

NURTURING WINNERS

How Hong Kong Can
Seize Its Fintech
Potential



- INTRODUCTION -

Fintech is widely considered one of the few potential beneficiaries of the Covid-19 outbreak, which has resulted in a spike in demand for online consumption and technologies that can help reduce face-to-face interaction. Yet the prognosis for Hong Kong's fintech sector is far from clear. The economic toll from the pandemic and a challenging funding environment are likely to hold back investment and therefore innovation. Further complicating the situation, Hong Kong is suffering the fallout from recent social unrest and heightened US-China trade and political tensions.

Since 2014, Accenture has been active in the development of Hong Kong's fintech sector, through our FinTech Innovation Lab Asia-Pacific, in partnership with Cyberport. In order to ascertain the current state of the local fintech ecosystem, we conducted a wide-ranging survey of multinational financial institutions and fintech-focused businesses located in the city.

The insights from the survey suggest several ways for the Hong Kong government to accelerate fintech adoption and innovation; and support the efforts of local firms to expand geographically under both the Greater Bay Area development plan and the Belt and Road initiative. As detailed in this report, this support includes increasing funding, nurturing talent and revising the regulatory approach to the sector to keep pace with digitally driven change.

- SUMMARY -

We surveyed 128 multinational financial institutions and fintech start-ups located in Hong Kong. The results of this survey show the city is perceived to be behind its global counterparts in fintech innovation and adoption. Exacerbating the issue are recent headwinds from US-China trade tensions and the Covid-19 pandemic, although the latter could in fact help take fintech forward in the city if funding and talent issues are addressed.

Our survey highlighted three areas in need of urgent attention to accelerate fintech innovation in the SAR:

- (i)** Broader adoption of fintech solutions;
- (ii)** Fintech talent development;
- (iii)** Fostering a culture of entrepreneurialism.

In terms of ramping up widespread fintech adoption, Hong Kong has a lot of consumer sceptics who are currently on the fence, but who could be won over with a clear value proposition and assurance that security and privacy issues will be handled properly.

Hong Kong enjoys considerable fintech natural advantages. The SAR has long been a preferred base for companies with ambitions to expand across Greater China. Hong Kong's access to mainland China's market is set to expand further under the Greater Bay Area development plan; and its global ambitions will be bolstered by the Belt and Road Initiative. Government and regulatory support are essential to help realise these geographic expansion opportunities, including cross-regional investment, outreach programmes and enhanced supervision.

Our survey found regulatory facilitation of fintech in Hong Kong, under the Hong Kong Monetary Authority (HKMA), is held in high regard and considered more friendly than that of competing hubs. The HKMA should look to strengthen its position further, by becoming a true digital regulator. Four pillars are key in this regard:

- (i)** harnessing the power of data to strengthen oversight;
- (ii)** enabling and driving innovation;
- (iii)** driving efficiencies and developing a future-ready infrastructure;
- (iv)** improving communication and engagement with the industry.

Underlying these four pillars is a future workforce with the necessary skills to keep pace with change.

Hong Kong could adopt ambitious strategies to address the talent issue and support fintech development. It could nurture homegrown talent by educating its Generation Z population on new technologies and new ways of working at an earlier age and by increasing government funding of early-stage technology ventures. More broadly, it could develop supporting schemes, hubs and events, and upgrade its technology infrastructure. That could help the SAR not only close the fintech adoption and innovation gap with other hubs, but also increasingly bring new solutions to international markets.

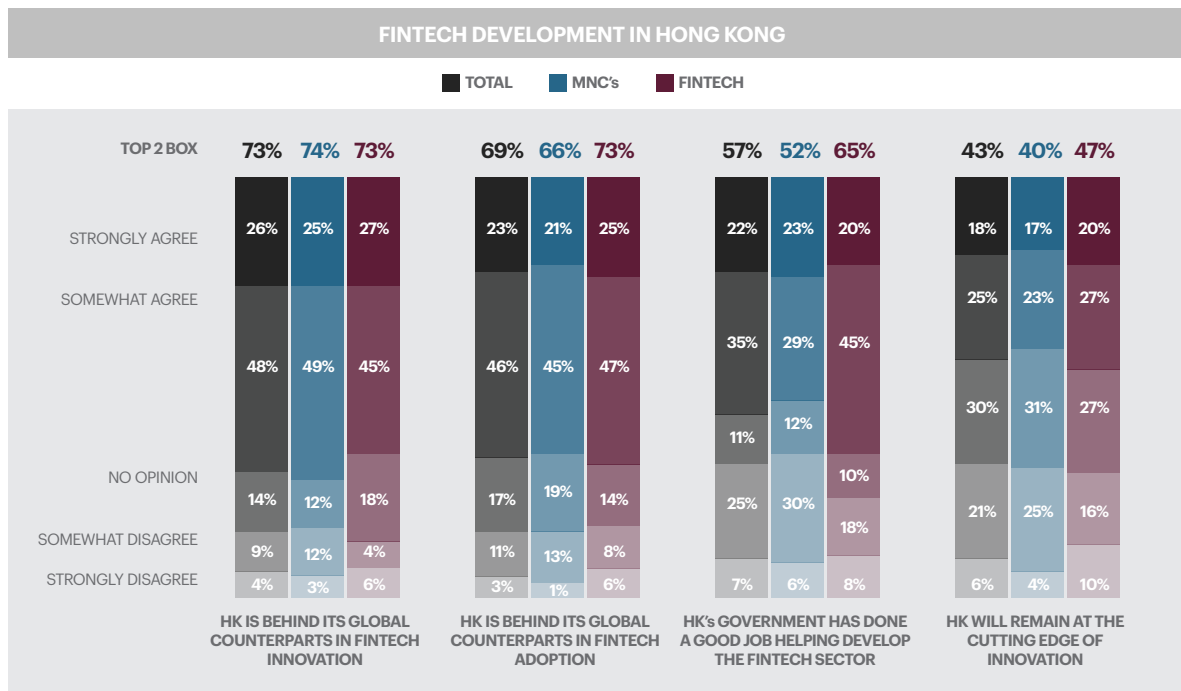
STATE OF PLAY HONG KONG'S CURRENT FINTECH LANDSCAPE AND TRENDS

Hong Kong is behind its global counterparts in fintech innovation and adoption, according to the majority of respondents we surveyed on the current trends and needs of Hong Kong's fintech sector. Conducted in August 2020, the survey covered 128 respondents – with a 60/40 split between multinational financial institutions (MNC FIs) and fintech-focused businesses located in Hong Kong.

Asked whether Hong Kong is behind in fintech innovation, 73 percent of all respondents either somewhat or strongly agreed. And 63 percent believed that Hong Kong is behind in fintech adoption. Only 43 percent believed that given its current trajectory, Hong Kong would remain at the cutting edge of innovation.

Figure 1: Is Hong Kong behind in fintech innovation and adoption?

7 in 10 organisations think that HK is behind in fintech innovation and adoption; this sentiment is stronger amongst Fintech companies



Source: Accenture Survey

The perception that Hong Kong is behind other global financial and technology hubs on innovation both in fintech and technology in general is widespread. Within Asia, Hong Kong is seen as having lost ground to Shenzhen, home to Tencent and Huawei, and Singapore, which has arguably nurtured a much more vibrant technology start-up ecosystem.¹ In 2019, the value of fintech investments in Singapore more than doubled year-on-year to US\$861 million across 108 deals, while that in Hong Kong nearly doubled to US\$374 million across 25 deals.²

As for adoption, there is a lingering perception that Hongkongers are more wary of fintech, based largely on the city's slow take-up of mobile payments. But that is partially due to the early and mass adoption of the convenient Octopus pre-paid wallet, used by over 95 percent of the city's population aged 15 to 64,³ as well as the lack of urgency among the city's well-entrenched incumbent MNC FIs to offer their customers fintech products.⁴

Recent headwinds

Of late, US-China trade tensions seem to be exerting a significant drag on the fintech sector (see figure 2). A slim majority of survey respondents, 51 percent, said US-China relations were having a moderate to major negative impact on overall adoption of fintech solutions in the city. The same proportion said it was having a negative impact on the availability of fintech talent in Hong Kong. US-China trade tensions are therefore regarded as more of a hindrance to fintech adoption in Hong Kong than the Covid-19 pandemic (see box below).

