial for senior management to lead by example and act as ambassadors for new solutions, setting a positive example for other employees to follow. However, 63% of Fintech solution providers and 45% of users consider a lack of internal endorsement to be a major or moderate roadblock for activation, suggesting that post-implementation endorsement may be lacking. Other key challenges include the lack of an active, two-way feedback loop, as well as UI / UX issues and difficulties faced by Fintech users in making updates or further iterations.
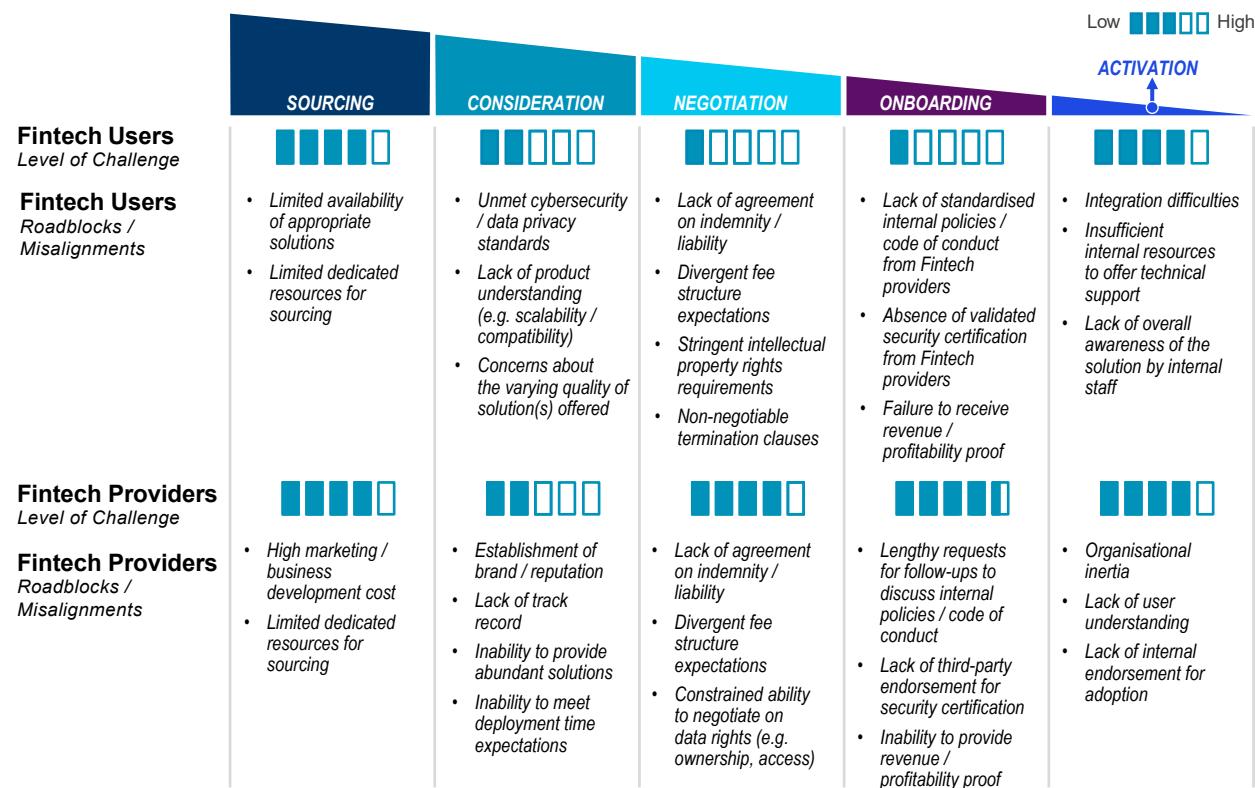
3.4.6　KEY TAKEAWAYS

Both financial institutions and Fintech solution providers face various challenges across five stages of the Fintech adoption lifecycle (see Figure 18). However, there are ways that many of these difficulties can be addressed.

As sourcing is the first point of communication between Fintech users and solution providers, streamlining this process is of utmost importance.

