

# Development of Financial Technologies

PANEL ON FINANCIAL AFFAIRS  
LEGISLATIVE COUNCIL

1 June 2020



# Progress Made since April 2019

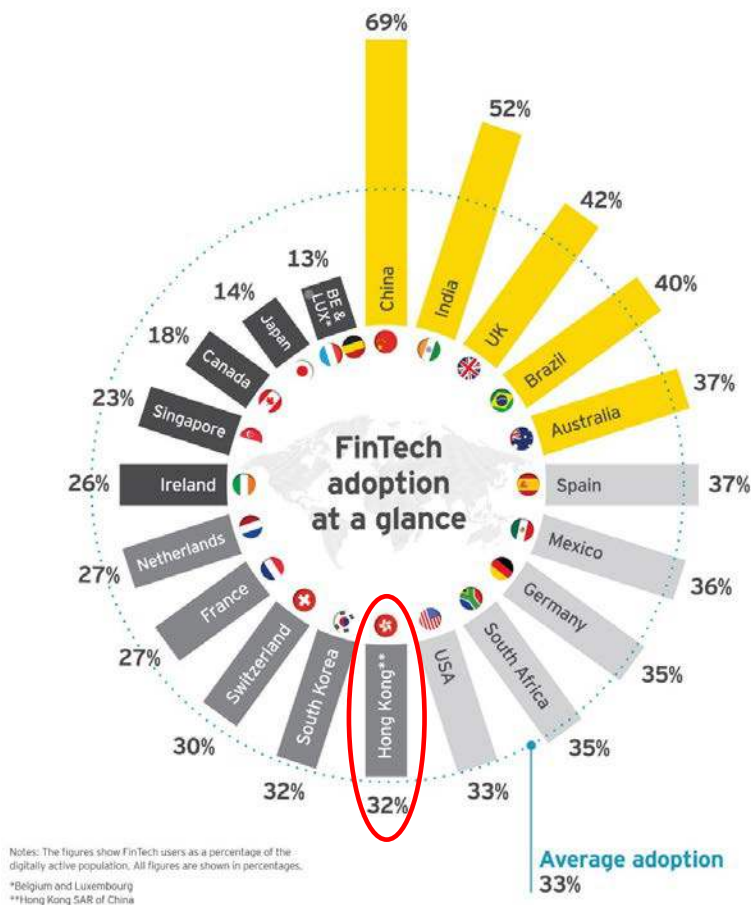
- Number of **Fintech companies and startups** operating in Hong Kong reached **600+**
- Granted **8 virtual bank** licences and authorised **4 virtual insurers**
- New regulatory framework on **virtual asset trading platforms**
- Satisfactory usage of the **Faster Payment System (“FPS”)** as a Fintech infrastructure
- 20 retail banks launched over **300 Phase II** (Customer Acquisition) **Open APIs**
- **2019 Hong Kong Fintech Week** successfully held in November 2019



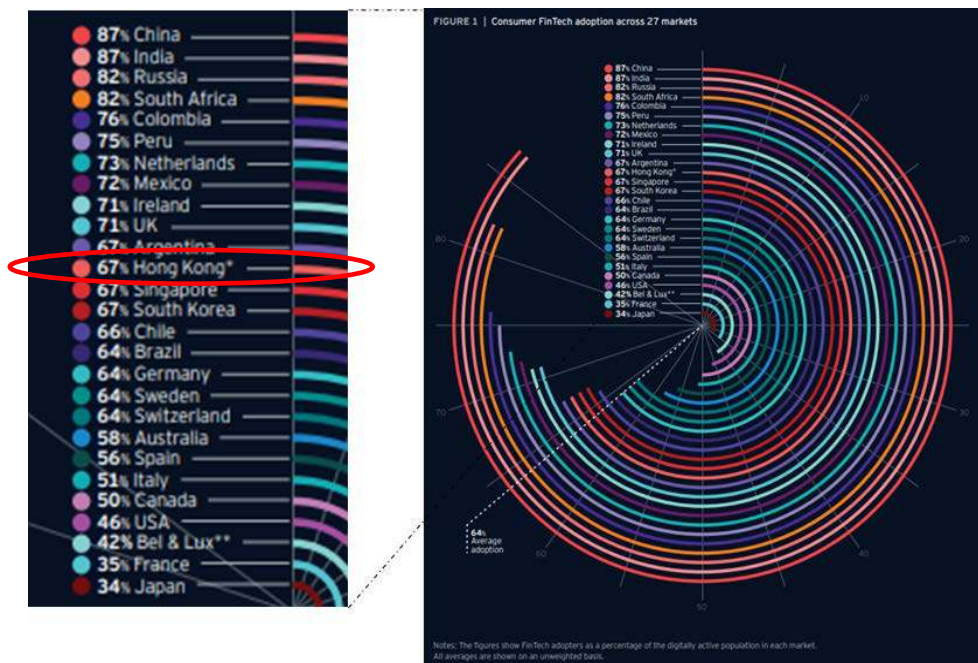
# HK has marked improvement on Fintech Adoption over the past few years