1. George Hammond and Mercedes Ruehl, "Why Hong Kong is failing to produce more tech start-ups", Financial Times, 6th February, 2020: <https://www.ft.com/content/458bc9d0-3e79-11ea-a01a-bae547046735>

2. Claudia Chong, "Fintech investment in Singapore more than doubled in 2019: Accenture", The Business Times, 20th February, 2020: <https://www.businesstimes.com.sg/garage/fintech-investment-in-singapore-more-than-doubled-in-2019-accenture>

3. Octopus Holdings Limited: <http://www.octopus.com.hk/en/corporate/about-octopus/profile/services/index.html>

4. Accenture Consulting, "Success Virtually Assured?", September 2019: https://www.accenture.com/_acnmedia/pdf-109/accenture-success-virtually-assured.pdf

Figure 2: Areas seeing largest negative impact from US-China trade tensions (all respondents)

How do you think trade tensions between US and China (including imposition of sanctions on technology transfer) have affected the following:	Major negative impact	Moderate negative impact	Total seeing negative impact
=1. The availability of fintech talent in Hong Kong	18%	33%	51%
=1. Overall adoption of fintech solutions in Hong Kong in general	18%	33%	51%
3. Adoption of fintech solutions for onboarding and compliance (e.g KYC, AML) in Hong Kong in general	13%	36%	49%
4. Regulations in Hong Kong governing fintech	15%	33%	48%
5. Your company's adoption of fintech solutions	10%	34%	44%
=6. Your company's development of fintech innovations or initiatives	16%	26%	42%
=6. Adoption of fintech solutions for payment in Hong Kong in general	12%	30%	42%

Source: Accenture Survey

Covid-19 could provide an impetus to accelerate fintech innovation and adoption in HK

The Covid-19 pandemic is tipped to be a game-changer for digital financial services globally as it accelerates fintech adoption and innovation.⁵ In Hong Kong, however, although 39 percent of the multinational financial institutions and fintechs we surveyed rated Covid-19 as a positive for overall adoption of fintech solutions, 43 percent saw it as a negative, and 18 percent said it would have no impact (see figure 3).

Most significantly, half of all respondents said the pandemic was either a moderate or major negative for the development of fintech innovations or initiatives, presumably through its imposition of funding and budgetary constraints, and the detrimental effect on the availability of fintech talent in the city. The latter concern was highlighted by 48 percent of respondents.

Both the funding and talent issues can be addressed. The Hong Kong government is in the process of setting up a HK\$22 billion (US\$2.8 billion) private equity fund dubbed the Hong Kong Growth Portfolio.⁶ Akin to a sovereign wealth fund, the new fund will use 10 percent of the government's Future Fund to invest in Hong Kong-specific projects aimed at boosting the city's competitiveness in financial services, commerce, aviation, logistics and innovation. The fintech sector will no doubt be a major beneficiary.

5. Ulric Eriksson von Allmen, Purva Khara, Sumiko Ogawa and Ratna Sahay, "How COVID-19 is rapidly evolving digital financial inclusion", World Economic Forum, 6th July, 2020: <https://www.weforum.org/agenda/2020/07/digital-financial-inclusion-covid19>

6. Denise Tsang, "Selection of fund managers to help run Hong Kong's new US\$2.8 billion investment vehicle to begin in year's second half, Paul Chan says", South China Morning Post, 12th June, 2020: <https://www.scmp.com/news/hong-kong/hong-kong-economy/article/3088870/selection-fund-managers-help-run-hong-kongs-new>

Figure 3: Impact of Covid-19 on various areas (all respondents, ranked by total negative impact)

How do you think the Covid-19 pandemic has affected the following:	Major negative impact	Moderate negative impact	No impact	Moderate positive impact	Major positive impact
Your company's development of fintech innovations or initiatives	13%	37%	20%	23%	8%
The availability of fintech talent in Hong Kong	10%	38%	27%	19%	6%
Your company's adoption of fintech solutions	14%	32%	23%	22%	9%
Overall adoption of fintech solutions in Hong Kong in general	16%	27%	18%	34%	5%
Regulations in Hong Kong governing fintech	12%	30%	30%	23%	5%
Adoption of fintech solutions for payment in Hong Kong in general	12%	30%	25%	24%	9%
Adoption of fintech solutions for onboarding and compliance (e.g KYC, AML) in Hong Kong in general	12%	26%	31%	20%	11%

Source: Accenture Survey

Accelerating innovation and adoption

When asked what Hong Kong, needed most attention to support the adoption of fintech innovation, the top three urgent priorities highlighted by respondents were broader adoption of cutting-edge technology, the availability of talent and skills development, and a greater level of entrepreneurialism or willingness to take risks (see figure 4). There was some divergence between MNC FIs and fintechs, with the former especially wanting to see broader adoption of cutting-edge technology in general (40 percent) and a unified KYC utility (34 percent), whereas fintechs were relatively more interested in better data protection laws (29 percent).

Figure 4: Areas most in need of attention in Hong Kong to help adoption of fintech innovations

Total Respondents	% selecting as urgent need / top priority*
1. Broader adoption of cutting-edge technology in general (including by consumers)	35%
2. Deeper talent pool/skills development	34%
3. Greater level of entrepreneurialism or willingness to take risks in general	33%
Fintech Respondents	% selecting as urgent need / top priority*
1. Greater level of entrepreneurialism or willingness to take risks in general	33%
2. Better data protection laws	29%
=3. Deeper talent pool/skills development	27%
=3. Broader adoption of cutting-edge technology in general (including by consumers)	27%
MNC Respondents	% selecting as urgent need / top priority*
1. Broader adoption of cutting-edge technology in general (including by consumers)	40%
2. Deeper talent pool/skills development	39%
3. Unified KYC utility	34%

*On a four-point scale (1 = urgent need/top priority, 2 = Moderate need, 3 = Nice to have but not urgent, 4 = No current need)

Source: Accenture Survey

On the issue of broad consumer adoption of technology, last year's Accenture Global Financial Services Consumer Study provides insights on how to segment consumers into four broad personas based on how they perceive and engage with banks and insurers (see figure 5).

Figure 5: Meet the personas:



Pioneers:
Risk takers, tech-savvy and hungry for innovation

Tech savvy and keen to engage with financial providers using mobile devices. Pioneers are hungry for innovation in services and channels. They account for 23% of respondents.



Pragmatists:
Ubiquitous, trusting and channel agnostic

Also making up 23% of the sample, Pragmatists see the technology as a means to an end rather than as a lifelong passion. They are satisfied with the service levels they receive and they expect good value from providers. They are interested in (though a little suspicious of) personalisation.



Sceptics:
Tech-wary, dissatisfied and alienated

Sceptics are the largest group, accounting for 33% of the sample, yet their dissatisfaction with financial providers means they are a challenging persona to engage. More than a third are under 35, making them a long-term opportunity for providers if they can be targeted.



Traditionalists:
Value human touch, tech-avoiders and losing trust

Generally older (55+) than the other personas, Traditionalists show low levels of engagement and satisfaction with their financial services providers. They are the smallest group from our consumer survey, comprising 21% of respondents.

Pioneers	Pragmatists	Sceptics	Traditionalists
<ul style="list-style-type: none"> - Tech savvy and keen to engage with financial providers using mobile devices - Pioneers are hungry for innovation in services and channels 	<ul style="list-style-type: none"> - Pragmatists see technology as a means to an end rather than as a lifelong passion - They are satisfied with the service levels they receive, and they expect good value from providers - They are interested in personalisation 	<ul style="list-style-type: none"> - Their dissatisfaction with financial providers means they are a challenging persona to engage - More than a third are under 35, making them a long-term opportunity for providers if they can be targeted 	<ul style="list-style-type: none"> - Generally older (55+) than the other personas - Traditionalists show low levels of engagement and satisfaction with their financial services providers

Of the consumers surveyed in various major global markets, those in mainland China were amongst the most likely to be classified as pioneers, who are tech-savvy and hungry for innovation. In China, nearly half of all consumers were identified as pioneers, compared to only 18 percent in Hong Kong.