FIGURE 18: KEY TAKEAWAYS

	SOURCING	CONSIDERATION	NEGOTIATION	ONBOARDING	ACTIVATION
Fintech Users *Level of Challenge*	◼◼◼◼◻	◼◼◻◻◻	◼◻◻◻◻	◼◻◻◻◻	◼◼◼◼◻
Fintech Users *Roadblocks / Misalignments*	• Limited availability of appropriate solutions • Limited dedicated resources for sourcing	• Unmet cybersecurity / data privacy standards • Lack of product understanding (e.g. scalability / compatibility) • Concerns about the varying quality of solution(s) offered	• Lack of agreement on indemnity / liability • Divergent fee structure expectations • Stringent intellectual property rights requirements • Non-negotiable termination clauses	• Lack of standardised internal policies / code of conduct from Fintech providers • Absence of validated security certification from Fintech providers • Failure to receive revenue / profitability proof	• Integration difficulties • Insufficient internal resources to offer technical support • Lack of overall awareness of the solution by internal staff
Fintech Providers *Level of Challenge*	◼◼◼◼◻	◼◼◼◻◻	◼◼◼◼◻	◼◼◼◼◻	◼◼◼◼◻
Fintech Providers *Roadblocks / Misalignments*	• High marketing / business development cost • Limited dedicated resources for sourcing	• Establishment of brand / reputation • Lack of track record • Inability to provide abundant solutions • Inability to meet deployment time expectations	• Lack of agreement on indemnity / liability • Divergent fee structure expectations • Constrained ability to negotiate on data rights (e.g. ownership, access)	• Lengthy requests for follow-ups to discuss internal policies / code of conduct • Lack of third-party endorsement for security certification • Inability to provide revenue / profitability proof	• Organisational inertia • Lack of user understanding • Lack of internal endorsement for adoption

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Sourcing

For Fintech solution providers, the largest obstacles identified are the exorbitant costs of marketing and business development. Other major roadblocks include the lack of Government / industry-led assessments of Fintech solution providers and limited resources dedicated to managing the sourcing process. Similar obstacles were highlighted by Fintech users, in addition to a shortage of appropriate solutions.

These challenges for the sourcing stage indicate that enhanced collaboration – and deeper interactions – between users and solution providers should be fostered.

Consideration

Financial institutions place considerable priority on cybersecurity / data privacy, solution quality and implementation compatibility / scalability. However, Fintech solution providers focus more on their track record, indicating a misalignment in priorities.

This misalignment is also reflected in the perceived roadblocks, with users emphasising the significant obstacles they encounter around implementation compatibility / scalability and cybersecurity / data privacy, while providers highlight brand reputation, track record and the inability to provide abundant solutions as major roadblocks.

These perception gaps suggest that providers may not fully comprehend user demands or adequately address concerns related to cybersecurity / data privacy and the compatibility and scalability of their solutions during early-stage discussions.

Negotiation

Both Fintech users and solution providers generally share a common view with respect to non-negotiable contractual items, including (1) indemnity / liability, (2) IP rights, (3) termination clauses and (4) data rights.

These items are often considered "standard" by both parties, leaving little-to-no room for negotiation, particularly with respect to indemnity / liability and data rights. Such misalignments tend to significantly delay the contracting process and often lead to major compromises by Fintech solution providers around their standard contracting terms, especially for smaller firms with less bargaining power.

Onboarding

One of the primary obstacles faced by Fintech solution providers is the lack of resources to meet the stringent documentation requirements. In particular, many Fintech solution providers fail to submit: (1) internal policy documents / codes of conduct, (2) security certifications and (3) revenue / profitability proof due to the lack of third-party endorsements, ongoing requests for follow-up meetings / reviews or simply because such documents are not available. Overcoming these hurdles requires buy-in from the financial institutions to streamline their internal vendor onboarding policies and processes, many of which fall outside the purview of financial regulators.

A notable example we uncovered during our interviews of streamlined onboarding processes was by a banking institution. The bank successfully placed certain documents into "risk categories", enabling Fintech solution providers with lower risk profiles to undergo a fast-track onboarding process (from 24 weeks down to 6 weeks). By aligning onboarding requirements with the level of risk associated with each solution, the bank has been able to better balance the need for thorough due diligence with a streamlined onboarding process. The Head of Innovation also highlighted the bank's efforts in working closely with Fintech solution providers to help them complete the required forms, in addition to offering ongoing support and guidance when needed.

Activation

The activation of Fintech solutions is critical in driving the broader adoption agenda. Internal communication and knowledge-sharing within organisations are crucial for fostering adoption, often having a greater impact than external incentives or drivers. Most Fintech solution providers and users prefer using internal communication to address any concerns or misconceptions that users have regarding Fintech solutions, clarify their benefits and share best practices. On top of that, Fintech users also prefer to train their employees to familiarise them with new solutions and build their confidence in using them.

However, key challenges remain around: (1) organisational inertia, (2) lack of user understanding and (3) lack of internal endorsement, stressed at length by Fintech solution providers. Fintech users often face difficulties in embracing new technologies and adapting their existing processes, with gaps in understanding the benefits and potential impact of Fintech solutions. Other core issues related to integration difficulties, insufficient internal resources to offer technical support and lack of awareness among internal staff, also need to be addressed by users to ensure successful activation.

3.5 TECHNOLOGY OVERLAYS: IDENTIFIED CHALLENGES

As A.I. and DLT continue to advance, financial institutions are embracing these solutions to gain a competitive edge, enhance customer experiences and unlock new opportunities. However, according to the Tech Baseline Assessment, there is still room for improvement in the use of more advanced A.I. and DLT solutions.