**Year 2017: 32%**

FinTech adoption rates across our 20 markets



**Year 2019: 67%**



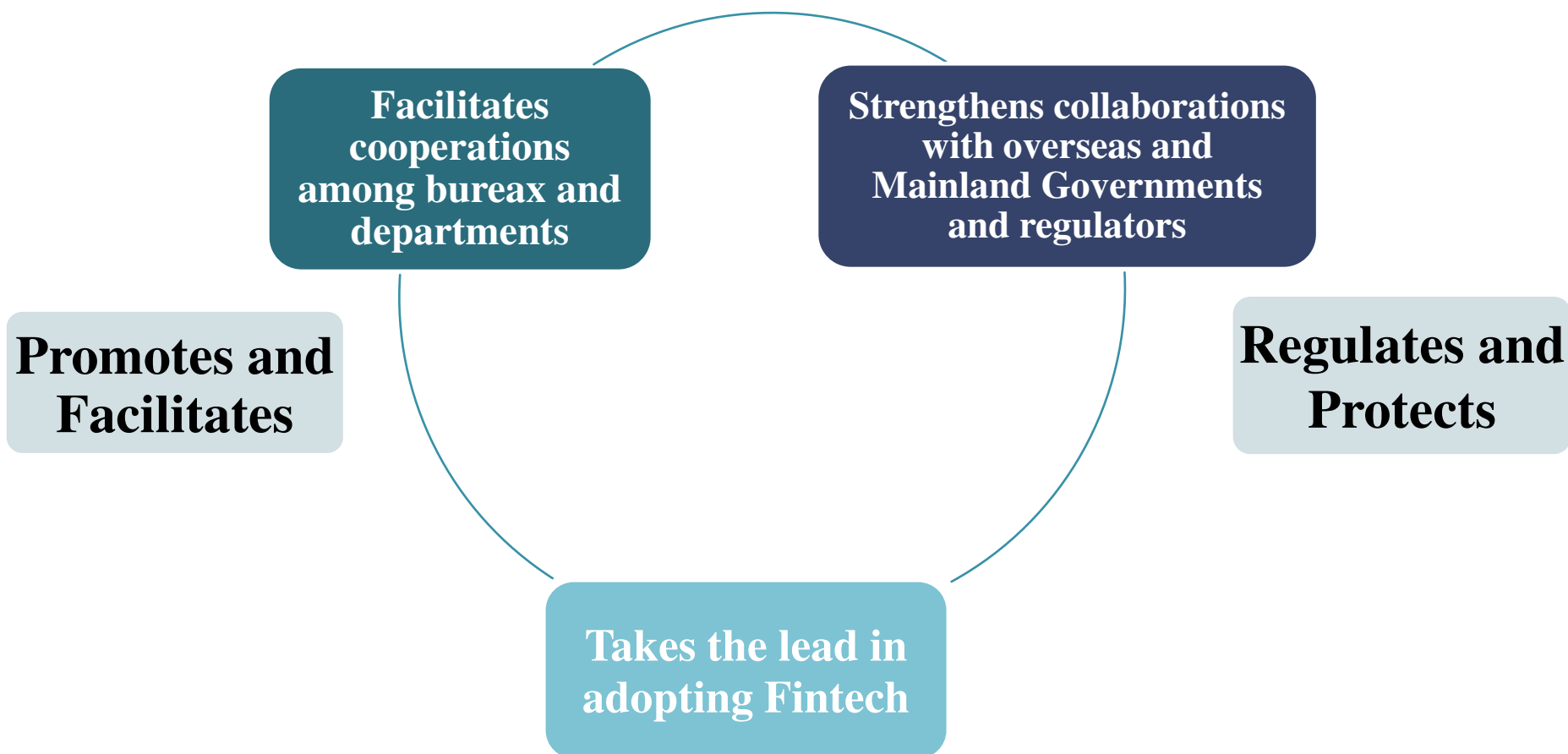
**Source: E&Y Global Fintech Adoption Index**

The Fintech Adoption Index is based on data collected from online questionnaires and interviews. The questionnaires and interviews were mostly focused on Fintech applications in payments, budget and financial planning, savings and investment, lending and insurance etc.

# Challenges and Opportunities

- **To support the Fintech industry amidst this challenging time**
- The outbreak of the COVID-19 accelerates incumbent financial institutions to embrace Fintech, and provides a **window of opportunity** for us to **promote wider Fintech adoption** e.g. the FPS, e-wallets, virtual banks and insurers