But China is a bit of an outlier because of its transformational experience with fintech, whereby the advent of mobile payments enabled the 'leap-frogging' of the country's underdeveloped payments infrastructure and low credit card penetration. Compared to other developed markets with strong fintech adoption, including Singapore and the United Kingdom, Hong Kong does not lag far behind. The city does have a relatively large share of sceptics (59 percent), however, referring to consumers who are tech-wary, dissatisfied and alienated.

Figure 6: Personas by market (% of total)

	Pioneers	Pragmatists	Sceptics	Traditionalists
China	48%	14%	35%	2%
Hong Kong	18%	12%	59%	11%
Singapore	19%	19%	52%	9%
United Kingdom	16%	24%	23%	37%
United States	21%	28%	16%	35%
Global	23%	23%	33%	21%

Source: 2019 Accenture Global Financial Services Consumer Study

The important point about sceptics is that they can be won over – unlike traditionalists, who are unlikely ever to embrace fintech. To convert sceptics, it is imperative that the value of fintech offerings be clearly demonstrated to them, and all data, security and privacy issues be handled with utmost care.

In short, to stay relevant and win loyalty in a digital economy, banks and insurers should harness consumer data to deliver a hyper-relevant, highly convenient and trustworthy customer experience.⁷

The tide of widespread fintech adoption in Hong Kong does seem to be turning. As of January 2020, half the city's population had signed up for the Faster Payment System (FPS), first introduced by the Hong Kong Monetary Authority (HKMA) in September 2018.⁸ Anyone can sign up to the electronic interbank payment system with their mobile phone number or email address and transfer money between different bank accounts, and also make payments at retail and dining outlets using QR codes on their smartphones.

Given Hong Kong's unique and substantial fintech natural advantages (discussed in the following section), and with the implementation of appropriate regulatory and government support, (outlined in section three), there is every chance that Hong Kong has the potential to outdo the industry's expectations on fintech adoption and innovation.

⁷ 2019 Accenture Global Financial Services Consumer Study

⁸ Enoch Yiu, "Hong Kong hits major fintech milestone as half the city's population signs up for HKMA's Faster Payment System", South China Morning Post, 13th January, 2020: <https://www.scmp.com/business/banking-finance/article/3045893/hong-kong-hits-major-fintech-milestone-half-citys>

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HONG KONG'S FINTECH OPPORTUNITIES AND NEEDS



Hong Kong's status as the most open and international city in China and its unique economic, social and legal positioning confer substantial fintech opportunities. The city benefits from supportive policies not only from the local government, as detailed in section three, but also the central government in Beijing. Of the latter, the Greater Bay Area (GBA) development plan and the Belt and Road Initiative (BRI) are the most prominent and significant.

Greater Bay Area prospects

The GBA initiative is set to create closer integration between Hong Kong, Macau and nine economically important cities in China's Guangdong province. In particular, the outline development plan calls for the consolidation and enhancement of Hong Kong's status as an international financial centre and strengthening its role as a global offshore Renminbi (RMB) business hub and international asset and risk management centre.⁹

In fact, in a move towards more rapid integration, state media announced in mid-August that China will launch RMB digital currency pilots in the GBA – in addition to pilots in the Beijing-Tianjin-Hebei and Yangtze River Delta regions.¹⁰

As discussed in our recent overview of the Asia-Pacific fintech landscape, “The Win-Win Proposition,” rather than asking what the initiative can do for Hong Kong, a better question might be “how can Hong Kong fintech firms help the Greater Bay Area open up?” By adopting that perspective, local fintech innovators could help Hong Kong reinvigorate its traditional role as the major facilitator of China's trade flows.¹¹

The overwhelming majority of MNC FIs and fintechs we surveyed said they had plans to tap into the GBA development plan, with 55 percent of respondents actively investing to develop relevant offerings (see figure 7). Only 5 percent said they had no plans to explore GBA opportunities.

9. Hong Kong Government, “Greater Bay Area Policy Areas”: <https://www.bayarea.gov.hk/en/opportunities/mainpoints-finance.html>

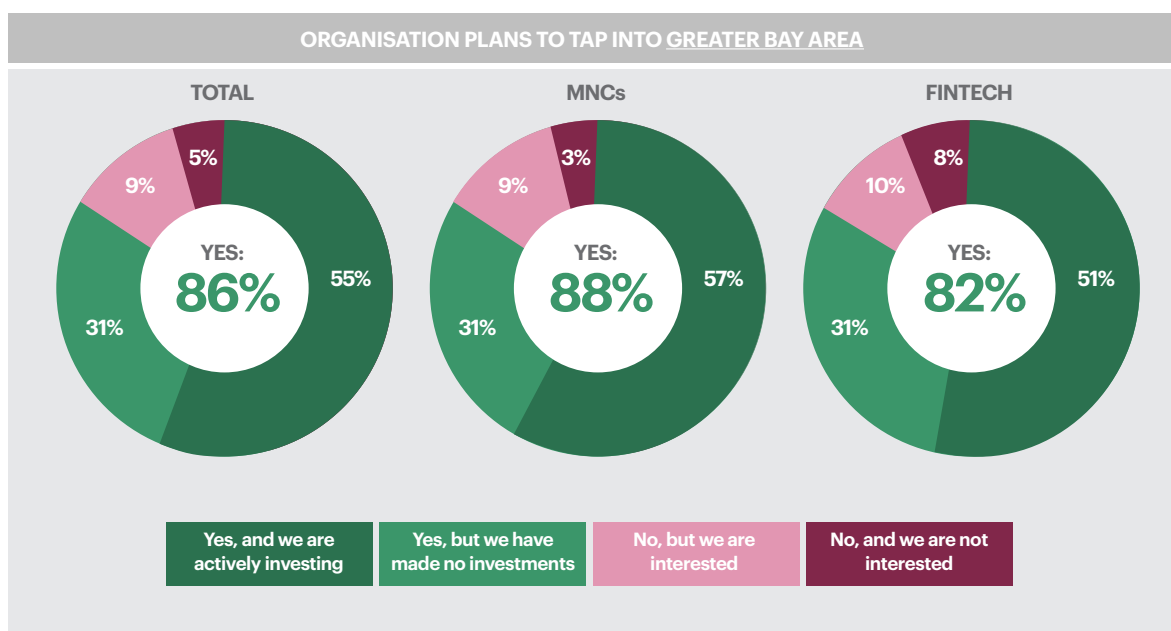
10. The Standard, ‘Yuan digital currency pilots to involve Greater Bay’, 14th August, 2020:

<https://www.thestandard.com.hk/breaking-news/section/3/153159/Yuan%C2%A0digital-currency-pilots-to-involve-Greater-Bay>

11. Fergus Gordon and Stuart Maltas, “Win-win: Driving fintech forces in Asia-Pacific”, Accenture, 18th March, 2019: <https://www.accenture.com/hk-en/insights/financial-services/win-win-asia-pacific-fintech>

Figure 7: Do you plan to tap into opportunities arising from the Greater Bay Area development plan?

8 in 10 organisations have plans to invest into the Guangdong - Hong Kong - Macao Greater Bay Area region and development plan; more so with MNC's



Respondents identified asset/wealth management, retail payments and B2B payments as the top three opportunities from the GBA plan (see figure 8).