There are indications that financial institutions may continue to apply A.I. technologies more deeply. Although many banks use some type of machine learning technology, supervised learning models clearly outperform more advanced methods, such as unsupervised and deep learning models. According to industry surveys, foreign financial institutions are moving more quickly into this space, suggesting that it may be advantageous for Hong Kong's financial institutions to follow suit.

The same is true for DLT. By 2025, financial institutions are expected to investigate a variety of DLT use cases, including CBDCs, clearing and settlement, credit scoring, tokenisation of financial assets and trade financing. While this represents a promising start, given that DLT is still in its early stages of development, it is worthwhile to closely monitor the development of DLT outside traditional financial services.

3.5.1 OVERARCHING CHALLENGES

The feedback we received during our interviews suggests a significant need for increased education regarding DLT. A common sentiment expressed was difficulty in understanding the technology and distinguishing it from the associated digital assets market. In addition, many noted that the wholesale adoption of DLT across the financial services industry has been hindered by the lack of regulatory clarity in various jurisdictions, particularly for financial institutions in Hong Kong that operate at a regional and global level.

During discussions about A.I., concerns were expressed regarding the implementation of GenA.I. in business operations, which has disrupted the market since its recent introduction. Key concerns revolved around determining the appropriate amount of proprietary information that should be fed into algorithms to ensure operational viability and reliability. There were also concerns about the extent to which data can be retained within a company's firewall without being infringed by the ultimate owner of the A.I. solution. Many participants emphasised the desire for a clearer regulatory framework regarding ethical practices with GenA.I.

3.5.2 BUSINESS-SPECIFIC CHALLENGES

Most respondents underscored the substantial deployment costs and the lack of a strong business case (i.e. showcasing an ROI in a set period of time) as major challenges, given that both A.I. and DLT are emerging technologies that are typically expensive to deploy.

This has led many financial institutions to question whether the potential benefits can justify the initial investments. Regarding A.I., in particular, many respondents also exhibited limited trust in using third-party solution providers, but at the same time acknowledged the limitations of their internal data and talent to ensure successful implementation of the technology. Other business-specific challenges revolved around data privacy and security concerns.

3.5.3 TECHNOLOGY-SPECIFIC CHALLENGES

Respondents highlighted major technology-related challenges when adopting and integrating both A.I. and DLT. For A.I.-based solutions, one of the main difficulties mentioned was the integration with existing legacy systems. With respect to DLT, many respondents cited the limited technical expertise of internal staff as the most significant challenge for adoption. Providing ample technical training sessions could be an effective approach to addressing these challenges.

4. ROADMAP KICK-OFF

The HKMA is committed to addressing the challenges identified across the Fintech adoption lifecycle, aiming to bridge the gap for both Fintech users and providers. Its primary focus is on implementing immediate and actionable steps to narrow or even close these gaps, creating a more conducive environment for Fintech adoption in Hong Kong's financial services industry (see Figure 19).

FIGURE 19: CONCLUSION & INSIGHTS FROM FINTECH ADOPTION STUDY

	SOURCING	CONSIDERATION	NEGOTIATION	ONBOARDING	ACTIVATION
Fintech Users *Key Findings*	• Limited availability of appropriate solutions • Limited dedicated resources for sourcing	• Unmet cybersecurity / data privacy standards • Lack of product understanding (e.g. scalability / compatibility) • Concerns about the varying quality of solution(s) offered	• Lack of agreement on indemnity / liability • Divergent fee structure expectations • Stringent intellectual property rights requirements • Non-negotiable termination clauses	• Lack of standardised internal policies / code of conduct from Fintech providers • Absence of validated security certification from Fintech providers • Failure to receive revenue / profitability proof	• Integration difficulties • Insufficient internal resources to offer technical support • Lack of overall awareness of the solution by internal staff
Fintech Providers *Key Findings*	• High marketing / business development cost • Limited dedicated resources for sourcing	• Establishment of brand / reputation • Lack of track record • Inability to provide abundant solutions • Inability to meet deployment time expectations	• Lack of agreement on indemnity / liability • Divergent fee structure expectations • Constrained ability to negotiate on data rights (e.g. ownership, access)	• Lengthy requests for follow-ups to discuss internal policies / code of conduct • Lack of third-party endorsement for security certification • Inability to provide revenue / profitability proof	• Organisational inertia • Lack of user understanding • Lack of internal endorsement for adoption
Conclusion / Insights	**Build Stronger Connections** • Operating a matching platform and running more events where Fintech users and providers can find each other	**Bridge Perception Gaps** • Informing and educating the market on the identified gaps / misalignments to optimise communications • Publishing research reports and conducting webinars to bridge the knowledge gap on Fintech solutions	**Create Common Ground** • Informing and educating the market on the identified gaps / misalignments to form a common ground • Developing guidance on contract requirements to serve as a reference for negotiations, providing a framework for discussions	**Minimise Duplicative Efforts** • Developing best practice guidance on onboarding practices to serve as a standardised framework for reference	**Share Lessons Learnt** • Offering avenues for various employee training and internal communication to empower staff and encourage active use of Fintech solutions • Facilitating external dialogue between Fintech users and providers to ensure alignment of initiatives to boost activation