# Role of the Government: Balance, Planning and Coordination



# Joint Effort of “HK Inc.”



財經事務及庫務局  
Financial Services and the Treasury Bureau



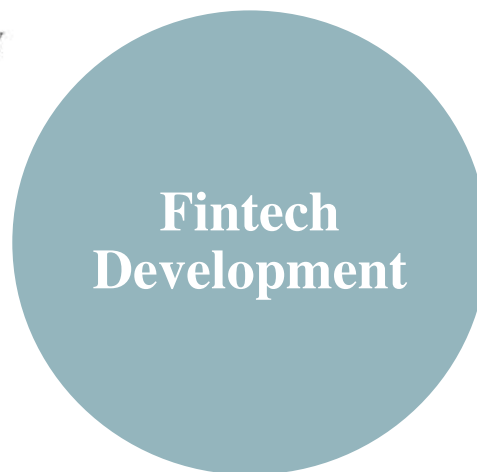
HONG KONG MONETARY AUTHORITY  
香港金融管理局



SECURITIES AND  
FUTURES COMMISSION  
證券及期貨事務監察委員會



保險業監管局  
Insurance Authority



Fintech  
Development

Invest**HK**

數碼港  
*Cyberport*

**HKSTP**  
香港科技園



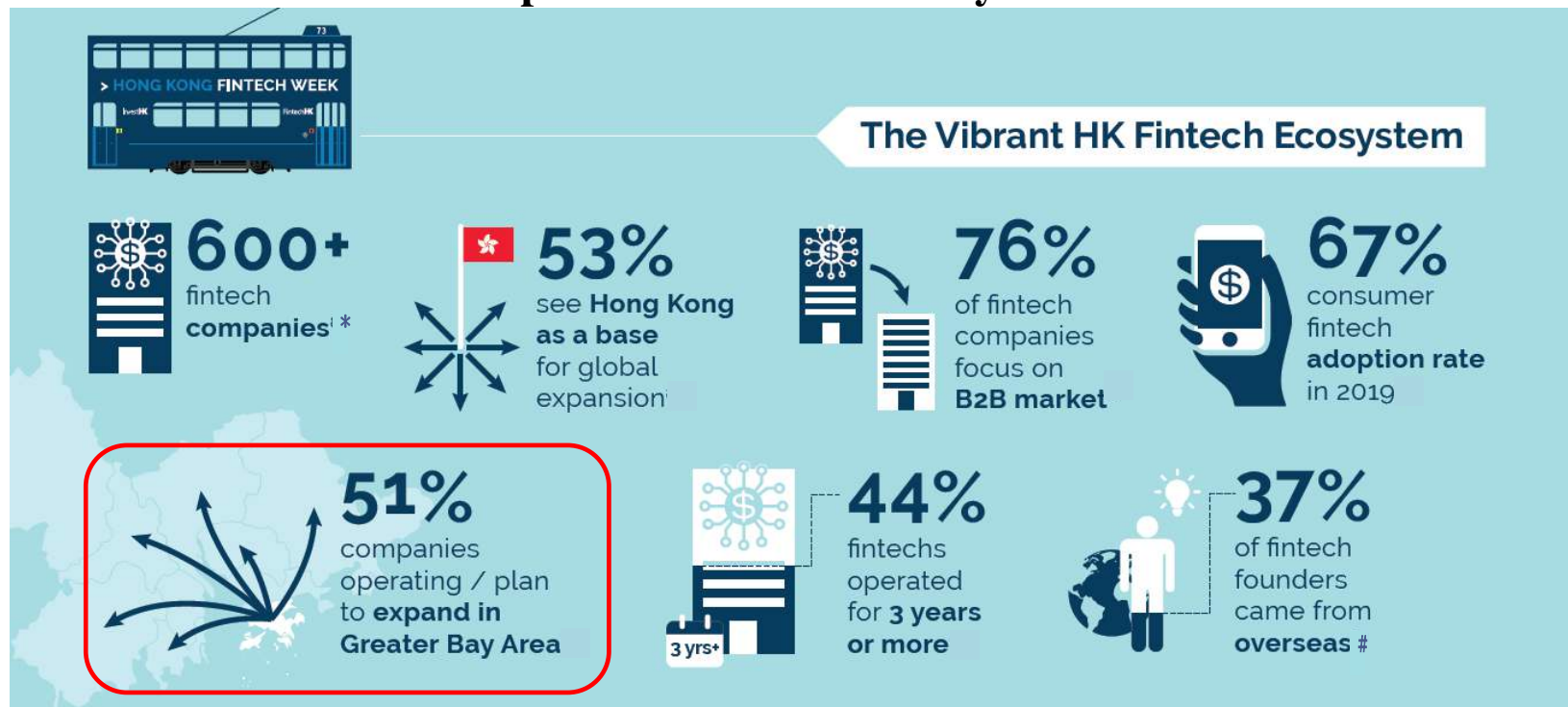
香港特別行政區政府財經事務及庫務局

Financial Services and the Treasury Bureau, Government of the Hong Kong Special Administrative Region

# InvestHK

## Fintech Ecosystem Study 2019

Among the survey respondents, **51%** of HK Fintech firms **operating / planning to expand in the Greater Bay Area**



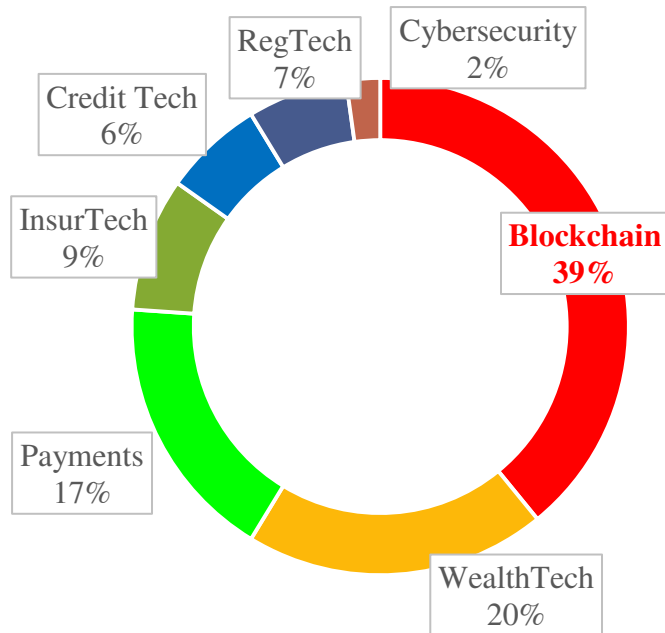
\* Increased from 160 in 2016 to over 600 in 2019