Optimism about asset management stems partly from the June 2020 joint announcement by the HKMA, the People's Bank of China (PBoC) and the Monetary Authority of Macao of the launch of a cross-boundary Wealth Management Connect pilot scheme designed to promote the GBA as a wealth management hub.¹² Under the pilot scheme, Hong Kong and Macau residents can buy onshore wealth management products sold by Chinese banks, while bay area residents can invest in products sold by Hong Kong and Macau banks. Still, several practical details have yet to be worked out, such as the list of products covered and investment quota size, as well as how the scheme will function considering China's capital controls.¹³

Aside from the top-three common opportunities, fintech respondents also see considerable opportunities in commercial banking for mid-sized to large corporates and trade finance. To this end, one fintech respondent called on the government to "establish a standardised industry-wide trade finance blockchain platform in the Greater Bay Area." Meanwhile, MNC FIs singled out retail banking as an area with strong potential under the GBA plan.

¹² HKMA, "HKMA welcomes Wealth Management Connect", 29th June, 2020: <https://www.hkma.gov.hk/eng/news-and-media/press-releases/2020/06/20200629-5/>

¹³ Alison Tudor-Ackroyd and Enoch Yiu "How China's Greater Bay Area wealth management connect could help millionaires move their money across borders", South China Morning Post, 9th July, 2020: <https://www.scmp.com/business/banking-finance/article/3092326/how-chinas-greater-bay-area-wealth-management-connect>

Figure 8: Opportunities from the GBA for fintech innovators in Hong Kong

Total respondents	% selecting as a top-three opportunity area
1. Asset management / wealth management	29%
2. Retail payments	27%
3. B2B payments	27%
Fintech respondents	% selecting as a top-three opportunity area
1. B2B payments	29%
2. Commercial banking for mid-sized/large corporates	29%
3. Trade finance	29%
MNC respondents	% selecting as a top-three opportunity area
1. Asset management / wealth management	32%
2. Retail payments	30%
3. Retail banking	27%

Source: Accenture Survey

To help realise GBA opportunities, both MNC FIs and fintechs highlighted a cross-regional system for technology investment and financing as a priority (see figure 9). MNC FIs placed relatively more importance on enhanced supervision, cooperation and information exchange on anti-money laundering (AML), counter terrorist financing (CTF) and anti-tax evasion, with 42 percent ranking it as a top three concern, while it was less of an issue for fintechs, with only 24 percent ranking it the same.

From January 2020, all cryptocurrency businesses and exchanges based in Singapore were brought under the city-state's current anti-money laundering and counter terrorist financing rules when the Monetary Authority of Singapore's new Payment Services Act came into effect, setting up a framework for the regulation of payment-related activities in the country.¹⁴

Fintechs were much more concerned about supporting outreach between investors and fintech innovators across the GBA (39 percent) and outreach between Hong Kong firms and local governments in the region (33 percent). As one fintech respondent commented, "[Hong Kong should] strengthen cooperation with other core cities in the Guangdong-Hong Kong-Macau Greater Bay Area to jointly build a world-class financial technology centre."

14. Stephen O'Neal, "Singapore AML Framework Can Attract Crypto Businesses, Not Chase It Away", 6th February, 2020: <https://cointelegraph.com/news/singapore-aml-framework-can-attract-crypto-businesses-not-chase-it-away>

Figure 9: Measures by Hong Kong government to help realise GBA opportunities

Total respondents	% selecting as a top-three initiative that would help realise opportunities
1. Develop a cross-regional system for technology investment and financing	42%
2. Harmonise or co-ordinate regulatory approach in specific sectors with other regional authorities	34%
3. Enhance mechanisms for supervision, cooperation and information exchange relating to anti money laundering, counter terrorist financing and anti-tax evasion	34%
Fintech respondents	% selecting as a top-three initiative that would help realise opportunities
1. Develop a cross-regional system for technology investment and financing	41%
2. Co-ordinate outreach between funding sources and fintech innovators in different regions	39%
=3. Help co-ordinate outreach between funding sources and fintech innovators in different regions of the Greater Bay Area	33%
=3. Harmonise or co-ordinate regulatory approach in specific sectors with other regional authorities	33%
MNC respondents	% selecting as a top-three initiative that would help realise opportunities
1. Develop a cross-regional system for technology investment and financing	43%
2. Enhance mechanisms for supervision, cooperation and information exchange relating to anti money laundering, counter terrorist financing and anti-tax evasion	42%
3. Harmonise or co-ordinate regulatory approach in specific sectors with other regional authorities	35%

(Percentage of respondents ranking among top three most useful)

Source: Accenture Survey

Belt & Road Initiative opportunities

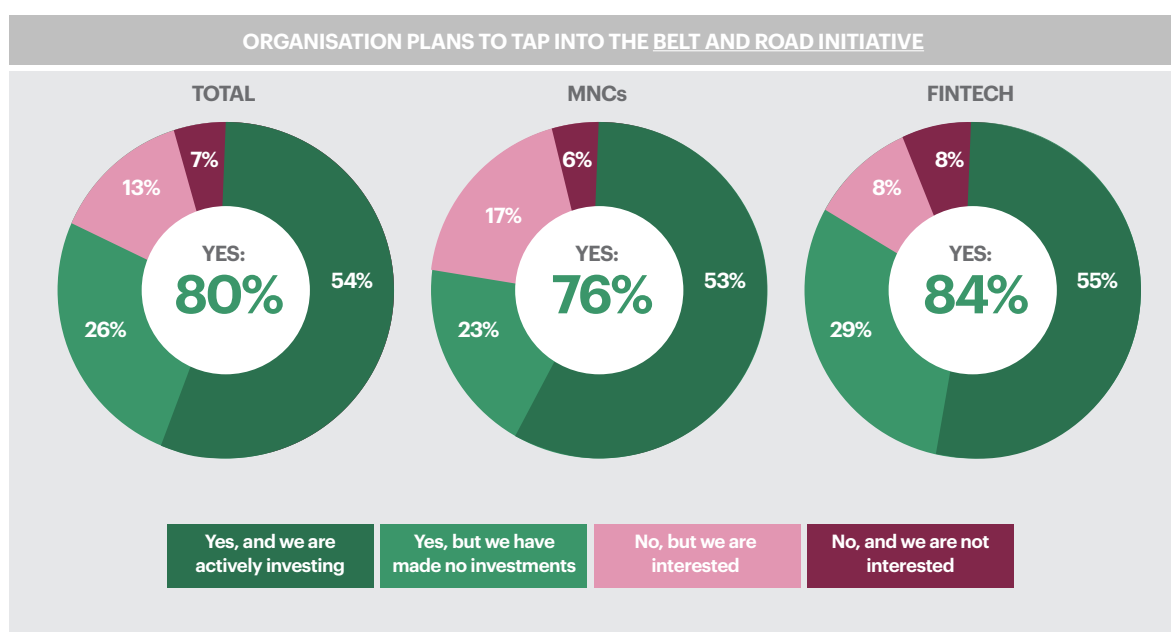
Hong Kong has long sought to position itself as an ideal base from which Chinese enterprises can launch global expansion plans, and as a stepping-stone for international companies seeking to enter mainland China's market. The BRI has the potential to substantially expand the scope of Hong Kong's role as gateway into and out of mainland China.

The BRI's remit is to promote cooperation among countries and regions in various areas, including facilitating unimpeded trade and financial integration. As the only major international financial centre in China with free flows of capital, Hong Kong has a specific role to play within the BRI in international project financing and offshore Renminbi (RMB) business.¹⁵ As one of the region's top asset management centres, Hong Kong can meet the demand for wealth management services generated by BRI projects. There is also strong potential for Hong Kong to become the risk management centre for state-owned enterprises investing in major BRI projects and looking to expand their international footprints.¹⁶

Interest in tapping into BRI opportunities ran high among survey respondents (80 percent), with 54 percent actively investing in them (see figure 10). Only 7 percent had no interest in exploring relevant opportunities.

Figure 10: Do you plan to tap into opportunities arising from the Belt and Road Initiative?

8 in 10 organisations have plans to tap into the Belt and Road Initiative; more so with Fintech companies



Source: Accenture Survey

Trade finance was, perhaps unsurprisingly, seen as the biggest opportunity created by BRI across the board, followed by B2B payments (see figure 11). Notably, fintechs see most opportunities from commercial banking for mid-sized/large corporates (31 percent), while MNCs see significant opportunities from insurance/reinsurance (25 percent).