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Sourcing

To address the challenges encountered by Fintech solution providers and users during the sourcing stage, the introduction of a matching platform where Fintech users and providers can easily connect is considered to be beneficial. While a centralised platform offers convenience, the HKMA also recognises that networking events provide a more dynamic and interactive environment for fostering relationships and initiating partnerships. The HKMA believes that hosting more of these events would play an important role in facilitating active engagement between users and providers.

Consideration

During the consideration process, it is important to bridge current perception gaps between Fintech users and solution providers, particularly in understanding user demands and addressing concerns related to cybersecurity and data privacy during implementation. To facilitate this, organising webinars, seminars and knowledge exchange sessions can provide a platform for meaningful discussions and information sharing. In addition, the publication of research reports and the establishment of a dedicated Fintech Knowledge Hub can provide access to valuable information for both Fintech users and solution providers, empowering them to make more informed decisions.

Negotiation

To streamline negotiations and overcome challenges in the contracting phase, it is important to provide guidance that outlines key considerations of Fintech solution providers and users. This will create a framework for a clearer delineation of responsibilities and liabilities, promoting smoother negotiation processes. Furthermore, educating the market about common misalignments in negotiation items will stimulate open discussions among users and providers to explore potential areas of compromise. By finding common ground, the HKMA believes that more successful partnerships can be forged.

Onboarding

One of the most notable hurdles during the onboarding phase is the struggle experienced by Fintech solution providers in complying with the extensive documentation requirements and criteria set by Fintech users. In fact, Fintech solution providers frequently undergo the same onboarding process with each new client, creating considerable duplication in efforts.

To alleviate this, the HKMA will consider issuing guidance with regard to onboarding practices for Fintech solution providers, which could serve as a starting point for collaborative efforts between regulators and the industry to establish agreeable practices for the onboarding process. The HKMA also urges financial institutions to revisit and reassess their vendor onboarding protocols, including adopting a "light touch" onboarding process for third-party vendors to kick off the engagement process before the full onboarding process is completed. The development of best practice guidance should play an important role in addressing upfront misalignments and uncertainties.

Activation

During the onboarding and subsequent deployment of Fintech solutions, the activation process may be better supported by delivering more targeted training sessions within organisations.

Our research indicates that such educational initiatives contribute significantly more to adoption rates than performance-based incentives. Financial institutions can promote a clear understanding and secure employee buy-in through robust internal awareness, communication and endorsement. Regulators will continue to support these efforts by offering subsidised or free-of-charge training programmes to empower Hong Kong's financial services workforce. Lastly, the HKMA will seek to enhance external dialogue between Fintech users and solution providers to help bridge perception gaps on key issues, such as integration difficulties and a lack of internal endorsement, driving more effective activation of Fintech solutions.