# 59% from Hong Kong and 4% from Mainland China

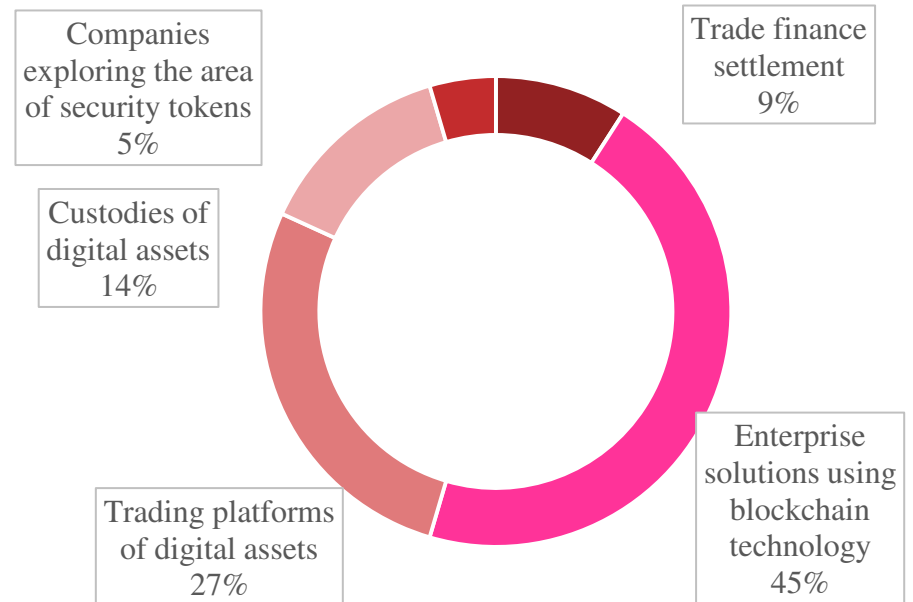
InvestHK

# Brought in 57 new Fintech firms to HK in 2019

% breakdown of 57 Fintech firms – by sub-sector



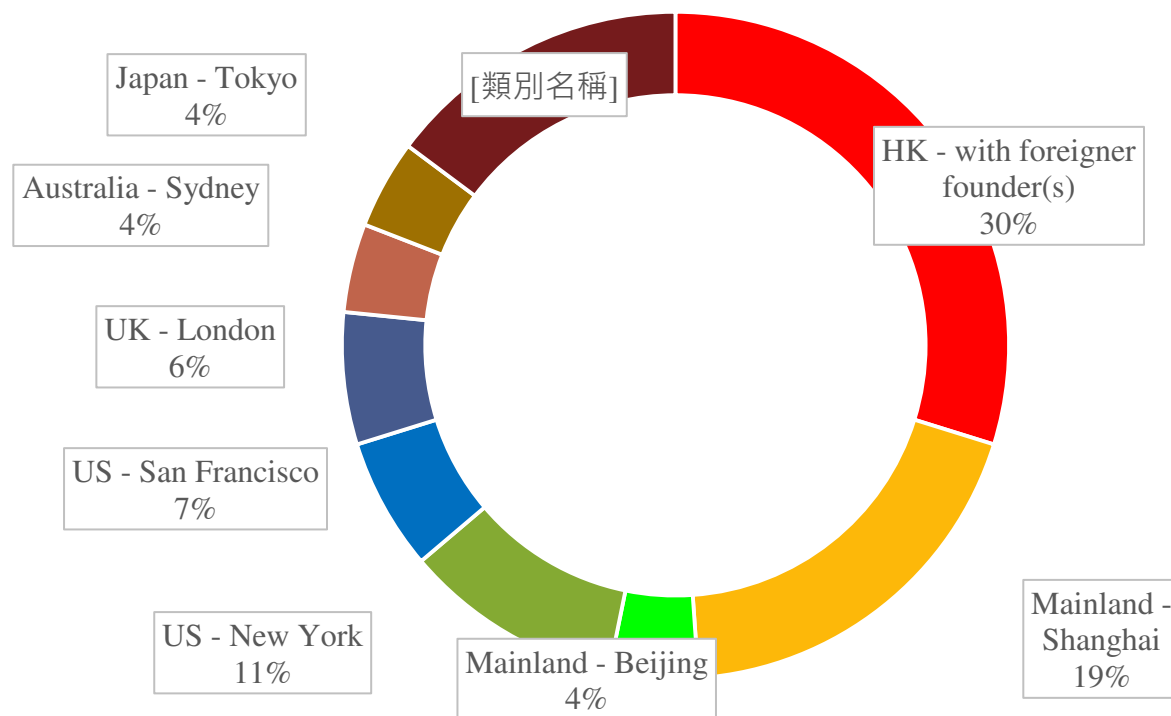
% breakdown of Blockchain firms – by sub-sector



**Blockchain firms showed the biggest growth  
(vs. 27% of total in 2018)**

# Apart from local HK Firms, other leading sources were from the Mainland, US and UK

% breakdown of 57 Fintech firms – by City of Origin



\*Others include 1 firm each from Berlin, Brussels, Paris, Jerusalem, Guangzhou, Singapore and Taipei.

# InvestHK

## Encouraging Results at 2019 Fintech Week in a Challenging Year



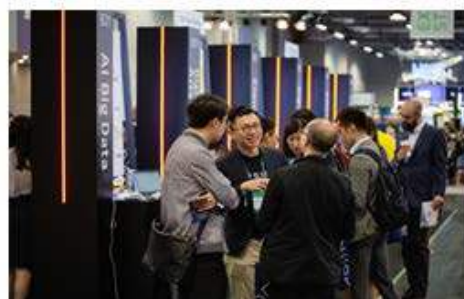
**12,000+** Attendees



**250+** World Class Speakers  
from 28 countries



**1,400+** Business Meetings



**150+** Exhibitors



Attendees from **60+** Economies

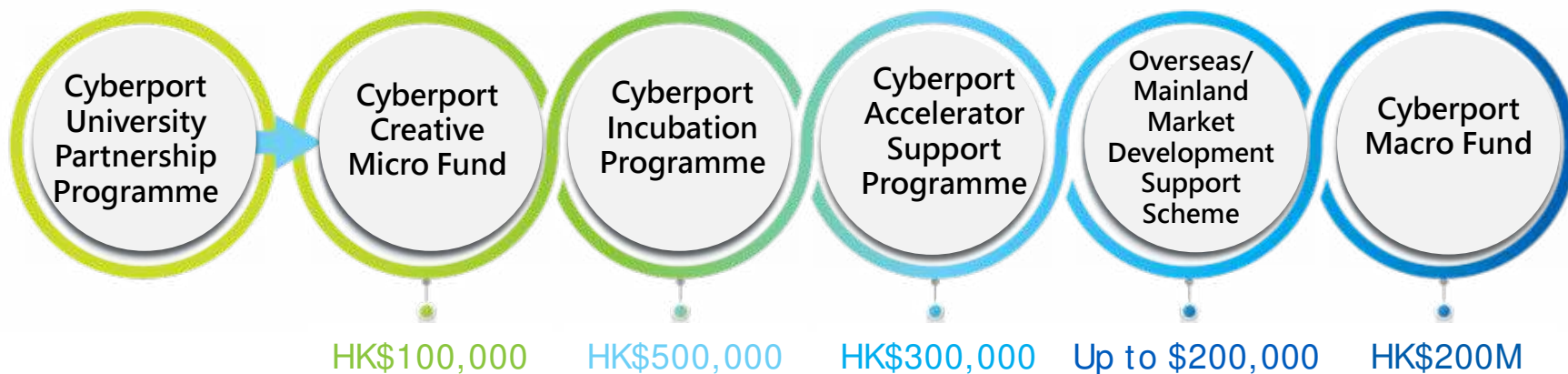


**200+** Media Visits

...and 50+ satellite events including innovation lab visits and networking receptions throughout the week