15. Belt and Road Initiative - Hong Kong: <https://www.beltandroad.gov.hk/work.html>

16. From Hong Kong Chief Executive Carrie Lam's address at the Asian Insurance Forum on 10th December, 2019: <https://www.scmp.com/presented/business/topics/tech-gba-pave-new-way-insurers/article/3042737/experts-discuss-how>

Figure 11: Top three opportunities from BRI

Total respondents	% selecting as a top-three opportunity area
1. Trade finance	30%
2. B2B payments	26%
3. Middle/back office services (reconciliation, settlement, custody etc)	24%

Fintech respondents	% selecting as a top-three opportunity area
1. Commercial banking for mid-sized/large corporates	31%
2. Trade finance	29%
3. B2B payments	27%

MNC respondents	% selecting as a top-three opportunity area
1. Trade finance	30%
2. Middle/back office services (reconciliation, settlement, custody etc)	26%
=3. B2B payments	25%
=3. Insurance / reinsurance	25%

Respondents pinpointed the development of a multinational system for technology investment and financing as the most pressing government initiative to help realise BRI opportunities (see figure 12), with 41 percent selecting it as a top-three most useful measure. The enhancement of supervision, cooperation and information exchange on AML/CFT and anti-tax evasion also scored highly. And both MNC FIs and fintechs are quite keen to see the government help coordinate outreach between firms in Hong Kong and local governments in BRI countries.

Figure 12: Measures by Hong Kong government to help realise BRI opportunities

Total respondents	% selecting as a top-three initiative that would help realise opportunities
1. Develop a multinational system for technology investment and financing	41%
2. Enhance mechanisms for supervision, cooperation and information exchange relating to anit money laundering, counter terrorist financing and anti-tax evasion	38%
=3. Provide more information on specific financial-industry initiatives related to the BRI	33%
=3. Help co-ordinate outreach between firms in Hong Kong and leading industry players in other BRI countries	33%
Fintech respondents	% selecting as a top-three initiative that would help realise opportunities
1. Develop a multinational system for technology investment and financing	39%
2. Help co-ordinate outreach between firms in Hong Kong and leading industry players in other BRI countries	35%
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1. Enhance mechanisms for supervision, cooperation and information exchange relating to anit money laundering, counter terrorist financing and anti-tax evasion	43%
2. Develop a multinational system for technology investment and financing	42%
3. Help co-ordinate outreach between firms in Hong Kong and leading industry players in other BRI countries	35%

Source: Accenture Survey

Technologies with high-impact potential

The four key and interrelated technologies driving fintech, collectively referred to as ABCD, are artificial intelligence (AI), blockchain, cloud computing and data analytics. These, along with enhanced application programming interfaces (APIs), robotic process automation (RPA) and security and authentication technologies have potential to generate high impact over the medium term in improving customer experience and revenues, and reducing costs and risks (see figure 13). Advanced data analytics and enhanced APIs in particular are seen as having a major impact across all these areas.

Figure 13: Technologies with greatest medium-term high-impact potential in various areas (all respondents)

Impact area	Rank	Technology	Percent respondents who expect high impact in next three years
Customer experience	1	Enhanced application programming interfaces (APIs)	47%
	2	Advanced data analytics	46%
	3	Soft Token (authentication)	41%
Revenues	1	Advanced data analytics	48%
	2	Enhanced application programming interfaces (APIs)	45%
	3	Natural language processing (e.g. Chatbots)	38%
Cost reduction	1	Artificial intelligence in general	43%
	2	Enhanced application programming interfaces (APIs)	41%
	3	Advanced data analytics	39%
Risk	1	Advanced data analytics	41%
	2	Artificial intelligence in general	41%
	3	Soft Token (authentication)	38%

* Ranked from "high, medium, low" impact in each area

Source: Accenture Survey

In terms of improving customer experience, MNC FIs are relatively more optimistic about the enhanced APIs (53 percent) that support open banking initiatives than fintechs (37 percent).

Open Banking APIs offer a range of benefits to MNC FIs, from enhancing the services they offer to increasing their revenue from new channels. Our previous survey on the readiness for Open Banking in Hong Kong found that the majority of locals were willing to share their data with third-party providers for customised offers such as a better mortgage or higher deposit rates, while only 31 percent said they were unwilling to share data. Hongkongers are much more willing to share data than those surveyed in Australia and the UK, 66 percent and 69 percent of whom, respectively, were unwilling to share data.¹⁷

In our new survey, MNC FIs were also much more optimistic about AI in general than fintechs (47 percent vs. 27 percent), possibly because they not only have sufficient resources to implement it, but also the scale to derive substantial benefits from it. The use of AI among banks in Hong Kong has been expanding, automating key functions across the front, middle and back offices.¹⁸ It is used increasingly in tasks such as credit assessments and fraud detection, and to improve the customer experience with services such as remote onboarding for account opening and 24/7 handling of customer enquiries using chatbots.

Internationally, there are several examples of fintechs using AI to attain lean operations, improve compliance, and increase customer engagement. Take WeBank's AI-powered chatbot, which reportedly can handle 98 percent of customer queries.¹⁹ Or Monzo's use of a machine learning system to flag potentially fraudulent transactions, reducing pre-paid card fraud to 0.1 percent and the false positive rate to 25 percent.²⁰

Beyond the top three technologies, both MNC FIs (40 percent) and fintechs (37 percent) also see greater scope for regulatory technology (regtech) and compliance technology to help their customers. Of course, some of the most significant recent innovations in regtech and compliance technology are driven by data analytics and AI.²¹ AI is also playing an increasing role in robotic process automation (RPA), which 40 percent of MNC FIs identified as having medium-term high-impact potential. The Covid-19 pandemic appears to have increased the focus on developing and implementing more sophisticated RPA systems and chatbots, which pave the way for reduced interaction between staff and customers.²²

MNC FIs also see significant scope (43 percent) for RPA to control costs. They also expect far greater impact from blockchain/distributed ledger technology (43 percent) than do fintechs (24 percent). Hong Kong's most high-profile blockchain-based fintech initiative to date is arguably eTradeConnect, a trade finance platform fully funded by a consortium of major banks in the city and launched in October 2018.²³

And for reducing risk, in addition to advanced data analytics, AI in general, and soft-token authentication, a sizeable proportion of MNCs (40 percent) also see a big impact deriving from enhanced APIs, presumably by allowing for the gathering and analysis of data from a broad range of sources in conducting compliance due diligence.

Regulatory and government support play an integral role in hastening the adoption of the above high-impact technologies and realising the opportunities presented by the BRI and GBA development plan. Hong Kong is rated highly in this regard. However, much more can be done to realise the city's potential as a leading digital financial services regulator.

17. Accenture, "The Time is Now", January 2019:

https://www.accenture.com/_acnmedia/pdf-99/accenture-time-is-now-open-banking-hong-kong.pdf

18. Hong Kong Institute for Monetary and Financial Research, "Artificial Intelligence in Banking: The changing landscape in compliance and supervision", August 2020: <https://www.aof.org.hk/docs/default-source/hkimr/applied-research-report/airep.pdf>

19. Eustance Huang, "China's first web-only bank hopes A.I. and robots can improve customer service", 28th November, 2018

20. "Monzo decreased pre-paid card fraud to 0.1% and false positive rate to 25% using machine learning", Best Practice AI

21. Matt High, "How AI and machine learning are driving RegTech innovation", FinTech Magazine, 29th June, 2020:

<https://www.fintechmagazine.com/fintech/how-ai-and-machine-learning-are-driving-regtech-innovation>

22. Andy Chun, "How the coronavirus is turbocharging Hong Kong's fintech revolution", South China Morning Post, 13th July, 2020:

<https://www.scmp.com/comment/opinion/article/3092803/how-coronavirus-turbocharging-hong-kongs-fintech-revolution>

23. Hong Kong Monetary Authority, Trade Finance:

<https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/fintech/research-and-applications/trade-finance/>

THE ROLE OF REGULATORY AND GOVERNMENT SUPPORT



Hong Kong's fintech ecosystem includes more than 600 start-ups and benefits from ample investment and accelerator programmes, a supportive government and friendly regulatory environment.²⁴ As one fintech respondent to our survey commented, "The regulatory system has reached the international level, the regulations are clear, efficient and reliable, and keep pace with the times."