By closing identified gaps and addressing ongoing misalignments through understanding users' priorities, enhancing transparency and fostering greater information sharing and connectivity, the HKMA aims to foster a more efficient and effective engagement process between Fintech users and providers in Hong Kong.
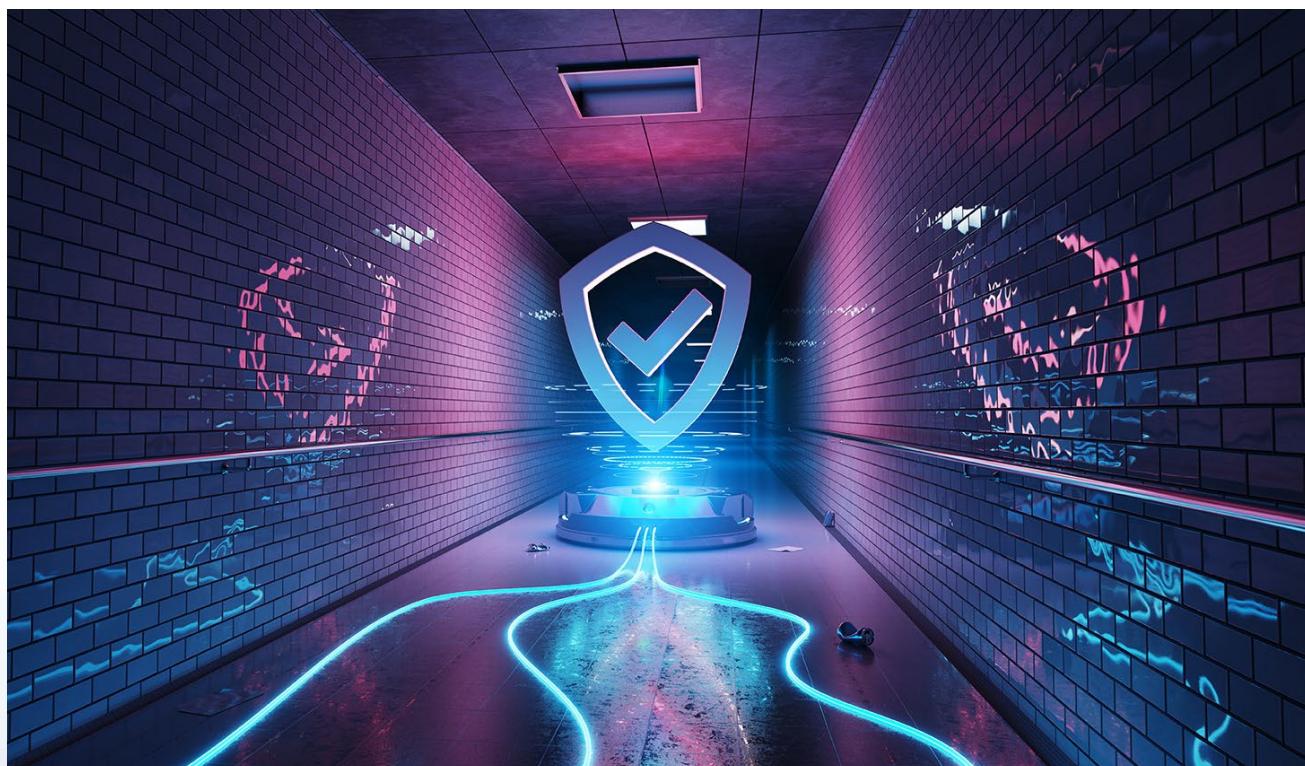
4.1 PLANNED INITIATIVES

Existing regulatory initiatives to drive Fintech adoption, including those instituted by the HKMA (e.g. administrating supervisory sandbox supported by the PoC subsidy scheme, creation of talent lists, establishing common infrastructures, offering supportive task forces, etc.), have been designed to tackle many identified challenges, especially with respect to sourcing, consideration and activation (see Figure 20).

Moreover, the HKMA has tested and validated certain strategic and tactical initiatives through concentrated efforts on Regtech in recent years. For example, the establishment of the Regtech Knowledge Hub as a centralised source of information, the publication of dedicated Regtech research papers, the issuance of nine distinct regulatory practice guides and the launch of landmark events such as the Global Regtech Challenge, have all contributed to advancing Regtech adoption. The HKMA believes that the success of these initiatives can be suitably adapted and broadened to serve other areas of Fintech.

Capitalising on the momentum of current initiatives, the HKMA is set to unveil a series of strategic and tactical initiatives to further facilitate the adoption of Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT across Hong Kong.

The key strategic initiative will involve transforming the existing Regtech Knowledge Hub into a comprehensive Fintech Knowledge Hub, capable of catering to a broad spectrum of Fintech areas. On the tactical front, new endeavours will include detailed experience sharing videos, Fintech showcase events, regulator-issued practice guides, in-depth research reports, webinars / seminars and training sessions. These multifaceted initiatives will be designed to address the key challenges identified in our survey and interview findings.

FIGURE 20: INITIATIVES MAPPING

Stage	Conclusion	Existing Initiatives	Planned Initiatives
Sourcing	**Build Stronger Connections** *within the Fintech ecosystem and foster deeper collaboration*	• Innovation hubs (e.g. HKMA-ASTRI) • Promotional videos • Fintech showcase events / conferences (e.g. awards / competitions)	• Revamping the Fintech Knowledge Hub • Launching Fintech Spotlight (i.e. video series) • Hosting the Fintech Showcase & Roundtable
Consideration	**Bridge Perception Gaps** *through knowledge-sharing and comprehending requirements from both sides*	• Innovation hubs (e.g. HKMA-ASTRI) • Promotional videos • Supervisory sandbox (e.g. Fintech Supervisory Sandbox) • PoC subsidy schemes by Cyberport • Research reports	• Launching Fintech Spotlight (i.e. video series) • Hosting the Fintech Showcase & Roundtable • Publishing Fintech research reports • Conducting knowledge-sharing webinars / seminars
Negotiation	**Create Common Ground** *to facilitate decision-making and better align expectations*	• N/A	• Hosting the Fintech Showcase & Roundtable • Releasing best practice guidance on Fintech adoption
Onboarding	**Minimise Duplicative Efforts** *to drive greater activation and utilisation of Fintech solutions*	• N/A	• Hosting the Fintech Showcase & Roundtable • Releasing best practice guidance on Fintech adoption
Activation	**Share Lessons Learnt** *by exchanging stories, best practices, benefits and values of Fintech solutions*	• Talent list (e.g. Visa support for int'l Fintech talent) • Common infrastructure (e.g. CDI) • Regulator-issued practice guides • Research reports • Government-sponsored training for Fintech users	• Revamping the Fintech Knowledge Hub • Launching Fintech Spotlight (i.e. video series) • Publishing Fintech research reports • Conducting knowledge-sharing webinars / seminars • Delivering training sessions for Fintech stakeholders