# Cyberport Provides Various Programmes and Funding Schemes

- Cyberport's Fintech cluster comprises of 406 Fintech companies. The development focus is to grow emerging clusters in InsurTech, RegTech and Blockchain, and strengthen their cyber security awareness and measures with support. We now have 2 virtual banks (Zhong An, WeLab) and 2 virtual insurance companies (Bowtie, Avo) .
- Cyberport provides various programs and funding schemes to support Fintech Start-ups and Scale-ups at different development stages



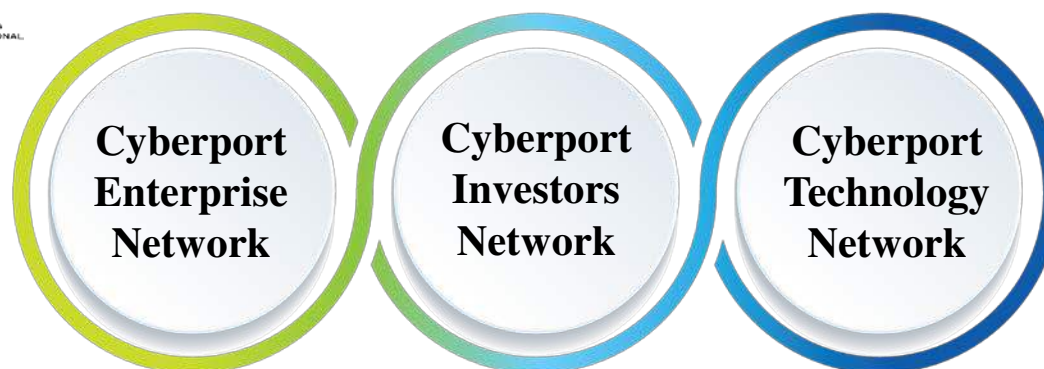
# Cyberport

## Cyberport Partner Networks

40+ Enterprises

100+ Investors

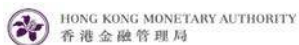
10+ Tech firms



Google ▶ f Start

AliCloud aws

Microsoft Tencent Cloud



**HK\$1.38 billion (Apr 2019 – Feb 2020)**



香港特別行政區政府財經事務及庫務局

Financial Services and the Treasury Bureau, Government of the Hong Kong Special Administrative Region

# Cyberport

## Talent Cultivation & Industry Development

- **Drives industry development through major events & initiatives** – e.g. “Belt and Road” Summit, Asia Financial Forum , Hong Kong Fintech Week, Internet Economy Summit, Accenture Fintech Innovation Lab, Cyberport Venture Capital Forum, FinTech Delegation to UK etc., and organises regular Tech training workshops covering AI/Big Data, Blockchain, Cyber Security, RegTech etc.
- **University Partnership Programme/Training/Internship** – since 2015, Cyberport has sponsored over 300 university students to attend overseas entrepreneurship boot camps at top universities (e.g. Stanford & Chicago Booth) to deepen their knowledge and interests in Fintech together with many industry engagement projects
- **Bridging Fintech companies to industry** – facilitates adoption of Fintech innovation by Financial Institutions and drives digital transformation for the financial industry to maintain global competitiveness through POC projects, training, matching, hackathon, events etc.



# Cyberport Cyberport Financial Practitioners FinTech Training Programme

- Funded by the FSTB and Cyberport to run the programme as a pilot.
- Subsidy covers 80% course fees for participants (e.g. banks, insurance companies, licensed corporations under SFC), employers are required to cover the remaining 20% fee to demonstrate commitment.
- In view of coronavirus outbreak, 8 of 32 sessions have been changed to webinar with positive feedback: 100% rated “Good to Very Good” from survey respondents

	Training session (i.e. Seminar/ Luncheon/ Workshop)	Total no. of FI signed up (as of 6 Jan 2020)	Total no. of FI expected	Total no. of FI on waiting list (31 Mar 2020)	Total no. of FI enrollment (as of 31 Mar 2020)	Total no. of FI attendees (as of 31 Mar 2020)	Total no. of FI absent (as of 31 Mar 2020)
Total no. of training session (in 2020)	32	1,958	1,500	493			
Total no. of webinar session (10 Mar 2020 – 19 May 2020)	8				60	52	8
Total no. of face-to-face session (28 May 2020 – 5 Nov 2020)	24						



# Hong Kong Science Park

## International Hub for 60+ Fintech Startups

HKSTP – where Fintech R&D and entrepreneurship converge

**830+** Tech  
Enterprises,  
Park Companies  
from **23** Nations

**8,700** R&D  
Workers,  
Total Population  
~**13,000**

Investment Raised:  
HK\$21.3B  
by Park co.  
(From Apr 2018 to Dec 2019)

Leading Tech  
Incubator  
Supporting  
400+ Start-ups



### Fintech Company Profiles @Science Park

- Wealthtech
- Regtech & Cybersecurity
- Capital Market Solutions
- Payment & Remittance
- BankTech
- InsurTech

# Hong Kong Science Park Fin+Tech Initiatives and Support

Energizing Hong Kong's Fintech development through industry & enterprise partnerships, innovation with startups, co-creation via GAA and data studio



GAA programme to support innovation and FinTech solution co-creation



Partnership with UK-DIT to promote and connect FinTech communities



Hackathons & pitching competition for industry partners



MOU and strategic partnership with local FSI and tech company to support FinTech development