Fintech businesses in the US are subject to a myriad of federal and state licensing or registration requirements depending on their activities. The number of potentially applicable US regulations to any single fintech firm has been criticised as a hindrance to the sector.²⁵

Compared to five other financial and technology hubs, including New York, Singapore, London, Silicon Valley and Shanghai, Hong Kong's regulatory environment was ranked best by the highest proportion of respondents, at 38 percent, and in the top three by 62 percent, in line with New York and ahead of Singapore (51 percent - see figure 14). Shanghai trailed the pack with only 36 percent of respondents awarding it a top three ranking. And there was some divergence between MNC FIs, who ranked New York ahead of Hong Kong; and local fintechs, who believed Hong Kong fared best in terms of regulatory environment.

China is shifting from its previous "light touch" regulatory approach to the fintech sector towards a more hands-on one, as it seeks to contain systemic risk while hastening the industry's development.²⁶ Fintech was described by the People's Bank of China as a "new engine" to hasten and upgrade the development of the country's financial sector.²⁷

24. Fintech News Hong Kong, "A Review of Hong Kong's Fintech Developments in 2019", 10th January, 2020: <https://fintechnews.hk/10762/various/a-review-of-hong-kongs-fintech-developments-in-2019/>

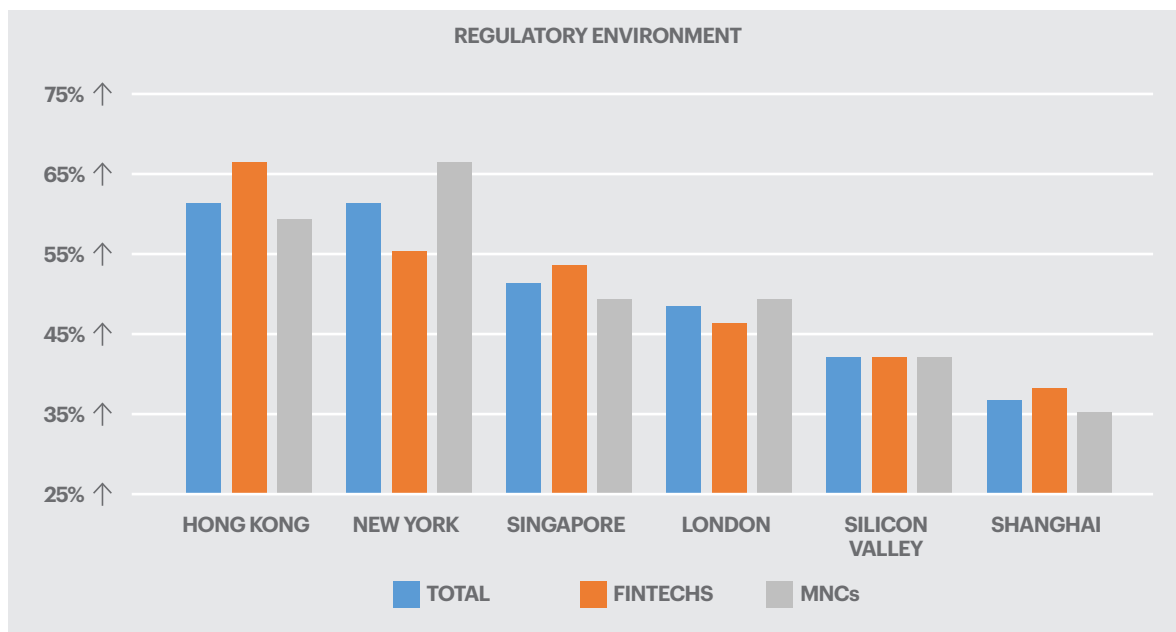
25. Reena Agrawal Sahni, "USA: Fintech Laws and Regulations: 2020", Shearman & Sterling, 16th June, 2020: <https://iclg.com/practice-areas/fintech-laws-and-regulations/usa>

26. Hong Kong Research Office of Legislative Council Secretariat, "Regulation of financial technology in selected places", May 2019:

<https://www.legco.gov.hk/research-publications/english/1819in14-regulation-of-financial-technology-in-selected-places-20190528-e.pdf>

27. Fintech News Hong Kong, "China Lays Out 6 Key Fintech Focus for the Next 3 Years", 6th September, 2019: <https://fintechnews.hk/10032/fintechchina/china-fintech-plan/>

**Figure 14: Financial and technology hubs ranked by regulatory environment
(Percentage of respondents awarding top 3 ranking)**



Source: Accenture Survey

Although Hong Kong is clearly perceived as having fintech ‘friendly’ regulations, it could perhaps benefit from more clarity, and a definitive, standards-driven approach to regulations, as opposed to the current system of suggested guidance. Moreover, the HKMA could further improve the relative standing of the city’s regulatory environment by becoming a true digital regulator (see below).

Also, financial services in Hong Kong generally sees the HKMA leading the way, with other regulatory bodies following. This disconnect can create delays and uncertainty. In contrast, all regulations in Singapore stems from the Monetary Authority of Singapore, with changes across the financial sector proceeding in lockstep. Hong Kong could consider enacting future changes in a similarly unified and coordinated manner.

Singapore’s Payment Services Act came into effect in January 2020, serving to unify and streamline the regulatory requirements for various payment services, including electronic payments and cryptocurrency dealing and exchange services. The Act aims to promote innovation by regulating according to each activity and the risk it carries, rather than by each provider.²⁸

²⁸ Stefania Palma, "Singapore expands fintech to stay ahead of other financial centres", Financial Times, 24th September, 2019: <https://www.ft.com/content/e7000952-b8fa-11e9-8a88-aa6628ac896c>

Asked which regulatory initiatives in Hong Kong have had the most impact on promoting fintech growth, 68 percent of all respondents singled out the FPS as having a large or major, game-changing impact (see figure 15). The expanded exit opportunities for fintech startups created by new initial public offering (IPO) rules allowing the listing of firms with differential voting rights, launched in April 2018, was identified by 64 percent of respondents. Rounding out the top five regulatory initiatives with most impact are the HKMA's FinTech Supervisory Sandbox 2.0 (introduced in September 2017); the eight virtual banking licenses awarded in March 2019; and the Open API Framework for the Hong Kong banking sector, which took effect in July 2018 (see figure 15).

Figure 15: Top 5 regulatory initiatives with most impact on promoting fintech growth

Rank (by total respondents)	Initiative	Date introduced	% total respondents who think it had a "major, game-changing impact" or "large impact" (top 2 of 5-point scale)
1	Faster Payment System	Sept 2018	68%
2	New IPO rules allowing listing of firms with differential voting rights	April 2018	64%
3	HKMA FinTech Supervisory Sandbox 2.0	Sept 2017	60%
4	Virtual banking licences	March 2019	59%
5	Open API Framework for the Hong Kong Banking Sector	July 2018	57%

Source: Accenture Survey

MNC FIs ranked the new IPO rules (68 percent) and FinTech Supervisory Sandbox 2.0 (68 percent) more highly than the FPS (66 percent). Fintechs, on the other hand, viewed the FPS as most important (71 percent), followed by the Open API Framework (59 percent) and new IPO rules (59 percent). They were less interested in the sandbox (49 percent).

The UK was the first country to mandate open banking, in 2018, with the aim of stimulating competition and innovation. Before that, the Financial Conduct Authority set up the world's first sandbox for fintechs in 2016.

Open banking continues to make progress in Hong Kong, with the HKMA launching phase two of its Open API Framework in October 2019.²⁹ In the first phase, 20 retail banks made available 500 APIs, offering mobile and website-based services such as foreign exchange rate information, deposit rate and loan product comparison. In the second phase, the participating banks will gradually launch further Open APIs to process applications for banking products and services. The HKMA is still developing the sector-wide framework for Phase III and IV Open APIs, which involve access to customer data and processing of transactions and are more complex and require greater control.