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Fintech Knowledge Hub

To address the difficulties encountered by Fintech solution providers and users in the sourcing and activation stages, the existing Regtech Knowledge Hub will be revamped to a Fintech Knowledge Hub to foster a shared understanding of Fintech solutions.

First and foremost, the new Fintech Knowledge Hub will serve as a comprehensive platform for curated Fintech content. By offering a one-stop shop, the platform will provide easy access to a wide range of information, including the Fintech Promotion Roadmap, as well as relevant HKMA publications, Fintech news and Fintech events.

Secondly, the Fintech Knowledge Hub will serve as a contact directory for both Fintech users (i.e. financial institutions) and Fintech providers. This directory will be organised according to specific Fintech focus areas, enhancing visibility and connectivity.

Thirdly, the platform will include a comprehensive directory of Fintech training service providers, along with their respective programmes, to continuously empower Fintech practitioners. The Fintech Academy will also be made accessible through the hub for Fintech users and service providers to leverage the combined strength of academics and industry practitioners.

By promoting the centralised sharing of Fintech content, the Fintech Knowledge Hub aims to foster better collaboration and knowledge exchange among participants within Hong Kong's Fintech ecosystem.

Fintech Spotlight: The Fintech Adoption Journey (i.e. Video series)

To help financial institutions better understand the underlying business cases for Fintech deployment, the HKMA will release a new series of experience sharing videos, which will feature companies that have been making developments in the identified Fintech focus areas, including Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT.

The HKMA will look to invite Fintech solution providers, financial institutions and other involved parties to share their experiences, including success stories, key adoption challenges and lessons learnt, in a fireside chat format. For example, videos may highlight details on constructing ESG-focused investment portfolios using an advanced ESG data analytics tool. This video series will highlight how Fintech solutions have positively impacted the financial services industry's operations and outcomes in real-life scenarios, while introducing common adoption pitfalls and how spotlighted organisations have overcome them.

Participating Fintech solution providers may benefit from increased visibility and recognition of their innovative solutions among prospective users. Financial institutions will be more confident to stay at the forefront of innovation and adopt new Fintech products encouraged by these success stories.

Fintech Showcase & Roundtable: Exploring Fintech Frontiers

The HKMA aims to launch quarterly Fintech showcase events, followed by roundtable discussions amongst key decision-makers, to foster long-term connections and dialogue between Fintech service providers and financial institutions. This will encourage the open communication of business needs and expectations, addressing any upfront misalignments in expectations with respect to deployment timelines, negotiation considerations and onboarding requirements, streamlining the adoption process.

Fintech solution providers will have the opportunity to concisely present their solutions and highlight their unique value propositions alongside notable client collaborations that exemplify compelling business cases. Fintech users will need to come prepared with relevant questions. These concise elevator pitches, lasting 5 to 15 minutes, will offer attendees a valuable snapshot of innovative Fintech solutions and how they are addressing specific business challenges being faced by financial institutions in Hong Kong.

To facilitate direct conversations, matchmaking sessions will be held via roundtable discussions, inviting key decision-makers from financial institutions and Fintech solution providers to discuss potential collaboration opportunities.

Additionally, the event will feature an expo area for attendees to explore dedicated booths set up by Fintech solution providers, with the provision of informational materials. For those unable to partake in the matchmaking session, this interactive space will provide an alternative approach for financial institutions to follow up with presenters and engage in more detailed discussions about their offerings, providing an opportunity for potential partnerships to be formed.

Best Practice Guidance

Given the challenges faced by Fintech solution providers and users during the negotiation and onboarding stages, the HKMA will introduce best practice guidance to foster greater clarity, transparency and efficiency for industry participants.

Guidance for the negotiation stage will focus on contractual requirements and onboarding practices. This will offer a clear reference framework that facilitates a smoother and more structured communication process between financial institutions and Fintech solution providers. The HKMA envisions that the guidance will cover vital areas such as indemnity / liability and data rights (including aspects of ownership, access, privacy and retention).

The HKMA plans to introduce guidance focused on recommended onboarding best practices, which will serve as a well-defined, best practice structure that both financial institutions and Fintech solution providers can refer to. Within the onboarding guidance, a critical area of focus will be directed to cybersecurity, given its importance in the successful integration of Fintech solutions.