1,000+ Open Banking API Listing at HKSTP Data Studio; AI Plug supporting AI



Local and global roadshows & events to attract and promote FinTech



# Hong Kong Science Park Fintech @InnoCentre (Launch in 2<sup>nd</sup> half 2020)

A Tech for Fin ecosystems for global market and talent



Fintech Solution  
Co-creation

FinTech Business  
Matching

Advocate Fintech  
Development

Global  
LaunchPad for  
Fintech from

**FinTech  
@InnoCent**

Lab & Sandbox  
for PoC Trial

Networking &  
Community  
Events

Fintech Deal  
Flow & Funding  
Opportunities

Training &  
Seminars

## On-going FinTech Projects

- CBDC PoC for BoT
- Trade Finance
- Virtual Bank
- P2P FX platform

Powered by

**A.I.**

**CyberSecurity**

**Blockchain**

**Data Analytics**



# Hong Kong Monetary Authority

## Providing a regulatory environment conducive to Fintech development

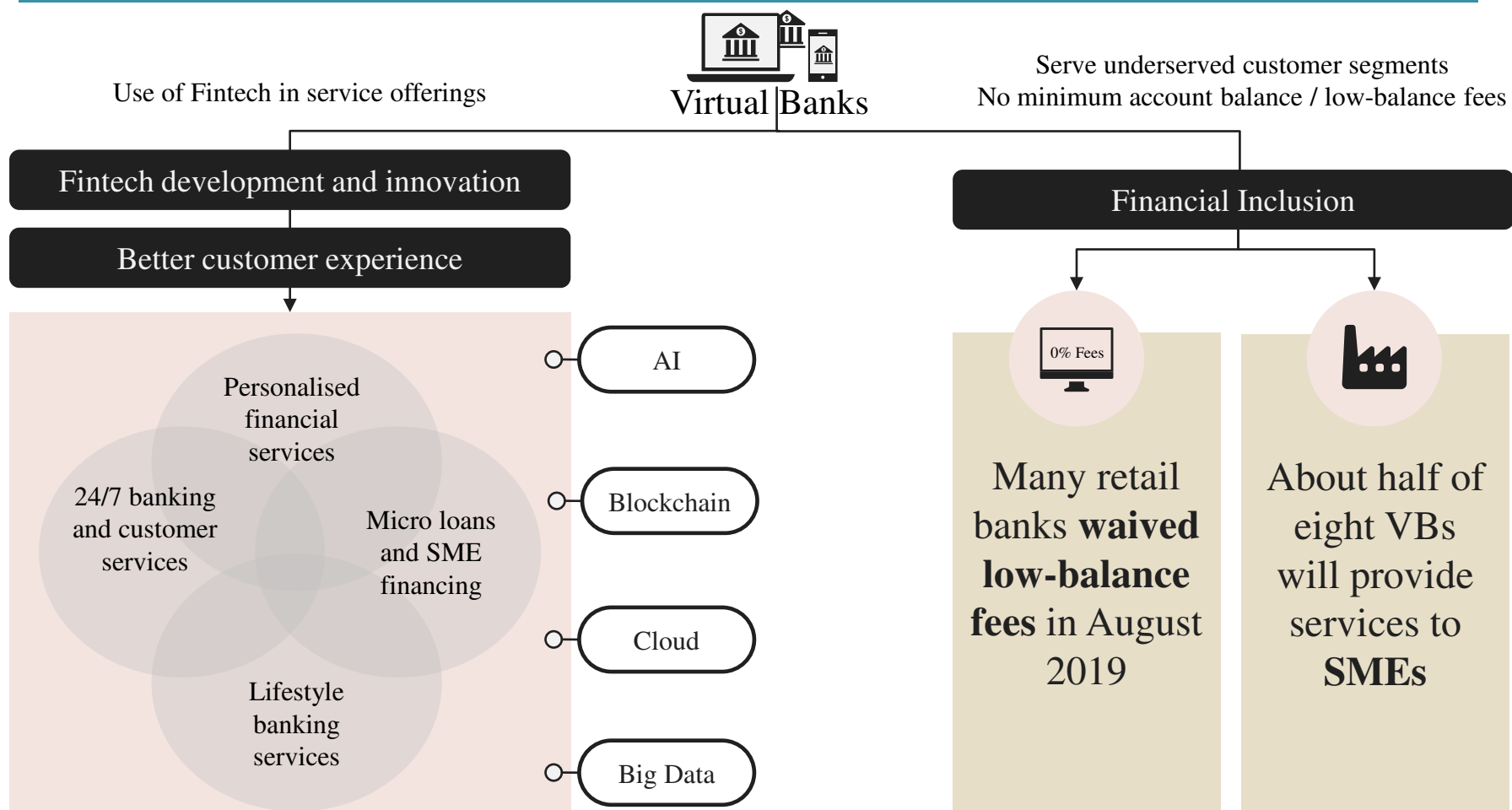
### Hong Kong Monetary Authority

Dedicated Fintech Team	Fintech Facilitation Office (FFO)
Sandbox	Fintech Supervisory Sandbox (FSS) 2.0
Payment	Payment Systems and Stored Value Facilities Ordinance (PSSVFO)
Virtual Banking Regime	Revised Guideline on Authorization of Virtual Banks
Open Banking	Open API Initiative
Cybersecurity	Cybersecurity Fortification Initiative (CFI)
Regtech	A series of Regtech initiatives