Building a digital regulator

In our recent series of articles on building a digital monetary authority for a digital age, we discussed how the pace of digitally driven change throughout the financial services industry calls for a review of central banks' and regulators' approach to supervision and policymaking.³⁰

The changes fall into four main areas: (i) new entrants, such as fintechs, that have permanently altered the financial services landscape; (ii) new technology; (iii) heightened and evolving customer demands and expectations; and (iv) the growing sophistication of security threats that requires greater regulation and compliance requirements to ensure financial and economic stability.

In short, central banks and monetary authorities need to become digital regulators to continue to meet their mandate. To make the transformation, develop the necessary capabilities and stay relevant, they must focus on four pillars, underpinned by a strong foundation:

Pillar 1:

Harness the power of data to sharpen their surveillance of risks, strengthen their financial oversight, drive regulatory compliance and boost monetary and financial policymaking

Pillar 2:

Enable and drive innovation internally and externally to promote a vibrant digital economy

Pillar 3:

Drive efficiencies and develop a secure, resilient, future-ready infrastructure for both the central bank and the financial services sector

Pillar 4:

Improve communication and engagement with the industry using more holistic digital services and two-way communications

The Foundation:

The four pillars will not function unless the monetary authority transforms its workforce for a digital future. Additionally, central banks must strengthen their internal delivery capabilities in terms of robust operations, such as leveraging automation and using lean processes—and helping to transition the financial sector's workforce.

²⁹ Hong Kong Monetary Authority: "Open API Framework for the Banking Sector: One year on", 31st July, 2019: <https://www.hkma.gov.hk/eng/news-and-media/press-releases/2019/07/20190731-3>

³⁰ Oliver Reppel, James Hwa Jaan Gan, Rohit Mathew, "Building a Digital Monetary Authority for a Digital Age", Accenture, May 2020: <https://bankingblog.accenture.com/building-digital-monetary-authority-for-digital-age>

Talent and funding must be addressed

Of the areas identified as in need of attention in Hong Kong to help development of fintech initiatives, a deeper talent pool and skills development came first, selected as an urgent or moderate need by 79 percent of respondents. Notably, talent was identified as an urgent or moderate need by only 69 percent of fintechs but 85 percent of MNC FIs. Clearly, talent is by far the most pressing potential bottleneck to the development of fintech solutions at the city's incumbent MNC FIs.

Singapore has various schemes to support local skills development, including salary subsidies, reimbursement of hardware costs for new employees, grants to cover retraining of people over 40, and internships and mentoring opportunities.³¹

Looking at only the most urgent need/top priority, talent was picked by 36 percent of all respondents (see figure 16), followed by greater access to venture capital seed funding, at 34 percent. A greater level of entrepreneurialism or willingness to take risks in general was highlighted by 28 percent, as were better data protection laws. Generally, fintechs selected fewer categories as an urgent/top priority, possibly reflecting greater satisfaction with the local environment than for MNC FIs.

The Israel Innovation Authority awards grants to facilitate collaboration between industry and research institutions across various areas including fintech.³²

³¹Joanna Seow, "Parliament: Govt steps up measures to boost careers of Singaporeans in their 40s and 50s", Straits Times, 4th March, 2020: <https://www.straitstimes.com/politics/measures-to-boost-careers-of-singaporeans-in-their-40s-and-50s>

³²Israel Innovation Authority: <https://innovationisrael.org.il/en/program/applied-support-research-institutes>

Figure 16: Areas most in need of attention in Hong Kong to help development of fintech initiatives

Total respondents	% selecting as urgent need / top priority*
1. Deeper talent pool/skills development	36%
2. Greater access to venture capital seed funding	34%
=3. Greater level of entrepreneurialism or willingness to take risk in general	28%
=3. Better data protection laws	28%
Fintech respondents	% selecting as urgent need / top priority*
=1. Less burdensome regulations	27%
=1. Lower tax rates	27%
=1. Greater level of entrepreneurialism or willingness to take risk in general	27%
=1. Greater access to venture capital seed funding	27%
MNC respondents	% selecting as urgent need / top priority*
1. Deeper talent pool/skills development	45%
2. Greater access to venture capital seed funding	38%
3. Better data protection laws	31%

*On a four-point scale (1 = urgent need/top priority, 2 = Moderate need, 3 = Nice to have but not urgent, 4 = No current need)

Source: Accenture Survey

More broadly on the talent issue, technology companies such as Tencent have complained of a lack of technology talent in Hong Kong,³³ and the latest release of Google Smarter Digital City 3.0 Whitepaper shows that corporates believe there is a 19 percent perceived local talent gap.³⁴ In response, Hong Kong launched its enhanced and newly streamlined Technology Talent Admission Scheme in January 2020 - which was first launched in June 2018 to provide a fast-track arrangement for admitting overseas and mainland Chinese technology talent.³⁵

But Hong Kong could also go further in nurturing homegrown talent. As one MNC FI respondent to our survey put it, "Hong Kong must develop and train her own talents rather than import them from overseas."

Therefore, a more ambitious approach to the talent issue, addressed in our FutureTech-Z Platform proposal, would be to educate Hong Kong's Generation Z at an earlier stage on new technologies and new ways of working (such as agile and design-led thinking) to enable them to bring their vision of the future to life (see figure 17).³⁶

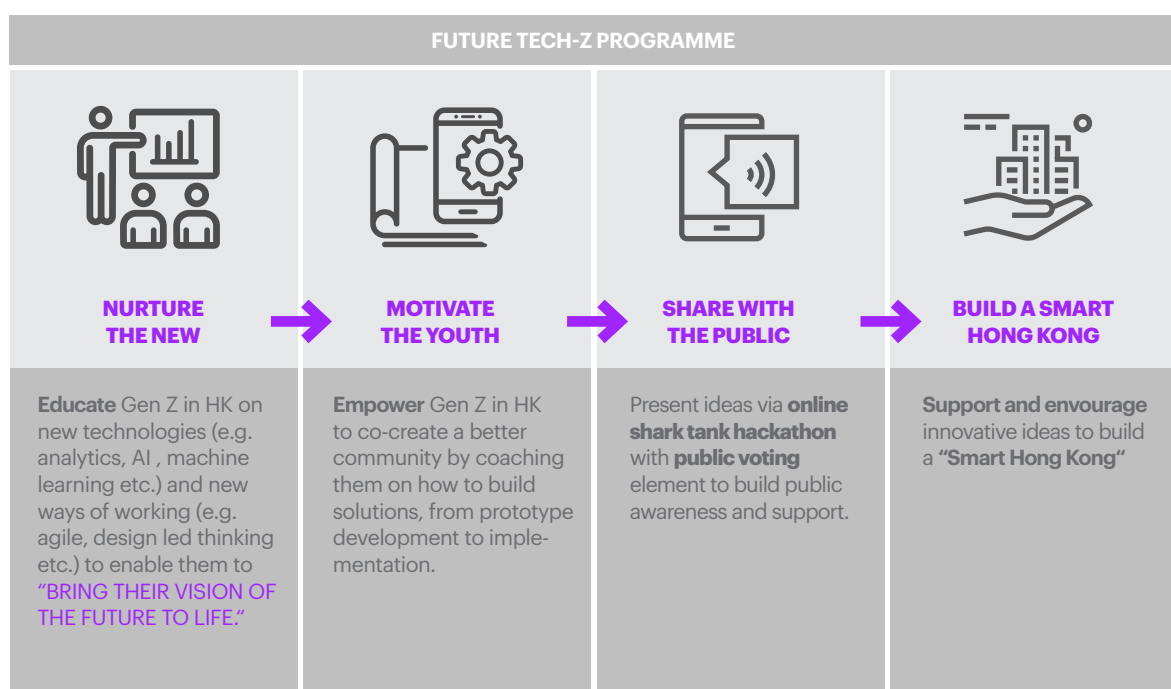
33. Hong Kong Government, "Government launches enhanced Technology Talent Admission Scheme", 30th January, 2020: <https://www.info.gov.hk/gia/general/202001/30/P2020012900480.htm>

34. Accenture, "FutureTech-Z Platform"

35. Hong Kong Government, "Government launches enhanced Technology Talent Admission Scheme", 30th January, 2020: <https://www.info.gov.hk/gia/general/202001/30/P2020012900480.htm>

36. Accenture, "FutureTech-Z Platform"

Figure 17: The FutureTech-Z Programme Overview



Source: Accenture Survey

Hong Kong is small enough and has sufficient resources to pursue such programmes. The city could also be more proactive in putting those resources to use in improving the availability of funding, especially in the critical early stages of new ventures.