With its introduction, Fintech service providers and users can refer to best practices and benefit from upfront clarity on frequently misaligned expectations, encouraging more partnerships in the Fintech adoption process.

Research Projects

In addition to its ongoing campaigns and events, the HKMA has outlined plans to undertake research projects that will play a role in driving the consideration and activation of Fintech solutions.

These projects aim to provide the financial industry with valuable insights into the latest developments, opportunities and risks pertaining to emerging technology areas, such as A.I. and / or DLT. Regulators, stakeholders and other industry players can stay at the forefront of emerging technologies and understand their implications, thus making more informed decisions when adopting Fintech solutions. Most importantly, the reports will highlight the business cases for Fintech solutions, which can build confidence for Fintech users.

The research projects will also cover adoption challenges, potential solutions and outlooks, offering financial institutions practical insights to address deployment challenges in the activation stage of the Fintech adoption process.

Beyond the two technology overlays, the HKMA is open to expanding its research efforts to cover additional topics of interest, such as DeFi, Open API, service personalisation, operations automation or cloud adoption.

Webinars / Seminars

To foster knowledge exchange and collaboration among financial institutions and regulators seeking to embrace Fintech advancements, a series of webinars / in-person seminars will be hosted throughout the upcoming year. These events aim to provide an interactive platform for stakeholders to share their insights and experiences on the latest Fintech development trends and the adoption of various Fintech solutions, focusing on Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT.

Each session will focus on exploring the latest trends and developments in the Fintech landscape, sparking discussions and facilitating engagement among key stakeholders involved in the supply, demand and facilitation of Fintech solutions. The sessions will cover a wide range of topics, such as charting the course for new-age robo-advisors or the rise of online brokerage platforms. Considering the growing interest in digital assets and regulatory efforts supporting their adoption, opportunities within the payment space as part of the DLT narrative may also be explored. Additionally, emerging Fintech solution providers may be invited to participate, providing them with greater visibility.

Through interactive sessions, the sessions will facilitate a dynamic and regular forum for industry professionals to share best practices and explore the practical applications of Fintech solutions. Participants will have the opportunity to explore the practical intricacies of Fintech adoption and consider the potential benefits and challenges of integrating these solutions into their organisations.

Training Sessions

To address the need for educational efforts to enhance the activation of Fintech solutions, the HKMA intends to hold targeted training sessions in the upcoming year. Existing training sessions have received positive feedback from Fintech users and are considered as one of the most effective initiatives. Future training sessions will be specifically tailored to facilitate technical knowledge-sharing and equip employees with practical Fintech skillsets for better Fintech usage.

To enrich the training sessions, the HKMA may invite guest speakers who are experts in their fields, including financial regulators, Fintech solution providers, Fintech users and industry bodies. These guest speakers will share their technical expertise and unique insights to provide participants with a comprehensive understanding of key concepts and emerging trends within the realms of Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT.

Furthermore, the HKMA aims to incorporate hands-on demonstrations of emerging Fintech solutions, such as GenA.I., a consolidated ESG data platform and a DLT-based interoperable platform. These demonstrations will allow participants to gain practical exposure to the benefits and usage of these solutions, going beyond theoretical knowledge. By experiencing, first-hand, how these solutions can be applied in real-life scenarios, participants will be better equipped to embrace and utilise them in their daily practices.

4.2 INITIATIVES UNDER CONSIDERATION

The initiatives within the roadmap demonstrate the HKMA's ongoing commitment to facilitating Fintech adoption. Throughout the interviews and surveys conducted in this study, it has attentively listened to a multitude of challenges and concerns. For example, the HKMA is aware that there is potential to strengthen existing initiatives, such as the supervisory sandbox and PoC scheme, and introduce new initiatives to address broader challenges around talent shortages and the need for additional financial support.

Given that many of these initiatives require extensive planning, dedicated resources and cross-sectoral collaboration, the HKMA is currently evaluating their feasibility and liaising with key stakeholders. As these initiatives mature, the HKMA will unveil them to further enable Fintech adoption.

Recognising the rapid evolution of Fintech landscape, the HKMA continues to be committed to proactively monitoring market trends and maintaining an open dialogue across sectors to provide timely, relevant and practical policy-level solutions, ensuring the development of a robust and sustainable local Fintech ecosystem.

4.3 CONCLUSION

Through the course of its research, the HKMA has identified a number of key adoption challenges throughout the Fintech adoption lifecycle. A variety of initiatives already implemented by local regulatory bodies have begun to tackle some of these issues, especially with respect to the sourcing, consideration and activation stages. Notably, numerous strategic and tactical initiatives are in place to facilitate the successful uptake of Regtech solutions, many of which can be leveraged to enhance the adoption of other key Fintech areas in the coming years, including Wealthtech / Investech, Insurtech, Greentech, A.I. and DLT.