# Hong Kong Monetary Authority

## Industry tectonic shifts are observed in virtual banking



# Hong Kong Monetary Authority

## Open API paves the way for tech-fin collaborations

### Benefits



Standardise connections



Encourage collaborations



Create innovative services

### 4-Phase Approach

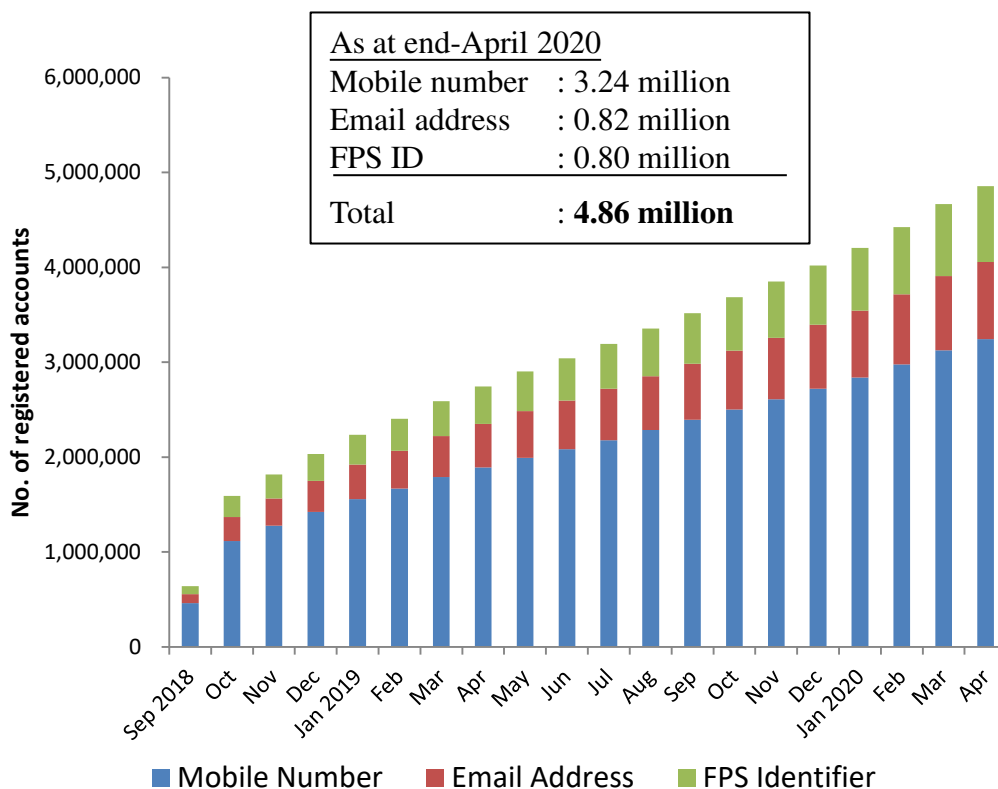
Phase I	Product Information	<b>Launched</b> Jan 2019
Phase II	Customer Acquisition	<b>Launched</b> Oct 2019
Phase III	Account Information	To publish a set of technical standards in 2020
Phase IV	Transactions	



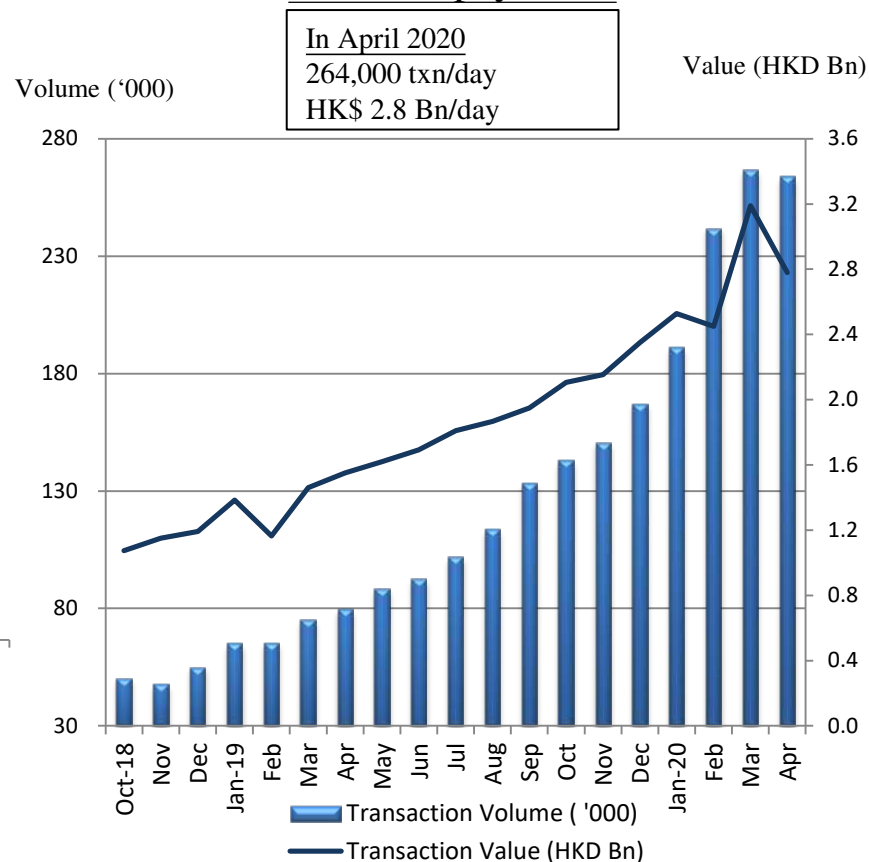
20 retail banks launched over 500 Phase I Open APIs and 300 Phase II Open APIs

# Hong Kong Monetary Authority Faster Payment System (FPS)

Number of registered accounts



Average daily turnover of HKD  
real-time payments



# Hong Kong Monetary Authority

## Report on Fintech Adoption and Innovation in the Hong Kong Banking Industry

- In May 2020, the Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm and subsidiary of the Hong Kong Academy of Finance (AoF), released a report titled “Fintech Adoption and Innovation in the Hong Kong Banking Industry” based on an industry-wide survey that aims to understand banks’ views on the current status and prospect of Fintech development in the next ten years.
- Key takeaways of the report:
  - Banks view Fintech **more as an opportunity than a threat**
  - On average **86%** of banks have adopted or plan to **adopt Fintech widely**
  - Banks are **proactive/reactive adopters** of Fintech rather than passive followers
  - Early signs of payoff - higher level of Fintech adoption is associated with **higher cost efficiency** and **profitability** for banks
  - Banks are confident that they will **continue to play a key role over the next 10 years**

# Securities and Futures Commission

## Regulatory Approach to Virtual Assets (“VAs”)

### (1) VA Funds

- Providing detailed guidance on the management and distribution of funds which invest in VAs (Nov 2018), and publishing terms and conditions to be imposed on VA fund managers (Nov 2019)

### (2) VA Futures Contracts

- Issuing a statement warning that platforms which offer or provide trading services in VA futures contracts without a proper licence or authorisation may be in contravention of the Securities and Futures Ordinance (“SFO”) or the Gambling Ordinance (Nov 2019)