Develop the supporting infrastructure

Beyond implementing an appropriate regulatory environment and addressing the talent and funding issues, a variety of supporting infrastructure is needed to help Hong Kong realise its full fintech potential. Schemes, hubs and events have a crucial role to play (see figure 18), especially in enabling greater outreach with other jurisdictions.

To be sure, many existing initiatives have already had a beneficial impact, and continue to be improved. The latest instalment of InvestHK's flagship fintech week (ranked the second-most impactful scheme for promoting fintech growth in Hong Kong), to be held online in November 2020, will feature a fast-track matchmaking programme inviting applicants from around the world to pitch their innovations.³⁷ The winning projects will receive up to US\$1 million in investment commitments from venture capitalists and the Hong Kong government. The HKMA is interested in solutions for digitalising trade finance in particular—with a view toward resolving issues faced by small- to medium-sized enterprises in the city.

36. Georgina Lee, "City pins hopes on 'centrepiece' global matchmaking programme for start-ups, as Hong Kong Fintech Week goes online", South China Morning Post, 11th August, 2020: <https://www.scmp.com/business/companies/article/3096817/city-pins-hopes-centrepiece-global-matchmaking-programme-start>

Figure 18: Top three most effective schemes, hubs and events in promoting fintech growth in Hong Kong

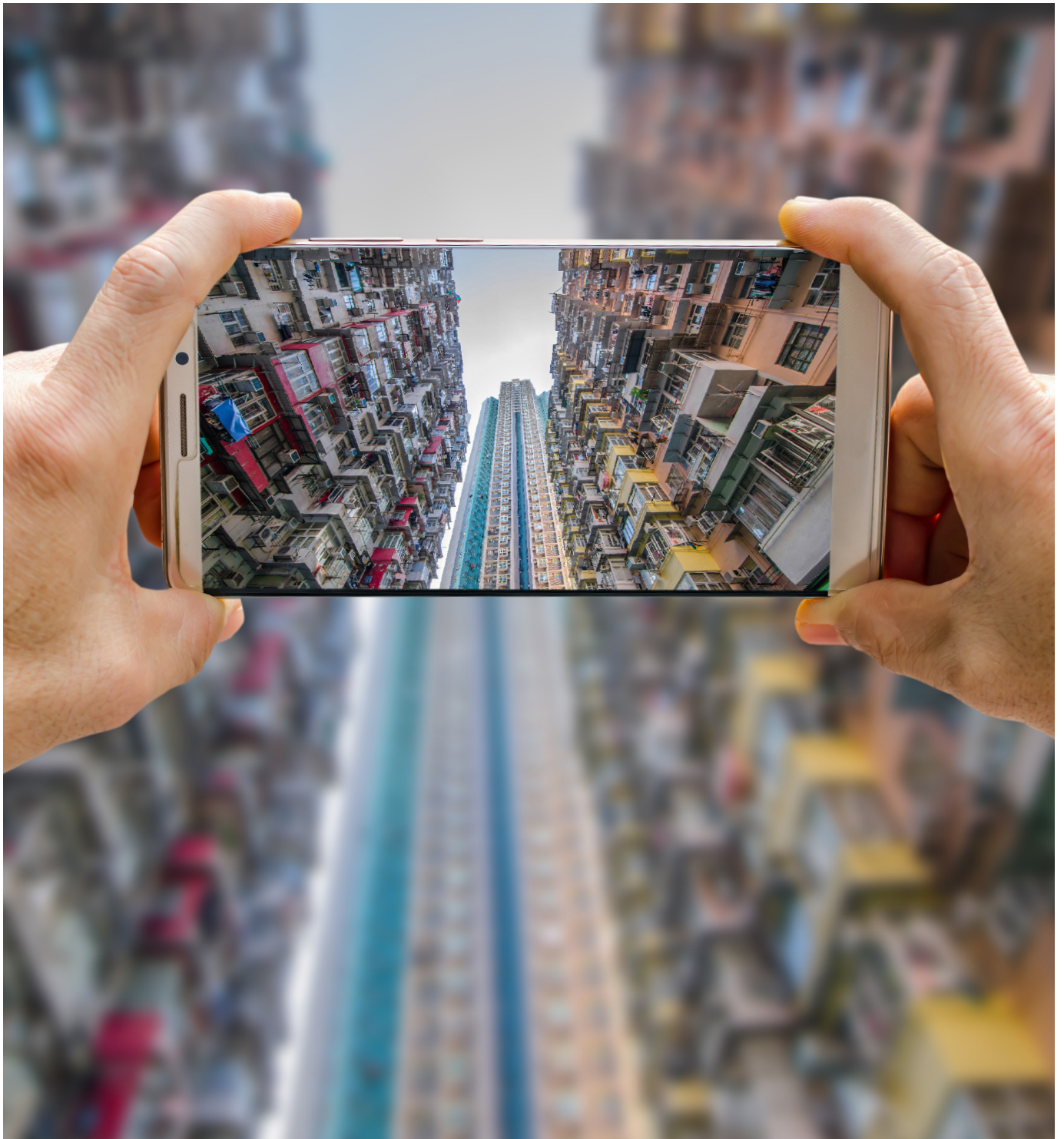
Rank (by total respondents)	Initiative	Date introduced	% total respondents who think it had a “major, game-changing impact” or “large impact” (top 2 of 5-point scale)
1	HKMA/ASTRI Fintech Innovation Hub	Nov 2016	50%
2	Hong Kong Fintech Week	Nov 2019	49%
3	HKMA FinTech Career Accelerator Scheme	Dec 2016	48%

Source: Accenture Survey



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CONCLUSION: RAMPING UP AND REACHING OUT



Hong Kong needs to address three urgent areas to spur fintech innovation and adoption in 'Asia's World City': the broader adoption of cutting-edge technology, talent development, and a greater level of entrepreneurialism. The SAR has significant capacity to tackle these issues with ambitious initiatives to upgrade infrastructure, cultivate homegrown talent and offer greater funding to early-stage start-ups.

More also needs to be done to help Hong Kong's fintechs tap into opportunities beyond the SAR. Hong Kong has long been a preferred base for companies with regional ambitions, with its access to mainland China's market set to expand under the GBA development plan and its global ambitions bolstered by the BRI. But in order to benefit from these newfound opportunities, Hong Kong-based firms would like to see supportive measures from the Hong Kong government, including cross-regional investment, outreach programmes and enhanced supervision.

The city would also benefit from a more proactive regulatory approach based on the four pillars of effective digital regulation: harnessing data, enabling innovation, driving efficiencies and improving communication. The HKMA is already cognisant of these pillars and has made clear strides in each.

But there is room to go further and to improve the delivery capabilities of the monetary authority's workforce in preparation for a digital future.

That future could see significant near-term growth in consumer fintech adoption rates within Hong Kong. The city has a relatively large share of fence-sitting sceptics who are just waiting to be won over by clear demonstrations of the value of fintech offerings. Again, government support could help that effort.

But the future must also be global since Hong Kong's population of 7.4 million and saturated banking sector would otherwise prove limiting factors for fintechs looking for massive scale. Fortunately, fintech is borderless, and with the requisite support, Hong Kong's fintech sector could not only close the gap with other hubs on adoption and innovation, but could also increasingly bring new, cutting-edge solutions onto the global stage.



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