The negotiation and onboarding stages remain significant bottlenecks to more widespread Fintech adoption. Addressing the issues embedded in these stages, however, presents a complex challenge due to the intricate nature of user policies and processes, as well as the limits of regulatory intervention. Notwithstanding this, the HKMA remains open to evaluating the merits and practicality of a variety of solutions proposed by research participants in this study.

The HKMA, together with the SFC and the IA, is committed to ensuring the ongoing success of Fintech adoption in Hong Kong. The HKMA believes that the strategic and tactical initiatives outlined in the current Fintech Promotion Roadmap represent an important next step in nurturing Hong Kong's position as a leading Fintech hub in the Asia Pacific region.

5. APPENDIX

5.1 RESEARCH METHODOLOGY
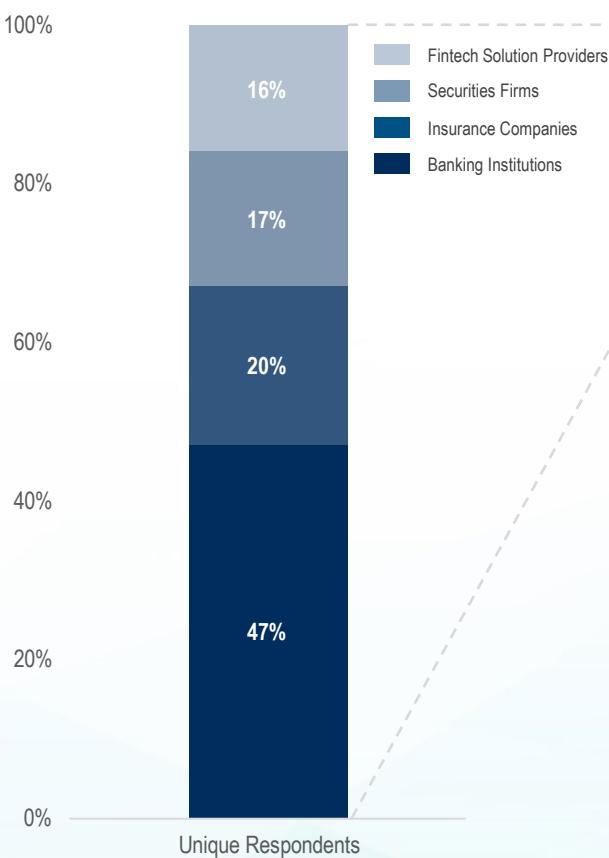
To gain a comprehensive understanding of the local Fintech adoption landscape, we surveyed and interviewed Fintech solution providers and users to gather insights and different perspectives across Hong Kong's financial services industry (see Figure 21). On the provider side, we focused on gathering insights from Wealthtech / Investech, Insurtech and Greentech solution providers. On the user side, we engaged a range of financial institutions, including banks, securities firms and insurance companies.

FIGURE 21: RESEARCH METHODOLOGY

Participants' Profile
Fintech Users and Providers

Research Methodology
Description

ONLINE SURVEYS

219 UNIQUE RESPONDENTS
Launched a survey to capture available data points from relevant stakeholders

IN-DEPTH INTERVIEWS

15 INTERVIEWS
Filled qualitative data gaps through conducting 15 interviews with 46 relevant executives

SECONDARY RESEARCH

Supplemented secondary research to fill in any data gaps / provide additional context and offer deeper insights into the captured data

Source: HKMA Fintech Adoption Study (2023), Quinlan & Associates analysis

Furthermore, we specifically targeted key decision-makers, including Chief Executive Officers, Heads of Departments, Chief Operating Officers, Chief Technology / Innovation Officers, Chief Risk Officers, Chief Sustainability Officers and senior executives within each financial institution to capture a wider range of perspectives. A total of 183 senior executives from companies in the financial services industry participated in the survey, along with 36 executives from Fintech solution providers that are based in or operate in Hong Kong.

In addition to the survey, we conducted in-depth interviews with 46 prominent executives from banks, brokers, insurers and Fintech solution providers, including representatives from Wealthtech / Investech, Insurtech and Greentech firms. These in-depth interviews allowed us to gather diverse perspectives on Fintech adoption success cases, challenges, solutions and future outlooks. The discussions also provided an opportunity for stakeholders to elaborate on their survey responses and share additional insights based on their expertise.

To complement our primary research, we conducted secondary research by reviewing existing reports, industry publications, press releases and other online sources. This secondary research helped to provide broader context and background information on the Fintech landscape, including industry trends, regulatory frameworks and ongoing initiatives.

By combining the insights from extensive surveys, in-depth interviews and secondary research activities, this whitepaper provides a comprehensive overview of the challenges, opportunities and potential pathways for Fintech adoption in Hong Kong.