### (3) VA Trading Platforms

- Announcing a new regulatory framework whereby centralised VA trading platforms which intend to offer trading of at least one security token may apply for licences (Types 1 and 7 regulated activities) from the SFC (Nov 2019)

# Securities and Futures Commission

## Regulatory Approach to VAs

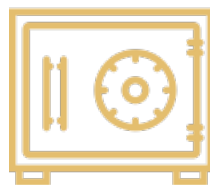
### (3) VA Trading Platforms

#### ■ Robust regulatory standards under the new framework

- Comparable to those applicable to licensed securities brokers and automated trading venues but also incorporate additional requirements to address specific risks associated with VAs:



Professional investors  
only



Safe custody of assets



AML/CFT



Prevention of market  
manipulative and abusive  
activities



Inclusion of virtual assets  
for trading

# Securities and Futures Commission

## Regulatory Approach to VAs

### (3) VA Trading Platforms

#### ■ **Limitations of the new framework**

- Opt-in only. No power to regulate a platform trading non-security tokens only
- VAs on licensed platforms are not subject to the authorisation and prospectus registration provisions
- Powers to take action against market misconduct (Parts XIII & XIV of SFO) will not apply

**Notwithstanding this, SFC has decided to adopt this interim solution, as it is manifestly in the public interest to act now, enabling investors to choose to participate in regulated platforms. A permanent solution through legislative amendments should be explored.**

# Securities and Futures Commission

## Key Regtech/Suptech Initiatives

- **Deploying advanced data analytics to facilitate technology-enabled supervisory procedures, and setting standards governing data to be submitted by licensed corporations**

### External

- **Circular on Data Standards for Order Life Cycles (Jul 2019)** which prescribe the min. content and presentation format of trading data to be submitted by licensed securities brokers with high transaction volume for compliance testing
- **Circular on remote onboarding of clients in recognised jurisdictions using facial recognition (Jun 2019)**

### Internal

- **Launch of Intelligence Relationship Identification System (Mar 2019)** that uses Natural Language Processing and Machine Learning techniques to identify interconnected listed and unlisted companies, individuals and intermediaries which may point to potential misconduct
- **Developing a data analytic platform** for automating certain supervisory inspection steps, **and a data visualization tool** for identification of fund movements in complex and large volume of transactional data in enforcement cases

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## Insurance Authority

# Insurtech Initiatives by IA

- **IA encourages and facilitates the use of Insurtech by the insurance industry and ensures that policyholders' interests are adequately protected**

### Insurtech Sandbox

- A controlled environment which allows insurers to experiment with new ideas so as to demonstrate to IA that those ideas could broadly comply with IA's usual supervisory requirements
- As of mid-May 2020, IA has approved 9 Insurtech Sandbox applications, 6 of which have completed trials and been rolled out to the market

### Fast track for applications for authorization of new insurers owning and operating solely digital distribution channels ("Fast Track")

- A dedicated queue for new authorization applications from applicants using solely digital distribution channels
- As of May 2020, IA has authorized 4 virtual insurers, of which 2 carry on life insurance business and 2 carry on non-life insurance business

Insurance Authority

# Insurtech Initiatives by IA

## Insurtech Facilitation Team

- Facilitates the Insurtech community's understanding of the current regulatory regime and provides advice on Insurtech-related topics as appropriate
- Since its establishment in February 2016, the team has handled some 240 inquiries from and held some 120 meetings with different stakeholders including Insurtech start-ups, technology firms and insurance companies

## International Fintech Co- operation

- IA entered into Fintech co-operation agreements with 3 overseas regulators, namely, the UK Financial Conduct Authority, the Dubai Financial Services Authority, and the Gibraltar Financial Services Commission
- These agreements will enhance the sharing of information and co-operation on referrals of innovative firms seeking to enter the counterpart's market
- IA was accepted as a member of the Global Financial Innovation Network ("GFIN") in June 2019. GFIN is an international network over 50 financial regulators and related organizations committed to supporting financial innovation in the interests of consumers



# Insurance Authority

## Insurtech Initiatives by IA

### Working Group on Embracing Fintech in Hong Kong under Future Task Force

- A platform which holds regular meetings for exchanging ideas of innovative Insurtech initiatives among key stakeholders
- In 2019, two working group meetings were held

### Guideline on Cybersecurity (GL20)

- The Guideline sets the minimum standard for cybersecurity that authorised insurers are expected to have in place. It also provides the general guiding principles of IA in assessing the effectiveness of the cybersecurity framework of an insurer
- The Guideline has been effective since 1 January 2020

Insurance Authority

## Insurtech Initiatives by The Hong Kong Federation of Insurers (“HKFI”)

### **(1) Motor Insurance DLT-based Authentication System (“MIDAS”)**

- Digitizes motor cover note or policy by adopting blockchain technology
- Allows policy holders and Transport Department to examine the validity of motor insurance policies with ease, which will help eliminate cases of insurance scams
- Launched in December 2018

### **(2) Insurance Fraud Prevention Claims Database (“IFPCD”)**

- Analyses and examines the data collected to enable the industry to detect patterns of fraudulent insurance claims and take early preventive measures where appropriate
- The project being developed in phases, the first phase of the IFPCD launched in December 2018 covers three lines of business, namely, motor, medical and personal accident insurance. The onboarding of travel line of business for IFPCD has started since November 2019. The IFPCD will be developed to cover life insurance at a later stage.



# Way Forward

- To collaborate with the **Financial Services Development Council (“FSDC”)** to conduct theme-based Fintech studies on **e-KYC platforms, Cross-boundary sandbox** and **Central Bank Digital Currency**; as well as **manpower study** on the Fintech industry
- To expand potential applications of technology infrastructures, such as the **“iAM Smart” platform**, in financial services
- Strengthen external and internal **promotion and facilitation**, including building a **one-stop promotion platform**
- To **groom more Fintech talents** through introducing **talents** from the overseas and strengthen training for in-service financial practitioners
- To provide more **support measures**, such as setting up a new in-town Fintech event space, "Fintech @ Gloucester"



- The End -

*Thank you*

